



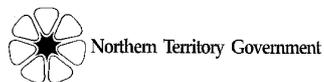
ALICE SPRINGS TELEGRAPH STATION HISTORICAL RESERVE

Plan of Management

May 2001



PARKS AND WILDLIFE COMMISSION OF THE NORTHERN TERRITORY



**Alice Springs Telegraph Station Historical Reserve
Plan of Management**

May 2001

Parks and Wildlife Commission
Of the Northern Territory
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SUMMARY

The Parks and Wildlife Commission of the Northern Territory aims to work with the community to manage and conserve the natural and cultural heritage of the Northern Territory while providing for use and enjoyment by present and future generations.

Nestled in low hills to the north of the township of Alice Springs, the restored Telegraph Station buildings are a reminder of a major event in the history of Australian development – the construction of the Overland Telegraph Line.

The Alice Springs Telegraph Station Historical Reserve is the site of one of the first permanent European settlements and as such is one of the most important historical sites in central Australia. The Alice Springs Telegraph Station Historical Reserve contains and protects some of the best examples of restored buildings from the early settlement era of the Northern Territory, in a setting that has, to a large extent, survived relatively undisturbed. In recognition of their heritage value the Telegraph Station buildings are listed on the Register of the National Estate and are proposed for declaration as a heritage place under the NT *Heritage Conservation Act*.

The early watershed anthropological studies by Spencer and Gillen began at the Telegraph Station. The site has continued to be a point of engagement between western and local Arrernte cultures.

The Reserve is an important tourism and recreation area. A visit to the historical buildings and the adjacent ‘Alice Springs’ waterhole is on the itinerary of the majority of all visitors to Alice Springs. The existing siting of the open recreation area and the vehicle parking areas in relation to the historic buildings, achieves a good balance between the need to provide visitor amenities and to conserve

the historic setting of the site. The surrounding natural bushland areas offers an attractive and easily accessible retreat for local Alice Springs residents on the outskirts of an expanding urban area.

This Plan of Management will be the second plan for the Reserve. The Plan continues to recognise the special place of the Telegraph Station in the community. It recognises the value of its history as well as the Reserve’s contemporary tourism and recreation values. The focus of this plan is on management and protection of the cultural and natural resources. It sets out the means by which all the Reserve’s values will be protected and managed for the use and enjoyment of all visitors.

Major Management Issues

For the life of this plan, significant management directions are :

- Adoption and implementation of a Conservation Plan for the historic area of the Reserve;
- Declaration of the historic zone of the Reserve as a Heritage Place under the *Heritage Conservation Act*;
- Continuation of concessionary operations to manage various aspects of the Reserve, particularly high visitor use areas;
- Consolidation of a network of walking and bicycle tracks with strong links to the township of Alice Springs;
- Construction of a dual walking /bicycle track from the picnic area to Wigley Waterhole;
- Establishment of a new access road into Wigley Waterhole;

- Systematic surveys to identify flora and fauna species and continued management of the natural resources within the Reserve;
- Development and implementation of a soil erosion rehabilitation plan, particularly along walking and service tracks;
- Continued implementation of a comprehensive visitor monitoring strategy for the Reserve including use of visitor surveys to monitor various issues;
- Identification and cataloguing of historical artefacts and development of a Artefact Management Strategy;
- Improved signage to give visitors a sense of arrival at the Reserve; and,
- Further development of interpretive material.

ACKNOWLEDGMENTS

The Strategic Planning and Development Unit of the Parks and Wildlife Commission in Alice Springs have prepared this draft. It has been produced in conjunction with the Planning Team for the Alice Springs Telegraph Station including Rangers of the Northern Territory's Central District and senior officers of the Parks and Wildlife Commission.

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1. INTRODUCTION TO THE PLAN

1.1 Location and Background

The Alice Springs Telegraph Station Historical Reserve, including northern extensions, is located on the northern outskirts of Alice Springs in central Australia (see Map.1). It occupies 3002 ha and comprises NT Portion 1927, Lots 5774, 941, 943, 1686 and 2314, Town of Alice Springs (see Map 2).

In October 1962 Reserve 1071 was proclaimed under the *Crown Lands Ordinance* Commonwealth Gazette 23, 5 June 1962. The Reserve (Lot 941) was placed under the care and control of the Northern Territory Reserve Board in June 1963. The Reserve (consisting of Lots 941, 943, 1686 and 2314) was declared under Section 12 of the *Territory Parks and Wildlife Conservation Act* in June 1978. The northern extensions (NT Portions 5774 and 1927) were vested in the Conservation Land Corporation in 1986 (see Map 2). These two areas have not been declared under Section 12 of the Act.

On 23 May 2000 the Federal Court determined that native title rights and interests existed over the Historical Reserve, excluding areas of public works as defined in section 253 of the *Native Title Act 1993* (see Map 2).

The Reserve's prime focus is the several remaining historic buildings that were originally part of the Alice Springs Telegraph Station. Restoration works commenced in 1966 with the concept of restoring the complex to the 1899-1908 period. This has become known as the "Bradshaw" era, named after the Postmaster during this period. Most restoration works were completed between 1966 and 1984. A chronology of major events associated with the Reserve is attached at Appendix 1.

Visitation has grown from an estimated 24,000 persons in 1966 to over 210,000 in 1999. The Reserve receives one of the highest visitations of any park in central Australia and is used extensively by the residents of Alice Springs. A large grassed and irrigated lawn area was established in 1967 for use by visitors for picnicking and associated day-use activities. This area remains very popular and continues to be actively used by the local community.

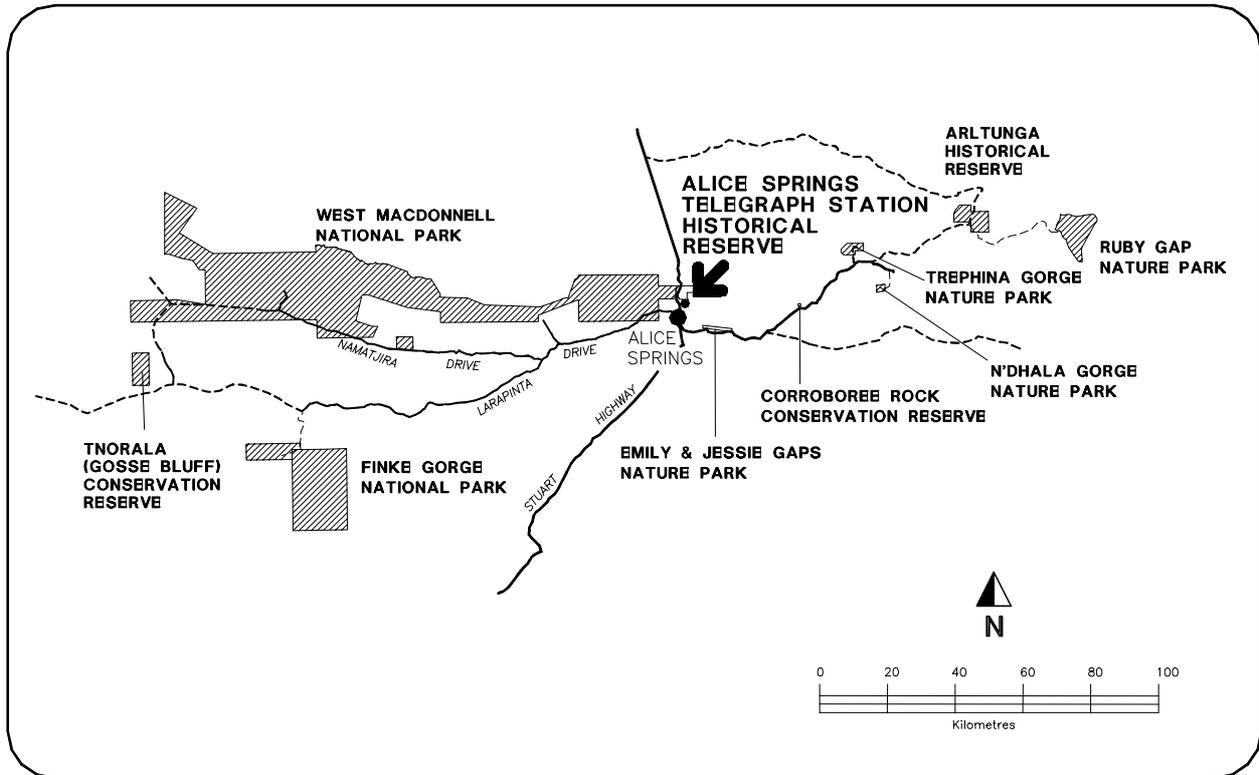
Entry fees were re-introduced in January 1991 for those visitors entering the historic precinct. In December 1998 a concession was approved for management of the historic precinct and for the maintenance of some visitor facilities.

1.2 Concept and Purpose of the Reserve

It is intended that the Reserve should provide an opportunity for visitors to experience at first hand the some of the oldest European structures in central Australia in a setting that complements their character. Visitors will receive an understanding of the whole history of the old Telegraph Station and more particularly the lifestyle of the residents during the Bradshaw era (1899-1908).

In addition, visitors can enjoy the adjacent picnic facilities in a shaded riverside setting. Opportunities also exist for exploring the surrounding natural bushland and visiting the several semi-permanent waterholes along the Todd River.

Map 1 – Reserve Locality



Located on the “doorstep” of Alice Springs, the Reserve will continue to play an important role for the local community by providing an attractive venue for social and community events, weddings and functions as well as the education of local people, especially school children. The Parks and Wildlife Commission will continue to promote community input and a sense of community ownership through programs such as ‘Alice on the Line’ for school groups and Heritage Week activities.

The Reserve also performs an important role in the local economy as one of the popular destinations for visitors to Alice Springs.

The principal purposes of the Reserve are:

- to conserve the remaining Telegraph Station buildings and associated resources of historic and cultural significance;
- to provide an attractive outdoor recreation area and tourist destination on the outskirts of Alice Springs;
- to provide appropriate interpretation of the Reserve as well as education opportunities regarding the historic and environmental aspects of the Reserve; and,
- to protect sacred sites and other locations of significance to Aboriginal people; and,
- to retain the natural bushland setting over most of the Reserve, to protect the habitats of native plants and animals and to maintain current ecological diversity.

1.3 Intent of the Plan

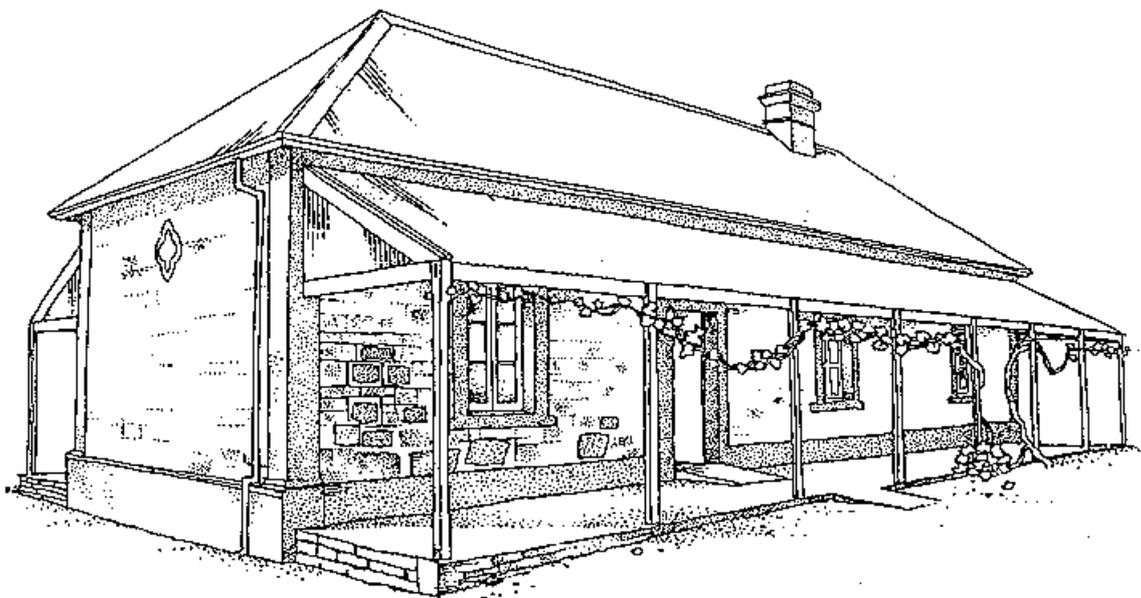
The first Plan of Management for the Alice Springs Telegraph Station was completed in 1989. This second Plan takes into account the development and management that has occurred throughout the past ten years and states the intent of the Parks and Wildlife Commission with respect to future management of the Reserve. It sets management objectives, addresses current issues and proposes appropriate measures to guide management and future development to protect and conserve the cultural and natural resources.

The Plan recognises and acknowledges the rights and interests of the local Arrernte people regarding sacred sites and related cultural matters.

The Plan recognises the recommendations of the Northern Territory Tourism Development Masterplan and Northern Territory Parks Masterplan to professionally develop and manage high profile parks such as the Alice Springs Telegraph Station. This will be achieved through development of high quality interpretive facilities and offering enhanced interpretation for the site including use of 'living exhibits' in buildings such as the Blacksmiths Shop and Barracks Kitchen.

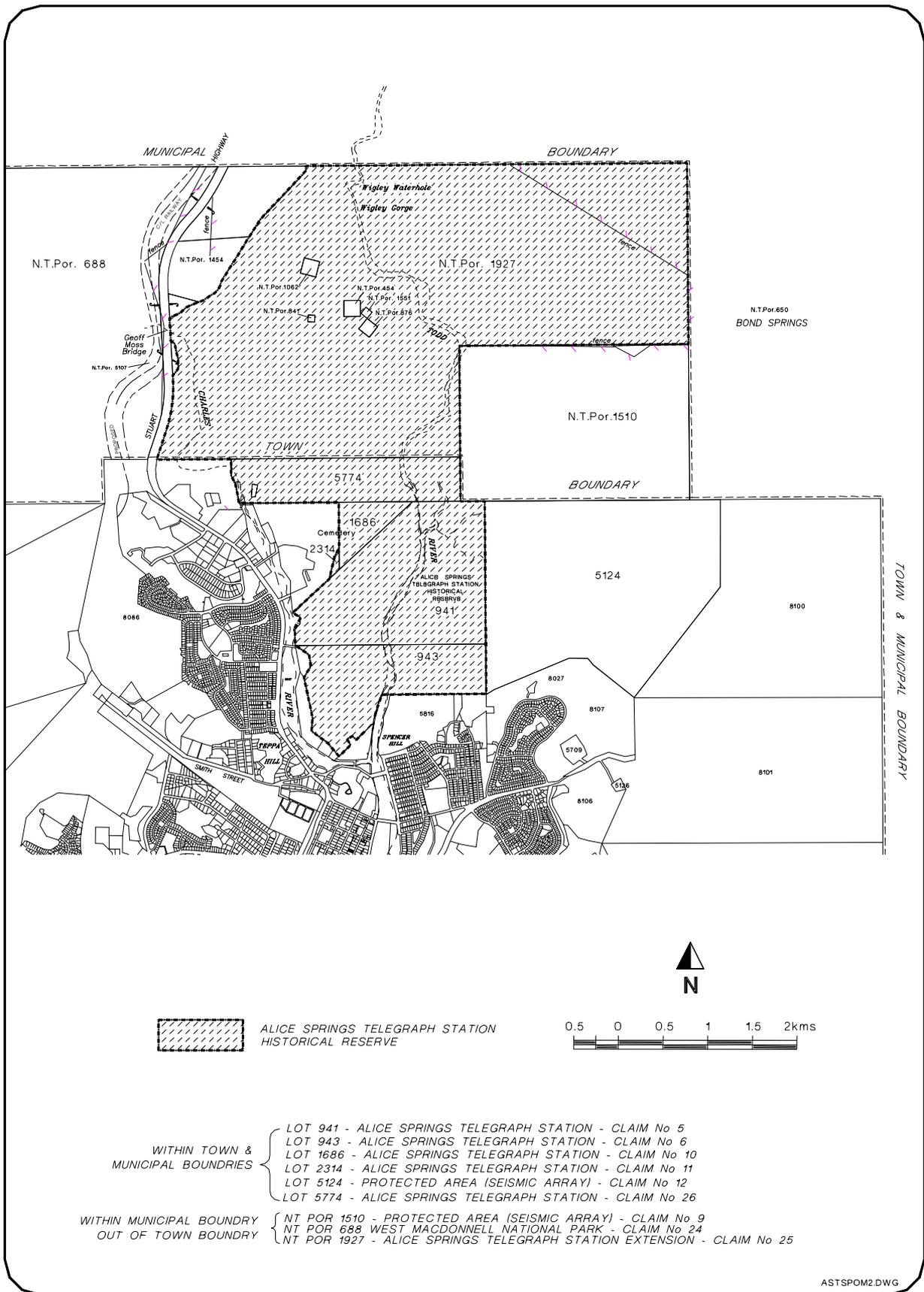
Key stakeholders such as the National Trust, tourism and commercial interests, neighbouring landholders and Parks and Wildlife Commission staff have assisted in the preparation of this Plan. Other government agencies and the public have also been consulted throughout the planning process.

The Plan has been prepared in accordance with Section 18 and 19 of the *Territory Parks and Wildlife Conservation Act*. It will be in force for a minimum of five years and a maximum of ten years unless revoked by a new Plan or amended in accordance with the Act.



Station Master's Residence

Map 2 – Tenure



2. VALUES OF THE RESERVE

2.1 Cultural Values

The Reserve's **European historic values** derive from the several restored and reconstructed Telegraph Station buildings. They are of considerable historical importance and, along with much of the Reserve, are listed on the Register of the National Estate. The site has also been recommended for listing in the Northern Territory Heritage Register. The Station was an important link in the Overland Telegraph Line and one of the first permanent European settlements in central Australia. It played a major role in the later European settlement and development of the region.

The **Aboriginal values** of the Reserve derive from associations of the local Aboriginal people with a number of important sacred and ceremonial locations in the area. These include nine registered sacred sites one of which, known as Welatye-terre, is on the Register of the National Estate. The Reserve is also of importance to Aboriginal people due to its use as an Aboriginal reserve and Aboriginal children's home for decades (see Appendix 1, 1932-1963).

2.2 Recreation and Tourist Values

The **tourist values** of the Reserve arise from the Telegraph Station buildings being the most accessible, widely promoted and presented European historic site available to visitors in the Alice Springs region. The Reserve has become a major regional tourist destination because of the historic aspects of the site and its association with the Overland Telegraph Line.

The **recreational values** of the Reserve are related to the attractive developed picnic areas associated with the historic buildings. These form an important regional recreation resource. They are heavily used by local residents and increasing numbers of tourists and also serve as a venue for numerous social and community events. Significantly, they are the only landscaped, developed and grassed picnic areas in Alice Springs.

In addition, the natural areas of the Reserve contain an extensive system of walking trails (see Map 3) and provide opportunities for a range of informal outdoor activities including nature appreciation and education. In previous years the 'Alice Springs' waterhole and Wigley Waterhole further to the north have been an attractive swimming localities for visitors. These waterholes are not permanent but when full are popular with some local user groups.

2.3 Interpretation and Education Values

The Reserve's **value for interpretation and education** is considerable. It provides an outstanding opportunity for visitors to discover the history and significance of the Telegraph Station as well as the wider story of the Overland Telegraph Line.

The Reserve also offers a range of historic and environmental education themes in a safe area conveniently accessible to Alice Spring's schools. Local school groups use the Reserve extensively for environmental education. Students from local schools participating in the Junior Ranger program use the Reserve on a regular basis.

The 'Alice-on-the-Line' program offered to local schools by Reserve staff is an excellent example of a living history type program of high educational value where school students

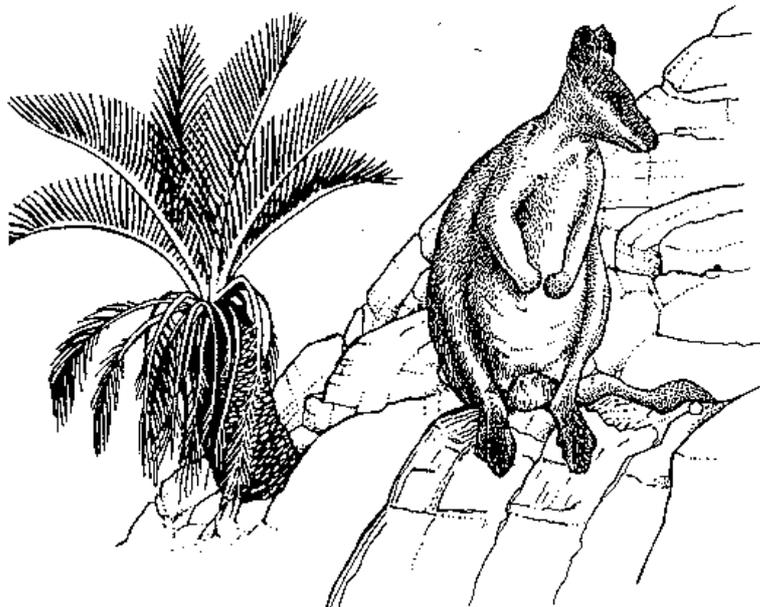
role-play various characters from the 'Bradshaw' era. Waterwatch has established monitoring at three waterholes in the Reserve. This is a community-based water quality-monitoring program, aimed at raising awareness of water quality issues and encouraging community involvement in water resource management.

Rangers annually conduct an interpretive program at the historic site and the Reserve's natural bushland is also used for a variety of interpretive activities.

2.4 Natural Values

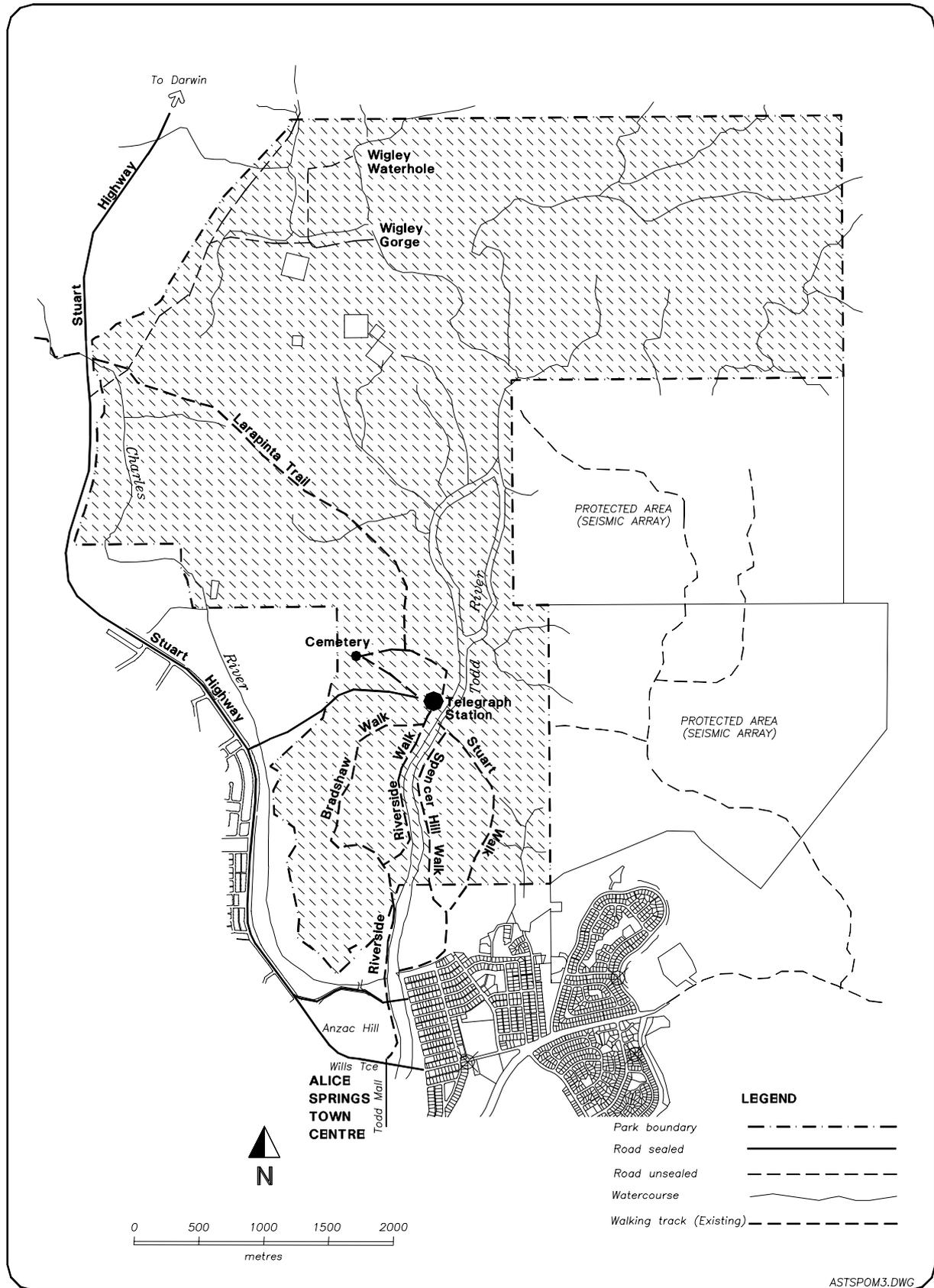
The Reserve's **natural values** derive from the retention of a relatively large natural area in close proximity to Alice Springs. The vegetation in the Reserve contains some unique vegetation communities as well as several vulnerable and rare native plant species. Of some interest is the fire sensitive vegetation associated with the Cliffs and Steep Rock Expanses community and includes Cycads, White Cypress Pines, Mulga, Spearwood and Plumbago. High plant diversity is also associated with the Rocky or Sandy Creeklines with Tea-tree community.

Alice Springs residents can enjoy the benefits of having a substantial natural area accessible on their doorstep including populations of Euros and the threatened Black-footed Rock wallabies.



Cycads and Black-footed Rock wallabies are both significant species found in the Reserve

Map 3 – Facilities and Infrastructure



3. ZONING SCHEME

The Zoning Scheme (Maps 4 & 5) is one of the major tools in pursuing the intent of the Plan. The Scheme provides a basis for the regulation of activities and developments within defined areas so that the visitor uses are compatible with the overall need to conserve the cultural and natural values of the Reserve.

Public access, activities and developments within any of these zones may be regulated if it is shown to be having an adverse impact on the values of the area.

All development will be carried out with a minimum of interference to the historic and natural qualities of the Reserve. Such developments will also be in accordance with the requirements of a variety a relevant legislation.

The following five management zones have been identified to control the use, development and management of the reserve:

- **Historic Zone**
- **Intensive Use Zone**
- **Dispersed Use Zone**
- **Special Protection Zone (Aboriginal)**
- **Service Zone**

Details of the general, use, development and management of each zone are given in Table 1.

Map 4 – Detailed Management Zoning, Historic Precinct

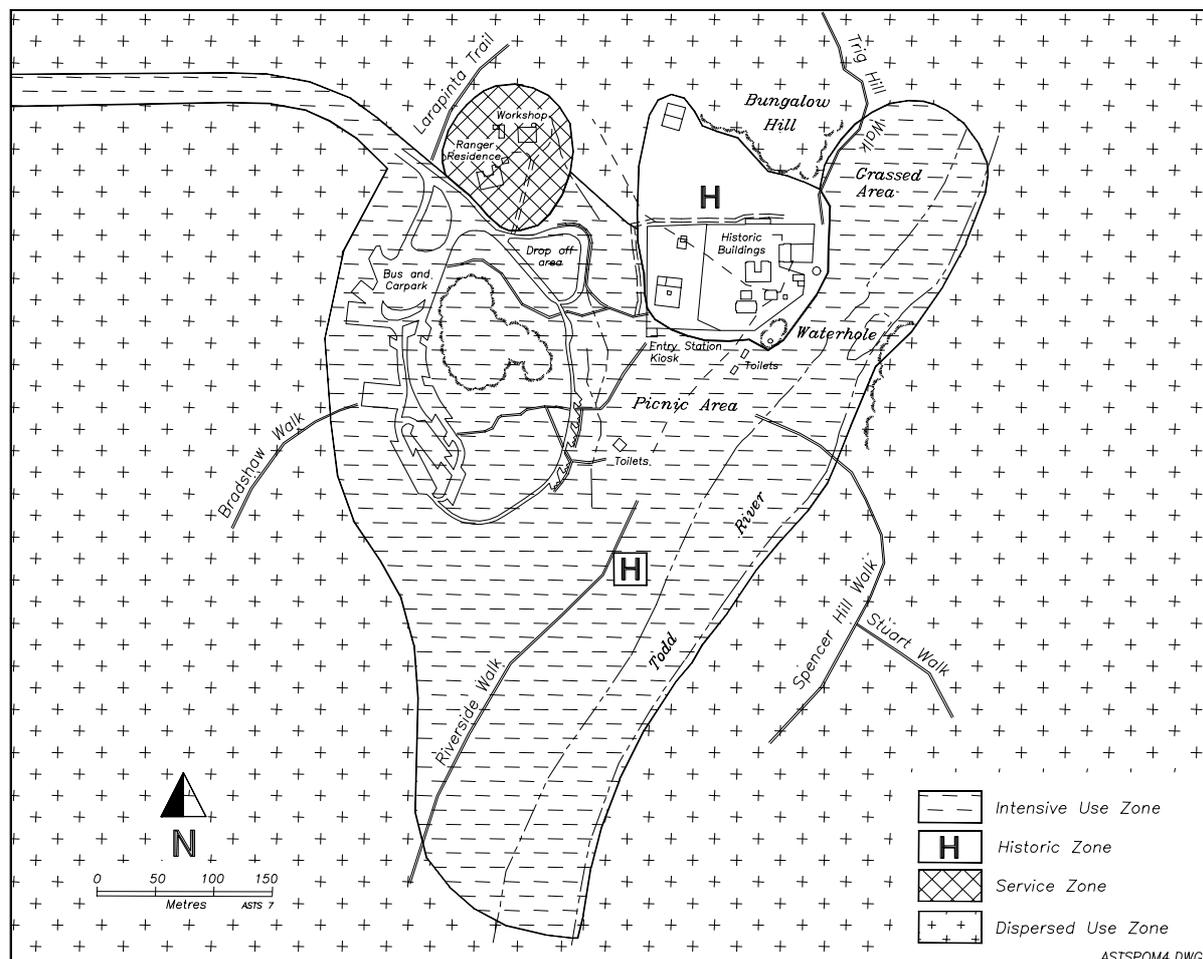
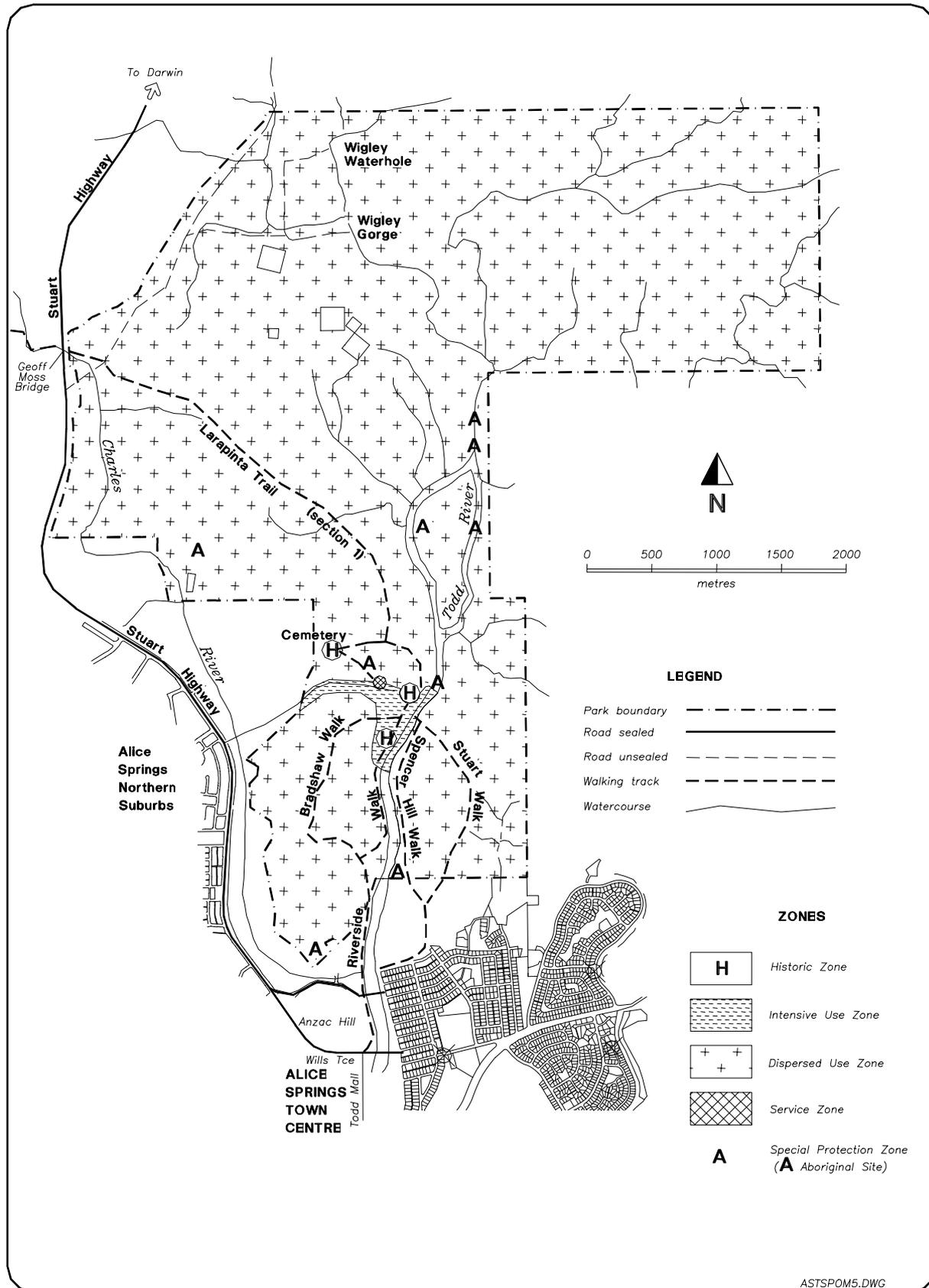


Table 1 : Zoning Scheme for the Alice Springs Telegraph Station Historical Reserve

Zone	Purpose	Management Guidelines
Historic	To provide for the conservation of the Telegraph Station buildings and associated historical features while allowing for visitor recreation, education and enjoyment.	Intensive management to conserve the historic buildings and the historic context of the area and present them as an attractive and informative visitor destination catering largely for short term visitors. Commercial activities within the zone will be supported subject to PWCNT concessionary operation policy and procedures.
Intensive Use	To provide for the majority of visitors seeking an easily accessible and developed picnic area. The zone will also be used to provide an area for small and large functions, social events, community events and commercial activities.	Intensive management of visitors and facilities in a landscaped environment. Commercial use within the zone will be permitted.
Dispersed Use	To provide day-use recreational opportunities for visitors in a natural setting, provided that the impact on the environment and values of the Reserve are minimal. In this zone visitors may experience less developed and crowded surroundings.	Dispersal of visitors to less crowded areas of the Reserve through use of a network of walking/bicycle tracks. Provision of educational and interpretive opportunities. Commercial use within the zone will be permitted.
Special Protection	To provide for the conservation and protection of important biological areas and cultural sites, particularly Aboriginal sites.	Special management to protect and conserve sites of biological and cultural interest.
Service	To provide for the essential services to meet the management requirements of the Reserve. This includes Ranger housing, workshop, office facilities, storage rooms and provision of services.	Provision of essential administrative and support facilities designed to have minimal impact on visitor appreciation.

Degree of Access	Provision of Facilities	Appropriate Activities
Will be by foot only and path works will be of a high standard. Vehicle access to service the zone will be permitted under permit or for management purposes only. Guidelines for access within the sealed rooms of the historic buildings will be developed.	Will be limited to items compatible with the conservation and interpretation of the site. Facilities that enhance visitor experience will be encouraged. Provision of facilities for visitors will be minimised and sited to be as unobtrusive as practicable. Development of additional historic features and maintenance of existing features will be in accordance with the Conservation Plan.	Will be compatible with the conservation of the historic complex including sightseeing, interpretive walks, photography and appreciation of the heritage associated with the site. Activities to enhance visitor experience will be encouraged. Areas within the zone can be used for commercial uses and special functions such as weddings, photography and filming.
Vehicle access by visitors will be restricted to designated sealed roads and parking areas. Bicycle and pedestrian access will be along designated and high standard tracks.	Appropriate visitor facilities include major infrastructure such as an entry information station incorporating an outdoor eating area, toilet blocks, road and parking areas, signs, lighting, interpretive shelters and signs, electric/gas barbeques, and a range of picnic furniture.	Will include picnicking, informal games, short walks, relaxation, community and social events, swimming (at times) and special functions. Commercial activities will be permitted but subject to PWCNT concessionary operations policy.
Public vehicle access will only be permitted on the formed road to Wigley Waterhole and Wigley Gorge. Public vehicle access to other areas in this zone will not be permitted except under the conditions of a permit. Pedestrian access will be by designated walking and bicycle tracks. Access by management vehicles will be permitted.	Appropriate visitor facilities includes walking/bicycle tracks, seating, signs and interpretive facilities.	Appropriate visitor activities include bushwalking, jogging, bicycling, mountain bike riding, swimming, bush picnicking, photography, nature appreciation and other similar informal low-impact uses.
Access by visitors will not be permitted except under the conditions of a permit issued by the appropriate authority.	Visitor facilities will not be provided.	Only activities specified under the conditions of the permit will be allowed.
Vehicle access will be high standard roads for management vehicles.	Facilities necessary for administration and management of the Reserve only such as offices, workshops, storage areas and accommodation.	Activities relevant to the management of the Reserve.

Map 5 - Management Zoning for the Reserve



4. MANAGEMENT OF THE RESERVE'S CULTURAL RESOURCES

Objectives

1. To manage and conserve the remaining fabric of the Old Telegraph Station buildings and surrounding historic sites in accordance with the Conservation Plan.
2. To present the old Telegraph Station buildings and their environs in an appropriate manner.
3. To protect and manage sites and resources of historic significance found elsewhere in the Reserve.
4. To protect sacred sites, sites of special significance, artefacts and other locations of Aboriginal significance found on the Reserve.
5. To preserve and, where appropriate, display historic artefacts associated with the Reserve.
6. To enable visitors to appreciate and understand the significance of the cultural resources of the Reserve through interpretive material and programs.
7. To promote and encourage further research into the Reserve's European and Aboriginal history.

4.1 European Cultural Resources

Information and Issues

Construction of the Alice Springs Telegraph Station commenced in 1872. It was the earliest European settlement in the Alice Springs area and a focus for later regional development. It remained a major centre of activity and communications until its Post Office functions were closed in 1932. The Station then served as a home for Aboriginal children until 1942 and was known locally as 'The Bungalow'. During the period 1942-46 the Army operated the Station as a Native Labour Camp. Following WWII the area was again used as an Aboriginal settlement until 1962. (A chronological list of major events at the old Telegraph Station is included in Appendix 1).

The Alice Springs Telegraph Station is the most significant of the remaining repeater stations on the old Overland Telegraph Line and represents a valuable part of the heritage of Australia. Seven of the Telegraph Station's early main buildings remain today. These are the Barracks, StationMaster's Residence, Kitchen, Post and Telegraph Office, Battery Room, Blacksmith's and Buggy Shed (see Map 6). All are built of local stone. They have been restored and reconstructed to approximate their appearance during the Telegraph Station era, as represented by the 'Bradshaw' period, 1899-1908, for which considerable written and photographic documentation is available.

Appropriate conservation guidelines are required for the historic precinct to prevent the loss of remaining physical evidence and to retain the area's historic cultural significance.

A Conservation Plan has been produced for the historic precinct and the Cemetery and will guide appropriate protection and management measures of these two sites. To ensure compliance with the Conservation Plan regular monitoring of the historic precinct will be necessary. All conservation works will comply with accepted ICOMOS Burra Charter guidelines.

Some ancillary structures from this era, such as stockyards, have been rebuilt. Associated historic sites - including the Telegraph Station cemetery containing five early graves, an old timber-lined well, the original 'Alice Spring' waterhole and several historic trees - occur in the vicinity of the Station.

From historical records a police hut, small weather observatory, flour store, milking shelter, vegetable gardens, ablution blocks and other outbuildings are known to have been sited around the Telegraph Station at various times in its history.

The Conservation Plan for the historic precinct provides details of past conservation efforts at the Telegraph Station.

Little effort has been made to date to conserve or present periods other than the 'Bradshaw' in the Station's history. Much of the evidence from these periods was removed or demolished during early restoration work on the complex. Minor evidence remains of several other historic structures, however, little remains from the 'Bungalow' period.

Several modern elements are located in and around the Telegraph Station area, most are visitor amenity or site protection items. Several of the Telegraph Station rooms have been furnished with items as authentic as possible to the 'Bradshaw' era to assist the site's presentation and interpretation. Modern items detract from the Station's historic presentation, however some may be necessary for management purposes, for safety reasons or for the protection of the historic buildings. Some of these structures may be required to hide inappropriate additions. Some of the early conservation works undertaken are historically inaccurate and inappropriate and measures may need to be taken to rectify these inaccuracies.

Several historic sites, with generally little remaining evidence and of varying significance, occur in the Reserve away from the Telegraph Station area. An area of land near the Reserve's southern boundary known as Middle Park served as a Police Camp during 1902, then later as an Army camp during WWII. A lone grave in the Wigley Waterhole area reputedly dates from before 1900. There are reports that a number of other people were buried elsewhere in the Reserve, however, to date other graves have not been found.

There are several buildings/structures from the 'Bradshaw' era in the vicinity of existing historic buildings that have not been re-constructed to date. Less apparent historic sites and remains around the Telegraph Station either have not been located or adequately documented.

Several old paths are still apparent crossing the Reserve such as those taken by the Overland Telegraph Line exploration parties and the Line's original route and associated northern road. The early tracks, and later a well used road, from the Telegraph Station to Stuart and the first sealed alignment of the Stuart Highway north from Alice Springs are also apparent. A section of Overland Telegraph Line through the Station area has been reconstructed for interpretive purposes. The location of this reconstructed section of Overland Telegraph Line is historically inaccurate.

Historic sites occurring elsewhere in the Reserve may require conservation and, possibly, interpretation. Historic routes, such as the route of the Telegraph Line or main track heading north, across the Reserve warrant identification, protection where appropriate, and possibly interpretation.

The Reserve is a potentially rich area for European artefacts with several interesting sites available for further investigation. The Commission holds numerous artefacts associated with the Telegraph Station and the Overland Telegraph Line. These include personal effects of Sir Charles Todd, who supervised the Line's construction, that have been donated by his family. Many of the items in the refurbished Station buildings have been similarly donated or are on loan; some are also of inherent antique value. Suitable measures to uncover and document further European historic artefacts in the Reserve may be required.

Comparatively little is known about the Telegraph Station's periods as an Aboriginal home and Native Labour Camp, the history and uses of the Middle Park area, and numerous other aspects of the Reserve's past.

The Telegraph Station precinct is the focus of visitor attention in the Reserve. During peak periods, overcrowding is a potential problem at the complex with the potential to have adverse impacts on visitor experience, the area's amenity and the historic features themselves. Most visitors show a keen interest in the Station's history and many seek more information than is now available. To minimise impacts on the historic features and maintain the quality of visitor experiences, visitor numbers and activities in and around the historic precinct may be regulated or restricted.

A number of authorities, such as the Australian Heritage Commission, the Heritage Advisory Council and community groups such as the National Trust, have a particular interest in the management and conservation of the Telegraph Station. Liaison is required with those outside organisations having a valid interest in the Telegraph Station's management.

As detailed in the Conservation Plan, any landscaping within the Historic Zone should ensure it does not impact on the historic integrity of the site.

An updated Interpretation Plan needs to be developed for the historic area of the Reserve. Existing interpretive displays at the Telegraph Station need updating following the introduction of new and additional interpretive elements.

All future infrastructure development in the vicinity of the historic buildings should be assessed to ensure that historic values are protected.

The refurbished interior scenes allow large numbers of visitors to see and experience conditions of the Bradshaw era (1899-1908). The scenes are an effective way of bringing the Telegraph Station to life and arousing the interest of visitors.

Original historic artefacts require professional curation. Other historic effects, particularly those not owned by the Commission or of inherent antique value, require close ongoing care and maintenance. Some of the historical items purchased in the past are not from the Bradshaw period (1899-1908).

More thorough documentation and use of an appropriate database of the Reserve's European historic sites, resources and artefacts are required.

Management Actions

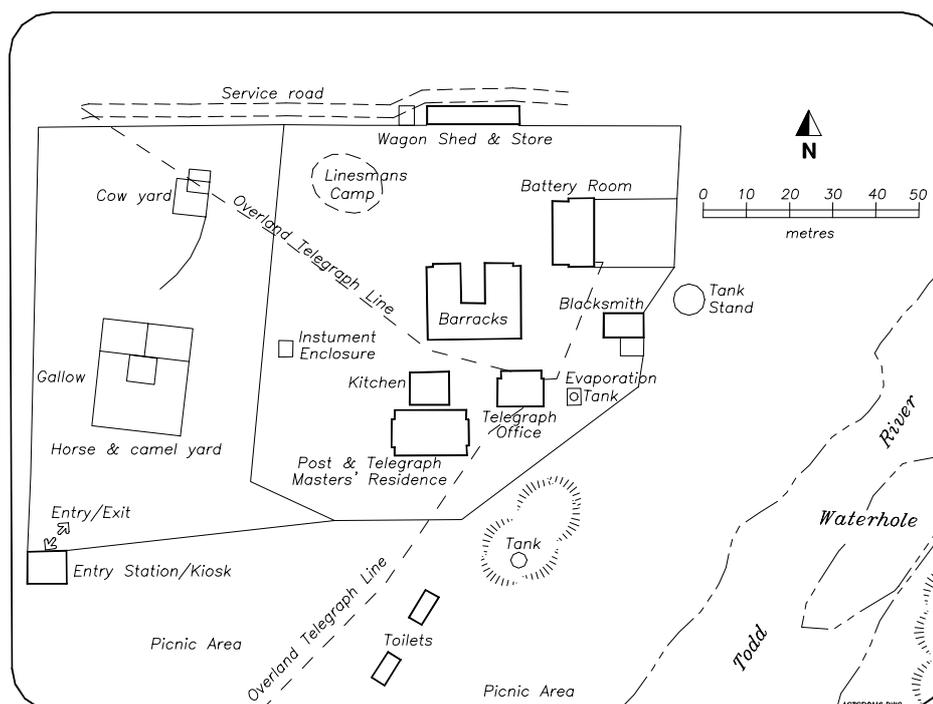
- 4.1.1** *Management of the Reserve's historic resources and values will be consistent with the area's inclusion as part of the National Estate. Measures to conserve these resources and values will be concentrated in the Historic Zone. Within this zone conservation of the remaining Telegraph Station buildings and associated features will be given priority over efforts to present and interpret the area to visitors.*
- 4.1.2** *The conservation management guidelines to be pursued in the Historic Zone and reflected in the Conservation Plan (1999) for the Reserve are:*
- *to conserve the remaining Telegraph Station buildings and take measures to retain, recover or reveal their cultural significance;*
 - *to ensure the on-going protection and maintenance of historic structures, sites and moveable cultural property;*
 - *to conserve, as far as possible, the remaining architectural evidence from all periods of the site's history;*
 - *to pursue a balanced conservation treatment of the area's overall history, but within this to target the 1899-1908 era for conservation and presentation efforts in and around the Telegraph Station complex;*
 - *to not undertake the speculative or conjectural rebuilding of any major buildings, from any historic period, for which no substantial physical evidence remains;*
 - *to reconstruct selected ancillary structures from the 1899-1908 era of which no physical evidence remains, where this will significantly assist presentation of the historic site, but only in instances where comprehensive and accurate design and location details are available; and,*
 - *to ensure that any contemporary additions can be installed and removed without detriment to extant and sub-surface historic fabric and site surrounds.*
- 4.1.3** *The Conservation Plan will be submitted for approval to the Parks and Wildlife Commission Board. All works in the historic precinct thereafter will be in accordance with the Conservation Plan.*
- 4.1.4** *The condition of the Telegraph Station buildings and other historic resources will continue to be monitored and the effectiveness of the conservation techniques employed will be assessed. Consideration of alternative conservation measures may be investigated as required in accordance with the Conservation Plan.*
- 4.1.5** *Measures to rectify historically inaccurate, inconsistent or inappropriate aspects of past conservation works will be undertaken, where practicable within resources allowed, and in accordance with the Conservation Plan.*
- 4.1.6** *Future conservation efforts will follow the ICOMOS Burra Charter principles and guidelines established for Australia in the Burra Charter and must comply with the Conservation Plan.*
- 4.1.7** *The Conservation Plan has identified sites of any possible remains of old buildings, structures and works known to have been located in and around the historic precinct.*

Any developments in the vicinity of the buildings will only be undertaken if there will be no impact on the historical integrity of the site.

- 4.1.8** *Modern elements required for management purposes, safe use of the site by visitors and presentation of information to visitors will be located out of sight. Modern structures or works in and around the Telegraph Station which are historically inconsistent or detract from the area's presentation and management will be progressively removed, relocated or treated to minimise their disruptive impact.*
- 4.1.9** *Any structures to be constructed in the vicinity of the historic zone will be in harmony with, the old Telegraph Station buildings in materials and design. Structures will be able to be removed at a later date.*
- 4.1.10** *Buildings/structures from the 'Bradshaw' era that have not been re-constructed may be constructed if resources are available and in accordance with the Conservation Plan.*
- 4.1.11** *The impacts of visitors on the historic precinct will be monitored. If required, visitor numbers or activities will be regulated to ensure protection of the area's historic resources and values.*
- 4.1.12** *Limited tree planting and landscaping programs may be undertaken in the Historic Zone, as required, to ensure the amenity and resilience of the site and to enhance the historic setting. The use of introduced plants will be confined to Couch Grass and selected species of historic significance or interpretive value.*
- 4.1.13** *The Alice Springs Telegraph Station Draft Interpretive Plan (1996) will be reviewed and rewritten to take into account recent developments at the Reserve such as the construction of the entry station.*
- 4.1.14** *To assist in the interpretation and educational use of the complex, some buildings or adjacent areas may be adapted for a variety of appropriate compatible uses. Possible compatible uses may include :*
- activity areas for the 'Alice on the Line' education program;*
 - historic re-enactments, demonstrations, working displays or other appropriate 'living-history' presentations;*
 - the presentation of appropriate interpretive displays;*
 - a guide contact/information point; and,*
 - other appropriate uses such as by voluntary groups or approved concessionaire operations.*
- 4.1.15** *Historic sites and remains scattered throughout the Reserve outside the Historic Zone will be identified and afforded special protection where appropriate. They may be included in the Reserve's interpretive program.*
- 4.1.16** *Historic routes across the Reserve should be identified and protected as appropriate. They may be included in the Reserve's interpretive program.*
- 4.1.17** *The reconstructed section of Overland Telegraph Line through the Telegraph Station area will be relocated to its pre-1900 route (see Map 6).*

- 4.1.18** *Suitably qualified persons will be encouraged to undertake historical research, surveys for European historic artefacts and archaeological investigations, including limited excavation work, at approved sites as required and under the conditions of a permit issued by the Commission.*
- 4.1.19** *The refurbished Bradshaw era (1899-1908) interior scenes at the Telegraph Station will be retained. Effort will be made to obtain additional historically correct items to improve these displays and refurbish other rooms with material of similar vintage. Access to the interior rooms of the buildings will only be permitted with a guide in attendance.*
- 4.1.20** *Professional advice will be sought regarding the care and maintenance of:*
- *those artefacts relating to the Telegraph Station and Overland Telegraph Line held by, or on loan to, the Commission; and,*
 - *items of inherent antique value that are used in the refurbished interior scenes.*
 - *A Maintenance Plan for the historic artefacts will be developed and adhered to. The artefacts may be used in the Reserve's interpretive program where appropriate.*
- 4.1.21** *The PWCNT will establish a set of guidelines for purchasing historic items to be displayed within the Telegraph Station. Guidelines should ensure that items for purchase are historically correct and the origin of the items are correctly recorded*
- 4.1.22** *A register of all historic resources - including buildings, structures or works and other sites - will be established and maintained for the entire Reserve. The register of artefacts relating to the Reserve and the Overland Telegraph Line will also be maintained, resulting in better management of the collection.*
- 4.1.23** *Liaison will be maintained with relevant heritage organisations, authorities and interest groups regarding the Reserve's historic resources and their management.*

Map 6 – Present Day Telegraph Station Complex



4.2 Aboriginal Cultural Resources

Information and Issues

Aboriginal people have close associations, both traditionally and since European settlement, with much of the Reserve including the Telegraph Station complex.

The Reserve has a rich collection of Aboriginal history and mythology. The area is criss-crossed by a number of 'dreaming trails' with several natural features attesting to the deeds of ancestral beings in the Altyerre or dreamtime. The area was an important meeting and ceremonial place for the Eastern Arrernte Aboriginal people. Its more recent history demonstrates many of the changing phases of Aboriginal-European relations in the region.

An array of traditionally significant sites and ceremonial grounds occurs across the area. These sites are important not only to the local Eastern Arrernte people but also, through story lines, to more distant people also.

There are Aboriginal names for many of the Reserve's features including the Alice Springs waterhole, Theyurre, and the surrounding area, Tyuretye.

Nine registered sacred sites occur on the Reserve, including the Alice Springs Waterhole. A registered woman's site known as Werlatyetherre, is also listed on the Register of the National Estate. Wigley Waterhole is a significant area and has been proposed for registration as a sacred site. Several other sites of significance are recorded within the Reserve, with the locations of some not precisely recorded. These sites will need to be considered in the management of these specific areas of the Reserve. The Alice Springs waterhole and Wigley Gorge area are both sacred sites that are constantly accessed by visitors. Some Aboriginal people associated with the Reserve still have strong ties to the Reserve and surrounding area

A variety of stone and wooden Aboriginal artefacts have been found in the Reserve, as well as more recent artefacts associated with the Telegraph Station. However, no major work to identify this material has yet been undertaken.

Many Aboriginal people have historical associations with the Reserve through the Telegraph Station's 'Bungalow' years. Some were born or had their conception sites in the area, others lived or went to school in the converted Telegraph Station buildings. Many of these Aboriginal people have a strong interest in the Reserve's management.

The Aboriginal history and significance of the Reserve would be of considerable interpretive value. Local Aboriginal people may be prepared to share this information and knowledge for inclusion in the Reserves's interpretation displays. The use of Aboriginal place names may add another element of interest for visitors.

Any new infrastructure developments will require consultation with the relevant Arrernte people and an Authority Certificate from the Aboriginal Areas Protection Authority.

Management Actions

- 4.2.1** *The Commission will liaise with the relevant Arrernte people to ensure that their views and aspirations are considered in the area's management. Proper consultation is of particular importance in relation to:*
- *the management of sacred sites and other known locations of significance, particularly regarding any publicity or provision of visitor access to these areas;*
 - *the inclusion and treatment of material relating to local Aboriginal people and their culture in the Reserve's interpretive program; and*
 - *the protection, salvage and possible display or use of Aboriginal artefacts.*
- 4.2.2** *Management of sacred sites in the Reserve will be in accordance with the Aboriginal Sacred Sites Act and in consultation with the Aboriginal Areas Protection Authority and the Aboriginal custodians for these sites.*
- 4.2.3** *Proposed developments in the Reserve will require site investigation and clearance with respect to Aboriginal sacred sites, in accordance with Government procedures. Visitor access to Aboriginal sacred sites are regulated or restricted as required.*
- 4.2.4** *The Alice Springs Waterhole and the Wigley Waterhole and Gorge areas are sacred sites and technically, permits are required to enter into areas containing registered or recorded sacred sites. Aboriginal Areas Protection Authority will be consulted with respect to continued unrestricted public access to these areas.*
- 4.2.5** *The area's Aboriginal values and history, including the more contemporary Bungalow era and Native Labour Camp periods, may be included in the Reserve's interpretive program. Subject to approval, stories from the Altyerre and other descriptions of the culture and lifestyle of the area's Aboriginal people, may be presented to visitors.*
- 4.2.6** *Aboriginal artefacts are automatically protected under the Heritage Conservation Act. Any Aboriginal artefacts found in the Reserve will be recorded and where possible left in situ, unless Aboriginal custodians wish to determine alternative arrangements. To prevent the taking of artefacts as souvenirs, the location of any unsecured items will not be publicised. Where artefacts of considerable value or interest are at risk they may, in accordance with the custodians, and subject to approval under the Heritage Conservation Act, be salvaged for conservation, storage and display.*

5. MANAGEMENT FOR VISITORS

Objectives

1. To provide a range of recreation and tourism opportunities within the Reserve while protecting the Reserve's natural and cultural values.
2. To maximise visitor appreciation and understanding of the cultural and natural values of the Reserve through use of appropriate interpretation.
3. To monitor visitor numbers, activities and the impact of visitors on the Reserve and where necessary, modify visitor access and behaviour.
4. To ensure all Reserve activities and developments meet safety requirements and minimise the risk of injury to visitors through interpretation and appropriate developments.
5. To continue liaison with the tourism industry re promotion of the Reserve to visitors.
6. Through interpretation and signage promote appropriate behaviour at the Reserve

5.1 Tourism and Recreational Opportunities

Information and Issues

The Alice Springs Telegraph Station provides a multitude of tourism and recreational opportunities. It has tourist links to other heritage attractions in Alice Springs including the Royal Flying Doctor Service, School of the Air, Heritage Transport Precinct and Pioneering Women's Hall of Fame. All these sites combine and are used to present the image of Alice Springs as a heritage town in the heart of the outback, focussing on the pioneering spirit of early settlers. It is therefore important to reinforce this theme at the Old Telegraph Station.

Three recent tourism initiatives have had an impact on the old Telegraph Station. These include the 'Discovering Alice', 'Northern Territory Heritage Trails' and 'The Telecommunication Link-up'. A 'Discovering Alice' sign is located in the picnic area.

The picnic area is the only open space grassed picnic area of its kind in Alice Springs and as such offers unique opportunities for users. The network of walking tracks is used extensively by Alice Spring's residents, clubs and visitors. Bicycle riders and walkers share several of these tracks.

The close proximity to Alice Springs makes the Reserve ideal for the pursuit of a range of active and passive recreational activities these include walking, running, bicycle riding sightseeing, nature appreciation, photography, bird watching and picnicking. The Reserve is also used for weddings and specialist functions. The close proximity to the schools of Alice Springs makes the Reserve an ideal place to encourage environmental activities.

The Reserve offers potential for use by tourist operators to conduct specialised tours and has been used by a number of concessionaires in the past. Camel and horse rides have been offered as well as stage coach rides for a short period. A permit has been issued to access part

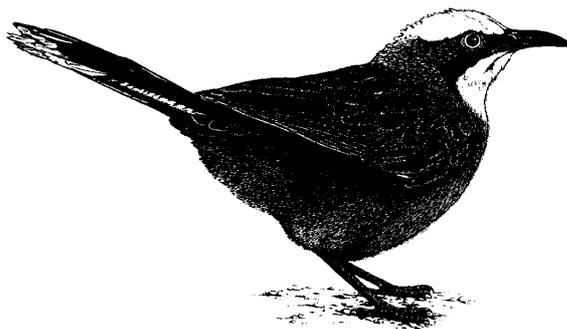
of the Reserve for horse rides. Permits are also issued for overnight guided bushwalks on the Larapinta Trail and a cultural tour. In 1998 a concession for the day-to-day operation of the entry station and tourist services at the historic precinct commenced. The Reserve is also a popular venue for outdoor weddings and functions.

The Reserve provides for commercial tourism opportunities and is widely used by local and interstate tour companies. Opportunities associated with the historical aspects of the place are particularly relevant and include self-guided tours and provision of services associated with the history of the site.

As the location of the first constructed buildings in central Australia, the Reserve has strong heritage links to the township of Alice Springs and surrounding country. This is reflected in the interest shown by the Alice Springs towns people in historical activities at the Telegraph Station.

Management Actions

- 5.1.1** *The impact of visitors on the Reserve will be carefully monitored.*
- 5.1.2** *The Reserve will continue to be promoted and used for a range of recreational activities including sightseeing, bushwalking, cycling, nature appreciation, photography, birdwatching, and picnicking.*
- 5.1.3** *Continued use of the Reserve for environmental education projects such as Alice-on-the-Line and Waterwatch will be encouraged.*
- 5.1.4** *Strong links with other heritage places in Alice Springs will be encouraged through use of appropriate interpretation themes such as transport, communication and Aboriginal heritage.*



Grey-crowned Babbler
Pomatostous temporalis

5.2 Visitor Access

Information and Issues

The Telegraph Station is linked to Alice Springs by a sealed access road leading off the Stuart Highway. A maze of informal vehicle tracks exists in the northern part of the Reserve. Several of these tracks have been closed and rehabilitated in recent years. Access to Wigley Waterhole is via the unmaintained old Stuart Highway and then by a rough graded track to the waterhole. The sealed old Stuart Highway has been deteriorating since the construction of the new highway, particularly at the crossing of the Charles River.

Two drop-off loops were constructed in 1993 for coaches and cars to allow easier access to the historic buildings and the picnic area. A large sealed parking area is located 200 metres west of the historic precinct.

A number of well-defined walking tracks run from the historic precinct to nearby historic, scenic or natural features. Most are short walks of a few hundred metres and include the Cemetery Walk, Goat Yard Walk and Trig Hill Walk. The short self-guided walk around the historic precinct includes access provisions for disabled people.

There are two shared walking/cycle tracks between Alice Springs and the Old Telegraph Station. One of these is beside the main access road to the Telegraph Station and the other is the Riverside Walk along the western bank of the Todd River.

Two other walks connect the Telegraph Station and the Alice Springs Township. The Spencer Hill Walk and the Stuart Walk link the historic precinct with the east side of Alice Springs. These walks terminate near the intersection of Gosse Street and Winnecke Avenue, and are used extensively by joggers and walkers.

The Telegraph Station is the start of the Larapinta Trail, a 250 km walking trail linking sites in the West MacDonnell National Park. This first section of the Trail heads north to the Geoff Moss Bridge on the Charles River before heading west to Simpson Gap, a distance of about 23.7 km.

5.3 Vehicle access

Information and Issues

The existing visitor access road along the old Stuart Highway into Wigley Waterhole is a sub-standard two-wheel-drive road and is becoming badly degraded.

The Reserve has several internal vehicle tracks used for management purposes. A number of these tracks have erosion problems. Use by visitors will not, in general, be permitted. Unauthorised off road activities by vehicles and motor cycles has been an on-going problem for Reserve staff.

Access to attend large functions held in the picnic area, the Special Functions Area (adjacent to the historic precinct) or the historic precinct have been catered for in the past. Vehicle access for the offloading of equipment etc at special functions within these areas should be provided.

Management Actions

- 5.3.1** *Motorised visitor access to the Telegraph Station area will be restricted to the existing sealed road and associated parking areas in the Intensive Use Zone.*
- 5.3.2** *Subject to funding, options for a new vehicle access road to Wigley Waterhole will be considered on a more direct route from the Stuart Highway. The new road would be of a formed gravel standard and future public access would be restricted to this new road once constructed.*
- 5.3.3** *The network of roads and tracks in the northern area will continue to be rationalised and roads not required for management purposes will be closed. Use of these internal management tracks by visitors will require a permit issued by the Commission.*
- 5.3.4** *Visitors will not be permitted to drive vehicles other than on designated public access roads.*
- 5.3.5** *The existing Telegraph Station parking area will be monitored to ensure it meets existing demands. Expansion of parking is not envisaged during the life of this Plan.*
- 5.3.6** *The access requirements of disabled people and other special needs groups to the picnic area and historical buildings will be catered for. Reserved parking spaces, easily negotiated paths, ramps, wheelchair height picnic tables, adequate seating and other suitable facilities have been provided where appropriate and will continue to be designed in any future developments.*
- 5.3.7** *Special access arrangements may be made to set up large community or tourist events under permit conditions.*

5.4 Walking and Cycling Tracks

Information and Issues

There is scope for rationalising the existing walking and bicycle track network encouraging greater pedestrian and cycle access to the area. Walkers and cyclists access the Alice Springs Telegraph Station from the Town via various tracks over land controlled by the Town Council. Consultation with interest groups and stakeholders will be necessary to help determine the future use of tracks and the track network.

Walking/bicycle tracks should be maintained to safe standards and use natural material where possible. User groups may agree to assist Reserve staff with track maintenance.

Management Actions

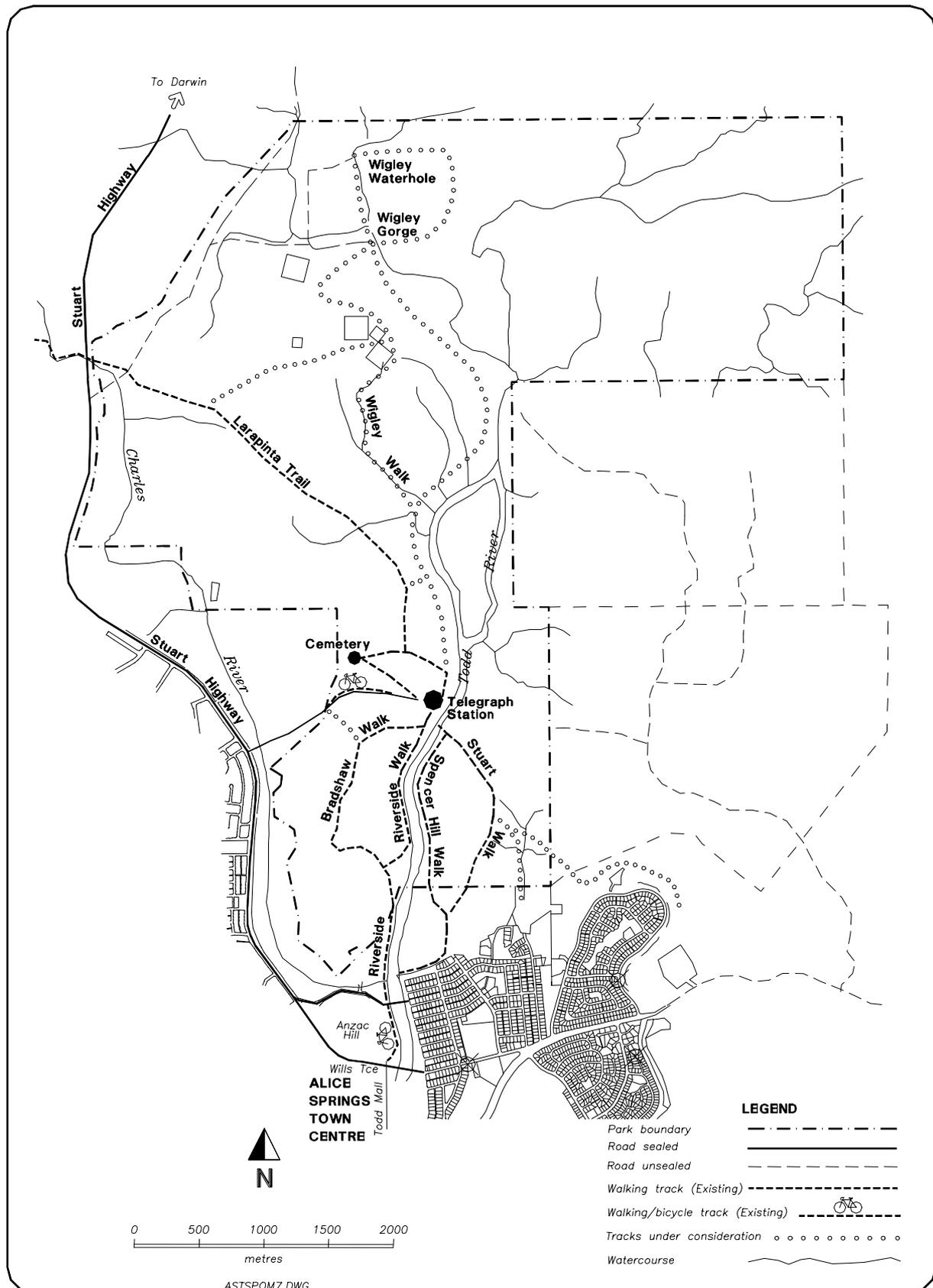
- 5.4.1** *Walking tracks constructed from parking areas in the Reserve to the historic precinct will be maintained at a high standard and be suitable for use by disabled persons.*
- 5.4.2** *In collaboration with the Alice Springs Town Council, consultation will occur with interest groups and stakeholders will be scheduled to assist the PWCNT determine*

the future usage of tracks in the Reserve. Following this consultation process, the Reserve's walking/bicycle track network will be progressively formalised and upgraded to disperse visitor use and provide access to points of interest (see Map 7). Tracks will be designated for walking, cycling, dual purpose or closed and rehabilitated. Tracks which will be considered in the discussions will include;

- *the Riverside Walk and the link to the Town;*
- *the Stuart Walk;*
- *walks linking the Telegraph Station with the Town via the Stuart walk;*
- *the dual purpose track adjacent to the entrance road; and*
- *a track to Wigley Waterhole;*

5.4.3 *Organised visitor activities utilising walking and bicycle tracks in the Reserve will be permitted providing impacts on the area's resources are minimal and activities do not entail exclusive use of tracks. The organisers of such activities will be required to apply for a permit. Permits may include special conditions regulating or restricting an activity as required.*

Map 7 –Walking and Bicycle Tracks – Existing and Envisaged.



5.5 Picnic Area – Visitor Facilities & Activities

Information and Issues

The Reserve is a major regional tourist destination and received an estimated 210,000 visitors in 1999. From visitor surveys conducted in 1998, interstate visitors predominate with around 60% and local residents contribute about 25% of visitors to the Reserve. Regional tourism continues to show a steady growth and this, combined with the continued development of Alice Springs, will result in increased visitor pressure on the Reserve.

The developed picnic area near the historic complex is an important local recreation venue used extensively for barbecues, relaxing and a variety of social events. Local people are the main users of this facility (about 60%) with families or groups of friends predominating. Many Alice Springs residents visit the picnic area several times each year many spending 2-3 hours per visit. The picnic facilities include electric barbecues, tables and seats. Two toilet blocks are provided as well as rubbish bins and drinking water. An automatic sprinkler system irrigates the area.

The picnic area is also a popular venue with local sporting or social clubs for parties and other functions, with many and occasionally hundreds of people attending such events. Weekends are the busiest times for the picnic area. The adjacent Alice Springs Waterhole, whenever reasonably full during the hotter months, is a popular venue for swimming.

The Reserve's natural areas, particularly those adjacent to the suburbs of Alice Springs, are used for many less intensive informal recreation, exercise and leisure activities including walking, jogging and bicycle riding.

The residents of Alice Springs have used Wigley Waterhole, an attractive natural recreation area, for some time. However, the uncontrolled nature of vehicle access and of the recreational use of the area has resulted in environmental damage to the site.

Special interest groups periodically use the Reserve's natural areas for a variety of activities including cross-country running and mountain bike riding.

Future management of the Telegraph Station area should accord with its increasingly important role as a popular local recreation area.

There may be a need to increase the numbers of barbecues and bench-type tables and the replacement of some ageing picnic facilities. This will alleviate some of the pressures on the existing picnic areas.

Wigley Waterhole and Wigley Gorge offer opportunities for a different type of picnic use.

Management Actions

5.5.1 *Provision of a developed picnic area for Alice Springs residents and visitors will be continued.*

5.5.2 *The Intensive Use Zone will continue to serve as the focus for most visitor activity in the Reserve. The zone will be further designed and developed to cater for high numbers of users. Additional electric barbecues, bench-type tables, seats, rubbish*

bins and other appropriate picnic furniture may be provided. The existing picnic area will be retained.

- 5.5.3** *To provide an alternate site and experience for picnickers visiting the Reserve, basic picnic areas will be retained at Wigley Waterhole and at Wigley Gorge. Facilities will remain at this level.*

5.6 Historic Precinct – Visitor Facilities & Activities

Information and Issues

The historic site provides visitors with a unique heritage experience and an understanding of the construction and operation of the Overland Telegraph Line as well as an appreciation of the lifestyle of the people who lived and worked at this site. The historic buildings have been restored to demonstrate these two main themes. The visitor surveys conducted in 1998 showed that the majority of people who visit the historic site remain for less than 1.5 hours.

Future management of the historic precinct should accord with its increasingly important role as a major regional tourist destination. Intensive management measures will be necessary to protect the historic buildings while providing a satisfying experience for tourists.

A visit to the Telegraph Station features in virtually all holiday packages to Alice Springs and is included in most local 'town tours'.

The majority of visitors, particularly those on commercial tours, spend less than 1.5 hours in the Reserve usually only inspecting the historic buildings and nearby waterhole. Tour operators should be encouraged to provide visitors with accurate information regarding the Telegraph Station and its history.

Specialist commercial tours also make use of the historic precinct. The needs of special interest groups should be recognised.

Living history activities will add to the character and uniqueness of the site.

Management Actions

- 5.6.1** *Consistent with the conservation of its historic values, management of the Historic Zone will recognise the importance of the Telegraph Station as a major regional tourist destination. The area will be intensively managed so as to provide visitors with the opportunity to conveniently inspect the historic precinct and associated historic features without damage to these resources.*
- 5.6.2** *The Northern Territory Tourist Commission (NTTC) will continue to advertise and promote the Telegraph Station as a high priority site for visitors wishing to experience and be exposed to central Australian history. The PWCNT will provide information to the NTTC.*
- 5.6.3** *Specialist commercial tours will continue to be encouraged to use the Reserve. However, those groups with particular needs or seeking additional assistance from Rangers should contact the Commission's regional office for a permit prior to their visit.*

5.6.4 *Living history displays will be expanded. Activities such as blacksmithing, cooking scones in the kitchen and use of telegraph equipment will continue to be developed in accordance with the Draft Interpretive Plan and the Conservation Plan.*

5.7 Special Functions

Information and Issues

Requests for special functions occur frequently and are appropriate in the Intensive Use Zone. An area should continue to be set aside for large community and tourist events and those groups wishing to undertake large community or tourist events should apply for a permit to do so.

Management Actions

5.7.1 *The grassed river terrace in the northeast of the Intensive Use zone will be managed as a Special Functions Area. Basic park/picnic furniture only will be provided. This area contains the remnants of sites of buildings associated with the historic precinct and any development will be preceded by historic and sub-surface investigations to ensure that possible historic values are not compromised.*

5.7.2 *The Special Functions Area will be the preferred location for accommodating organised groups and large community or tourist events. Groups wishing to use the Special Functions Area will be required to apply for a permit from the regional office of the Parks and Wildlife Commission.*

5.8 Visitor Monitoring

Information and Issues

In the past collection of visitor information has been limited to data from traffic counters on the access road and recorded observations by Reserve staff.

In 1998 the vehicle traffic counter was upgraded and pedestrian counters were installed on some walking tracks. Calibration surveys of vehicle numbers have been conducted several times and has resulted in a revising of yearly visitor estimates downwards suggesting that some early visitor figures may have been over estimated. It has also resulted in some comprehensive visitor statistics being produced from this time.

In the 1998/99 financial year three visitor surveys were conducted, one each in the peak, shoulder and off-peak tourist seasons. These surveys have yielded valuable demographic information on visitors to the Reserve as well as resulting in information on several management issues about the historic precinct and picnic area. A Visitor Monitoring Strategy is needed to clearly identify the goals and objectives to be achieved and outline methods and procedures. It should also be consistent with the goals and objectives of the Parks and Wildlife Commission's draft visitor-monitoring strategy.

Collection of reliable raw data on a regular basis on vehicle numbers, vehicle type, and number of passengers is vital to determine an accurate calibration factor and accurate visitor estimates for the Reserve.

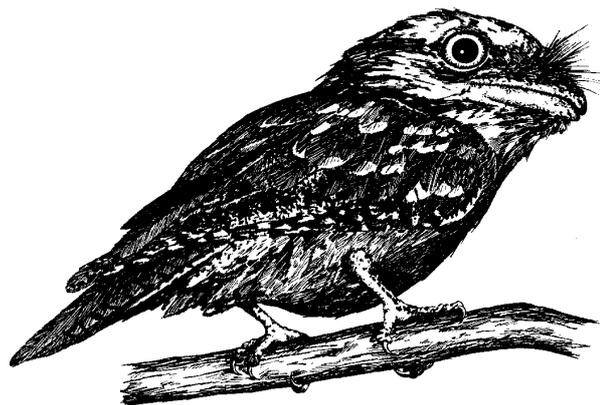
To assist the Parks and Wildlife Commission to plan developments for the future, visitor needs and satisfaction surveys are required. Such surveys are a vital tool to enable managers to understand and resolve key issues such as crowding, use/overuse of resources, impact on resources and facilities required.

The analysis of the visitor surveys has produced some interesting results that will be beneficial to management, particularly with regard to picnic area and historic site users. The surveys have identified visitor demographics, visitor destination and length of stay in different parts of the Reserve and has recorded satisfaction levels on facilities provided. The surveys also gave some direction on provision of additional facilities.

Little on-going and measurable monitoring of the environmental impact of visitors in the Reserve has been undertaken to date apart from some photographic records. The establishment of biophysical mapping of the Reserve will assist with providing base information. Analysis of the data collected will provide guidelines for management of visitor impacts on the environment in the future.

Management Actions

- 5.8.1** *A Visitor Monitoring Strategy will be produced for the to accurately determine visitor numbers and to gain an understanding of visitor needs/desires/satisfaction to assist in determining management direction.*
- 5.8.2** *Quantitative vehicle and visitor calibration surveys will be continued. This will be done at least seasonally to capture seasonal trends in visitor numbers.*
- 5.8.3** *Qualitative surveys will be continued in accordance with the Visitor Monitoring Scheme at least every three years. Surveys will be designed in conjunction with the Northern Territory Tourist Commission to ensure consistency.*



Tawny Frogmouth
Podargus strigoides

5.9 Interpretation and Education

Information and Issues

Interpretive signs at the entrance to the historic precinct briefly explain the history and significance of the area to visitors. A 'Visitor's History Guide' is available for visitors to use on a self-guided tour through the historic buildings and environs.

Many of the rooms in the historic precinct have been furnished to portray the Bradshaw era (1899-1908). The Barracks contains a photographic display of the history of survey, construction of the telegraph line and history of the site until its closure as a telegraph office in the 1930s. The kitchen in the Barracks and the Station Master's kitchen are being used to produce tea and scones for sale and the Blacksmiths shop is also established as a working display and produces some saleable items. The Telegraph Office is used by Morsecodians at various times of the year to relay telegraph messages. Guided tours are available of the historic precinct or visitors can use the self-guided map and brochure.

A range of interpretation and educational information products and services at the Telegraph Station will promote the intended character and inform and educate visitors about the Reserve's aesthetic, natural and cultural values and the recreational opportunities available in the Reserve. It will also provide clear orientation, directional and safety information to all visitors. Interpretation will open the eyes and minds of visitors to the uniqueness of the Reserve, encourage a positive visitor experience and promote a strong corporate image.

A draft Interpretation Plan was produced for the historical precinct in 1996. The theme developed for the site in that Plan was:

The lifestyles and spirit of endeavour of the people associated with the ASTS throughout the entire history of the site epitomises the pioneering spirit and heritage of outback Australia.

The draft Plan proposed four story lines to tell the history of the Telegraph Station:

1. the Telegraph Station Story (surveying the line, erecting the wire, maintaining the wire and the end of the wire);
2. following the Wire, inroads into the outback;
3. the Singing Wire; and,
4. an Arrernte Perspective on the History of the Telegraph Station site

The draft Interpretation Plan also proposed three communication strategies to convey the 'how', 'when' and 'where' to tell the stories to visitors and uses a logical sequence of experiences to effectively communicate the theme and messages to visitors so that they can understand the full history of the site. A visit to the Telegraph Station is essentially divided into promotion (pre-visit), orientation and involvement (on site or during a visit) and reinforcement (post visit) stages.

Much of the 1996 draft Interpretation Plan may still be relevant, however this plan needs to be rewritten to take into account the recent introduction of new and additional interpretive elements in the Historic precinct.

Historic re-enactments and equipment demonstrations have been used to assist in interpreting the historic precinct in the past. The Bi-Centennial 'Alice on the Line' Project, an

environmental educational program involving local school children in a live-in exercise, is undertaken within the historic precinct. This activity is an exciting and valuable interpretive exercise for participants and visitors alike.

Due to the proximity of the Reserve to Alice Springs it receives considerable use by local primary and secondary schools. School excursions focus on the historic precinct and the picnic area. Interstate high school groups, in the 13-19 years age group, also visit the Reserve during the main tourist season. A teacher's kit containing suggested programs, activities and worksheets is available for visiting school groups. As part of the Junior Ranger program, the Parks and Wildlife Commission's Community Education Officer provides considerable assistance and teaching materials to schools using the Reserve for historic and environmental education purposes.

Community based education programs occur in the Reserve. The Waterwatch program is conducted at three waterholes located in the Reserve – Wigley Waterhole, Alice Springs waterhole and a waterhole adjacent to Spencer Hill. Greening Australia also uses the Reserve for community educational purposes.

The Telegraph Station provides a unique and valuable educational experience focusing on the local history and the natural resources of the Reserve.

The 'Alice-on-the-Line' education kit is an invaluable resource kit available for visiting school group and the Waterwatch program will continue to be encouraged and supported as a valuable community program.

Management Actions

- 5.9.1** *The 1996 draft Interpretive Plan will be reviewed and may be used as a basis for a new Telegraph Station Interpretive Plan. Many of the suggestions in the 1996 Plan may be considered for inclusion. Implementation of the new Plan will be as resources permit.*
- 5.9.2** *The Reserve's visitor information services will be upgraded. Priority will be given to:*
- *advising visitors to the Telegraph Station of alternative or additional attractions and recreation opportunities available elsewhere in the Reserve;*
 - *encouraging sight-seeing visitors at the Telegraph Station to extend their visit and experience more of the Reserve;*
 - *advising visitors of precautions necessary in the Reserve's natural areas; and,*
 - *providing information at pedestrian access points to the Reserve, particularly from nearby Alice Springs.*
- 5.9.3** *The educational role of the Reserve will continue to be promoted to schools, which will be actively encouraged to use the area.*
- 5.9.4** *School groups wishing to use the Historic Zone will be required to contact the Ranger-in-Charge prior to their visit to arrange a booking and so avoid overcrowding of the area or possible conflict with other users. The Ranger-in-Charge will co-ordinate their visit with the consesionaire operating the Historic*

Zone. School groups will be free to make independent use of other parts of the Reserve during normal opening hours.

5.9.5 *A catalogue detailing the opportunities, locations and resource materials available for the educational use of the Reserve has been established and will continue to be made readily accessible to teachers and other interested persons. These materials include Junior Ranger activity kits and the 'Alice-on-the-Line' education kit.*

5.9.6 *Reserve staff will support the Waterwatch program by providing access to waterhole sites.*

5.10 Visitor Safety

Information and Issues

Maintaining visitor safety is one of Parks and Wildlife Commission's primary management objectives for the Reserve.

A number of visitors have drowned in the Alice Springs waterhole and in the Todd River when in flood. Visitors need to be made aware of the dangers associated with swimming in the Reserve to help prevent these misfortunes in the future.

Medical kits are kept in the Reserve to meet the numerous requests for minor first-aid assistance from visitors. Rangers are trained in first aid and search and rescue techniques.

The water in Alice Springs and Wigley Waterholes, when full provide a wading or swimming opportunity for many visitors, mainly children, during the hotter months of the year. Rain water which is collected in tanks is used in the 'Alice-on-the-Line' program.

Several species of nuisance insects occur in the Reserve, notably Inch Ants in the picnic area. Mosquitoes can also be prevalent after rainfall resulting in nuisance value and potential health problems.

Overnight walkers departing the Old Telegraph Station when using section 1 of the Larapinta Trail should be encouraged to use the Overnight Walkers Registration Scheme.

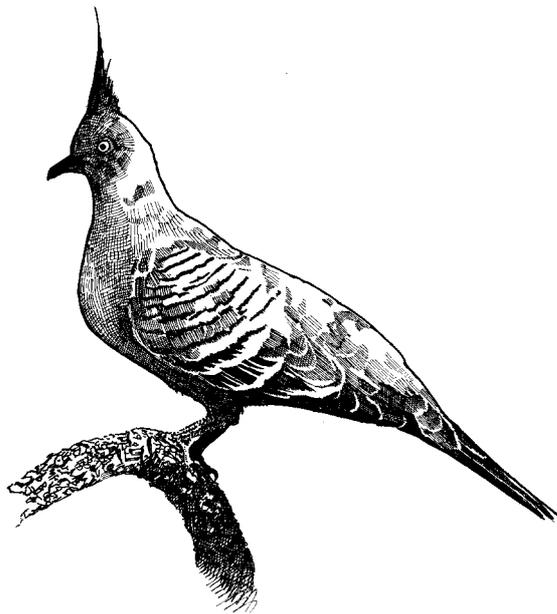
Management Actions

5.10.1 *Reserve staff will be adequately trained in first aid, emergency search and rescue techniques and be familiar with and able to competently implement the Reserve's emergency procedures.*

5.10.2 *Use of the Overnight Walkers Registration Scheme will continue to be promoted and walkers encouraged to register with the scheme for their own safety.*

5.10.3 *The quality of the water at Wigley Waterhole, the Alice Springs waterhole and the water tank used for the 'Alice-on-the-Line' program will continue to be monitored according to the Reserve's Water Monitoring program. Signs will continue to be erected in accordance with By-law guidelines if, after testing, bacteria levels, are found to be above acceptable limits.*

- 5.10.4** *Existing pathway lighting will be maintained however additional lighting may be installed to assist visitor movement at night.*
- 5.10.5** *Appropriate measures for the control of nuisance insects such as inch ants and mosquitoes will be taken when necessary.*



Crested Pigeon
Ocyphaps lophotes

6. MANAGEMENT OF THE RESERVE'S NATURAL RESOURCES

Objectives

1. To optimise biodiversity within the Park through conservation of the diversity of native plants and animal species and to ensure the continued maintenance of habitats.
2. To protect the natural environment, which includes native plants and animals, soils, geomorphological resources and water resources and, where appropriate, rehabilitate disturbed and eroded landscapes.
3. To provide special protection to threatened, rare, key and fire sensitive native plant species in the Park.
4. To implement appropriate management plans for fire, feral animals and weeds for the Reserve.
5. To minimise the impact of the commercial utilisation of Park resources on Park values.
6. To promote research, monitoring and recording of the Park's biodiversity.
7. To enable visitors to appreciate and understand the significance of the Park's natural resources through appropriate interpretive material and programs.

6.1 Landforms, Geology and Soils

Information and Issues

The Reserve is an area of low rugged terrain dominated by small rocky hills up to 40 metres high and is traversed by the Todd River. The Todd River has cut a comparatively narrow valley through the Alice Springs Granite creating a local widening of the valley. The scenery around the Old Telegraph Station is characteristic of a granite terrain with rounded boulder-strewn hills, bare flaking rock surfaces and pockets of a gritty quartz-rich soil. The southern parts of the Reserve provide a scenic backdrop to nearby urban areas of Alice Springs

The Alice Springs region has a complex and ancient geology. Structurally the Reserve is divided into two blocks by the east-west Charles River fault, a major geological feature in the northern area. South of the fault the Alice Springs Block comprises Emily Gap Schist, Teppa Hill metamorphic, Sadadeen Range Schist and Alice Springs Granite. The northern Wigley Block comprises Charles River gneiss and 'unassigned gneiss'.

Within the Alice Springs Block, foliation of the Alice Springs Granite and Sadadeen Range gneiss has dominated the scenery, giving rise to slabby continuous outcrops and a rugged terrain strewn with large rounded boulders. North of the Charles River fault, the topography is more rounded, with fewer large boulders strewn over the surface.

The Reserve contains no known mineral deposits of economic significance although a mineral lease occurs adjacent to the Reserve. Construction quality rock and sands do occur, however plentiful supplies are available elsewhere in the region. The entire area is part of

Mining Reserve 328, which is a reservation from occupation under Section 178 of the *Mining Act*.

Lithosoils - shallow stony skeletal soils - cover the majority of the Reserve on the rugged slopes of the hills that are mostly bare rock with pockets of soil. Deeper alluvial, red clayey sands with well-developed profiles cover the depositional terraces flanking the Todd River.

The Reserve contains interesting rocky outcrops interspersed by relatively flat areas of land. The retention of the Reserve's scenic qualities depends upon the appropriate siting of facilities and infrastructure to minimise their impact.

The Reserve contains several vehicle and pedestrian tracks that are subject to erosion. These tracks will require erosion control measures and monitoring to ensure erosion is minimised.

Some areas of the Reserve are highly susceptible to soil erosion due to the fragility and instability of the soil and are therefore unsuitable for any developments. Other areas will be susceptible to erosion if the proper design and siting of infrastructure developments does not occur. High visitor use near the historic buildings has caused dust problems in the past.

Erosion control measures should be designed and installed to ensure that they are effective. Removal of soil from the Reserve is not permitted except for specific management requirements or to solve safety issues. Old borrow pits have the potential for erosion if disturbed.

The Reserve's geology presents a number of opportunities for specialised interpretive and educational programs.

Management Actions

- 6.1.1** *Care will be taken in the planning, design, location and construction of all new developments within the Park to ensure that they have minimum visual impact on the natural scenic qualities of the Park. Wherever possible, natural barriers will be used to assist in the screening of facilities from public view. The draft Development Guidelines for the Alice Springs Telegraph Station Historical Reserve will be used to assist with defining areas where certain infrastructure developments would be inappropriate.*
- 6.1.2** *Every practical effort will be made by Reserve staff to prevent soil erosion. A Soil Rehabilitation Management Strategy will be produced for the Reserve that will identify sites subject to soil erosion, stating what action is to be taken and establishing priority areas for attention. Annual Action Plans will be derived from the Strategy identifying rehabilitation measures to be progressively implemented.*
- 6.1.3** *Advice from the Department of Lands, Planning and Environment will be sought to ensure the proper design and siting of any new developments and to ensure soil erosion is kept to a minimum.*
- 6.1.4** *Erosion control measures or special design features such as visitor access controls, construction of barrier fencing, diversion of run-off, construction of water control humps or diversion drains, removal of wind-rows and/or revegetation will be designed and constructed to maximise effectiveness. The Department of Lands,*

Planning and Environment will be requested to provide advice on remedial works required for erosion problem areas.

- 6.1.5** *Soil will not be removed or disturbed in the Reserve unless approved by the Commission for safety or management purposes. Disused borrow pits in the Reserve will be monitored by Reserve staff during the period of self-rehabilitation.*
- 6.1.6** *Activities that cause excessive soil disturbance such as off-road driving will not be permitted. All vehicles must remain on designated roads and tracks. Reserve vehicles may drive off-road in emergency situations, such as when fighting fires.*
- 6.1.7** *Maintenance of lawn cover and intensive landscaping measures will be employed as dust control measures in the vicinity of the historic precinct. Historic buildings will be monitored to ensure that water from sprinklers does not cause rising damp in the building fabric and does not come closer than 1m to the buildings in accordance with the Conservation Plan.*
- 6.1.8** *The draft Interpretive Plan for the Reserve may provide for the presentation of information to visitors on the geology of the Reserve in its regional setting and specific sites of geological interest.*
- 6.1.9** *Operations for the exploration and recovery of minerals may only be permitted in accordance with the requirements of relevant legislation. This legislation includes the Territory Parks & Wildlife Conservation Act and the Mining Act, in accordance with the Administrative Arrangements set in place between the Parks and Wildlife Commission and Department of Mines and Energy.*

6.2 Water Resources

Information and Issues

Surface water is limited throughout the Reserve. The Todd and Charles Rivers, the major watercourses, are ephemeral with typically dry and sandy channels. Several semi-permanent waterholes occur in the Todd River. There are no current useable bores in the Reserve however the one to the south of the picnic area was still operating in the early 1980s. Wells have been used to obtain water in the past however none of these are in use today.

Occasional heavy rains can result in localised flooding in the Reserve, as well as the flooding of Alice Springs township downstream. The office and workshop area has suffered flooding however water diversion banks and clearing of stream channels built since that flood should have alleviated the potential for further flooding. The majority of visitor facilities including those in the picnic area have been positioned above flood levels from all but the most serious floods.

The main watercourses in the Reserve have a high visual appeal and attract considerable visitor attention.

Careful siting of future developments is required to ensure that infrastructure is not flooded and water damaged. Construction of water diversion banks and clearing sand out of stream

channels may be necessary in some parts of the Reserve to protect assets. Floods have, in the past, temporarily prevented access to the Old Telegraph Station and threatened developments.

Monitoring the quality of water in some of the waterholes found throughout the Reserve by Reserve staff and Waterwatch should continue for safety reasons and as means of maintaining positive community relationships.

Management Action

- 6.2.1** *To provide attractive natural corridors for visitors walking tracks will be sited adjacent to watercourses, where possible, in any expansion of the Reserve's walking track network.*
- 6.2.2** *Only minor developments, designed and constructed to withstand occasional inundation, will be located in flood-liaible areas. The draft Development Guidelines for the Reserve should be used to identify potential flood areas where developments should not be sited.*
- 6.2.3** *Water diversion banks will be constructed to control and divert water flow away from infrastructure if required.*
- 6.2.4** *Parts of the Reserve may be closed when flooding presents a danger to visitors or makes access hazardous.*
- 6.2.5** *Monitoring of some waterholes in the Reserve in conjunction with Waterwatch will continue as a Reserve program.*

6.3 Native Vegetation

Information and Issues

The vegetation in the Reserve is both diverse and among the most species rich of any found in central Australia. A total of 272 indigenous species and 35 introduced species have been recorded in the Reserve. There are 50 plant species regarded as fire sensitive.

Biophysical mapping of the Reserve has identified eight major vegetation communities;

- Witchetty Bush on Rocky Hills of Granite, Schist or Gneiss;
- Witchetty Bush/Mulga on Gravelly Rises of Granite, Schist or Gneiss;
- Rocky or Sandy Creeklines with Tea-tree;
- Large Sandy Red Gum Creeklines;
- Cliffs and Steep Rock Expanses;
- Amphibolite Rocky or Gravelly Patches with no Spinifex;
- Ironwood/Fork-leaved Corkwood on Alluvial Flats; and,
- Saline Patches on Alluvial Flats.

(see Appendix 5, Map of Vegetation Communities)

The two vegetation communities covering the majority of the Reserve are 'Witchetty Bush on Rocky Hills of Granite, Schist or Gneiss' and 'Witchetty Bush/Mulga on Gravelly Rises of Granite, Schist or Gneiss'. A combination of these two communities also occupies a large part of the Reserve. These three community types cover nearly 90% of the Reserve. The

'Witchetty Bush on Rocky Hills of Granite, Schist or Gneiss' is the most species rich of all vegetation communities in the Reserve. A number of rare plants occur in these communities including two that are nationally rare (*Gossypium nelsonii* and *Stipa centralis*) and one that is rare in the Northern Territory (*Einadia nutans subsp. nutans*). Also, these communities are fire sensitive in that fires that are too frequent or intense can adversely affect them and lead to an increase in spinifex. They can, however, tolerate occasional fires. It is critical therefore, to monitor the build up of fuel in seasons after good rainfall.

There are two types of communities occurring in the riverine type environment. These include the 'Rocky or Sandy Creeklines with Tea-tree' in the northern parts of the Reserve and the 'Large Sandy Red Gum creeklines' occurring downstream from the historic precinct. The boundary between these two riverine type communities is just north of the historic buildings and is very noticeable. High plant species diversity is a characteristic of 'Rocky or Sandy Creeklines with Tea-tree'.

The most fire sensitive community in the Reserve is the 'Cliffs and Steep Rock Expanses' found in the southwestern corner. This community contains *Macrozamia macdonnellii* (Cycad), *Callitris glaucophylla* (White Cypress Pine), *Acacia aneura* (Mulga), *Pandorea doratoxylon* (Spearwood) and *Plumbago zeylanica* (Plumbago).

The small areas of 'Amphibolite Rocky or Gravelly Patches with no Spinifex' consist of a very distinctive rock type associated with distinctive lower storey vegetation. The small areas of 'Saline Patches on Alluvial Flats' contain a variety of Chenopods. There are small areas of 'Ironwood/Fork-leaved Corkwood on Alluvial Flats' community occurring in the northeastern part of the Reserve and contain a high diversity of plant species.

The Reserve contains one nationally vulnerable species, *Macrozamia macdonnellii* (MacDonnell Ranges Cycad). It also contains four rare species, two nationally rare (*Gossypium nelsonii* and *Stipa centralis*) and two rare in the Northern Territory (*Einadia nutans subsp. nutans* and *Ophioglossum lusitanicum*). There are a further four species that have a poorly known conservation status. These are *Actinobole uliginosum* (Flannel Cudweed), *Crotalaria dissitiflora var. dissitiflora* (Grey Rattlepod), *Lythrum paradoxum* and *Oxalis radicata*.

A total of thirty-three disjunct species have been recorded for the Reserve with four of these having a conservation code of rare. These are *Einadia nutans subsp. nutans*, *Gossypium nelsonii*, *Ophioglossum lusitanicum* (Austral Adders Tongue) and *Plumbago zeylanica* (Plumbago).

A further four species are endemic to the Northern Territory and only occur in the southern bioregions and two of these species have not been formally described. The four species are *Juncus A87739 MacDonnell Ranges*, *Macrozamia macdonnellii*, *Pluchea A87409 Ormiston* and *Stipa centralis*. Fifty fire sensitive plant species have been recorded from the Reserve.

A comprehensive understanding of the distribution of vegetation communities and the ecological factors influencing that distribution is required in order to protect the native vegetation from impacts such as fire, weeds, feral animals and intensive visitor use. Continued mapping of vegetation units on a Geographic Information System (GIS) is essential for Reserve staff to be able to make more informed decisions about management of natural resources.

Future vegetation surveys will need to be undertaken according to biophysical mapping procedures to ensure the integrity of current vegetation data is maintained and also to monitor the changes that occur to vegetation over time.

Throughout the Reserve native vegetation is of significant aesthetic and recreational value. A setting of native plants can enhance Reserve developments. Many indigenous trees and shrubs are suitable for regeneration and amenity planting.

The vegetation of the Reserve and its adaptations to arid conditions, as well as the uses of plants by past Aboriginal and European communities, is of considerable interpretive value.

Research into some of the threatened and rare plants may be required to determine any specific management requirements and should be supported by the Commission.

Vegetation within the Reserve is under constant threat from fire, introduced animals, weeds and soil erosion.

The 'Witchetty Bush on Rocky Hills of Granite, Schist or Gneiss' community has some degree of self-protection but the frequency and intensity of fire is critical in good seasons.

The fire sensitive plant species associated with the 'Cliffs and Steep Rock Expanses' community may require protection measures.

The 'Witchetty Bush/Mulga on Gravelly Rises of Granite, Schist or Gneiss' vegetation community is species rich and the presence of Buffel Grass resulting from the disturbance of the soil surface can cause a reduction of biodiversity.

The 'Saline Patches on Alluvial Flats' vegetation community occurs on soils that have high erosion potential.

The 'Ironwood/Fork-leaved Corkwood on Alluvial Flats' community is species rich. It is also subject to erosion when the soil is disturbed by off-road driving and cattle intrusions which in turn encourages the spread of weed species.

Management Actions

6.3.1 *The Reserve's soils and vegetation communities will continue to be surveyed and vegetation units mapped using biophysical mapping to enable more comprehensive definition, location and analysis of vegetation communities within the Reserve.*

6.3.2 *Changes to native vegetation over time will be monitored in association with other Reserve programs. Biophysical mapping and GIS will be the primary tools used to monitor any changes and to address environmental threats to vegetation communities.*

- 6.3.3 *Local native species will be used for amenity planting and landscaping programs in the Reserve with the exception of those associated with the staff residence.*
- 6.3.4 *Appropriate interpretive or educational material relating to native vegetation communities will be included in the Reserve's Interpretive Program.*
- 6.3.5 *Research into the Reserve's threatened and rare plants will be encouraged.*
- 6.3.6 *Disturbance to native vegetation communities across most of the Reserve will be minimised. Management measures to reduce disturbance to these communities from agents such as introduced plants and animals, intense wildfires and activities of visitors are specified elsewhere in this Plan.*
- 6.3.7 *Reserve staff will monitor the 'Witchetty Bush on Hills of Granite, Schist or Gneiss' vegetation community in good seasons to ensure the accumulation of grasses after exceptional rainfall does not result in a fire hazard developing.*
- 6.3.8 *Fire sensitive species associated with the 'Cliffs and Steep Rock Expanses' vegetation community will be afforded extra protection. This may include specific fire management and special interpretive/ educational treatment and species in these communities will be closely monitored.*
- 6.3.9 *Greater protection will be given to rare plant species through the use of special management practices including weed control and fencing.*
- 6.3.10 *Maintenance of the biodiversity of the 'Witchetty Bush/Mulga on Gravelly Rises of Granite, Schist or Gneiss' community will be undertaken by controlling Buffel grass.*
- 6.3.11 *Infrastructure development will be sited away from the erodible vegetation community 'Saline Patches on Alluvial Flats'.*
- 6.3.12 *Greater protection will be give to the vegetation community 'Ironwood/Fork-leaved Corkwood on Alluvial Flats' by fencing on the Reserve boundary in the north-eastern corner of the Reserve, controlling off-road driving and increased control of Buffel grass.*

6.4 Introduced Plants

Information and Issues

Thirty-five (35) introduced plant species have been collected from the Alice Springs Telegraph Station Historical Reserve for the Commission's herbarium, including 4 Class B noxious weeds. A further 54 introduced plant species have been recorded from the immediate surrounding area which includes part of the township of Alice Springs. These plants vary in degrees of infestation, distribution and potential threat to other areas of the Reserve. Most of the introduced plants are concentrated around the historic precinct, picnic areas and nearby developed sites. Approximately half of these are amenity plantings.

The proposed *Weed Management Act* for the Northern Territory will place more responsibility on the landholder to manage introduced weeds. The Parks and Wildlife Commission Corporate Plan (1997-2000) states that weed control plans will be prepared for all parks and reserves and actions identified and implemented. The Weed Management Strategy developed for the Reserve will require reviewing to ensure it continues to meet Corporate and regional objectives.

Introduced plants have been associated with the Telegraph Station since its establishment. More than 20 introduced species planted for amenity or utility purposes remain in the Reserve. Most are in and around the historic precinct, picnic areas and Ranger's residence. Efforts have been made to replace many of these with indigenous species. However, several introduced species in the vicinity of the historic precinct, such as the Peppercorn trees, are of historical significance or part of the historic setting and should not be removed. Others, particularly couch grass, serve valuable management purposes such as lawn cover, dust or erosion control and riverbank stabilisation.

In recent years, a successful program to remove Giant Reed (*Arundo donax*) from the Reserve has been implemented. Several Date Palms (*Phoenix dactylifera*) were also successfully removed from the picnic area at this time. An on-going joint program to prevent Mexican Poppy (*Argemone ochroleuca*) spreading upstream along the Todd River into the Reserve has been successful. This weed has also been removed from upstream catchments adjacent to the Reserve boundary. Devil's Rope Cactus (*Opuntia imbricata*) has also been recently removed from catchments adjacent to the Reserve boundary.

The main introduced plant species that are actively managed in the Reserve include:

- Giant Reed (*Arundo domax*) has been removed from around the Alice Springs waterhole and immediately downstream; on-going control continues on the patch occurring on the southern Reserve boundary.
- Buffel Grass (*Cenchrus ciliaris*) has been controlled around the Ranger's residence and immediate surrounds for aesthetic reasons as well as a means of reducing fire risk;
- Burr Medic (*Medicago polymorpha var vulgaris*) has been controlled in the picnic area and is part of an on-going program;
- Oat Grass (*Avena fatua*) has been controlled in the picnic area;
- Saffron Thistle (*Carthamus lanatus*) has been controlled in a creekline adjacent to the picnic area;
- Sow/Milk Thistle (*Sonchus oleraceus*) has been controlled along the banks of the Todd River;
- Wild Turnip (*Brassica rapa*) has been controlled in the picnic area; and,
- Ruby Dock (*Acetosa vesicarius*) has been controlled around the buildings.

Management of weeds in the Reserve should ensure that:

- a whole-of-reserve and coordinated approach is undertaken over time to ensure the on-going success of control programs;
- resources are not wasted through inadequate review of the effectiveness of current weed control techniques;
- catchments are used to ensure effective management of weed species; and'
- the vegetation map is used to prioritise control efforts.

The continued collection of basic information on weed management, such as resources used, species controlled and the area controlled, is essential to ensure the on-going success of the

weed management program. Similarly, the monitoring techniques applied will also need to have a consistent approach.

Weeds reduce the Reserve's conservation value, have a variety of adverse ecological impacts and can create a negative experience for visitors. The historic precinct, picnic area and environs have the greatest concentration of weeds and are high-risk sites for new invasions. These areas require intensive and regular weed control efforts.

Species classified as Noxious Weeds Class A or B, under the *Noxious Weeds Act*, are required by law to be eradicated by landholders.

Effective control and, where possible, the eradication of weeds requires on-going monitoring and management efforts. Control of weeds using herbicides is an effective means of management but use of appropriate chemicals in visitor areas and along watercourses should be carefully considered. Use of fire as a control measure for weeds should be carefully assessed before use, particularly in the control of Buffel grass.

Use and spread of materials such as sand and gravel can result in the introduction of weeds and the movement and use of earthmoving equipment can lead to the spread of weeds

Extension efforts with neighbouring landholders and education of visitors can have a positive effect in the control of weeds.

Many introduced amenity plant species could be replaced by appropriate indigenous species. A few introduced species serve important management or amenity roles that may warrant their retention. In particular, couch is a drought and salt tolerant lawn cover for which there is no practical alternative indigenous species.

Some introduced plants warrant retention or reintroduction in the historic precinct because of their historical associations.

Safety of visitors should be given high priority when using herbicides to control weed species in high visitation areas of the Reserve.

Management Actions

6.4.1 *The weed Management Strategy for the Reserve will be reviewed annually.*

6.4.2 *Weed Action Plans detailing the required action and summarising results of the previous years program will be produced annually. Other information such as the area controlled, time and money spent on control and specific objectives achieved will be documented to review and refine management over time.*

6.4.3 *Present programs for the control, reduction or eradication of introduced plants will continue and new programs undertaken as necessary. Priority in these programs will be given to:*

- *locations highly susceptible to invasion such as heavily used areas, roadsides, disturbed or development sites, rehabilitation or revegetation areas and the Reserve's borders with urban and semi-urban areas;*
- *sites where the habitats of key native plants and animals are under pressure;*
- *new infestations or encroachments in previously weed-free natural areas.*

Weed control measures will be as species specific and environmentally sound. The health and safety of visitors, nearby residents and Reserve staff will be major considerations when selecting and implementing suitable measures.

- 6.4.4** *Weed control programs will pay particular attention to the eradication of Class A & B noxious weeds.*
- 6.4.5** *Reserve staff will pay particular attention to ensuring past successful weed programs are continued such as control of Giant Reed (*Arundo donax*) and Burr Medic (*Medicago polymorpha* var *vulgaris*) (see Appendix 5).*
- 6.4.6** *Future control of Buffel grass will take a catchment approach and will only take place where it occurs in low density. Control programs will focus on the 'Ironwood/Fork-leaved Corkwood on Alluvial Flats', the 'Witchetty Bush/Mulga on Gravelly Rises of Granite, Schist or Gneiss' and 'Rocky or Sandy Creeks with Tea-tree' vegetation communities (see Appendix 5).*
- 6.4.7** *Periodic monitoring of the distribution and abundance of known introduced plants, plus surveillance of high-risk areas to identify invasions by new species, will be an important part of any weed control program.*
- 6.4.8** *Special precautions should be taken in the movement and use of earthmoving equipment in the Reserve and the relocation or importations of soil so as to minimise likely weed problems.*
- 6.4.9** *Educational and extension efforts, seeking the assistance of visitors and neighbouring landholders in the control of weeds in the Reserve, may be undertaken.*
- 6.4.10** *Introduced non-invasive plants may be used in the Historic, Intensive Use and Service Zones for amenity purposes. Wherever possible suitable indigenous species will progressively replace existing exotics and be given priority in landscaping works.*
- 6.4.11** *Historically significant plants in the historic precinct will be identified and retained where practicable. Appropriate introduced species may be reintroduced in an around the buildings to enhance the site's historic setting or for interpretive purposes.*
- 6.4.12** *For safety reasons it may be necessary to divert visitors with appropriate signage when using herbicides in the Intensive Use and Historic Zones.*

6.5 Native Animals

Information and Issues

The Reserve provides a sufficiently large area to support a relatively diverse and abundant native animal population. The connection of the Reserve with the Simpsons Gap block of the West MacDonnell National Park provides a corridor for the exchange of species between the two areas, greatly reducing the “island” qualities of each park and in turn providing improved security for the existing native animal populations.

Twenty-two species of native mammals have been recorded in the Reserve. The granitic rocky outcrops forming the majority of the Reserve provide shelters and caves suitable for use by larger mammal species such as Euros, Black-footed Rock wallabies and Dingoes. Echidnas are also occasionally observed in the rocky parts of the Reserve. A Black-footed Rock-wallaby monitoring program was conducted for several years at three main sites in the Reserve. This was part of a wider central Australian monitoring program to determine if total population numbers of rock wallabies are declining. Indications are that although numbers fluctuated from one survey to the next, total numbers of wallabies remained stable. This survey has now been discontinued at this Reserve.

The gneissic rocky areas provide shelter for the smaller mammal species in the form of deeper crevices and slabs of rock. These include the Fat-tailed Antechinus, Fat-tailed Dunnart and Stripe-faced Dunnart being commonly sighted. The Reserve offers a range of suitable habitats for a variety of bat species and nine species of bat have been captured. Included in these are Gould’s Wattled Bat, Chocolate Wattled Bat, Little Bat and Eastern Forest Bat.

Over 151 species of birds have been recorded from the Reserve on the Commission’s Fauna Atlas. The Reserve provides a significant area of shrubland interspersed with tall trees and grassland areas. The area is therefore favourable to shrub dwelling birds such as the wrens, honeyeaters and robins but needs to be carefully managed to maintain the availability of suitable trees and shrubland for feeding and nesting purposes. The existing waterholes provide useful but small areas of habitat for feeding water birds. The riverine habitat with tall trees containing hollows and shade are also a favoured habitat for many bird species.

The Reserve contains 59 species of reptiles. Included amongst these are 12 Gecko species, 14 Monitor species, 14 Skink species and 12 Snake species. The quartz gecko (*Diplodactylus galeatus*) was thought to be a species with a very restricted distribution and highly specialised habitat requirements of pegmatite associated quartz. This gecko has now been found in a variety of habitats.

The Reserve does not contain any unusual or uncommon reptile species. The more common geckoes to be observed in the Reserve include *Gehyra montium*, *Gehyra variegata* and *Heternotia binoei*. The Long-nosed Dragon (*Lophognathus longirostris*), *Pogona vitticeps* and the Perentie (*Varanus giganteus*) are commonly observed. The more common skinks include *Cryptoblepharus carnabyi*, *Ctenotus alacer*, *Ctenotus leonhardii* and *Ctenotus saxatilis*. The Western Brown Snake (*Pseudonaja nuchalis*), Eastern Brown Snake (*Pseudonaja textilis*) and Yellow-faced Whip Snake (*Demansia psammophis*) are commonly observed within the Reserve.

Five frog species have been recorded from the Reserve. These include Main's Frog, Spencer's Frog, Green Tree-frog, Red Tree-frog and Trilling Frog.

Fauna surveys have been conducted on an *ad hoc* basis in the past but has yielded valuable information on species present and numbers of species observed and captured. Now that a vegetation map of the Reserve has been completed, future fauna surveys will be conducted within the vegetation units identified by the vegetation survey of the Reserve (see Appendix 5). These fauna surveys need to be systematic and follow biophysical mapping methodology.

Appropriate management of the Reserve's range of habitats is essential for protection of the area's native fauna.

The more apparent and abundant species of wildlife are of considerable interpretive value.

Visitor access to key habitat areas of the Reserve may need to be regulated to ensure adequate protection of native fauna species.

Fauna within the Reserve is under threat from the presence of humans and the siting and construction of visitor infrastructure.

Native fauna in the area has for many years been under threat from the impact of introduced animals, changes in the fire regime, grazing, introduced plants and firewood collection.

Changes to the native fauna in the Reserve should be monitored over time to ensure Reserve staff obtains a complete picture of changes to fauna populations in the Reserve over time.

Management Actions

- 6.5.1** *Retention of most of the Dispersed Use Zone as natural bushland will serve to protect a range of native fauna habitats. Native animal populations will be periodically surveyed and monitored to determine their status and distribution.*
- 6.5.2** *Information on the wildlife of the Reserve will form part of the Interpretive Program.*
- 6.5.3** *Visitor access to key habitat areas may be regulated where it is demonstrated that fauna populations are adversely affected by human activity.*
- 6.5.4** *Visitor developments or other Reserve facilities will be appropriately sited and designed to minimise the impact on native fauna populations.*
- 6.5.5** *The Reserve will be managed to encourage biodiversity and provide conditions necessary for the survival of native fauna populations including any re-introduced species. Threats such as weeds will be managed to reduce impact and encourage native fauna populations. Feral animals will be managed using baits, biological control (eg use of Calicivirus), traps and/or fences. Fire management will aim to protect the biodiversity of the Reserve, thereby assisting the diversity of the native fauna. Biophysical mapping will be used to assist with management of these environmental threats.*

6.5.6 *Fauna surveys within vegetation units will be continued and become an integral part of the biophysical mapping process for the Reserve. The data collected will be utilised by managers to ensure the further protection of the Reserve's fauna.*

6.6 Introduced Animals

Information and Issues

Dogs and cats are a problem across most of the Reserve, particularly adjacent to the suburbs of Alice Springs. Cattle and horses occasionally stray into the Reserve, particularly when the northern boundary fences are down after flooding. Rabbits occur in many parts of the Reserve and manage to survive by sheltering under dense bushes and in rocky areas.

At present, visitors are permitted to bring domestic pets into the Reserve to the designated parking area only. In the past, domestic pets were a continuing problem, particularly in the picnic area and in waterholes. However, many of these problems have been dramatically reduced since the new Pets-in-Parks policy commenced. The resident Ranger is able to keep domestic pets but only with a permit issued by the Commission.

The proximity of the Reserve to the township of Alice Springs has resulted in packs of dogs from the town roaming the Reserve. Walkers/joggers and wildlife have been harassed and rubbish bins upended.

A variety of domestic animals including horses and camels have been kept in the Reserve but only under the conditions of a permit issued for such purposes. Permits have been given for the presence of introduced animals at special functions including Heritage Week and for commercial horse trail rides, on the Reserve.

Dogs and feral or marauding domestic cats prey on native animals and require effective on-going control measures.

Effective fencing is required to exclude cattle and horses from the Reserve.

Continued monitoring of rabbit numbers supported by well-timed control measures and follow-up actions are required to ensure numbers are kept low.

Some introduced animal control measures such as shooting and baiting can cause danger to visitors and wildlife.

Visitors will need to be informed of the Pets-in-Parks policy in relation to the Reserve.

Occasionally, it may be appropriate for domestic animals connected with the Telegraph Station's history to be present in the Reserve.

Management Actions

- 6.6.1** *Control measures may be employed to deal with the dog and cat problem in the Reserve.*
- 6.6.2** *All boundary fences of the Reserve will continue to be maintained to exclude cattle and horses, especially after flooding. Close liaison with adjacent landholders will continue regarding the problem of stock intruding into the Reserve and the control measures adopted.*
- 6.6.3** *Present rabbit control measures will be continued as necessary. Rabbit numbers will be closely monitored so the implementation of control measures can be timed to have the greatest effect.*
- 6.6.4** *Control measures for introduced animals will be as species specific and environmentally sound as practicable. The health and safety of visitors, nearby residents and Reserve staff will be major considerations when selecting and implementing suitable measures.*
- 6.6.5** *Information on introduced animals will be included in the Reserve's Interpretive program.*
- 6.6.6** *In accordance with the Parks and Wildlife Commission's Pets-in-Parks policy, dogs will be restricted to the parking area. Visitors may bring introduced animals, other than domestic pets, into the Reserve after obtaining a permit.*
- 6.6.7** *Pets belonging to Reserve staff are restricted to the Service Zone, and to be kept under control at all times.*
- 6.6.8** *Selected introduced animals may be permitted in the Reserve under permit and used in the historic precinct for interpretive or educational purposes.*

6.7 Fire

Information and Issues

Fire has long been a part of the central Australian environment and has played an important role in shaping the region's flora and fauna. In the past, Aboriginal people used fire as an aid to hunt and forage for wildlife, which resulted in a patchwork of burnt and unburnt vegetation communities. The advent of pastoralism resulted in a change to the use of fire as a tool in land management, with a greater emphasis on fire prevention. Fire prevention results in a build up of fuel load that can eventually lead to large and severe uncontrolled wildfires.

Fire has always been part of the region's ecology. The Reserve's dominant Acacia shrublands are fire-sensitive and are likely to be degraded by severe wildfires.

Current fire management concentrates on maintenance of fire breaks around the Reserve's boundary, hazard reduction operations in high-risk areas and protection of infrastructure.

Most of the fuel reduction burning to take place in the past has been strip burns along the banks of the Todd River to control the build up of Couch Grass (*Cynodon dactylon*).

The Reserve is situated within a Fire Protection Zone declared under the *Bushfires Act* that surrounds Alice Springs. Much of the area is also within the Northern Territory Fire Service's area of responsibility. As such the Bushfires Council and Northern Territory Fire Services need to be informed of any burning to be undertaken in the Reserve.

The use of fire as a management tool is essential for effective conservation of biodiversity in central Australia. It can also be used in habitat management and to overcome some pressing ecological problems such as the growth of woody weeds.

Resources will continue to be allocated for planning and implementing fuel reduction burning as well as fighting outbreaks of wildfire. Uncontrolled fires can cause serious deleterious effects to the ecology and biodiversity of a Reserve as well as place life and property at risk. To ensure all fire management issues are addressed over several years, a strategic approach to fire management has been adopted within a Fire Management Strategy.

A clear guideline of the areas to be burnt, in what priority and to achieve which objectives of the fire management strategy will need to be established annually.

Measures to protect the buildings in the historical precinct are key elements of any fire management strategy for the Reserve.

The Reserve's Fire Management Strategy takes into account relevant legislation and liaison with neighbours.

Electric barbeques are provided for picnicking and a requirement for open fires by visitors is not necessary in this area. Open wood fireplaces are provided at Wigley Waterhole and Wigley Gorge.

Management Actions

- 6.7.1** *Fire will continue to be used as an ecological management tool to: -*
- *provide a diversity of vegetation communities and habitats at varying stages of regeneration from fires of differing intensities;*
 - *encourage the regeneration or control of specific native plant species, vegetation communities or habitats;*
 - *to reduce fuel loads and reduce the possibility of more intense and damaging fires; and*
 - *to protect fire sensitive plants and communities, and fauna populations.*
- 6.7.2** *The Fire Management Strategy for the Reserve will be updated identifying the objectives and resources available both on and off Reserve. It will be prepared with input from relevant Commission staff and neighbours.*
- 6.7.3** *A Fire Action Plan will continue to be developed and implemented annually that identifies priority areas for fuel reduction burning, incorporates recommendations from the burning program of previous years and satisfies the objectives of the Reserve's Fire Management Strategy.*

- 6.7.4** *The Historic, Intensive Use and Service Zones will be managed as total wildfire exclusion areas. Buildings within these zones will be provided with adequate fire protection systems or equipment. Fire management in and around these zones will employ measures having minimal disruptive or visual impacts.*
- 6.7.5** *The use and management of fire in the Reserve will be in accordance with the provisions and regulations of the Bushfires Act, Northern Territory Fire Services Act and other relevant legislation.*
- 6.7.6** *Visitor's use of fire in the picnic area will be restricted to gas or electric barbecues. Visitors will be advised that no open fires will be permitted in the Intensive Use and Historic Zones except under the conditions of a permit issued by the Commission. The use of open fireplaces will be permitted at Wigley Waterhole and Wigley Gorge and visitors will continue to be advised to collect firewood prior to entering the Reserve and to only light fires in the fireplaces provided.*



Australian Ringneck
Barnardius zonarius

7. RESERVE ADMINISTRATION

Objectives

1. To ensure that the Reserve has sufficient operational resources to enable effective management of the Reserve.
2. To ensure that adequate staff levels are maintained for the effective management of the Reserve.
3. To integrate management of the park with corporate goals and objectives and the provisions and guidelines of the Northern Territory Parks Masterplan.
4. To provide responsible management and ensure the provisions of this Plan are met.
5. To provide opportunities for private enterprise to operate within the Reserve consistent with the overall need to protect the Reserve's natural and cultural values.
6. To administer the *Territory Parks and Wildlife Conservation Act*, its By-laws and regulations and undertake appropriate law enforcement. In addition, to administer Parks and Wildlife Commission policies and procedures.
7. To develop partnerships with native title owners, neighbouring lanholders and managers to achieve common objectives and resolve emerging conflicts to achieve speedy and satisfactory solutions.
8. To encourage appropriate research and monitoring projects into the Reserve's cultural and natural resources.

7.1 Staffing

Information and Issues

There are 7 Rangers located at the Reserve. A house is provided for the senior Ranger in the Reserve. The staff manage and service 11 unstaffed, remote reserves in the Central District extending from Anna's Reservoir Conservation Reserve, 160 kilometres to the north, to Chambers Pillar Historical Reserve, 160 kilometres to the south.

Additional contract staff have, until recently been employed to provide visitor services to the historic precinct. These included conducting guided tours, operating and managing the entry station and providing special services such as operating the Blacksmith's Shop. A concessionaire now operates and provides these facilities and services.

Volunteers have been used to assist with the provision of a number of services such as visitor surveys. The Reserve is very popular for school students seeking work experience in the field of park management. Students are used for a range of duties including park developments, management of resources and various maintenance tasks.

Current staff numbers for the Reserve are adequate but this may be reviewed during the life of this Plan in view of:

- changes in visitor numbers;
- changes of park management responsibility; and,
- changes in the demand for services.

Reserve staff will need to be adequately trained, have the management skills and receive sufficient career development to meet the requirements of their jobs.

Volunteers can assist Reserve management and support long and short-term park programs at minimal cost. Supervision of volunteers is essential in achieving quality results.

Management Actions

7.1.1 *The Parks and Wildlife Commission will endeavour to ensure that the Reserve has adequate staffing levels and training to conduct its operations.*

7.1.2 *Programs suitable for volunteers will be identified and could include assistance with large on-going projects such as fire and weed management and assistance with smaller projects that can achieve results in small measurable stages.*

7.1.3 *Reserve staff will closely supervise projects undertaken by volunteers to ensure quality control and that results meet set objectives.*

7.2 Management Infrastructure

Information and Issues

A Ranger's residence, workshop, storage sheds, staff facilities and office have been constructed to provide for the Reserve's management. There are two ablution blocks in the picnic area. The Reserve is fully fenced. Water, electricity and telephone services are supplied to the developed area of the Reserve from the Alice Springs town networks. Rubbish from the Reserve is taken to the Alice Springs town dump. Sewage disposal is by on-site septic tanks at the Ranger's residence and a biocycle system in the picnic area.

Construction of the two-loop drop-off system for coaches and cars occurred in 1992. This project also involved implementation of a landscape design to screen the historic precinct from other management uses such as the service area, parking areas and picnic area. A network of service roads extends throughout the Reserve.

A concessionaire operated entry station for the Reserve adjoins the picnic area and historic precinct. The entry station also includes a kiosk with outdoor dining and souvenir shop.

Effective fencing is vital for the protection of the Reserve's cultural and natural values and a continued staff presence is necessary for security.

As far as possible, the Service Zone should not detract from the overall visual amenity of the Reserve.

The network of informal vehicular tracks throughout the Reserve attracts unauthorised use.

Management Actions

- 7.2.1** *All boundary fencing and gates will be regularly checked and maintained, with assistance from neighbouring landholders where possible.*
- 7.2.2** *The existing Ranger's residence will be maintained and occupied. However due to the proximity of Alice Springs, no further staff accommodation will be constructed in the Reserve.*
- 7.2.3** *Landscaping and screening of the Service Zone will be maintained.*
- 7.2.4** *A minimum network of service roads should be maintained throughout the Reserve to provide access for management and safety purposes. Closure and rehabilitation of unwanted roads will be implemented.*

7.3 Commercial Opportunities and Operations

Information and Issues

The Reserve lends itself to certain types of commercial opportunities, of both a short and long term nature. To date these have included:

- horse trail rides;
- camel rides;
- stage coach rides;
- management of the historic precinct;
- helicopter joy flights;
- guided bushwalks;
- commercial and feature filming;
- conduct of special functions; and,
- various maintenance contracts.

Commercial operations that have some historical context have been supported and it is likely that this will continue.

The setting of the Reserve, and particularly the historical precinct, is used extensively as background for weddings and photography of wedding parties.

Certain commercial operations may be appropriate within or in relation to the Reserve.

Any concessionary operation must not have a deleterious impact on the local environment or the historical values of the Reserve.

Various commercial operators request approval for filming and still photography at the Reserve.

Many requests are received each year for public gatherings and special functions within the Reserve.

Proposals to construct any infrastructure in the Reserve require approval by the Commission before proceeding.

Management Actions

- 7.3.1** *Minor short-term commercial activities which are compatible with the Reserve's values and intended uses, including guided bushwalks, camel safaris, specialists tours, commercial filming or photography and the like, may be undertaken in the Reserve.*
- 7.3.2** *Any concessionary applications proposed for the Reserve will be subject to the Parks and Wildlife Commission's Concessionary Licences Policy and normal application procedures. Any agreement will include term contracts that set out the rights and obligations of the concessionaire. Concession operations that are shown to have a serious negative impact of the Reserve will not be permitted.*
- 7.3.3** *Applications for Commercial filming or photography in the Reserve will be subject to the Commission's Commercial Filming Policy.*
- 7.3.4** *Any infrastructure to support Commercial activities within the Reserve will comply with the draft Development Guidelines for the Reserve and be approved by the Commission.*

7.4 Legislation

Information and Issues

The Parks and Wildlife Commission operates under two main acts, the *Territory Parks and Wildlife Commission Act* and the *Territory Parks and Wildlife Conservation Act*. The Commission operations and planning are also subject to a number of other Northern Territory acts such as the *Environmental Assessment Act*, *Soil Conservation and Land Utilisation Act*, *Heritage Conservation Act* and the *Sacred Sites Protection Act*. Fire management in the Reserve is subject to the *Bushfires Act* and *Northern Territory Fire Services Act*. In addition a number of Commonwealth acts have an impact on Park planning and operations such as the *Native Title Act* and the *NT Land Rights Act*.

The likelihood of offences being committed is likely to increase with an increasing number of visitors. The most common by-law offences at the Alice Springs Telegraph Station Historical Reserve are, visitors bringing dogs into the Reserve, littering, vandalism of park furniture (tables, signs and fences) and off-road driving.

Offences against the *Territory Parks and Wildlife Conservation Act* and by-laws will always occur. Reserve regulations and by-laws should be enforced to ensure protection of the Reserve's natural and cultural resources.

The Management Actions in this Plan require periodic review to ensure that the most appropriate management for the Reserve is implemented.

Management Actions

- 7.4.1** *As appropriate, all proposed developments will be assessed under the Environmental Assessment Act, Soil Conservation and Land Utilisation Act, Heritage Conservation Act, Native Title Act and the Sacred Sites Protection Act.*
- 7.4.2** *The management actions in this Plan will be reviewed on at least an annual basis. The Plan will also be fully reviewed by the Reserve Planning Team after 5 years in operation.*

7.5 Leases and Licences

Information and Issues

Leases and licenses may need to be issued within the Reserve to allow for services and facilities to be provided by outside interests. These may be required for a specific area of land in the Reserve or over the use of buildings. It is essential that such developments or uses are compatible with the management and conservation objectives of the Reserve. It must be noted that issuing of leases and/or sub-leases has Native Title and Land Claim implications.

When assessing applications where a lease or licence needs to be issued, the character of the Reserve, impact on the environment, length of tenure and necessity of the development to the operation of the Reserve and safety of visitors should be considered.

Before a lease or licence is issued it will have conditions attached and be subject to an appropriate fee as determined by the Conservation Land Corporation.

Management Actions

- 7.5.1** *Leases and licences will only be issued for developments which are sympathetic with the character of the Reserve, do not impact deleteriously upon the Reserve's natural, cultural and aesthetic values, be of a reasonable period and be compatible with the management and conservation objectives of the Reserve as well as the Reserve's zoning scheme.*
- 7.5.2** *All leases and licences will be subject to conditions designed to ensure the continued protection of the Reserve's values. Leases and licences may be subject to fees as determined by the Conservation Land Corporation.*
- 7.5.3** *Any development or lease or licence issued for an activity in the Reserve will comply with the requirements of the Native Title Act.*

7.6 Land Tenure

Information and Issues

The Alice Springs Telegraph Station Historical Reserve, including northern extensions comprises NT Portion 1927, Lots 5774, 941, 943, 1686 and 2314, Town of Alice Springs and covers an area of 2003 ha (see Map 2).

The original Reserve (Lot 941) was placed under the care and control of the Northern Territory Reserve Board in November 1962. The Reserve (consisting of Lots 941, 943, 1686 and 2314) was declared under Section 12 of the *Territory Parks and Wildlife Conservation Act* in June 1978. The northern extensions (Lot 5774 and NT Portion 1927) were vested in the Conservation Land Corporation in 1986 (see Map 2). These two areas have not been declared under Section 12 of the Act.

On 23 May 2000 the Federal Court determined that native title rights and interests existed over the Historical Reserve, excluding areas of public works as defined in section 253 of the *Native Title Act 1993* (see Map 2).

An evaluation was completed of all parks and reserves during 1999 making recommendations for future management. One of the recommendations for the Alice Springs Telegraph Station Historical Reserve was that a full review be undertaken of existing land use and future land requirements including such constraints as buffer zones for the neighbouring seismic array (lot 5124 and NT Portion 1510).

Management Actions

7.6.1 *Requirements for the declaration of Lot 5774 and NT Portion 1927 under Section 12 of the Act will be investigated.*

7.6.2 *The Commission will undertake a review of existing land use and future land requirements for the Reserve.*

7.7 Liaison with Neighbours

Information and Issues

There are a number of neighbouring landholders or users that must be considered in the management of the Reserve. There are six small inholdings for radio communication purposes, serviced by a variety of easements (see Map 2). There are two easements through the Reserve, one for electricity and the other for telephone. A streamflow gauging station is located on the Todd River near Wigley Gorge in the northern area. The Reserve's southern boundaries abut urban and semi-urban land uses. An Aboriginal community near the Charles River abuts the Reserve on the southwestern boundary.

There are several vacant crown land lots adjacent to the Reserve. The Joint Geological and Geophysical Research Station adjoins the Reserve to the east and two blocks are declared a Protected Area under the *Territory Parks and Wildlife Conservation Act* (see Map 2). The Parks and Wildlife Commission has a Joint Management Agreement in place with the Research Station under section 74 of the Act. Bond Springs Pastoral Lease abuts the Reserve to the north and north-east.

The smooth functioning of the Reserve depends upon the maintenance of harmonious relations with the Arrernte native title owners for the area, neighbours and other outside interest groups. It also depends on parties meeting their respective land management obligations such as maintenance of boundary fencing, fire management and feral animal control.

Close liaison should be maintained with the Alice Springs Town Council, particularly over access routes into the Reserve.

Liaison with community or special interest groups that have particular interest in the Reserve is essential for continued support for the management of the Reserve.

Management Actions

7.7.1 *Efforts should be made to maintain good relations with adjacent landholders and the wider community and to ensure respective obligations are met, particularly in relation to:*

- *land use planning around the Reserve;*
- *the provision of pedestrian access points;*
- *fencing;*
- *the control of domestic and feral animals;*
- *other resource management issues such as fire, weeds and soil erosion; and,*
- *any new residential development adjacent to the Reserve.*

7.7.2 *Liaison will be maintained with those organisations responsible for the management of inholdings within the Reserve, favoured by easements over parts of the Reserve or operating extraneous facilities in or across the area. Co-operative arrangements will be pursued to meet the needs of these organisations while ensuring that any impact in the Reserve's resources and values is minimised.*

7.7.3 *Existing easements into and across the Reserve will be maintained for as long as is required. Any further requests for easements, communications corridors or the like will be subject to the approval of the Director of the Parks and Wildlife Commission.*

7.7.4 *Liaison with the Town Council will be maintained at existing levels or increased when major developments effecting both parties are planned.*

7.7.5 *The Commission should maintain close contact with community or special interest groups that have a particular interest in the Reserve. Subject to suitable administrative arrangements these groups may be encouraged to provide voluntary assistance in selected management programs and activities.*

7.7.6 *The Commission will maintain a close and cooperative working relationship with the Joint Geological and Geophysical Research Station regarding management of the adjoining Protected Area.*

7.8 Research and Monitoring

Information and Issues

Some research has been undertaken into the cultural and natural resources of the Reserve. Such studies by universities and other interested bodies have been encouraged in the past and will continue to be encouraged because they add significantly to the resource information. The Commission's Policy in respect of monitoring in Parks has a strong emphasis on continuity of programs and several databases have been established for a number of programs.

There are various monitoring programs currently operating in the Reserve. These fall into two main groups, monitoring of visitors and monitoring of natural/cultural resources. Monitoring of visitor numbers and the needs/satisfaction levels of these visitors is ongoing. Monitoring of environmental impacts from visitors and other management activities will need to be developed further during the life of this Plan, as it is essential for improved management.

The commencement of the biophysical mapping project in the Reserve will greatly enhance the ability of Reserve managers to manage the natural resources of the Reserve, more particularly the native flora and fauna. Use of the Reserve's computer based GIS will continue to assist with the management of cultural resources including historic and Aboriginal sites in the Reserve.

There is a need to continue research and monitoring programs for the Reserve so that the resultant increase in knowledge about the Reserve's cultural and natural values will lead to more effective management practices.

Monitoring of changes to the natural and cultural resources of the Reserve should become an integral part of park management.

A comprehensive and on-going system for monitoring of visitors and visitor impacts on the Reserve environment should be continued to improve park management.

Management Actions

- 7.8.1** *The PWCNT will encourage properly formulated research and monitoring that benefits the Management of the Reserve.*
- 7.8.2** *The monitoring of changes to the natural resources will continue and management of these resources revised as required.*
- 7.8.3** *Monitoring of visitor numbers and the needs/satisfaction levels of these visitors will continue as stated in the Reserve's Visitor Monitoring Strategy. A scheme to monitor the impacts on the environment by visitors will be developed further during the life of this Plan.*

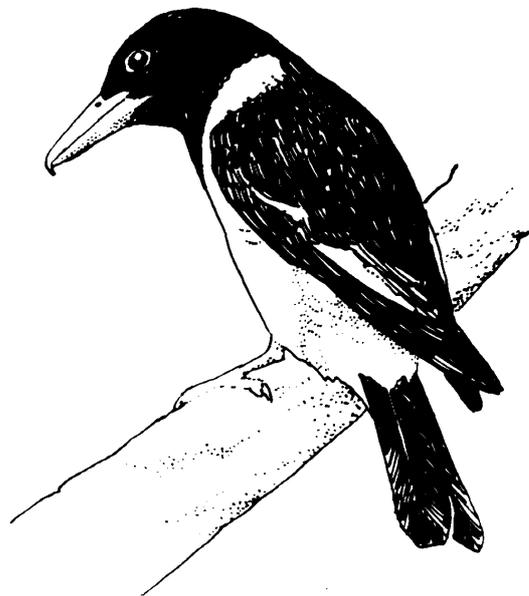
7.9 Performance Audit

This Plan of Management recognises the increasing tendency towards accountability in the planning and management of parks and thus pays due attention to performance management. Indicators which are identified as Management Actions below, are provided as a yardstick against which progress in achieving the objectives of the Plan can be gauged. Their constant monitoring will enable the Parks and Wildlife Commission to monitor any difficulties or undesirable trends and to keep management on track to achieve the key objectives of the Plan. The aim in this Plan is to work towards a measurement system which satisfies the following criteria:

results-oriented	- focuses primarily on outcomes and outputs;
selective	- concentrates on the most important indicators of performance;
useful	- provides information of value to the Commission;
accessible	- provides periodic information about results; and
reliable	- provides accurate, consistent information over time.

Management Actions

- 7.9.1** *All management actions in this Plan will be reviewed on at least an annual basis.*
- 7.9.2** *The proportion of management actions implemented will be reported.*
- 7.9.3** *This Plan will also be fully reviewed by the Reserve Planning Team after 5 years in operation.*



Pied Butcherbird
Cracticus nigrogularis

8. IMPLEMENTATION

The actions outlined in this plan are summarised and given priority order to assist in their systematic implementation. Actions are given priority as a measure of their relative importance and urgency for implementation.

Generally, actions with a designated high priority should be implemented before actions with a medium or low priority, although expediency or changing circumstances may, at times, require a revision of priorities.

Most routine park management operations such as park inspections, rubbish collection, vehicle maintenance, office and other such duties, have not been included in this action list.

Priorities are assigned as follows:

- High** Imperative in order to achieve this Plan's stated objectives.
- Medium** Very important to achieve this Plan's stated objectives but subject to the availability of resources.
- Low** Desirable to achieve this Plan's stated objectives but only if the necessary resources are available and only after higher priorities have been satisfied.
- Ongoing** Must be implemented on an ongoing basis in order to achieve the objectives of this Plan.

The listed reference pages refer to the page where the major reference for each particular section is stated.

ACTION	PAGE	PRIORITY
Management of the Reserve's Cultural Resources		
4.1.1 Manage the Reserve as part of the National Estate	15	High
4.1.2 Implement the Conservation Plan for historic area	15	High
4.1.3-7 Manage the Historic Precinct in accordance with the Conservation Plan	15	High
4.1.8 Minimise impact of modern items on the presentation of the Old Telegraph Station area.	16	Medium
4.1.9 New structures to be in harmony with the Telegraph Station buildings	16	High
4.1.10 Re-construct other buildings from Bradshaw era	16	Low
4.1.11 Monitor impacts of visitors on the complex.	16	High
4.1.12 Tree planting in the Historic Zone	16	Low
4.1.13 Develop a new Interpretive Plan for the Station.	16	Medium
4.1.14 Adapt some historic buildings for other uses	16	Medium
4.1.15 Protection for lesser historic sites	16	Medium
4.1.16 Identify and protect historic routes	16	Medium
ACTION	PAGE	PRIORITY

4.1.17	Relocate OT line through Historic Precinct	16	High
4.1.18	Encourage research of historic sites	17	Low
4.1.19	Obtain historic items to furnish rooms	17	Low
4.1.20	Develop a maintenance schedule and improved preservation for antique items.	17	High
4.1.21	Establish a set of guidelines for purchasing of historic items for display purposes	17	Medium
4.1.22,23	Establish a register for all historic resources.	17	High
4.2.1	Liaise with appropriate people and groups regarding management of historic and Aboriginal cultural resources	19	Medium
4.2.2	Manage sacred sites in accordance with AAPA	19	High
4.2.3	Obtain AAPA clearance for all new developments	19	High
4.2.4	Consult AAPA re continued public access to waterholes	19	High
4.2.5	Aboriginal information to be interpreted	19	Ongoing
4.2.6	Protect/display Aboriginal artefacts	19	High

Management for Visitor Use

5.1.1	Monitor visitor impacts on the Reserve	21	High
5.1.2	Promote the Reserve for recreational purposes	21	Ongoing
5.1.3	Encourage the use Reserve for educational projects	21	Ongoing
5.1.4	Encourage links to other heritage sites	21	High
5.2.1,2	Close Reserve nightly and display opening times	22	High
5.3.1	Maintain current vehicle access and car park	23	Ongoing
5.3.2	Construct new access road into Wigley Waterhole and Wigley Gorge.	23	Low
5.3.3	Rationalise network of vehicle tracks in extension area and close unwanted tracks.	23	Medium
5.3.4	Visitors driving off-road not permitted	23	High
5.3.5	Monitor parking requirements	23	Ongoing
5.3.6	Cater for access requirements of disabled people	23	High
5.3.7	Special access arrangements for large functions	23	Ongoing
5.4.1	Maintain/upgrade walking tracks to Historic area	23	High
5.4.2	Expand and upgrade walking/cycle track network	24	Medium
5.4.3	Organised activities permitted with a permit	24	Ongoing
5.5.1	Continue to offer a high standard picnic area and picnic facilities	26	High
5.5.2	Allow for further development of Intensive Use Area	26	Low
5.5.3	Retain basic facilities in Wigley area	27	Ongoing
5.6.1	Continue to offer site for historic appreciation	27	High
5.6.2	NTTC to continue promotion of the Reserve	27	Ongoing
5.6.3	Specialist commercial tours encouraged	27	Ongoing
5.6.4	Expand living history displays	28	Ongoing
5.7.1	Continue to offer an area for community events and functions	28	High
5.7.2	Management of groups in the Special Functions Area	28	Ongoing

ACTION	PAGE	PRIORITY
5.8.1 Implement a Visitor Monitoring Strategy.	29	High
5.8.2,3 Quantitative and qualitative visitor surveys	29	High
5.9.1,2 Develop and implement Interpretive Plan for historic area and upgrade visitor information services	31,32	Medium
5.9.3-5 Continue to offer and promote use of Reserve and historic buildings for environmental/ historic education	32	High
5.9.6 Support Waterwatch program	32	Ongoing
5.10.1 Reserve staff to be adequately trained in first aid, emergency search and rescue procedures	32	High
5.10.2 Promote and encourage Overnight Walker Registration	32	High
5.10.3 Continue to monitor water quality in waterholes and tanks	32	Ongoing
5.10.4 Maintain path lighting	33	Ongoing
5.10.5 Control of nuisance insects	33	Low

Management of the Reserve's Natural Resources

6.1.1 Design of new developments	35	Ongoing
6.1.2 Develop a Soil Rehabilitation Management Strategy and implement through annual Action Plans.	35	High
6.1.3,4 Seek advice from DLPE re soil erosion	35	Medium
6.1.5 Monitor disused borrow pits	36	Ongoing
6.1.6 Visitor activities causing erosion not permitted	36	Low
6.1.7 Maintain lawn cover to prevent dust	36	Ongoing
6.1.8 Interpretive Plan to provide information on geology	36	Low
6.1.9 Exploration and recovery of minerals	36	Low
6.2.1 Siting of walking tracks	37	Ongoing
6.2.2-4 Allow for and manage flooding	37	Medium
6.2.5 Continue to monitor waterholes	37	High
6.3.1,2 Implement regular vegetation surveys to update the biophysical mapping information.	39	Medium
6.3.3 Use native species for landscaping	40	Ongoing
6.3.4 Include information on local native species in interpretation	40	Medium
6.3.5 Encourage research into the Reserve's rare or threatened plants	40	Low
6.3.6 Minimise disturbance to plant communities	40	High
6.3.7-12 Staff to monitor and protect vegetation communities	40	High
6.4.1-4 Develop a Weed Management Strategy and implement through annual Action Plans	42,43	High
6.4.5,6 Staff to control specific introduced species	43	High
6.4.7 Monitor high risk areas	43	High
6.4.8 Precautions in moving earthmoving equipment	43	Ongoing
6.4.9 Seek assistance in control of weeds	43	Ongoing
6.4.10,11 Use of introduced plants in the Reserve	43	Low
6.4.12 Safety precautions while using herbicides	43	Ongoing
6.5.1 Periodically survey native animal distribution	45	Ongoing
6.5.2 Information on wildlife to be used in interpretation	45	Medium
6.5.3,4 Regulate visitor activities and developments	45	Ongoing
6.5.5 Manage Reserve to encourage biodiversity of species	45	High

ACTION	PAGE	PRIORITY
6.5.6 Conduct fauna surveys within vegetation units.	46	High
6.6.1-4 Continue introduced animal control programs.	47	High
6.6.5 Interpretation on introduced animals	47	Low
6.6.6,7 Pets in Parks	47	Ongoing
6.6.8 Animals for interpretive or display purposes	47	Ongoing
6.7.1 Use of fire as an ecological management tool	48	Medium
6.7.2,3 Develop Fire Management Strategy and implement through annual Action Plans.	48	High
6.7.4 Fire management in the Telegraph Station Area	49	High
6.7.5 Management of fire in accordance with relevant legislation	49	High
6.7.6 Visitor use of fire in picnic areas	49	Ongoing
 Reserve Administration		
7.1.1 Maintain adequate staffing levels	51	High
7.1.2 Training and staff development	51	High
7.1.3 Identify and supervise programs suitable for volunteers	51	Ongoing
7.2.1-4 Maintain infrastructure including buildings, fences, walking tracks and vehicle tracks.	52	High
7.3.1-4 Manage commercial operations as required.	53	High
7.4.1 Proposed developments to be assessed under relevant legislation	54	High
7.4.2 Monitor compliance with this Plan.	54	High
7.5.1-3 Issue of leases and licences in the Reserve	54	Ongoing
7.6.1 Consider declaration of extra Portions under Section 12	55	Low
7.6.2 Review land use and boundary rationalisation	55	High
7.7.1 Continue to liaise with neighbours and others associated with the Reserve.	56	High
7.7.2 Continue to liaise with managers of inholdings	56	High
7.7.3 Maintain existing easements	56	Low
7.7.4-5 Continue to liaise with Town Council and special interest groups.	56	Ongoing
7.7.6 Maintain working relationship with Joint Geological and Geophysical Research Station	56	High
7.8.1 Encourage research that benefits Reserve	57	High
7.8.2 Monitor changes to the natural and cultural resources	57	Ongoing
7.8.3 Monitor visitor needs and satisfaction levels	57	Ongoing
7.9.1 Review management actions annually	58	Ongoing
7.9.2 The proportion of management actions implemented to be reported	58	High
7.9.3 Planning team to review Plan after 5 years	58	

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Appendix 1 : MAJOR EVENTS IN THE HISTORY OF ALICE SPRINGS TELEGRAPH STATION AND THE SURROUNDING AREA.

YEAR	EVENTS
30,000 years prior to European settlement of central Australia.	<ul style="list-style-type: none"> Archaeological and other evidence place initial Aboriginal occupation of central Australia at approximately 30,000 years. More intense use of the area occurred in the last 1000 years (Smith 1996). There is some evidence, on linguistic and genetic grounds, that the Arrernte people may have migrated into central Australia from further east in the earliest phases of this intensified occupation (Birdsell, 1993). The Reserve area, with its waterhole and nearby soakages would have provided permanent water to Aboriginal people particularly in dry times.
1860-1862	<ul style="list-style-type: none"> John McDouall Stuart makes three attempts to cross Australia from south to north. In doing so Stuart and his party are the first Europeans to visit Central Australia. Stuart succeeds on his third attempt in July 1862, he recommends the route as suitable for a proposed Overland Telegraph Line.
1863	<ul style="list-style-type: none"> July : the area now known as the Northern Territory, then part of N.S.W., is annexed to S.A.
1870	<ul style="list-style-type: none"> The S.A. Government passes a Bill to construct the Overland Telegraph Line. On 10 June Charles Todd is given the job of organising the Line's construction. In July he employs John Ross to explore and survey the best route for the Line.
1871	<ul style="list-style-type: none"> Gilbert Mc Minn discovers and names Simpsons (sic) Gap on 18 February. William Whitfield Mills discovers and names the 'Alice Spring' on 11 March. The site is chosen as suitable for a repeater station. Mills oversees construction of Section 'C' of the Line, 131 miles from just north of the Waterhouse Range to 21 miles north of Native Well. Construction takes from 22 March until 29 December. August.: C. Palmer, a teamster with the Line construction parties, dies near Central Mount Stuart - confusion remains over his burial, the grave near Wigley Waterhole is marked as being Palmer's. November : Mc Minn begins construction of the first Alice Springs Telegraph Station building, the 'Barracks' which will be men's quarters and an office. Work also starts on stable and simithy. Disruption of traditional Aboriginal use of the Telegraph Station area commences, proximity of European settlement limits use of nearby ceremonial grounds for secret/sacred activities. Benjamin Clarke sends the first message south from the Telegraph Station on 30 December, but only as far as Charlotte Waters.

1872	<ul style="list-style-type: none"> • The first message from the Telegraph Station to Adelaide is transmitted on 3 January. It contains news of death of Card Kraegan ('for want of water') who had been on his way north to take charge of the Station. • The Overland Telegraph Line is finally completed at Frews Pond on 22 August. Due to a cable break-down, the first communications from London to Adelaide are not transmitted until October. • Johannes Ferdinand Mueller takes charge of the newly-opened Alice springs Telegraph Station and is officially named Stationmaster in September. The Telegraph Station and surrounding area are administered by the S.A. Department of Telegraphs. • December : Charles Todd is awarded the CMG. • The first pastoral leases in Central Australia, Undoolya and Owen Springs, are taken up during the year. They are still in existence today.
1873	<ul style="list-style-type: none"> • June : Repoling of the Line begins, poor and damaged wooden poles in the north are replaced by iron Oppenheimer Patent Poles. • The first full year of the Line's Operation, 9,000 messages are transmitted. • Telegraph officers begins official meteorological observations.
1874	<ul style="list-style-type: none"> • February : Aborigines attack the Barrow Creek Telegraph Station. Stapleton and Franks are killed, Flint (who is later posted to Alice Springs) is wounded and several of the attacking <u>Kaititja</u> people are killed. Many <u>Kaititja</u> and <u>Anmatjera</u> people are killed in subsequent reprisals. • A reserve of 25 square miles is declared around the Telegraph Station to provide land for stock purposes (cattle and sheep for rations and horses for work). Impacts of livestock diminish this area's value for hunting and foraging by Aboriginal people.
1878	<ul style="list-style-type: none"> • Telegraph Stations on the Line become post offices and officers-in-charge are now called Post and Telegraph Stationmasters.
1879	<ul style="list-style-type: none"> • April : Mounted Constable John Shirley opens a Police Station at the Telegraph Station. A police camp, consisting of tents and bough shelters, also set up in the Middle Park area. • September : Ernest Ebenezer Samuel Flint becomes Post and Telegraph Stationmaster. He later becomes a Justice of the Peace. • Central Australia's first regular postal service begins, a 6 weekly service between The Peake (now Oodnadatta) and the Telegraph Station.
1881	<ul style="list-style-type: none"> • Mounted Constable William Willshire replaces Shirley.
1882	<ul style="list-style-type: none"> • Mounted Constable Erwin Wurmbrand joins Willshire to help quell increasing levels of cattle spearing by Aborigines. Both reputedly used severe measures in dealing with Aborigines.

1883	<ul style="list-style-type: none"> The longest recorded dry period in Central Australia – 214 days without rain.
1884	<ul style="list-style-type: none"> Charles Todd reports that by this year, the Telegraph Station at Alice Springs consisted of men’s quarters, office, stationmaster’s quarters (which probably became the present kitchen), mens hut, transport store, harness room, blacksmith and cartshed; all of stone. There was also a stockyard, well, 3,400 sheep and 31 horses.
1886	<ul style="list-style-type: none"> April : The police move from the Middle Park camp at the Telegraph Station Heavitree Gap. Tempe Downs pastoral lease is taken up. Government surveyor, David Lindsay, discovers rubies at Glen Annie, 140 kilometres east of the Telegraph Station, causing a ‘rush’ - the rubies are later found to be garnets. Flint marries, his wife was probably the first European woman to live at the Telegraph Station.
1887	<ul style="list-style-type: none"> April-June : Alluvial gold is discovered at Paddy’s Rockhole, Arltunga, 110 kilometres east of the Telegraph Station. Mounted Constable Willshire is appointed the region’s first Mining Warden, to help deal with the ‘rush’. July : Flint dies, aged 33, of rheumatic fever, and is the first person to be buried at the Telegraph Station cemetery. September : Joseph Skinner is appointed Stationmaster and in November he becomes a Justice of the Peace. November : first records of reef gold at Arltunga. Construction of the present Stationmaster’s residence begins.
1888	<ul style="list-style-type: none"> David Lindsay surveys and lays out the town of Stuart, south of the Telegraph Station. The township site is gazetted on 28 November. H.Y.L. Brown, Government Geologist, visits Central Australia. Mica mining begins at Harts Range, 150 kilometres north-east of Stuart.
1889	<ul style="list-style-type: none"> Mrs Skinner gives birth to a daughter on 12 June, she was probably the first European child to live at the Telegraph Station. Duplex telegraph equipment is installed on the line to cope with increased traffic.
1890	<ul style="list-style-type: none"> A serious fire damages the ‘Barracks’. Mounted Constable Wurmbrand arrested and charged with murder of two Aboriginal men, he is acquitted in Adelaide but does not return to Central Australia.
1891	<ul style="list-style-type: none"> A mail service to Arltunga begins - once every 5 weeks. Stuart has grown to include a hotel, store, butcher, brewery and saddler’s shop.

1892	<ul style="list-style-type: none"> • Frances James Gillen is appointed Stationmaster. He is also made a Special Magistrate and is the first Sub-Protector of Aborigines appointed in Central Australia. Gillen's posting as the start of his interest and study of the Aboriginal people of Central Australia. The Gillen's have two sons while at the Telegraph Station.
1893	<ul style="list-style-type: none"> • June : Charles Todd is knighted, K C M G.
1894	<ul style="list-style-type: none"> • The Horn Scientific Expedition visits Central Australia. It includes Baldwin Spencer who later collaborates in anthropological research with Gillen.
1897	<ul style="list-style-type: none"> • Reef gold is discovered at White Range, Arltunga.
1898	<ul style="list-style-type: none"> • February : Gillen opens a Government Battery and Cyanide Works for gold production at Arltunga.
1899	<ul style="list-style-type: none"> • April : Thomas Andrew Bradshaw is appointed Stationmaster. He is also a Magistrate and Sub-Protector of Aborigines. • Repoling of the entire Overland Telegraph Line with iron poles is completed. The Line is straightened to enter Stuart through Heavitree Gap. Another wire, of copper, is added over the whole length of the Line, enabling faster transmissions and a much greater volume of traffic. The 'Wheatstone System', using perforated paper tapes, comes into use. The iron wire is used to hand-transmit morse messages for local traffic. Expansion of the station provides work for some <u>Arrernte</u> people. • A fortnightly mail service from the Telegraph Station to Arltunga begins. • A mounted Constable is posted to the Arltunga goldfields.
1901	<ul style="list-style-type: none"> • January : Ernest Bradshaw, brother of the Stationmaster dies and is buried in the Station cemetery. • April : Spencer and Gillen pass through Central Australia on a 'Second Expedition amongst the Aboriginal Tribes'. • A Special telephone hook-up from the Telegraph Station to Darwin, using extra battery cells takes place. • Doctor Gilbert White, Bishop of Carpenteria, visits Central Australia.
1902	<ul style="list-style-type: none"> • The discovery of gold at Winnecke Depot, near Arltunga leads to another 'rush'.

1903	<ul style="list-style-type: none"> • There is considerable goldmining activity at Arltunga and Winnecke Depot. The population peaks at about 400 but soon reduces substantially. • A Post Office and Police Camp open at Winnecke Depot. • The Post Office at the Telegraph Station becomes a Money Order office. • There is a typhoid epidemic at Winnecke Depot and in Stuart. Four people die. Dr Shanahan, the region's first doctor, is posted to the area for a few months.
1904	<ul style="list-style-type: none"> • February : a public gaol and prison is gazetted at Heavitree Gap
1905	<ul style="list-style-type: none"> • Additional married quarters are built south of the Telegraph Station complex – Ernest Allchurch's bungalow.
1907	<ul style="list-style-type: none"> • June : Bradshaw supervises erection of the first telephone line from the Telegraph Station to Stuart, to a store owned by F.B. Wallis. • Construction of a stone gaol commences in Stuart. • The first motor car arrives in Central Australia as part of an unsuccessful attempt to cross the continent south to north by Harry Dutton and Murray Aunger (they repeat the effort successfully the next year).
1908	<ul style="list-style-type: none"> • July : John McKay becomes Stationmaster. He is also a Magistrate and Sub-protector of Aborigines.
1909	<ul style="list-style-type: none"> • Official opening of the new Police Station and stone gaol in Stuart. • Payable quantities of gold are discovered at Tanami, 650 kilometres north-west of Stuart.
1911	<ul style="list-style-type: none"> • January : the Commonwealth Government assumes control of the Northern Territory. The Telegraph Station is administered by the Postmaster-General's Department.
1914	<ul style="list-style-type: none"> • The first school in Stuart is started by Mrs Ida Stanley who is seconded to the town to care for part-Aboriginal children. Early classes were held in part of the stone gaol. The school serves both European and Aboriginal children and is known as 'The Bungalow'.
1915	<ul style="list-style-type: none"> • A mail service, at 6 weekly intervals, begins from the Telegraph Station north to Powell Creek.
1916	<ul style="list-style-type: none"> • Frederick Alfred Price is appointed Stationmaster. There has been a gradual shift from telegraphic to postal work. The position becomes known as Telegraphist-in charge or Senior Telegraphist. Price was also a Justice of the Peace and serves on the Bench in Stuart. He worked eight years without a break (due to staff shortages during WWI) and died soon after returning to Adelaide.

1922	<ul style="list-style-type: none"> The first aeroplane lands in central Australia, piloted by Lieutenant Briggs.
1924	<ul style="list-style-type: none"> Ernest Allchurch is appointed Senior Telegraphist.
1925	<ul style="list-style-type: none"> Sam Irvine begins first motorised mail service from the Telegraph Station. Voice communication is made available on selected routes using a phonophone on the existing telegraph lines.
1926	<ul style="list-style-type: none"> Adelaide House, the first hospital in Stuart is opened by the Australian Inland Mission.
1927	<ul style="list-style-type: none"> Central Australia becomes a separate Administration from Northern Australia.
1928	<ul style="list-style-type: none"> Coniston Aboriginal massacre occurs north-west of Stuart, over 25 Aboriginal people killed in reprisal for the murder of a European dingo-trapper. The Mail Service to Arltunga ends and the Post Office there is closed.
1929	<ul style="list-style-type: none"> August : the central Australian railway line reaches Stuart with a resulting increase in the local population. The Hartley Street School opens in Stuart.
1932	<ul style="list-style-type: none"> January : the Alice Springs Telegraph Station is closed when a new Post Office is opened in Stuart, D.P. Adamson is the first Postmaster. December : an Aboriginal Reserve is created around the Telegraph Station under the administration of the Department of Native Affairs. The Telegraph Station becomes a home for part-Aboriginal children from all over the N.T. south of Pine Creek. The home was established under the policies of assimilation and forced removal of Aboriginal children from their parents for a European education. It is known as 'The Bungalow' after Ida Standley's earlier school. The first superintendent and matron are Mr and Mrs G.K. Freeman (six further couples are in charge of 'The Bungalow' over the next 30 years). Reports on living conditions in the home vary. The central Australian Administration ends and the region reverts to the Northern Territory Administration under the Commonwealth Government.
1933	<ul style="list-style-type: none"> August : the town's name change from Stuart to Alice Springs is officially gazetted. Alterations and additions to the Telegraph Station buildings include a large dormitory, enclosed verandahs, water tanks and ablution blocks. Additional windows are added to the 'battery room' which is used as a school. There is a gold rush to the Granites area, 550 kilometres north-west of Alice Springs.

1936	<ul style="list-style-type: none"> The Aboriginal Reserve at the Telegraph Station is enlarged to 1079 acres.
1937	<ul style="list-style-type: none"> Electricity is reticulated throughout Alice Springs. A passenger and airmail service is inaugurated on the Darwin-Alice Springs-Adelaide route by Guinea Airways.
1938	<ul style="list-style-type: none"> Alice Springs is the only repeater station operating between Darwin and Port Augusta. 2-way teleprinter system is now in use.
1941	<ul style="list-style-type: none"> A second copper line is added to the existing Overland Telegraph poles and the Line is moved to alongside the railway line in places.
1942	<ul style="list-style-type: none"> Aboriginal children from 'The Bungalow' are evacuated to Arltunga or settlement in South Australia during the war years. The Telegraph Station is taken over by the Army as a Native Labour Camp until 1945. Army installations in the Middle Park area reportedly include a powder magazine, detention centre and pig farm.
1943	<ul style="list-style-type: none"> Completion of the sealing of the Stuart Highway from Alice Springs to Darwin (work began in 1940).
1945	<ul style="list-style-type: none"> The Native Affairs Branch assumes occupancy of the Telegraph Station as an Aboriginal Settlement.
1946	<ul style="list-style-type: none"> Public telephone channels become available from Adelaide to Darwin.
1953	<ul style="list-style-type: none"> Totemic <u>Arrente</u> ceremonies held north of the Telegraph Station, some of the rituals are filmed by Strehlow.
1954	<ul style="list-style-type: none"> The first Aboriginal pre-school opens at the Telegraph Station.
1956	<ul style="list-style-type: none"> The first secondary school opens in Alice Springs at Anzac Oval. Further totemic <u>Arrente</u> ceremonies held north of the Telegraph Station, possibly the last major ceremonies of their kind in the area.
1962	<ul style="list-style-type: none"> October : The Alice Springs Telegraph Station is declared a reserve.
1963	<ul style="list-style-type: none"> February : Aboriginal occupants of 'The Bungalow' are moved to an improved site at Amoonguna, just south-east of Alice Springs. June : and placed under the care and control of the Northern Territory Reserves Board. Alan Hayes is appointed the first Ranger/caretaker.

1966	<ul style="list-style-type: none"> • Restoration work begins on the Telegraph Station buildings. Over the next few years John Taylor works to restore the complex to the 1895-1905 period. • Extensive lawn and tree planting programs. • Estimated 24,000 visitors to the Reserve.
1967	<ul style="list-style-type: none"> • Playground and fauna compound established. • Restoration of Telegraph Office complete. • First visitor information material produced.
1968	<ul style="list-style-type: none"> • Reserve entrance fees introduced (they were later abandoned). • Fauna compounds extended. • Restoration of Post Master's Residence completed.
1969	<ul style="list-style-type: none"> • Restoration of 'Barracks' interior completed. • Joint Defence Space Research Facility established south-west of Alice Springs.
1970	<ul style="list-style-type: none"> • Minor addition to the Reserve's western boundary. • Restoration of 'Barracks' exterior completed. • Reserve connected to town water supply.
1971	<ul style="list-style-type: none"> • March : re-enactment of discovery of 'The Alice Spring' by Mills performed at Alice Springs Telegraph Station. • Alice Springs Municipal Council formed.
1972	<ul style="list-style-type: none"> • Television arrives in Alice Springs. • Department of Northern Territory established.
1974	<ul style="list-style-type: none"> • STD telephone service arrives in Northern Territory.
1976	<ul style="list-style-type: none"> • <i>Aboriginal Land Rights Act (NT)</i> passed. • Restoration of Blacksmiths Shop complete, equipped with full contents of a smithy.
1977	<ul style="list-style-type: none"> • January : Territory Parks and Wildlife Commission replaces Northern Territory Reserves Board. • New hospital opens in Alice Springs. • Reserve's estimated annual visitation passes 100,000.
1978	<ul style="list-style-type: none"> • 'Bradshaw' and 'Flint' walking tracks constructed. • July : Northern Territory granted self-government.
1979	<ul style="list-style-type: none"> • October : plans announced to construct a recreation lake on the Todd River north of the Telegraph Station, initial feasibility studies undertaken. • Reconstruction of horse, cattle and goat yards around Telegraph Station.

1980	<ul style="list-style-type: none"> • February-May : Aboriginal people associated with the area object to recreation lake proposal – on grounds of flooding of <u>Werlatyetherre</u> and other significant sites. • March : Territory Parks and Wildlife Commission becomes Conservation Commission of the Northern Territory. • September : two sacred sites registered on/around Reserve. • October : Telegraph Station buildings and surrounding Reserve listed on Register of National Estate. • Rapid resource surveys carried out over proposed extension and recreation areas. • Post and Telegraph Office equipped with loaned equipment, staffed by Postmistress and opened to the public. • Standard gauge railway reaches Alice Springs. • Ranger-guided walks introduced (later phased out).
1981	<ul style="list-style-type: none"> • Alice Springs Telegraph Station used for re-enactment of camel mail delivery (phasing-out of ‘old’ Ghan railway). • Existing car park opened. • Electric barbeques installed to replace gas units. • ‘Alice Springs Telegraph Station Historical Photographs’ booklet published.
1983	<ul style="list-style-type: none"> • March : major floods through the Reserve and Alice Springs. • April : renewed recreation lake proposals, continuing opposition from Aboriginal people with camp set up at <u>Werlatyetherre</u> sacred site. • September : <u>Werlatyetherre</u> sacred site listed on the Register of the National Estate. • ‘Alice Springs Telegraph Station Teachers Handbook’ produced.
1984	<ul style="list-style-type: none"> • Board of Inquiry into Todd River recreation lake proposal and other potential sites established. • June : Board of Inquiry’s report opposed to Todd River recreation lake proposal on grounds of unknown sedimentation problems and conflicts with sacred sites. • Joint Geological and Geophysical Research Station, adjoining Reserve to east, declared a Protected Area. • Restoration of buggy shed completed, ICOMOS guidelines applied for first time. • New southern toilet block constructed
1986	<ul style="list-style-type: none"> • April : minor extension (125.7 ha) to north of Reserve. • December : major extension (1,433 ha) to north of Reserve.
1987	<ul style="list-style-type: none"> • Australian Bi-Centennial Authority funding received for ‘Alice on the Line’ school children’s environmental-living project. • Sealing of south road greatly increases number of visitors, Reserve’s annual visitation estimated at over 200,000.

1988	<ul style="list-style-type: none"> • March : major floods through Reserve and Alice springs. Government announces feasibility investigations into construction of flood mitigation works on Todd River at Telegraph Station site. • September : Draft Plan of Management released for public comment. • October : ‘Alice on the Line’ Project launched.
1989	<ul style="list-style-type: none"> • April : First Heritage Week open night held. • July : Larapinta Trail section 1 opened.
1990	<ul style="list-style-type: none"> • Injunction on dam proposal applied.
1991	<ul style="list-style-type: none"> • June : Fauna compound removed.
1992	<ul style="list-style-type: none"> • January : Entry fees introduced to historic precinct.
1996	<ul style="list-style-type: none"> • POM amended to expand Future Use zone for flood mitigation works behind Greenleaves residential development. • Historical items in buildings partially catalogued
1997	<ul style="list-style-type: none"> • Interactive link with other Telegraph Stations installed.
1998	<ul style="list-style-type: none"> • December : Commercialisation of precinct commences. • Discovering Alice shelter and display installed. • Visitor surveys conducted in July and October
1999	<ul style="list-style-type: none"> • July : Park Entry Station constructed by concessionaire.
1999	<ul style="list-style-type: none"> • September : Native title claims for the Alice Springs urban area heard in the Federal Court.
2000	<ul style="list-style-type: none"> • May : The Federal Court determined that native title rights and interests existed over the Historical Reserve excluding areas of public works as defined in section 253 of the <i>Native Title Act 1993</i>.

Appendix 2 – CHECKLIST OF FLORA WITH SIGNIFICANCE FOR CONSERVATION

Botanical Name	Family	Common Name(s)	Conservation Code
<u>Plants Recorded from the Reserve</u>			
<i>Acacia salicina</i>	MIMOSACEAE	[Cooba, Native Willow, Broughton Willow, Willow Wattle]	D:a/o;
<i>Actinobole uliginosum</i>	ASTERACEAE	[Flannel Cudweed]	3kC-
<i>Alectryon oleifolius subsp. elongatus</i> { <i>Heterodendrum oleifolium sensu Fl. CA</i> }	SAPINDACEAE	[Bullockbush, Cattle Bush, Rosewood, Boonaree]	D:o/a;
<i>Amyema gibberula var. gibberula</i>	LORANTHACEAE	[-]	D:a/o;
<i>Amyema preissii</i>	LORANTHACEAE	[Wire-leaf Mistletoe]	D:o/a;
<i>Aristida biglandulosa</i> { <i>Lithospermum arvense</i> }	POACEAE	[Cane Grass Three-awn, Two-gland Three-awn]	D:a/o
<i>Capparis spinosa var. nummularia</i>	CAPPARACEAE	[Caper Bush, Wild Passionfruit, Nipan]	D:o/a;
<i>Chenopodium desertorum subsp. anidiophyllum</i>	CHENOPODIACEAE	[Desert Goosefoot, Frosted Goosefoot]	D:o/a;
<i>Convolvulus remotus</i>	CONVOLVULACEAE	[-]	D:o/a
<i>Crotalaria dissitiflora var. dissitiflora</i>	FABACEAE	[Grey Rattlepod]	3k; D:o,k
<i>Cynoglossum australe</i>	BORAGINACEAE	[Australian Hounds Tongue]	D:o
<i>Cyperus vaginatus</i>	CYPERACEAE	[Put-a-puta, Stiff-leaf Sedge]	D:a/o
<i>Diplachne parviflora</i>	POACEAE	[Small-flowered Beetle Grass]	D:o
<i>Dodonaea viscosa subsp. mucronata</i> { <i>D. viscosa var. spathulata</i> }	SAPINDACEAE	[Hill Sticky Hopbush]	D:a/o;
<i>Einadia nutans subsp. nutans</i> { <i>Rhagodia nutans</i> }	CHENOPODIACEAE	[-]	3rC-; D:o,r;
<i>Eragrostis lacunaria</i>	POACEAE	[Purple Lovegrass]	D:o/a
<i>Euchiton sphaericus</i> { <i>Gnaphalium sphaericum</i> }	ASTERACEAE	[Common Cudweed]	D:o/a
<i>Glossocardia bidens</i> { <i>Glossoygne tenuifolia</i> }	ASTERACEAE	[Native Cobblers Pegs]	D:o/a
<i>Gossypium nelsonii</i>	MALVACEAE	[-]	3RC-; D:a,r;
<i>Heliotropium flintii</i>	BORAGINACEAE	[-]	D:a
<i>Indigofera leucotricha</i>	FABACEAE	[Silver Indigo, White Indigo]	D:a/o
<i>Juncus A87739 MacDonnell Ranges</i>	JUNCACEAE	[-]	endmc.to.sthnreg.
<i>Lythrum paradoxum</i>	LYTHRACEAE	[-]	3k; D:o,k
<i>Macrozamia macdonnellii</i>	ZAMIACEAE	[MacDonnell Ranges Cycad]	3VCA; endmc. to sthnreg;

<i>Melaleuca bracteata</i>	MYRTACEAE	[Black Teatree]	D:o
<i>Ophioglossum lusitanicum</i>	OPHIOGLOSSACEAE	[Austral Adders Tongue]	3rC-(cryptic); D:o/a,r
<i>Oxalis perennans</i>	OXALIDACEAE	[-]	D:o/a
<i>Oxalis radicata</i>	OXALIDACEAE	[-]	3kC-; D:o,k
<i>Parietaria debilis</i>	URTICACEAE	[Shade Pellitory, Native Pellitory]	D:o/a
<i>Persicaria lapathifolia</i>	POLYGONACEAE	[Pale Knotweed]	D:o
<i>Pluchea A87409 Ormiston</i>	ASTERACEAE	[-]	endmc.to.sthnreg.
<i>Plumbago zeylanica</i>	PLUMBAGINACEAE	[Plumbago]	D:o,r;
<i>Sclerolaena costata</i>	CHENOPODIACEAE	[-]	D:a
{ <i>S. obconica</i> }			
<i>Senecio cunninghamii</i> var. <i>serratus</i>	ASTERACEAE	[Bushy Groundsel]	D:a;
{ <i>S. sp. aff. cunninghamii sensu Fl. CA</i> }			
<i>Stemodia viscosa</i>	SCROPHULARIACEAE	[Sticky Blue-rod, Pinty-pinty]	D:o
<i>Stipa centralis</i>	POACEAE	[-]	3RC-; endmc. to sthnreg.
<i>Trema tomentosa</i> var. <i>viridis</i>	ULMACEAE	[Peach-leaved Poison Bush, Poison Peach, Native Peach]	D:o;
{ <i>T. aspera</i> }			
<i>Vittadinia sulcata</i>	ASTERACEAE	[-]	D:o/a

Additional Plants Recorded from within 3' of the Reserve

<i>Amyema hilliana</i>	LORANTHACEAE	[Ironwood Mistletoe]	D:a;
<i>Gossypium sturtianum</i> var. <i>sturtianum</i>	MALVACEAE	[Sturts Desert Rose]	D:a/o
<i>Myoporum acuminatum</i>	MYOPORACEAE	[Boobialla, Desert Boobialla, Western Boobialla]	D:o/a;
<i>Potamogeton crispus</i>	POTAMOGETONACEAE	[Curly Pondweed]	3rC-
<i>Sida A90797 Rainbow Valley</i>	MALVACEAE	[-]	3kC-; D:a,k
<i>Threlkeldia inchoata</i>	CHENOPODIACEAE	[Tall Bonefruit]	3k

Conservation Codes

Distribution Category

- '1' taxa that are known only from the type collection; if additional collections have been made from the type location the taxon receives a distribution category of 2.
- '2' taxa with a maximum geographic range within Australia of less than 100 km.
- '3' taxa with a geographic range within Australia exceeding 100 km

Conservation Status

- 'X' or 'x' [presumed extinct] - these taxa have either not been found in recent years despite thorough searching, or have not been found for at least 50 years and were known only from now intensively settled areas. At present there are no NT taxa in this category.
- 'E' or 'e' [endangered] these taxa are in serious risk of disappearing from the wild state within one or two decades if present land use and other casual factors continue to operate. At present there are no southern region taxa in this category.
- 'V' or 'v' [vulnerable] these taxa are not presently endangered but are at risk of disappearing from the wild over a longer period (20-50 years) through continued depletion or changes in land use.
- 'R' or 'r' [rare] these taxa are rare but not currently considered to be threatened (ie neither endangered or vulnerable). Taxa may be represented by a relatively large population in a very restricted area or by smaller populations spread over a wider range.
- 'K' or 'k' [poorly known] these taxa may potentially belong to any of the above categories but there is presently insufficient information to confidently assign codes. Many taxa have been classified as poorly known in the NT ('k') because of the low number of known populations (10 or fewer) and a dearth of detailed field knowledge about the size, health or threats to these populations. Many of these taxa are probably not uncommon but until further field work is undertaken we have adopted a conservative approach and highlighted the taxa requiring further work.

Reservation Code

- 'C' [conserved] this symbol is used to indicate the known occurrence of a taxon within a conservation reserve either nationally (ie with status of V, R or K) or within a NT reserve (ie status of v, r or k).

Disjunct Codes

Disjunct codes are also given for some taxa, indicated by the prefix 'D:'. The coding system was developed for the plant checklist for the southern bioregions (Albrecht et. al., 1997) and accommodates some of the concepts used to classify plants as relictual.

The coding system recognises four types of disjunction, based on continental distribution and occurrences inside and outside of the arid zone. The codes are 'a', 'o', 'a/o' and 'o/a' and were assigned to taxa with two or more geographically separated populations, at least one of which is more than 200 km from any other. These are visually illustrated in the plant checklist for the southern bioregions and are described below.

'a' - [Arid]. Type 'a' taxa are confined to the arid zone with one or more disjunct populations in the southern NT.

'o' - [Mesic]. Type 'o' taxa have distributions that are almost exclusively outside the arid zone with one or more isolated populations in the southern NT. This group includes taxa that are commonly known as relicts. The arid zone populations of many of these taxa occur in sheltered mesic habitats where moisture is permanent or

persists for longer periods than in the surrounding landscape. These populations are generally thought to be remnants of a former more extensive distribution. Disjunct populations of type 'o' taxa are more likely to be of conservation significance than those of the other types.

'a/o' - [Predominantly Arid]. Type 'a/o' taxa have distributions that are predominantly in the arid zone with one or more disjunct populations in the southern NT. They also have limited occurrence outside the arid zone. Populations outside the arid zone may be extensions of those in the arid zone or they may be disjunct from them.

'o/a' - [Predominantly Non-arid]. Type 'o/a' taxa have distributions that are predominantly outside the arid zone, with a proportionally small part of their range extending into the arid zone and with disjunct populations in the southern NT.

Another category has been created for park checklists, to highlight the occurrence of a population that mostly occurs on the park or reserve which is significantly disjunct from other southern region populations of the same taxon:

'p' – [Disjunct Park Population]. Type 'p' taxa have a population within a park that is at least 100 km from the nearest other population. The population in the park may be restricted to the park or may extend slightly beyond it. The 'p' category may also be used where the area under study is not a park. Most taxa with 'p' type disjunctions are also disjunct at the continental scale (a, o , a/o or o/a).

The checklist for the southern bioregions (Albrecht et. al., 1997) also lists a disjunct conservation code for some disjunct taxa and this code is included here. It identifies those disjunct taxa for which some or all of the southern region populations are of conservation significance. These taxa may or may not have national or NT conservation codes. The categories are the same as those used for national and NT conservation status:

e = endangered in the southern region	r = rare in the southern region
v = vulnerable in the southern region	k = poorly known in the southern region

An example is D:o,r . In some cases, the disjunct conservation code applies to some but not all southern region populations. This occurs when some populations are large and secure.

Adequacy of Reservation Code

Taxa that are known from a conservation reserve are assigned to one of three categories for the adequacy of reservation, defined as :

'a' indicates that the taxon is considered adequately reserved, with a total population of 1000 plants or more known to occur within conservation reserves.

'I' indicates that the taxon is considered inadequately reserved, with a total population of less than 1000 plants known to occur within conservation reserves.

'-' - indicates that the taxon has been recorded from a reserve but that the population size within the reserve is unknown.

Appendix 3 - CHECKLIST OF FAUNA WITH SIGNIFICANCE FOR CONSERVATION

<u>Family</u>	<u>Scientific Name</u>	<u>Common Name</u>	<u>Conservation Status</u>
BIRDS:			
Accipitridae	Lophoictinia isura	Square-tailed Kite	IUCN – 1; NT – T
Cacatuidae	Cacatua leadbeateri	Major Mitchell’s Cockatoo	IUCN – 3
MAMMALS:			
Macropodidae	Petrogale lateralis	Black-footed Rock-wallaby	ANZECC – Vul; IUCN – 6; ESP – Vul; NT - TV
REPTILES:			
Scincidae	Egernia slateri	Slater’s Egernia	NT - FI
Boidae	Aspidites ramsayi	Woma Python	IUCN - 1

ANZECC – A conservation classification of species according to the Australian and New Zealand Environment and Conservation Council (ANZECC). Classifications are Presumed extinct (Pext), Endangered (End) and Vulnerable (Vul).

IUCN – a conservation classification for species listed with the International Union for the Conservation of Nature Red List of Threatened Animals. Numbers refer to :

- | | |
|--|------------------------------------|
| 1. Threatened Species which includes Critically Endangered, Endangered and Vulnerable. | 4. Extinct and Extinct in the wild |
| 2. Lower Risk – Conservation Dependent | 5. Data Deficient |
| 3. Lower Risk – Near Threatened and of Least Concern | 6. Sub-species and populations |

ESP – conservation classification under Endangered Species Protection Act of 1992. Classifications are Presumed extinct (Prext), Endangered (End) and Vulnerable (Vul).

NT – a conservation classification for species within the Northern Territory. These classifications are :

A	Protected under International Agreement	P	Extinct or Presumed extinct
C	Critical in Rodent Action Plan	R	Rare
Cb	Restricted Colonial breeding or roosting species	RI	Rare or Insufficiently known
E	Endangered	S	Specially protected
Ec	Criticall Endangered	T	Possible Threatened
I	Insufficiently known (suspected rare, vulnerable or endangered)	V	Vulnerable

Appendix 4 - CHECKLIST OF INTRODUCED PLANTS

Botanical Name	Family	Common Name(s)	Conservation Code
<u>Plants Recorded from the Reserve</u>			
* <i>Acetosa vesicaria</i> { <i>Rumex vesicarius</i> }	POLYGONACEAE	[Rosy Dock, Wild Hops, Ruby Dock]	
* <i>Amaranthus viridis</i>	AMARANTHACEAE	[Green Amaranth]	
* <i>Argemone ochroleuca subsp. ochroleuca</i> { <i>A. mexicana</i> }	PAPAVERACEAE	[Mexican Poppy]	
* <i>Bidens bipinnata</i>	ASTERACEAE	[Cobblers Pegs, Beggars Ticks]	
* <i>Brassica tournefortii</i>	BRASSICACEAE	[Wild Turnip, Turnip Weed, Mediterranean Turnip]	
* <i>Bromus catharticus</i>	POACEAE	[Prairie Grass]	
* <i>Bromus diandrus</i>	POACEAE	[Brome Grass, Great Brome]	
* <i>Buglossoides arvensis</i>	BORAGINACEAE	[-]	
* <i>Cenchrus ciliaris</i> {includes <i>C. pennisetiformis</i> }	POACEAE	[Buffel Grass]	
* <i>Cenchrus setigerus</i>	POACEAE	[Birdwood Grass]	
* <i>Citrullus lanatus</i>	CUCURBITACEAE	[Paddy Melon, Pie Melon, Wild Melon, Camel Melon]	
* <i>Citrullus lanatus</i>	CUCURBITACEAE	[Paddy Melon, Pie Melon, Wild Melon, Camel Melon]	
* <i>Conyza bonariensis</i>	ASTERACEAE	[Tall Fleabane, Flax-leaf Fleabane]	
* <i>Critesion murinum subsp. glaucum</i> { <i>Hordeum glaucum</i> }	POACEAE	[Northern Barley Grass]	
* <i>Cucumis myriocarpus</i>	CUCURBITACEAE	[Prickly Paddy Melon, Gooseberry Cucumber]	
* <i>Cynodon dactylon</i>	POACEAE	[Couch Grass]	
* <i>Dalbergia sissoo</i>	FABACEAE	[Himalayan Raintree]	
* <i>Eragrostis barrelieri</i>	POACEAE	[Pitted Lovegrass]	
* <i>Eragrostis tenuifolia</i>	POACEAE	[Elastic Grass]	
?* <i>Erodium aureum</i>	GERANIACEAE	[-]	
* <i>Gypsophila tubulosa</i> { <i>G. australis</i> }	CARYOPHYLLACEAE	[Chalkwort]	
* <i>Helianthus annuus</i>	ASTERACEAE	[Sunflower]	
* <i>Lactuca serriola</i>	ASTERACEAE	[Prickly Lettuce]	
* <i>Melinis repens</i> { <i>Rhynchelytrum repens</i> }	POACEAE	[Natal Red Top, Red Natal Grass]	
* <i>Opuntia lindheimeri</i>	CACTACEAE	[-]	

* <i>Osteospermum muricatum</i>	ASTERACEAE	[-]
* <i>Sida acuta</i>	MALVACEAE	[Spiny-head Sida]
* <i>Sisymbrium erysimoides</i>	BRASSICACEAE	[Smooth Mustard]
* <i>Sisymbrium irio</i>	BRASSICACEAE	[London Rocket]
* <i>Sisymbrium orientale</i>	BRASSICACEAE	[Indian Hedge Mustard]
<i>Solanum ellipticum</i>	SOLANACEAE	[Native Tomato, Potato Bush, Potato Weed]
* <i>Solanum nigrum</i>	SOLANACEAE	[Black Nightshade, Black-berry Nightshade]
<i>Solanum quadriloculatum</i>	SOLANACEAE	[Wild Tomato, Tomato Bush]
* <i>Sonchus oleraceus</i>	ASTERACEAE	[Milk Thistle, Common Sow-thistle]
* <i>Taraxacum officinale</i>	ASTERACEAE	[Dandelion]
?* <i>Tribulus terrestris</i>	ZYGOPHYLLACEAE	[Cat-head, Caltrop, Bindieye]

Additional Plants Recorded from within 3' of the Reserve

* <i>Agrostis viridis</i>	POACEAE	[Water Bent]
* <i>Arundo donax var. donax</i>	POACEAE	[Giant Reed, False Bamboo]
* <i>Avena fatua</i>	POACEAE	[Wild Oat]
* <i>Calotropis procera</i>	ASCLEPIADACEAE	[Rubber Bush, Rubber Tree, Calotrope, Kings Crown]
* <i>Capsella bursa-pastoris</i>	BRASSICACEAE	[Shepherds Purse, Shepherds Heart, Pickpocket]
* <i>Carthamus lanatus</i>	ASTERACEAE	[Saffron Thistle, Woolly Star-thistle]
* <i>Cenchrus longispinus</i>	POACEAE	[Gentle Annie, Burr-grass]
* <i>Cerastium glomeratum</i>	CARYOPHYLLACEAE	[Mouse-ear Chickweed]
* <i>Chenopodium murale</i>	CHENOPODIACEAE	[Nettle-leaf Goosefoot, Green Fat Hen, Sowbane]
* <i>Crotalaria retusa</i>	FABACEAE	[Wedge-leaf Rattlepod, Kimberley Horse Poison]
* <i>Digitaria ciliaris</i>	POACEAE	[Summer Grass]
* <i>Echinochloa crus-galli</i>	POACEAE	[-]
* <i>Echium plantagineum</i>	BORAGINACEAE	[Patersons Curse, Salvation Jane]
* <i>Emex australis</i>	POLYGONACEAE	[Spiny Emex, Three-cornered Jack, Double Gee, Prickly Jack]
* <i>Eragrostis cilianensis</i>	POACEAE	[Stinkgrass]
* <i>Erodium botrys</i>	GERANIACEAE	[Long Storks-bill, Big Herons-bill]
* <i>Erodium cicutarium</i>	GERANIACEAE	[Common Herons-bill]
* <i>Euphorbia hirta</i>	EUPHORBIACEAE	[Asthma Plant, Asthma Herb, Snake Weed]
* <i>Fumaria parviflora var. parviflora</i>	FUMARIACEAE	[Fumitory]
* <i>Galenia pubescens var. pubescens</i>	AIZOACEAE	[Galenia]
* <i>Glaucium corniculatum</i>	PAPAVERACEAE	[Bristly Horned Poppy]
* <i>Gomphrena celosioides</i>	AMARANTHACEAE	[Gomphrena Weed]

Botanical Name	Family	Common Name(s)	Conservation Code
<i>Lepidium africanum</i> { <i>L. hyssopifolium sensu Fl. CA</i> }	BRASSICACEAE	[Common Peppergrass, Rubble Peppergrass]	
* <i>Lolium perenne</i>	POACEAE	[Perennial Ryegrass]	
* <i>Lolium rigidum</i>	POACEAE	[Wimmera Ryegrass]	
* <i>Lycium ferocissimum</i>	SOLANACEAE	[African Boxthorn]	
* <i>Medicago minima</i>	FABACEAE	[-]	
* <i>Medicago polymorpha var. brevispina</i>	FABACEAE	[Spineless Burr Medic]	
* <i>Medicago polymorpha var. vulgaris</i>	FABACEAE	[Burr Medic]	
* <i>Medicago sativa</i>	FABACEAE	[Lucerne]	
* <i>Melia azedarach</i>	MELIACEAE	[White Cedar]	
* <i>Melilotus indicus</i>	FABACEAE	[Sweet Melilot]	
* <i>Merremia dissecta</i>	CONVOLVULACEAE	[White Convolvulus Creeper]	
* <i>Opuntia elatior</i>	CACTACEAE	[-]	
* <i>Opuntia imbricata</i>	CACTACEAE	[Devils Rope Cactus, Chain-link Cactus]	
* <i>Oxalis corniculata</i>	OXALIDACEAE	[Creeping Oxalis, Creeping Wood-sorrel]	
* <i>Oxalis debilis var. corymbosa</i> { <i>O. corymbosa</i> }	OXALIDACEAE	[Pink Shamrock]	
* <i>Oxalis pes-caprae</i>	OXALIDACEAE	[Soursob]	
<i>Ozothamnus kempei</i> { <i>Helichrysum kempei</i> }	ASTERACEAE	[-]	
* <i>Panicum antidotale</i>	POACEAE	[Giant Panic]	
* <i>Papaver hybridum</i>	PAPAVERACEAE	[Rough Poppy]	
* <i>Pisum sativum</i>	FABACEAE	[Field Pea]	
* <i>Poa annua</i>	POACEAE	[Winter Grass]	
* <i>Polycarpon tetraphyllum</i>	CARYOPHYLLACEAE	[Four-leaf Allseed]	
* <i>Polypogon monspeliensis</i>	POACEAE	[Annual Beardgrass]	
* <i>Rapistrum rugosum</i>	BRASSICACEAE	[Giant Mustard]	
* <i>Rumex crispus</i>	POLYGONACEAE	[Curled Dock]	
* <i>Schinus molle var. areira</i>	ANACARDIACEAE	[Pepper Tree]	
* <i>Setaria verticillata</i>	POACEAE	[Whorled Pigeon Grass]	
* <i>Solanum elaeagnifolium</i>	SOLANACEAE	[Silver-leaf Nightshade]	
* <i>Sporobolus indicus var. capensis</i>	POACEAE	[Rat-tail Grass]	
* <i>Stellaria media</i>	CARYOPHYLLACEAE	[Chickweed]	
* <i>Vaccaria hispanica</i> { <i>V. pyramidata</i> }	CARYOPHYLLACEAE	[Bladder Soapwort]	
* <i>Verbena tenuisecta</i>	VERBENACEAE	[-]	

- | | | |
|---|----------|--------------------|
| * <i>Vicia monantha subsp. monantha</i> | FABACEAE | [Spurred Vetch] |
| * <i>Vicia monantha subsp. triflora</i> | FABACEAE | [Spurred Vetch] |
| * <i>Vulpia myuros</i> | POACEAE | [Rats-tail Fescue] |

Appendix 5- MAP OF VEGETATION COMMUNITIES

An A3 colour version of this vegetation communities map is available from the Parks and Wildlife Commission's Biodiversity Assessment Unit, Alice Springs.