STRATEGY

Prepare a masterplan to guide future planning for tree planting across the Waverley LGA and target percentage canopy covers as integral components of strategic tree planting in Waverley.

ACTIONS

• Analyse and identify landscape character zones within Waverley.
• Identify a regional network of wildlife corridors and habitat locations for integration in the Greening Masterplan in consultation with other LGAs and with reference to Green Web Sydney.
• Coordinate with other relevant strategies and plans, including the Waverley Transportation Policy, the Green Links pedestrian network, Town Centre plans, draft Gap Analysis on Sustainability and adopted Plans of Management.
• Prepare a masterplan to guide future planning for tree planting across Waverley to achieve proposed canopy cover. The document should be used as a first-step tool for planning Council tree planting initiatives and to provide tree planting advice to developers and private landowners.
• Identify trees with a Safe Useful Life Expectancy (SULE) of five years or less and assess on an individual basis for possible replacement.
• Investigate a system of ordering required species well in advance of need.
• Provide additional staff and resources to replace aged and dangerous trees and to fund the ongoing maintenance of additional tree planting.
• Investigate using funds from the Environment (Green Asset) Levy and other sources of government funding.

2 Tree selection

2.1 NATIVE VERSUS EXOTIC

The Triassic Hawkesbury Sandstone of the Waverley LGA has traditionally supported Coastal Sandstone Heath, Sydney Sandstone Ridgetop Woodland and small areas of Sydney Sandstone Gully Forest (Green Web Sydney, 2004).

Being so close to Sydney, the area was quickly settled and the onset of agriculture, manufacturing and a greater density of residential use meant that almost all of the remaining vegetation was swept away. Today, just 0.6 per cent of total land area remains. Only eight significant examples of local indigenous vegetation remain in Waverley; these are scattered along the coastline but do not form a continuous corridor.

European settlement introduced a variety of exotic trees, as well as some Australian species that had not previously been found in the area. Some, such as *Ficus ‘Hillii’* (Hills Fig) and *Phoenix canariensis* (Canary Island Date Palm) are of cultural significance but others, like the *Cinnamomum camphora* (Camphor Laurel), are now regarded as weeds because of their invasive effect on local indigenous species.

In Waverley today, the majority of trees currently selected for public planting are ‘native’ with a small percentage of deciduous exotic trees chosen to allow for solar-access to narrow-fronted properties. A minimum of 200 new street trees are planted each year and nature strip trees can be planted, free of charge, at the request of residents and the discretion of Council (matched against either a proposed species or Council’s list of preferred species).
However there are differing opinions within the community about the range of tree species suitable for Waverley and whether exotic species should be planted at all. In July 2002 Council adopted a policy that all future public domain planting—including streets, parks and reserves—should comprise ‘native’ species and wherever possible locally-indigenous species.

Native plants are seen as preferable largely for environmental reasons (habitat, water retention in upper catchment, drought tolerant, often less maintenance, better soil stabilisation) and because of their contribution to developing a local landscape character/identity that is authentically Australian. Moreover, the Waverley Local Environment Plan 1996 stipulates that planting native trees and shrubs should be encouraged.

Nonetheless, it was also recognised that on occasions exotic trees may be the only suitable choice in particular planting situations and that the planting policy should, “incorporate a degree of flexibility in relation to planting non-indigenous and sometimes deciduous species in identified selected areas—especially in heritage areas, commercial zones and in instances where issues of solar access need to be considered”.

2.2 WHAT IS A NATIVE TREE?

The definition of a native tree species is generally interpreted as one that would have been growing in Waverley at the time of European settlement. However, it is also interpreted as:

- endemic (in other words, found only in this specific location)
- locally indigenous (found in Waverley prior to European settlement but can be extended to include Sydney’s eastern suburbs)
- native (broadly found in Australia).

The first definition technically excludes any species that is found outside the Waverley area, which is plainly not practicable; while the third would include species from such places as tropical and Mediterranean climates that could out-compete locally indigenous species. The second definition is therefore the most useful since it includes a range of species that are likely to grow in Waverley. However, it is important to note that many people urge a less purist approach because the local soil conditions and microclimate have been changed by successive years of human intervention. Moreover, regional trees of a different genus would not threaten the gene pool of a more local species.

2.3 ENCOURAGING LOCALLY INDIGENOUS TREE STOCK

As noted earlier locally indigenous species are environmentally valuable and contribute to an ‘authentic’ local character. Council may consider the following suggestions to promote locally indigenous planting:

- identify appropriate locally indigenous tree species, as outlined in the Planting List located in the Appendix

Image 2: The Coastal Banksia (Banksia integrifolia) is a locally indigenous species well suited to most street and private sites in Waverley.
• provide locally indigenous tree species through forward planning and providing tube stock of less common Sydney species

• investigate whether it is possible to cultivate locally indigenous shrubs (commonly multi-stemmed and four metres in height) as street and park trees through pruning during early growth

• promote locally indigenous tree species to residents through Council’s annual Free Tree Program

• consider the totemic value of trees to the indigenous community. There is a connection here with the traditional values placed on trees by ethnic communities

• develop an education program for residents and Council staff to accompany the above approach. For example, expand the Gardening with Native Plants workshops where required

• favour locally indigenous tree species in all Development Control Plans, Plans of Management and Strategic Plans

• consider other selection factors when choosing locally indigenous tree species such as the value of preserving local identity and character or ensuring adequate solar access. Apart from Bushcare work, local seed stock could be replaced with species found still within the eastern suburbs but of a different genus.

**STRATEGY**

Carry out a program to encourage the use of locally indigenous tree species in Waverley.

**ACTIONS**

• Adopt a performance-based approach to tree species selection described in this TMP and outlined in the Appendix, especially recommendations for street and park trees.

• Replace all current plant species lists used by Council with a new brochure incorporating the master species list and the performance matrix included in this TMP.

• Ensure that the brochure incorporating the master species list and performance-based matrix is the principal tool used for the selection of tree species in Waverley.

• Conduct regular workshops with relevant Council personnel to ensure a thorough understanding of the procedures included in this TMP and general best practice in management of Waverley’s trees.

• Adopt procedures for promoting locally indigenous tree species in relation to working with nurseries, Council’s annual free tree program, and favouring locally indigenous tree species and locally provenanced seed stock in all DCPs, Plans of Management and strategic plans.
2.2 TREE PLANTING TO REFLECT LOCAL CHARACTER

It is important that the selection and maintenance of trees contribute to and support the local character of a particular site. In certain streets an avenue of trees may help to define and enhance existing heritage, environmental and architectural features.

Any tree planting carried out by local residents without consultation with Council may be well meant but could unintentionally create problems with regard to sight lines for drivers and pedestrians, inconsistency of landscape, damage to Council and/or private property, public liability claims or the added difficulty of ongoing maintenance.

*Image 3: Original plant communities in the Waverley Council area (Benson and Howell, 1990).*

*Image 4: This Bracelet Honey-Myrtle is locally indigenous but has a short lifespan.*
5 Tree species diversity and tree selection

There are differing views about the value of having just one species of tree planted in a single street. Some people think a more uniform approach adds to the visual appeal by creating a delightful ‘avenue’ of trees; others feel that varying the number of species provides greater biological diversity and contributes to the viability of native fauna habitats.

Street trees have the potential to soften the impact of development and inspire a sense of unity in the built environment. Community comments on street tree selection indicated that people would prefer to see a variety of tree heights and species across the LGA. Overall, consistency of one or two species within a street was preferred, although appropriate street tree species selection was also viewed as a key management issue.

Appropriate species selection is the most cost-effective way of reducing the potential for damage caused by trees in the built environment. Decisions about future tree species selection must be informed by the lessons learnt from past tree planting, particularly with regard to inappropriate species selection and the conflict between mature trees and the built elements within their immediate environment. Problematic trees that cause significant damage, such as *Ficus hillii*, should only be considered in streets identified as landscape heritage items.

In considering species selection site conditions criteria should include:

- width of planting opportunity on nature strip, tree planting square, road shoulder or median strip
- soil depth and type
- relationship to compass points for shade and sun
- existing character or ‘avenue of trees’ in the street
- location with slow traffic or fast traffic; location of crossings and traffic lights
- overhead obstructions or constraints and underground services
- associated building types, such as hotels or schools
- pedestrian and vehicle use and need for visibility
- access for street cleaning equipment and garbage collection vehicles.
- choosing species that have performed well in similar sites or in the same street
- feedback from community consultation.

Horticultural selection criteria should include:

- habit of growth
- physical form
- visibility around trunk and canopy
- pollution tolerance
- drought tolerance
- growth rate and longevity
- weed potential for urban bushland and private property
- maintenance/creation of habitat and promotion of species diversity
- tolerance of compacted soils with low aeration or poor drainage.

*Image 17: Typical Waverley street trees, providing shade and softening the landscape.*