

INTRODUCTION

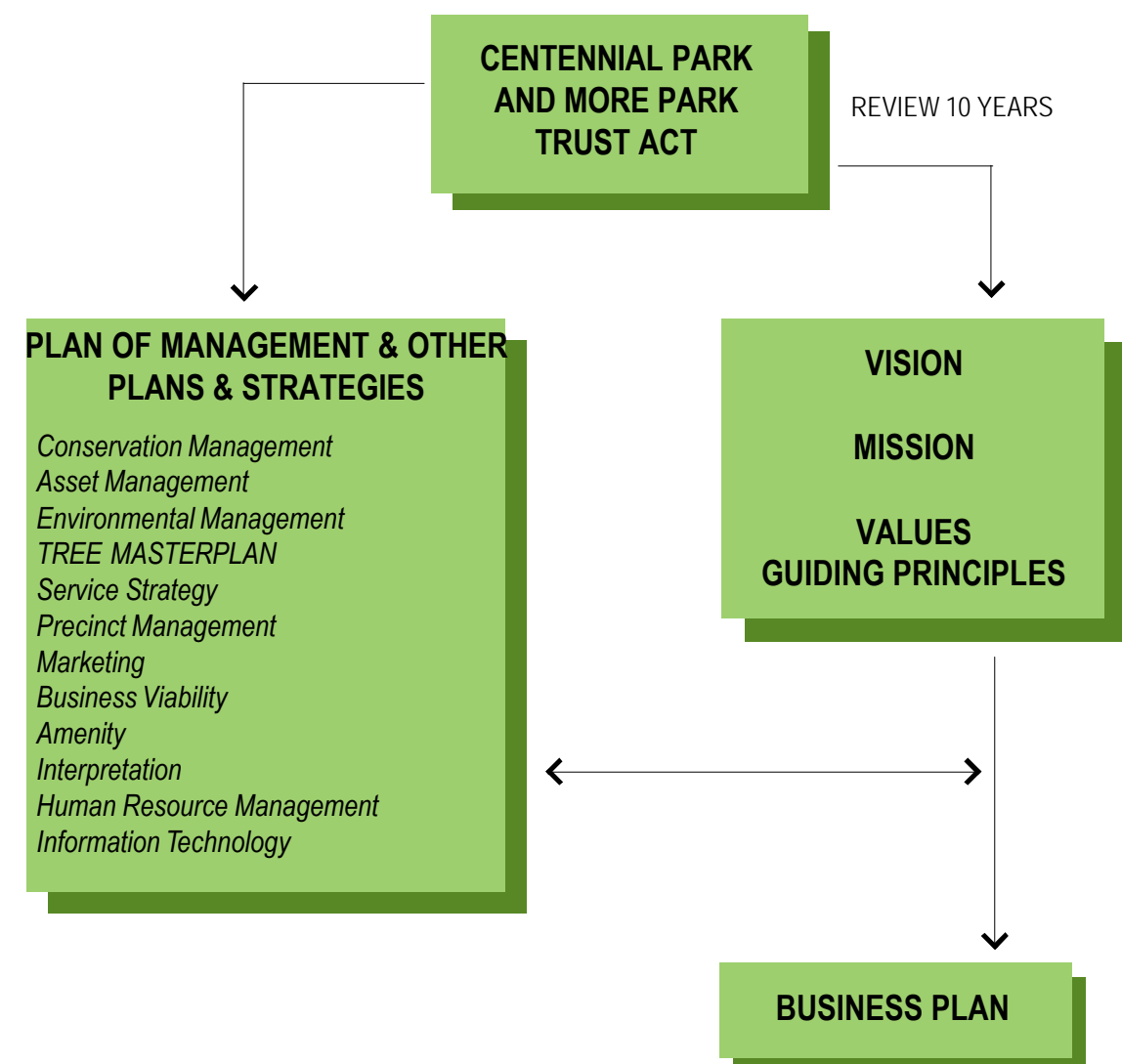
1.1 PROJECT BACKGROUND

The Centennial Park and Moore Park Trust prepared a Plan of Management for the Centennial Parklands in 1997. The main purpose of this study was to consolidate all strategic planning issues; amongst these, the living heritage of the Parklands was identified as one of five key issues. Of particular concern was the condition and management of the existing tree population. This Tree Masterplan was commissioned to address this concern, and to provide specific responses to the following issues:

- (i) the lack of a comprehensive landscape design philosophy;
- (ii) the need to develop public recognition and acceptance of tree removal and replacement practices;
- (iii) the need to monitor tree conditions;
- (iv) the need to refine horticultural practices for application to the Parklands;
- (v) the need to develop interpretation programmes for the cultural and more natural landscapes in the Parklands.
- (vi) the need to protect and enhance habitat for native fauna

1.2 PLANNING FRAMEWORK

The value of the Parklands to the community is central to its planning framework. The Parklands have high historical, cultural, scientific, educational, cultural, recreational and financial value for the community. These values, together with the Trust's guiding principles and the Plan of Management, which is a statutory document, underpin all planning, policy development and decision-making of the Trust. The following flow chart shows where the Tree Masterplan fits within the planning framework.



I.3 SCOPE OF WORKS

This Tree Masterplan focuses on the trees of the Centennial Parklands; related design issues such as parking, circulation, and recreation are addressed in other studies. Where appropriate and available, the Tree Masterplan incorporates information from these studies. A fauna study has not been done to date, and thus the issues and recommendations contain few references to fauna. It should be noted however that fauna checks are carried out prior to the removal of any tree.

This study involved the review, collection and analysis of relevant heritage, design, environmental and aboriginal data and the preparation of a Masterplan. The plan delineates precincts and sub-precincts, defines the existing landscape character of each, and proposes strategies for conserving, or where necessary, modifying the landscape character of each sub-precinct. These strategies focus on the following objectives:

- (i) To conserve the trees in the Centennial Parklands in accordance with their heritage, design and cultural values;
- (ii) To manage and maintain trees and habitat in a way that perpetuates the distinctive and essential landscape character of the Centennial Parklands into the next millennium;
- (iii) To enhance the recreational amenity and aesthetic appeal of Centennial Park, Moore Park and Queens Park intended by their founders;
- (iv) To establish a framework to accommodate acceptable amounts of change in planting patterns, that is, change which respects the existing landscape character.

The number of trees in the Parklands, over 9000, prohibited the consideration of individual trees; instead planting element types, or distinct groups of trees such as avenues and groves were identified and evaluated. The definition of planting types in this report represents an expansion of the landscape types used in the *Centennial Parklands Tree Survey*.

The results of this study are presented in two volumes. Volume I, the Tree Masterplan Overview, summarizes the broad results of the study, and contains the landscape character and action plan diagrams. Volume II contains the background data of heritage, physical characteristics and tree data assessments; the studies that underpin the masterplan and its recommendations.

The preparation of the Tree Masterplan also involved liaising and presenting findings to a Steering Committee, presentation to the Centennial Park and Moore Park Trust and to the community, with responses considered and amendments made where appropriate.



I.4 STUDY PROCESS

The preparation of this Tree Masterplan involved three phases:

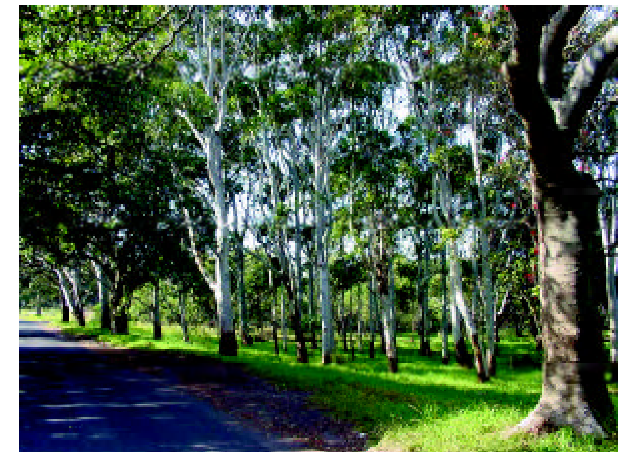
- 1 Identification of character types created by trees, such as avenues & forests, and the mapping of the Parkland in terms of these character types.
- 2 Undertaking detailed studies, to ensure a comprehensive and complete understanding of the issues that affect the existing tree population and replanting strategies into the future.

Detailed studies were as follows:

- (i) **Heritage:** a heritage study provided an historical and cultural assessment of the tree population, including details of significant plantings; a timeline evolution of planting periods and identifying a list of successful and/or failed tree species;
- (ii) **Design:** a design study identified significant vistas, spaces, and plantings. It also analyzed the major planting types and patterns of tree species in order to generate definitions of the Parklands' landscape character;
- (iii) **Environment:** a review and analysis of environmental conditions, particularly soils, indicated the way in which the natural forces and human impacts have dictated species selection and the health and performance of existing established plantings;
- (iv) **Age and Condition of Trees:** a Safe Useful Life Expectancy (SULE) analysis of the tree population revealed the precarious physical conditions of many of the Parkland trees and the increasing importance of implementing a tree replacement programme;
- (v) **Arboriculture:** a brief overview of arboriculture practices highlighted the opportunity and need to improve existing (or implement new) techniques in order to achieve the recommended landscape character.
- (vi) **Fauna Habitat:** a review and assessment of the existing habitat values of the Parklands in order to integrate native fauna priorities with tree management practices.

Assessment of data to develop descriptions of the existing landscape character for each precinct and sub-precinct of the Centennial Parklands. Issues such as poor performance, overmature or inappropriate plantings were identified for each sub-precinct. Together, the character descriptions and issues formed the basis for developing recommendations to manage in landscape character for each precinct and sub-precinct. Other factors such as hazardous trees, disease, habitat and restrictive soil conditions set parameters for these recommendations. The studies also resulted in a list of trees considered appropriate for continued use or introduction to the Parklands. This list is an appendix to Volume I.





THE APPROACH

2.1 STATEMENT OF CULTURAL SIGNIFICANCE

“...enormous aesthetic value, not only because of their contribution to the greening of Sydney's eastern suburbs but also because they demonstrate an evolution of landscape styles including the English landscape tradition, the picturesque, the gardenesque and the post World War II native plant movement.”

The Centennial Parklands, comprising Moore Park, Centennial Park and Queens Park are of outstanding heritage significance. They have historical, aesthetic, social, natural and research values at all levels, from national to local. The Parklands represent a generally intact and thus rare example of 19th Century designed landscape. The Parklands have many features common to urban parklands developed in the late 19th and early 20th centuries.

From their origins in the Second Sydney Common, the Parklands demonstrate the growing appreciation in Victorian times of the need for public open space for recreation, education and enjoyment. The dedication of Centennial Park in 1888 was important in marking a significant milestone in the development of the Australian colonies – the centenary of European settlement in New South Wales. Centennial Park is also representative of a trend in the western world in the second half of the nineteenth century towards the establishment of large landscaped urban parks where people of all classes could get away from the cramped conditions of the city.

The Centennial Parklands are important for their associations with several institutions and individuals influential in the horticultural development of Sydney and New South Wales. Of particular note are the links with Charles Moore, Director of Sydney's Botanic Gardens and his successor in that role, J H Maiden. Not to be forgotten are the Park supervisors, James Jones and William Forsyth whose contributions to the development of the Parklands have been less widely recognised. Collectively, these men had an enormous influence on amenity horticulture, particularly the tree species that have become characteristic of many of Sydney's urban parks and streets.

The Centennial Parklands have great aesthetic value, not only because of their contribution to the greening of Sydney's eastern suburbs but also because they demonstrate an evolution of landscape styles including the English landscape tradition, the picturesque, the gardenesque and the post World War II native plant movement. The Grand Drive in Centennial Park is a rare example of a great tree-lined avenue laid out in the gardenesque style. The use of indigenous tree species such as *Ficus macrophylla*, *Ficus rubiginosa*, *Melaleuca quinquenervia* and several araucaria species is significant as an indicator of experimentation with native plants and a growing appreciation of their horticultural potential. Maiden's introduction of *Phoenix canariensis* as an avenue planting in Moore Park and Centennial Park led to the widespread use of this species in parks and streets throughout New South Wales, imparting a tropical look to many precincts and towns.

The tree plantings in the Parklands have varying degrees of significance. Of outstanding value are those trees planted in the formative years of the Parklands' development, from the 1890s to the 1920s. Many of these

are now excellent mature specimen trees and are important components of the Parklands' avenues and spaces. In addition to the palm avenues mentioned above, there are several historic planting features which lend a distinct character to Centennial Parklands. These include the avenues of figs, araucaria and oaks which line Grand Drive and most of the entry roads to Centennial Park, the belt and grove plantings of paperbarks which define many watercourses and wetland areas, and the evergreen woodland rim on the perimeter of the Parklands.

The considerable social significance of the Centennial Parklands to past and present generations may be measured by the very high levels of visitation and recreational use of the area. The esteem in which the Parklands is held by the contemporary community may be gauged by their listing on the NSW Heritage Register in 1999 and by the level of community concern expressed when threats to the Parklands arise.

Centennial Parklands have enormous technical and research potential since they reflect in their plant selection and landscape design more than 130 years of experimentation with native and exotic plant species. The archival record of the Parklands in areas such as arboriculture, landscape design, plant pathology, outdoor recreation and heritage conservation is a valuable research tool for present and future park managers throughout Australia.

While the Parklands is clearly a highly modified landscape, there remains an obligation to protect and enhance natural values wherever possible. In a region of Sydney, where natural heritage in terms of fauna habitat is now rare, the Parklands offer a significant opportunity to provide habitat and raise community awareness of biodiversity as it relates to the urban parkland experience.

The heritage significance of the Centennial Parklands and its tree population is being enhanced through a program of innovative park management practices and the continuing use of the Parklands as a place for the commemoration and celebration of important events in Sydney and New South Wales.



2.2 PHILOSOPHY

The vision for the Centennial Parklands, articulated in the *Draft Plan of Management* (1997), perpetuates its tradition as the peoples' park:

Our vision is that the Centennial Parklands will be a place of beauty, peace, excitement and culture in the hearts of the people of Sydney; a place where a diversity of activities can be safely pursued by people of all ages and abilities; a place where national, civic and individual milestones are marked and treasured in landscapes, events, monuments, memories.

Trees are one of the Parklands most important assets; with the steep slopes of the sandstone ridges and the expanses of grass and water, trees have defined the character, structure and role of the Parklands throughout its history. Trees frame the leisure grounds and vistas, form broad avenues and picturesque settings, delineate fields and fairways; — in short, enhance the recreational, aesthetic and cultural value of the Parklands. More importantly, tree plantings reflect changes in these values over time. Essential threads in the fabric of the place, trees are a link with the past as well as a legacy for the future.

Trees are also the most fragile asset in the Parklands, variations in the character and patterns of the tree population readily mark the effects of pollution, disease, drought, and erosion as well as the caprices of age. Sustaining the distinct character of the Centennial Parklands and the vitality of its tree population depends on the continuous adaptation of management and maintenance practices to these restrictive growing conditions in the Parklands and the ephemeral nature of the trees themselves.

The broad avenues of trees so characteristic of the Centennial Parklands also connect the Parklands to the city and local area. By understanding the character and importance of this green link, planting more trees and conserving existing ones to strengthen this link, it will be possible to reverse decades of encroachment and re-confirm the civic role of the Parklands.

This Tree Masterplan for the Centennial Parklands sets out principles and strategies for the conservation of the existing tree population, a framework for the sensitive integration of new tree plantings into the historic fabric of the Parklands, and management and maintenance approaches to strengthen and sustain the tree population — and ultimately the Parklands themselves — into the next millennium.

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2.3 PRINCIPLES AND STRATEGIES

The following four principles and strategies set out, in general terms, guidelines for ensuring the perpetuation and longevity of the Centennial Parklands tree population and the enhancement of fauna habitat.

PRINCIPLE 1

Protect the essential character of the parklands’ trees through the judicious removal and replacement of failed or aesthetically inappropriate trees.

Strategies

- (i) Implement replacement techniques, such as the block replacement of avenues and groves to maintain or renew the integrity of the planting element.
- (ii) Prioritise tree replacement in accordance with the significance of the tree planting to its immediate area as well as to the Parklands as a whole.
- (iii) Replace, in kind and where necessary, trees of high heritage, design and cultural value.
- (iv) Replace trees that perform poorly or present hazards with more appropriate trees.
- (v) Remove trees that obscure views and vistas, compromise the health of adjacent trees or detract from the desired landscape character.
- (vi) Avoid specimen infill plantings in groves and avenues plantings, unless ideal conditions are available. Block replacement is preferred.

PRINCIPLE 2

Sustain the health of existing trees through improved management and maintenance techniques.

Strategies

- (i) Adopt a flexible and proactive approach to tree maintenance with the aim of anticipating and reducing hazardous potential.
- (ii) Use tree species suited to site-specific conditions.
- (iii) Adapt tree planting to major shifts in recreational activities of the Parklands’ visitors and changes in growing conditions.
- (iv) Monitor and modify planting techniques to improve tree performance.
- (v) Continue and expand the regular monitoring of trees throughout the Parklands.

PRINCIPLE 3

Strengthen and reinforce the central parklands’ landscape character with new planting initiatives.

Strategies

- (i) Develop a clear definition of the Parklands character, identify essential areas, elements and qualities.
- (ii) Use new plantings to strengthen connections, clarify spatial structure and character, mark entrances and junctions and reflect changes in use and/or conditions.
- (iii) New plantings must complement the existing landscape character, have acceptable maintenance requirements, and be ecologically appropriate for the specific site conditions.
- (iv) Changes in planting patterns must continue the tradition of distinguishing the diverse use and character of spaces throughout the Parklands.
- (v) New planting must be phased and structured to allow for short term, and possibly undesirable impacts in order to gain long term benefits.
- (vi) Encourage the evolution of the Parklands’ palette of plants through continued experimentation with tree species.

PRINCIPLE 4

Optimise, reinstate and create habitats for native fauna, through tree selection, improved knowledge, and management techniques.

Strategies

- (i) Provide suitable habitat for a diversity of native fauna species that are endemic to the Parklands area or its immediate region.
- (ii) Manage the trees of the Parklands to benefit all native fauna species, without unwarranted emphasis on any one species at the expense of others.
- (iii) Provide the maximum fauna habitat within the limitations of the cultural setting, recognising the range of other values and objectives required of the Parklands.
- (iv) Consider the future reinstatement of native fauna species to the Parklands only when there is appropriate habitat for such species.
- (v) Review the conditions that caused fauna species to be lost from the Parklands and to remove the causes of these losses wherever possible.
- (vi) Eradicate or control non-native fauna in the Parklands, since such introduced species compete for habitat elements with native fauna species.