

National Capital Authority Tree Management Policy Issues Paper August 2019







### Contents

Tree Management Policy 2019/20 Scope	3
NCA's Urban Tree Legacy	5
NCA Trees	7
Key Issues	9
Resilience and vulnerability of the NCA's urban forest	9
Design, development and land use planning	13
Community participation and knowledge	16
Maintenance, Data, Monitoring and Evaluation	19
Heritage and Culture	22
Governance and Management Arrangements	25
Potential Priorities for NCA Tree Management:	28
References	29





This document has been prepared in partnership with Urban Forest Consulting and the Republic of Everyone.





### Tree Management Policy 2019/20 Scope

There are over 18,000 trees on National Capital Authority (NCA) managed land in Canberra. The NCA actively cares for these trees to ensure they are safe, managed in accordance with the relevant heritage management plan and wherever possible, grown to the maximum age possible. This reflects the NCA's responsibility under the *Environment Protection and Biodiversity Conservation Act (1999)* (EPBC Act).

Trees in the Central National Area of Canberra are fundamental in strengthening the geometry and intent of the Griffins' formally adopted plan for Canberra. Trees provide visual strength to the Land Axis from Parliament House to Anzac Parade; they help form and define the main avenues of the National Triangle; as well as establishing other formal spaces.

Trees are also essential to the creation of the attractive parklands, streetscapes, and other spaces. They both complement and soften the built setting of central Canberra. Canberra has been renowned as a Garden City and the 'bush capital', which demonstrates the important status trees have in the Canberra landscape.

This issues paper has been prepared to inform the development of a comprehensive Tree Management Policy for the NCA. The development of a Tree Management Policy for the NCA managed trees is a generational occurrence. It will enable a response to the current and future challenges that will impact on the trees, and also guide the trajectory towards resilient and thriving landscapes. Aligning with the NCA's Corporate Plan, the tree policy will meet one of the key objectives, which is to achieve excellence in the care and custodianship of the National Capital's special and symbolic places.

The policy will:

- Cover all of the 18,000 trees under NCA ownership and management and will provide a clear future direction for urban tree management excellence on NCA land (see Image 1)
- Acknowledge the role that NCA trees play within the broader Canberra urban forest and NCA's role in providing leadership in the management of Canberra's future urban forest
- Articulate a vision, set of overarching principles, targets or key performance indicators and key tree management policy positions for the management of NCA trees.





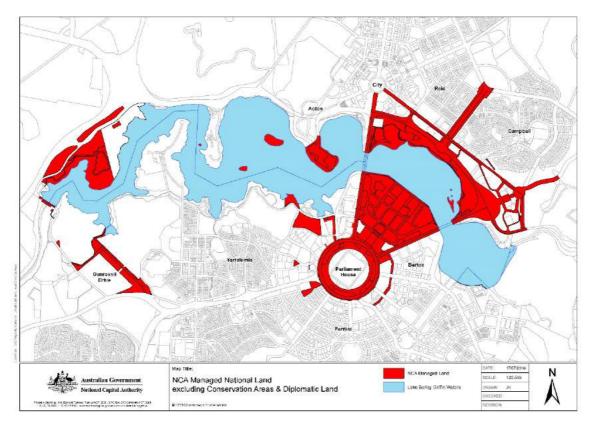


Image 1: Extent of land managed by the National Capital Authority to which the policy will apply





### NCA's Urban Tree Legacy

Canberra is a modern capital city with an international reputation for its unique landscape. It is also a planned city, on a selected site for the Nation's Capital defined by the inherent beauty of the broader landscape, the plains, wooded hills and distant mountains.

The urban tree legacy of central Canberra has been guided by the vision of the Griffins' design and the pioneering work of Charles Weston, Lindsay Pryor and the development work undertaken by the National Capital Development Commission (NCDC) and others.

Trees are a fundamental part of Canberra's landscape, playing a major role in the setting within which people reside and work, creating a city in a forest which is in sympathy with the natural environment.

The existing landscape was an integral part of the Griffins' design for the new capital and featured heavily in the drawings and plans of Walter Burley Griffin and his wife Marion Mahony Griffin. The Griffins' design is strongly influenced by the City Beautiful and Garden City movements with integration of scenic vistas and separated urban functions set in green spaces, reflecting late nineteenth and early twentieth century thinking.

Transforming the open, wind-swept, largely treeless site into the Griffins' vision and treed city of today was a challenge. The climate was harsh and the soils relatively poor. European settlement had a detrimental impact on the site with extensive tree clearing on the surrounding hills and consequent degradation of the shallow soils creating widespread wind and water erosion.

Charles Weston, who pioneered the greening of the area and surrounding hills, planted over two million trees and shrubs between 1911 and 1926. The creation of experimental nurseries at Acton and Yarralumla reflected new 'conservation' thinking in Australia which saw the experimentation and assessment of a wide range of exotic and native trees and shrubs for the site and devised the best methods of planting and establishment.

Weston also influenced the rural landscape through the rehabilitation of fodder trees and putting stricter controls on ringbarking. It was a period where trees were provided free of charge to landholders. In the urban context, Weston created a unique character for the streets, avenues and parkland of the emerging city.

The early work of the Griffins and Weston has continued with important research and testing of species to continue the creation of magnificent cultivated areas matching the native vegetation thus creating beautiful spaces and places.

Contemporary understanding of the benefits of urban forests recognises the contribution to city liveability and the health and wellbeing of the community. This understanding combined with key cultural values will maximise the contribution the urban forest makes. As the Griffins and Weston combined aesthetics and science over 100 years ago – it is time to mirror that thinking again.





It is over 100 years since Weston began his pioneering work and it is time now to reflect on the past, infuse contemporary thinking and practices to create a blueprint to ensure the urban forest is resilient and thriving in the future.

The NCA is the custodian of Canberra's Central National Area. The 18,000 trees in this prominent location provide a stunning setting for the national institutions and memorials. Guiding these trees and treed landscapes into the future can be an exemplar for all of Canberra and other cities around the globe.



Image 2 and 3: NCA trees provide a stunning setting for some of Australia's most prominent institutions and memorials.







### NCA Trees

The trees on NCA managed land provide a wealth of benefits at both local and city-wide scales.

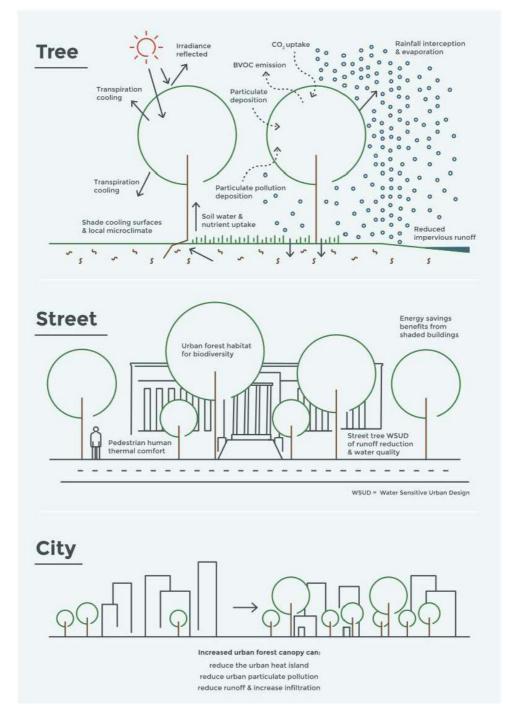


Image 4: The broad benefits provided by urban trees at various scales (Adapted from Livesley et al, 2018)





NCA trees are one of the most influential factors of central Canberra's character. They provide excellent shade and cooling, providing tree canopy cover of approximately 33% over NCA land.

The NCA currently manage around 18,000 trees. A detailed inventory of the trees in the Central National Area highlights the following:

- 93% of trees have a useful life expectancy over 20 years
- 23% of trees have a useful life expectancy over 40 years
- The most common species is Eucalyptus mannifera 12%
- The second most common tree species is *Eucalyptus bicostata* 11.5 %
- Together these two species represent almost a quarter of NCA's tree population
- Many of NCA's trees are mature and yet only 8% are juvenile
- Over 90% of trees are in good health with only 3% in poor health.



Image 5: Spatial distribution of NCA's trees. The two most common species are Eucalyptus bicostata (orange) and Eucalyptus mannifera (blue)

These statistics show that NCA trees are healthy, relatively long-lived, well managed and cared for. There is a wide range of species across NCA land with more than 50 species represented. This diverse range of species adds to the resilience of the treescape.







### Key Issues

### 1. Resilience and vulnerability of the NCA's urban forest

### What are the issues?

While the population of trees managed by the NCA are healthy, have relatively long growing lives and are well managed, there are a range of vulnerabilities within the population that make it less resilient. These vulnerabilities arise from current and future impacts, which revolve predominantly around the changing climate but also increasing competition for space e.g. densification and public events. The question of vulnerability and therefore resilience towards these challenges is bounded by current research around a number of important factors, namely vegetation diversity, species selection and integrated design and management solutions.

With almost 25% of the NCA's street tree population represented by only two species, this is the first cause for concern. Tree populations, like many other assets, require diversity to minimise risks and the impacts of future shocks. Industry guidelines suggest that no one species should represent more than 5 - 10% of an urban tree population, a benchmark that if relied upon, the NCA would not currently meet. In addition to species diversity, healthy tree populations should demonstrate a diversity of age classes and spatial diversity.

Another vulnerability in the tree population is the age profile. 30% of NCA's trees are mature and they will require good care and protection to maintain their health. Only 8% of the trees are juvenile which suggests the NCA may need to increase its tree planting program to mitigate the future impacts of tree removal and renewal as these trees senesce.

Changing climate, extremes of weather, increased extreme heat days and intense rainfall events, emerging pests and diseases and development place enormous pressures on this increasingly important asset. Careful guidance that is respectful of the past whilst embracing the present and the future will create a future forest that provides myriad benefits to the community and visitors to Canberra.

The changing climate, in particular, is likely to have significant impacts on NCA's trees. Changes in average long-term temperatures, periods of extreme heat, increased frosts during winter, lower annual average rainfall and more extreme rainfall events will place existing trees under increased stress. NCA's current palette of species being planted within the landscape requires a "future viability" lens to determine appropriateness for planting under these more extreme weather conditions.

Other future impacts to consider include ongoing development and urban renewal pressures, and Canberra's water future in terms of provision of and access to soil moisture to support vegetation growth.





Integrated design and management is a holistic way to consider the landscape, the growing conditions and improvements that could be made to a site to ensure long term tree viability and health. Access to adequate soil moisture, minimisation of compaction, access to nutrients, space for tree canopy and root systems are all components of integrated design and management. While the NCA practice some of these things on a general basis, they are not embedded or documented into existing management programs.

Further to this, NCA's trees are vulnerable to the impacts of compaction and damage due to the usage of its parks for events and when development or works occur. This issue is addressed in more detail in Design, Development and Land Use planning.





Image 6 and 7: Trees are vulnerable to impacts during events in parks and development.







# Case Study 1 - Removal and replacement of visually prominent treescape – Anzac Parade

Anzac Parade was reconfigured and replanted as a memorial avenue in 1965 and is lined on both sides by *Eucalyptus bicostata*. Commonly known as the Southern Blue Gum, it occurs naturally near Canberra at Burrinjuck. According to Pryor and Banks (1991), it prefers more rain than is usual for Canberra and suffers severely from drought on sites that are dry or where the soil is shallow. The tree has a life span of approximately 80-100 years in Canberra.

Due to the visual sensitivity of the Parade, the NCA is currently maintaining the mature treescape by removing individual trees as they fail and replanting in accordance with the original 3-row design, and significantly improving of soil health to enhance the health of the trees. The long-term effect is that while the overall treescape and canopy will be maintained, the tree groupings will consist of plantings of different ages, building resilience among the population.

Images 8 and 9: Tree resilience along Anzac Parade





### Case Study 2 - Senescing of mass plantings – Dunrossil Drive

Dunrossil Drive includes a significant landscape of heritage value that marks the approach to Government House. Charles Weston devised and planted the grand avenue. It includes a row of elm trees either side of the roadway with pine trees beyond. The elm trees were planted as early as 1918, and the pine trees were planted in 1927-28. Eighty years later, the majority of the pine trees were dead or dying, resulting in weakened or falling trees and branches. This area is popular with local residents and the condition of the pines was creating a public safety risk.

The pine trees were removed in two stages, over a relatively short period – in 2013 and 2015/16 – followed by replanting 12-18 months after each removal stage. The central avenue of elm trees has been strengthened with evergreen oaks (*Quercus englemannii*) to enhance the year-round avenue effect. The dense planting of *Pinus radiata* has been replaced with a more open planting of *Pinus canariensis*. The new planting creates a more open parkland setting, better meeting the needs of local residents, improving maintenance standards and better accommodating nearby events.











### What does best practice look like?

- Climate ready palette of species that meet a broad range of functions such as heritage values, shade, landscape amenity and character, biodiversity
- Integrated pest and disease management
- Integrated Water Management planning
- Water sensitive urban design
- Structural cells and soils in areas of high activity and compaction
- Urban tree management excellence and soil health considerations.

### How could these issues be addressed?

- Collaborate with researchers already conducting work on climate ready species for Canberra and further trials e.g. Australian National University, Macquarie University's Which Plant Where project
- Review the current species list and adapt as needed to reflect current research
- Identify and categorise the probability of future risks on NCA's landscapes and trees that compromise their resilience



- Develop typologies and scenarios for locations where water sensitive urban design is appropriate and can be implemented
- Consider appropriate water sources and corresponding investment required to drought proof NCA's landscapes
- Recognise and apply the role of trees in Climate Change Adaption actions
- Continue to experiment with integrated landscape management techniques, document successes and failures and provide feedback loops into programs
- Establish clear principles regarding best practice urban tree management, particularly establishment, monitoring (for pest and climate impacts), renewal and replacement, integrated design
- Improve soil health and tree growing conditions across NCA land to improve the resilience and longevity of the treescape.





## 2. Design, development and land use planning

#### What are the issues?

Issues relating to design, development and land use planning will include many of the issues raised in other sections of this issues paper. Some of these common issues include:

- Ongoing changes to population, social behaviour, climate change, increase in tourism and other contemporary issues impact on land use, landscape character, the design of spaces and this in turn has an impact on trees. For example, a greater number of people are using the Central National Area for recreation, events and sightseeing. This creates the need for more paths, wider paths and vehicle access
- Original tree species established in some areas are no longer suitable e.g. now classified as weed species, poor performance in areas where compaction is occurring, etc
- Guidelines for appropriate tree species selection for areas where current species are not performing well are needed
- Trees take a long time to grow so there is a need to plan for what will be appropriate in the future. e.g. species selection, location of planting and planting density.

There will continue to be conflict between densification, public events and the need to maintain and grow the NCA's tree canopy cover. Any loss of canopy from tree removals or decline in tree health will jeopardise the much-needed contribution that trees make to the designed landscape character, including vital environmental services such as shade provision.

There are gaps in NCA policy and strategy that prioritise the management and care of trees with respect to events, development and land use planning. The freedom to continue to innovate and experiment on NCA land at the Lindsay Pryor National Arboretum will be important to help achieve good outcomes. Providing clear and transparent guidelines around how these activities are managed with trees in mind and how NCA landscapes can transition towards more resilience, diversity and functionality for the future is desirable.

The National Capital Plan sets out broad principles and policies for the development of Canberra and the Territory, as well as detailed conditions of planning, design and development for areas under the detailed planning control of the NCA. These detailed policies are relevant to the areas managed by the NCA. Review of parts of the National Capital Plan presents an opportunity to incorporate principles and policies concerning targets for tree canopy cover, tree removal, landscape plantings and species selection. Embedding principles and policies in the National Capital Plan could help ensure that new development continues to contribute to the landscape setting of the National Capital and reflect contemporary thinking about the role of trees in the urban landscape.











Image 14 and 15: Events in NCA public open space can impact on trees

### What does best practice look like?

- Integrated strategic and policy documentation that reflect an agreed vision for future land and treescapes
- Tree canopy targets at various scales that provide incentives to appropriately manage the pressures on trees
- Successional plans for proactive tree replacement to guide transitions to future landscapes
- Incorporate design knowledge and practice of integrating trees and green infrastructure into development
- Robust tree protection and enforcement, including the use of bonds
- Consider the land use (e.g. events) in the selection of tree species and the resilience of the tree species to better suit the use and future impacts
- Create a "place planning approach" for tree planting in line with landscape character function and requirements so that all stakeholders (developers, event organisers, planners etc) can work towards the same goals.



Image 16: Best practice includes documented tree protection zones and enforcement of such







#### How could these issues be addressed?

- Work towards aligning Tree Management Policy with the National Capital Plan and other relevant strategic priorities
- Review the NCA planning frameworks to include clear visions, objectives and principles that reflect contemporary best practice from cities across the world
- Advocate for a Canberra Landscape Plan, vision and shared narrative
- Embed the principles and objectives of the Tree Management Policy into statutory planning framework
- Develop landscape and development design excellence guidelines that clearly demonstrate how integrated design can provide good built form and landscape outcomes including case studies
- Ensure all developments are undertaken to realise a net gain in greening
- Develop robust tree protection measures that incorporate Australian Standards, AS 4373 Pruning of Amenity Trees and A 4970-2009 Protection of Trees on Development Sites
- · Provide certainty on tree protection requirements and enforcement
- Consider the temporary use of sites and how best to manage the landscape for events e.g. landscape maintenance and recovery plans, informal/casual site use, control of works and inappropriate use
- Match landscape design, management and maintenance with species selection.





Image 17 and 18: Managing the impacts on NCA's landscapes will be important





### 3. Community participation and knowledge

### What are the issues?

Trees are an invaluable asset that benefit and belong to all. In Canberra there has been a perception of a lack of transparency regarding management of the urban forest. Regardless of whether it is NCA or ACT Government land, many in the community don't differentiate between jurisdictional boundaries and the NCA's communications around this have in the past have been limited. There are also divided opinions around the current and future management of NCA trees, as well as ACT Government trees. The broad array of community expectations, values and needs around the urban forest further defines the need for transparency of information, clear and agreed pathways of decision making and a shared, inclusive vision for the future forest.

Developing more trust within the community will need to be a priority for the NCA to effectively manage expectations, leverage community support for the management of trees and landscapes and change attitudes towards trees to seek better on-ground outcomes.

### What does best practice look like?

There are some good examples across Australia showcasing how engagement and communications can be tailored to provide transparent access to information raising community understanding and acceptance of the way in which the trees are managed. Mechanisms such as citizen forestry, on-line maps, visual communications, engaging programs and activities all support greater community understanding and participation.

**202020 Vision** has demonstrated the effectiveness of joining both industry and community conversations, simple yet engaging communications tools and a clear and consistent message to bring the urban forest into mainstream conversation.

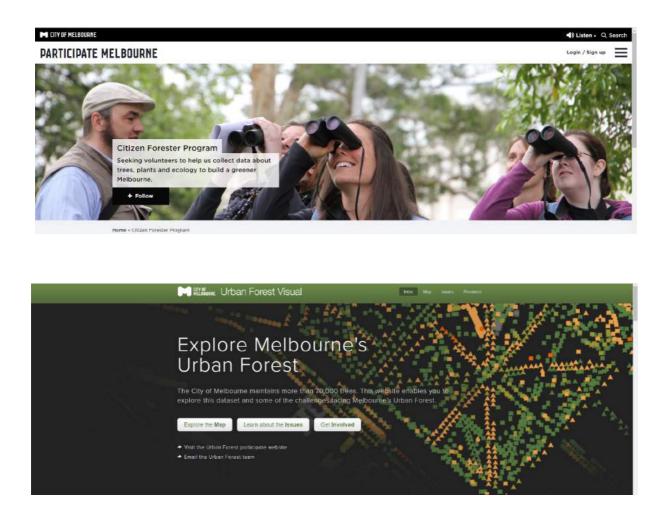






#### City of Melbourne's suite of Urban Forest communication tools

The City of Melbourne have developed a suite of communications tools to a) provide transparency about their programs, projects and decision making and b) to encourage greater participation and stewardship from the community.





### How could these issues be addressed?

It is timely to be having a discussion about the future of the NCA's urban forest and the community's role within that. The NCA's leadership in developing a Tree Management Policy that articulates the current issues relating to the trees, explores solutions of excellence and sets a shared vision for the future is a positive step towards consistent, transparent and publicly available information for the benefit of the community.

Ongoing community conversations and engagement programs will need to support NCA's work e.g.:

- The establishment of a community group such as Friends of NCA Trees
- Investigation of the role for citizen scientists, advisory committees, industry working groups
- Community forums and workshops
- Development of structures and programs for shared governance
- Development of engaging stories that are connected to place and reflect the variety of values held by the community
- Development of case studies that reflect successes and failures of tree management activities over the long term
- Engaging with younger generations to engender forest champions of the future
- Embracing technology to broaden community access and knowledge
- The development of a communications program/strategy with innovative transparent and engaging communications tools will continue to keep the community informed about NCA's trees.







### 4. Maintenance, Data, Monitoring and Evaluation

#### What are the issues?

In order to effect evidence-based decisions about tree management, the NCA will require robust data and information about is trees that is monitored and evaluated to inform decision making. This will inform the trajectory of best practice methods needed for application on NCA land to achieve future landscape vision, canopy cover targets and standard of landscape excellence. The NCA's tree inventory is an up to date comprehensive dataset that captures important values of trees. There is more work to be done in categorising these trees as assets within the NCA reporting system, attributing them dollar asset values and prioritising their landscape functionality values e.g. shade, heritage or biodiversity, to determine management styles and succession planning.

Best practice urban tree management needs to reflect not only the full life cycle of trees, but also the influence of the landscape in which the tree is planted. Master-planning, species selection, planting, establishment, maintenance, succession planning, tree removal, tree repurposing and tree renewal are all components of tree management that are currently considered by the NCA but are not formally documented or integrated.

In developing an effective monitoring and evaluation framework, it is important for the NCA to articulate what information and data is of most value to the management of trees, how the data will be maintained for integrity and what the results will be used for.





Image 19 and 20: Ongoing maintenance and monitoring of NCA trees is important for future tree health





### What does best practice look like?

- Full park and street tree inventory, updated annually and to include values (e.g. dollar, environmental, heritage, biodiversity etc)
- Inclusion of tree inventory into asset management system and planning
- Evidence based community conversations and education that reflects the data and performance of trees
- Technical capacity building amongst NCA staff and relevant contractors to deliver tree management excellence
- Development of a monitoring and evaluation framework that provides a feedback loop into policy, strategy and decision making.

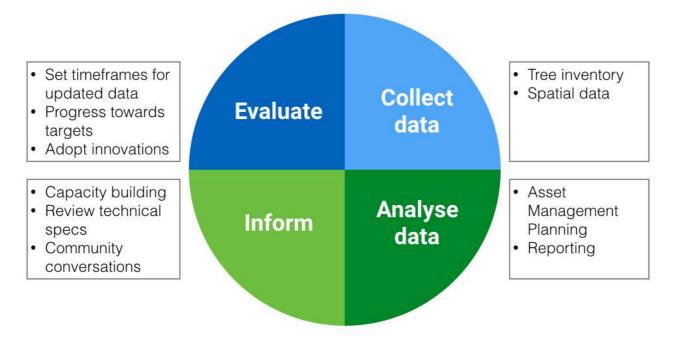


Image 21: Tree Management Monitoring and Evaluation Framework







#### How could these issues be addressed?

- Updated tree inventory to include all trees incorporated into NCA asset management system
- Scheduled annual proactive maintenance works based on ongoing assessment
- Develop a street and park tree Masterplan to include tree renewals (to be informed by review of Heritage Management Plans and appropriate climate ready species list)
- Develop best practice technical tree management guidelines and specifications reflective of current research that encourages innovation and experimentation
- Ensure budgets and resources are adequate to deliver works
- Development of case studies discussing successes and failures of landscape implementations
- Trials of tree species in the Lindsay Pryor National Arboretum, and in cooperation with other tree management agencies in the ACT
- · Incorporate results of species trials into adaptive species lists
- Utilise citizen science for collecting relevant tree and landscape information e.g. presence of indicator species
- Minimum standard requirements and upskilling of contractors
- Develop an appropriate monitoring and evaluation program for various aspects of NCA tree management including timeframes and feedback loops
- Ensure that landscape maintenance plans compliment the content of heritage management plans and address issues relating to events/use of sites to achieve excellence in the care of the landscape and risk management standards.





Image 22 and 23: Best practice urban tree management





### 5. Heritage and Culture

### What are the issues?

There is a vast richness of heritage and cultural layers embedded in the landscapes and trees of the NCA and broader Canberra. From the First Nations people, through to the time of the Griffins and Weston then onto Pryor and the NCDC, the landscape and trees carry many stories and values. There are numerous significant groups of trees (e.g. the 600 trees lining Anzac Parade that form part of the Parliament House Vista) that are protected under the *Environment Protection and Biodiversity Conservation Act 1999* and individual trees of heritage value e.g. the English Oak at York Park planted by HRH the Duke of York in May 1927.

As custodians of this living place there is a need to plan for not only the immediate future but for the next century and beyond. It is essential for the Tree Management Policy to guide the evolution and transition of the dynamic urban forest, to a composition more suited to projected climatic and environmental conditions while retaining heritage and cultural qualities that are so unique to Canberra. In addition to the provision of heritage and cultural values there are contemporary expectations of environmental service provision from trees that contribute to liveability and health and wellbeing.

If the NCA landscape is to preserve and enhance cultural and heritage values and provide for contemporary needs, it is imperative to develop a position on the underlying principles that guided original plantings and landscape design. These can then be analysed for their applicability in line with the diversity and priority of other values in future landscape applications. Articulating these on a landscape basis will provide the pathway for then integrating climate change science, indigenous values and the needs of Canberra's community into ongoing decision making, through innovation and experimentation.





Image 24 and 25: NCA landscapes will need to preserve cultural and heritage values while providing for contemporary needs



#### What does best practice look like?

- A strategy to conserve and strengthen heritage and cultural values, including indigenous values where appropriate, while accounting for other values such as climate change adaptation, health and wellbeing and biodiversity
- Landscape reflection of the diversity of Australia, its peoples, natural environments, cultures and heritage
- Guiding removal and replacement of trees to conserve cultural and heritage values whilst informed by contemporary science
- Enhance the existing character and quality of the landscape through urban tree management excellence
- Transition the values of a mature landscape into new generation, climate adapted, functional landscapes
- A shared community understanding of the way forward.

### Case Study 3: Shrine Reserve Master Plan and 5 Year Tree Plan

A very comprehensive, rigorous and adaptive Tree Plan that examines one of Melbourne's most significant memorial places and collection of trees, the Melbourne Shrine of Remembrance.

The project explores new ideas and best practice for ground preparation, tree planting and tree establishment within the urban context. The plan sensitively curates new plantings within the framework of existing significant historical plantings.

The plan has explored a wide tree palette, including both exotics and natives, to develop a plan that considers climate change while still retaining important links with the commemorative and historical qualities of the site.





#### How could these issues be addressed?

- Using cultural heritage as a guide, review the performance and function of landscapes through time while looking at the underlying principles that guided original landscapes intentions to evaluate which factors are embedded for future use and which are obsolete for the future of Canberra
- Develop representative advisory groups for ongoing support
- Develop a tree palette that considers both climate change and heritage/cultural values
- Develop principles for tree management to guide heritage management plans
- Develop understanding of the spatial qualities of the existing and future landscape to guide successional plantings
- Develop principles to guide inclusion of indigenous values
- Develop guidelines to enhance multiple benefit provision of trees whilst respecting heritage and cultural values.





### 6. Governance and Management Arrangements

#### What are the Issues?

Canberra's urban forest is complex. It is managed by a number of agencies, including the NCA and ACT Government. This governance can often lead to a number of challenges including resourcing and management issues. Where common boundaries occur, a collective approach is critical to the management of our treescape.

Traditional owner engagement is paramount to secure a resilient and thriving future urban forest. Developing partnerships and articulating roles and responsibilities for both NCA's trees and the broader Canberra urban forest will ensure that Canberra remains a garden city through good onground outcomes.

### What does best practice look like?

- Shared urban forest narrative, vision and targets
- Shared knowledge and outcomes, including indigenous, heritage, biodiversity values
- Strong clear and transparent lines of communication
- Partnership agreements for shared boundaries
- Clear leadership and strategic management planning facilitated by champions
- Strong investment based on sound cost benefit analysis whereby trees are managed as valuable assets
- Adequate and shared resources
- Proactive and strategic roll out of tree works programs
- Integration of tree management policies into all infrastructure works programs and developments





Image 26 and 27: A shared vision to cover areas with shared boundaries will help to effectively manage NCA trees





### Case Study 4: Melbourne Water's Yarra River Strategic Plan

The Yarra River has been recognised as a community asset that spans the jurisdictions of 15 government agencies, traditional owners and the community. The plan is underpinned by a 50-year community vision, the creation of the Yarra Protection River Act 2017 and the establishment of the Birrarung Council that will provide independent expert advice to the Minister for Water.







Australian Government

### How could these issues be addressed?

- Strengthen collaboration with key stakeholders across Canberra
- Develop a shared vision that aligns with Sustainable Development Goals
- Through partnerships, develop a cohesive approach to managing trees
- NCA leadership: strengthening of National Capital Plan
- Develop exemplar case studies and management tools
- Develop appropriate funding models to secure the long-term health, growth and viability of Canberra's urban forest
- Explore alternative funding sources such as green bonds and philanthropic approaches.



### Potential Priorities for NCA Tree Management:

Based on these issues, there is a strong pathway for opportunities and solutions moving forward. These include:

### 1. A shared urban forest vision for Canberra

A vision developed for the NCA Tree Policy must be reflective of a broader vision for Canberra's whole urban forest

### 2. Building resilient landscapes

The benefits of NCA's trees will need to be maximised into the future so as to face future challenges such as climate change

### 3. Protecting the existing urban forest

As a high-profile location, NCA land is highly valued for both development and conduct of events. These activities need to validate the role of trees in supporting their outcomes and protect them accordingly.

#### 4. Growing the forest

Proactive tree renewal and replacement coupled with the existing tree planting program will ensure that NCA's trees remain dynamic and diverse

#### 5. Adopting best practice

Management of NCA trees will reflect up to date standards and process for best practice urban tree management including maintenance commitments, irrigation, soil improvement and species selection

#### 6. Valuing the benefits

biodiversity, environmental services, cultural and heritage, health and wellbeing. Embed into planning and operations.

### 7. Providing Leadership

NCA has a clear role in championing Canberra's urban forest, leading by example and engaging with the Australian community to generate stewardship over the future urban forest.

#### 8. Monitoring and evaluation

Building on the existing information available, the NCA can continue to monitor its trees and document its procedures and processes for both improved programming but also for others to access and learn from.







### References:

Citygreen, 2019. https://citygreen.com

S. J. Livesley, E. G. McPherson, and C. Calfapietra 2016. The Urban Forest and Ecosystem Services: Impacts on Urban Water, Heat, and Pollution Cycles at the Tree, Street, and City Scale. Journal of Environmental Quality, 45, pp119-124

Shrine Reserve Masterplan, 2018: https://participate.melbourne.vic.gov.au/domain

Yarra River Strategic Plan, Melbourne Water, 2019, <u>https://www.melbournewater.com.au/about-us/publications-and-policies/developing-yarra-strategic-plan</u>

