

# GREENING SYDNEY PLAN



The *Greening Sydney Plan* is a supporting document to the *Environmental Action 2016 – 2021 Strategy and Action Plan* that was endorsed by the City of Sydney in March 2017. The City's most up to date set of environmental targets and actions are contained in *Environmental Action 2016 – 2021 Strategy and Action Plan*.



# INTRODUCTION

THE SUSTAINABLE SYDNEY 2030 STRATEGY COMMITS THE CITY TO BECOMING GREEN, GLOBAL AND CONNECTED. THE COMMITMENT TO GREEN LIVING NOT ONLY FOCUSES ON MAKING GREEN LIFESTYLE CHOICES, BUT ALSO THE PHYSICAL GREENING OF OUR URBAN ENVIRONMENT.

## THE PHYSICAL GREENING OF OUR URBAN ENVIRONMENT IS IMPORTANT BECAUSE IT:

- Filters and improves the air we breathe;
- Provides shade for our houses and streets;
- Can regulate sunlight to our houses and streets;
- Reduces urban run off and stormwater pollution;
- Improves the appearance, economic value and liveability of our Cities; and,
- Provides a connection to nature in our Cities.

There are many stakeholders with an interest and capacity to green our urban landscape, and engaging them all to contribute to the greening of Sydney requires a plan and strategic action.

This City will implement its urban greening programs and actions through the Greening Sydney Plan.





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## THE VISION

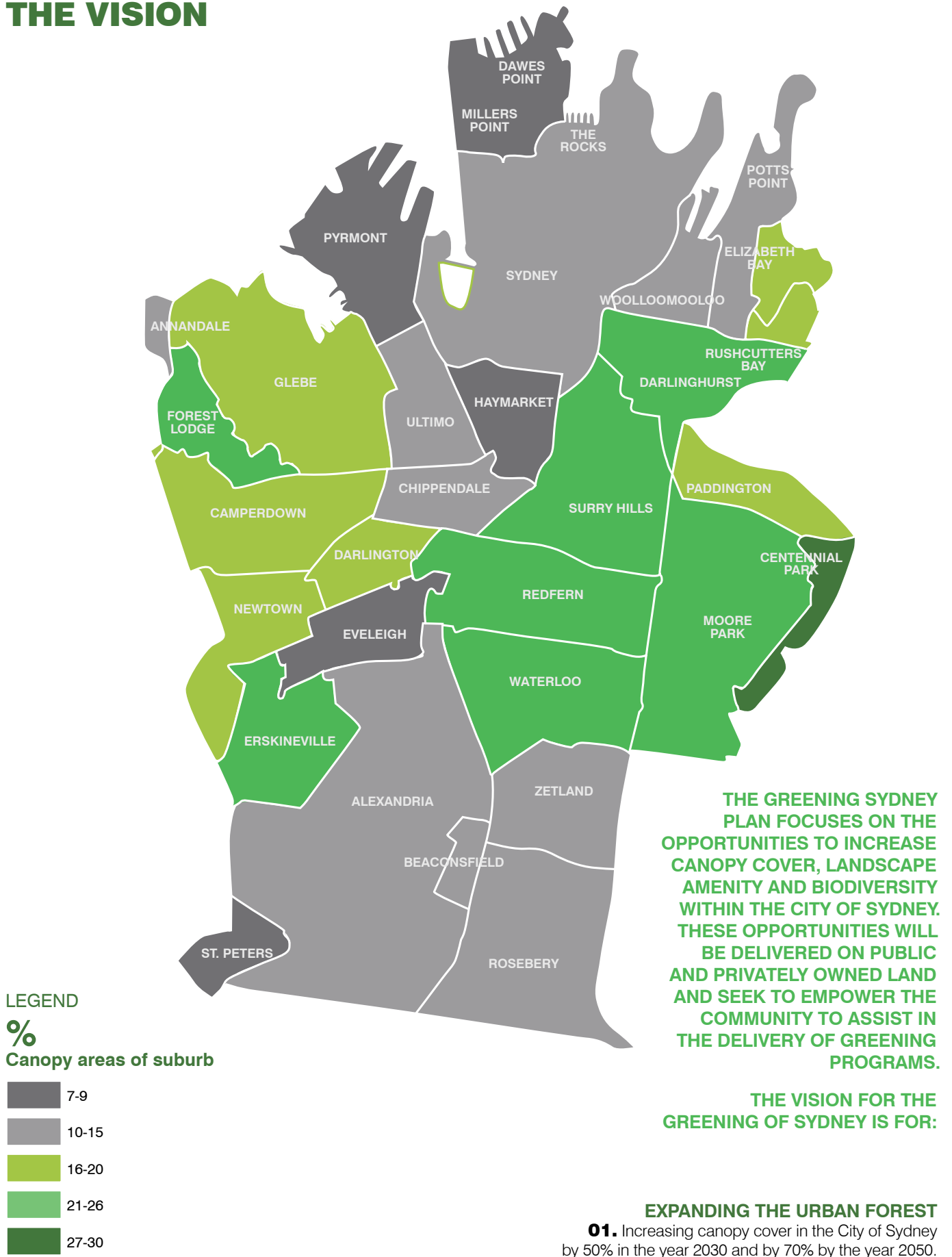




Fig Tree planting (Photo: Arterra 2011)

## GREENER STREETS

- 02.** Creating a Liveable Green Network of streets by planting all available footpath locations with trees nominated in the City of Sydney Street Tree Master Plan.
- 03.** Planting trees in unused road space.
- 04.** Building central landscaped medians and replacing paving with trees and landscape planting.



Habitat in Sydney Park

## MORE PARKS AND OPEN SPACE

- 05.** Acquire more land for public open space, and tree and landscape planting.
- 06.** Balance the recreational and functional requirements of parks with greening objectives to increase canopy cover.
- 07.** Build habitat parks and landscape City streets to promote and support biodiversity.



Orphan School

## GREENING NEW DEVELOPMENT AND PRIVATE LAND

- 08.** Establish minimum guidelines and standards for the provision of open space, landscaping and urban canopy in new development.
- 09.** Promote the use of green roofs and green walls on new buildings and development.
- 10.** Investigate the provision of a grant program to provide funding for residents and businesses to plant and maintain large canopy trees on their property.



## GREEN LINKS AND URBAN WILDLIFE CORRIDORS

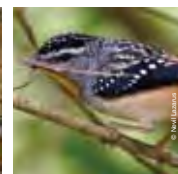
- 11.** Building wildlife corridors and habitat pockets through residential suburbs, backyards and public parks.
- 12.** Planting on stormwater, gas and power easements main road and rail corridors to create green links.
- 13.** Undergrounding and aerial bundle cabling (ABC) of electricity services to expand and improve the quality of the urban forest.

## EMPOWERING THE COMMUNITY TO GREEN OUR CITY

- 14.** Building social capital by empowering the community to work together to protect and strengthen the urban forest and landscape.
- 15.** Supporting volunteer groups to revegetate and maintain green space and urban habitat.
- 16.** Developing a Junior Ranger program to encourage children to assist in the maintenance, monitoring and managing of the City's urban parks and landscape.
- 17.** Building community gardens to support residents in sustainable food production and community building.
- 18.** Establishing a City Farm Sustainability Learning Centre.



Chippendale Tree Planting



Spotted Pardalote



Understorey at Sydney Park

## 1.1 WHAT IS THE GREENING SYDNEY PLAN?

The Greening Sydney Plan documents the City's commitment and aspirations for the "living green" elements of our urban landscape – tree canopy, understorey and greenspace located on both public and private land.

The Plan coordinates the City's projects and programs that focus on providing tree canopy, landscape amenity, and native habitat creation.

## 1.2 BENEFITS – WHY WE NEED ONE?

The Greening Sydney Plan aims to create a liveable green City, recognising the importance of trees and other vegetation and their potential to support diverse ecosystems in an urban environment. The Plan also acknowledges the important benefits biodiversity can bring to City living.

It is also important to promote and co-ordinate the City's planning, development, operations and community programs to ensure the City's greening efforts and activities make Sydney a truly green city by 2030.



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## ECOLOGICAL



Liquidambars in Baptist Street, Redfern  
(Photo: Arterra 2011)

- Temperature modification – heating and cooling of buildings.
- Air quality improvements – pollution absorption and oxygen production.
- Carbon dioxide storage.
- Stormwater and catchment benefits – filtration and absorption of water.



Habitat in Sydney Park

A mix of appropriate plant species can improve habitat and promote biodiversity in urban environments.

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## PUBLIC DOMAIN AMENITY



Living colour display Martin Place

Trees, gardens and floral displays:

- Improve the amenity and look of streets.
- Enhance cultural events.

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## SOCIAL AND PSYCHOLOGICAL



McElhone park pond

Research acknowledges the contribution of parks, trees and biodiversity to the well-being of city dwellers.



Chifley Sq, Sydney (Photo: Arterra 2011)

Trees and other vegetation can provide:

- A reduction in cooling costs
- An increase in real estate values
- A reduction in health service costs
- An improvement in the viability of retail activity.

## POLICY CONTEXT

### OPPORTUNITIES TO GREEN SYDNEY

THE GREENING SYDNEY PLAN FITS UNDER A BROADER POLICY AND STRATEGIC PLANNING FRAMEWORK DEVELOPED BY THE CITY OF SYDNEY. KEY POLICY DRIVERS ARE THE SUSTAINABLE SYDNEY 2030 STRATEGY AND THE CITY OF SYDNEY ENVIRONMENTAL MANAGEMENT PLAN. (Refer Figure 2.1)

Appendix A1 provides an overview of the Policy Context and City of Sydney plans and policies that the Greening Sydney Plan responds to or influences.

The Sustainable Sydney 2030 is the City's guiding strategic plan for the coming 25 years that sets a vision for a Green, Global, and Connected City.

The Greening Sydney Plan contributes to the "Green" component of the Vision by developing a liveable green city that recognises the importance of trees and quality open space that support diverse and abundant ecosystems in an urban environment.

The City of Sydney Environmental Management Plan establishes the City's environmental vision, goals, targets and actions for the next ten years and beyond. It addresses the themes of energy and emissions, water, waste, plants and animals.

The Greening Sydney Plan contributes to the delivery of Environmental Management Plan objectives through prioritised actions to improve and expand the tree and vegetation structure of the City, and the creation and enhancement of habitat for urban ecology and biodiversity.



Figure 2.1



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## BACKGROUND

### 3.1 THE CURRENT SITUATION – WHERE ARE WE NOW?

Historically the landscape that comprises the City of Sydney local government area consisted of a variety of vegetative and ecological associations influenced by underlying geology, soils and aspect. Vegetation types included forests, heaths, and Banksia scrub on sandstone, turpentine/ironbark forest on shale, and swampland and mangroves along the harbour shoreline.

There has been a drastic decline in the original vegetation with clearing of forests, filling of swampland, reclamation of shorelines, increased hard pavements, roofs, piping stormwater runoff, and modification of soil profiles with imported fill material.

As a result the City is the most urbanised local government area with little existing remnant vegetation. There is less than 380 hectares of open space (14% land area) with a rate of provision of less than 22 square metres of open space per resident. The quality of open space and public domain is very important in meeting the needs of a healthy community.

The City's urban landscape is managed, monitored and maintained by a combination of in-house staff, contractors and community volunteers.

The City has 15.5% of its area covered by urban canopy. Of this, 42% of canopy cover is from private property (62% land area), 32% from the City roads (street trees – 23% land area) and 26% from the City's parks (15% land area).

## 3.2 CURRENT CITY OF SYDNEY INITIATIVES – WHAT HAS BEEN ACHIEVED

From 2004 to 2011 the City of Sydney has undertaken numerous projects and programs that have dramatically improved the canopy cover and landscape quality of the City. These include:



Volunteer at Rozelle Bay

### COMMUNITY PROGRAMS

The City has assisted volunteers from Pyrmont Ultimo Landcare, the Rozelle Bay Community Native Nursery, and the Glebe Society's Blue Wren Group to undertake locally-indigenous species propagation and planting programs. Community members have also participated in National Tree Day planting activities in the Glebe area and in Sydney Park. A workshop on how to green backyards and balconies to promote biodiversity has been added to the "Live Green" program.



Street Tree Planting

### STREET TREE PLANTING PROGRAM

Over 7,000 advanced street trees have been planted.



Paddington Reservoir Garden

### OPEN SPACE RENEWAL

- 31.5 hectares
- 53 sites
- \$130M



Floral Baskets

### PUBLIC DOMAIN LANDSCAPING (VERGE PLANTING, FLOWER BASKETS, LIVING COLOUR)

Locally-indigenous species have been incorporated in new developments, park upgrades and other landscaping projects.



Pirrama Park

### ACQUISITION OF OPEN SPACE

- 16.4 hectares
- 48 sites



Habitat in Sydney Park

### HABITAT CREATION

Locally-indigenous bushland has been established:

*Orphan School Creek (Forest Lodge), Federal Park (Glebe), Glebe Foreshore, Sydney Park (St Peters), Light Rail corridor (Pyrmont), Bicentennial Park (Glebe), Paddy Gray Reserve (Glebe), Lew Hoad Reserve (Glebe)*



Bioretention habitat – Sydney Park

### WATER SENSITIVE URBAN DESIGN

Locally-indigenous species have been incorporated into rain gardens to promote biodiversity whilst ensuring efficient stormwater treatment.



## 3.3 WHAT NEEDS TO BE DONE

There is still more to be done and the Greening Sydney Plan will enable the City to develop a considered and coordinated response for its programs and projects to achieve a liveable green city.

The key undertakings the Plan will allow are:

### UNDERTAKE RESEARCH

The Plan includes research projects that benchmark the current situation in terms of urban ecology, canopy cover, and heat island impact including the use of precedents and best practice.

### SET REALISTIC AND ACHIEVABLE TARGETS

The background research will inform the setting of targets which will allow the City to track progress and manage and monitor its performance over time.

It is important that the City's 2030 canopy coverage targets be realistic and achievable. Given the numerous benefits that trees provide, it is understandable that setting targets for 2030 may be considered too long a wait. However, this timing is considered appropriate as it takes many years, if not decades, for most trees to reach their mature size. In response to these timeframes the City is also setting canopy targets for 2050.

### PLAN

The Greening Sydney Plan will be coordinated with the City's infrastructure provision activities in ensuring space for trees, landscape treatments and water sensitive urban design.

### ESTABLISH

The Greening Sydney Plan outlines an action plan to allow implementation of a works program to ensure projects are prioritised and strategically planned, with cross collaboration between City departments.

### MANAGE, MEASURE AND MONITOR

Targets set by the Greening Sydney Plan will be tracked and the performance measured to ensure the Plan's objectives are achieved.

### ORGANISATIONAL

The Greening Sydney Plan will assist in ensuring that organisational structure and resource allocations are targeted to achieve Greening Sydney objectives.

### CAPACITY BUILDING, EDUCATION AND COLLABORATION

The Greening Sydney Plan has a focus on community engagement to expand the capacity and type of greening outcomes.

## 3.4 A BALANCED APPROACH REQUIRED

Given the context of a densely populated urban landscape, the Greening Sydney Plan needs to consider competing functions and interests for limited public domain space. This includes providing space for pedestrians, cycle ways, recreation and sport.

In terms of tree species selection the modified soil and microclimate conditions will also require an approach of the "right tree for the right place" with a range of native and exotic species selected to cope with the prevailing urban conditions.

# GREENING SYDNEY PLAN

STRATEGIC AND DELIVERY FOCUS AREAS



Figure 4.1 Illustrates the strategic and delivery focus of the Greening Sydney Plan



**THE STRATEGIC FOCUS AREAS INFORM THE PLAN'S MAIN OBJECTIVES AND TARGETS. IN SUMMARY THESE ARE:**



Established native street trees  
(Photo: Arterra 2011)

### URBAN CANOPY

#### Developing and protecting the City's Urban Forest

Focuses on developing and protecting the City's urban forest that will deliver climate change benefits, urban heat island reduction, stormwater benefits, and associated economic and social benefits. Key targets to be developed include percentage canopy cover. *Refer to 4.1*



Green and golden bell frog

### URBAN ECOLOGY

#### Greening to improve Habitat for Biodiversity

Focuses on promoting biodiversity through creation or enhancement of habitat in parks, streets, and private properties to create a network of key habitat areas linked by wildlife corridors, and engaging the community in these initiatives. *Refer to 4.2*



Volunteers – Rozelle Bay

### COMMUNITY EMPOWERMENT

#### To green and care for our urban landscape

Focuses on meeting the community desire for a sustainable City environment and supporting them to learn more about it and be active in its development, enhancement and care through programs that support volunteers, community gardens, junior rangers, local fauna and LandCare groups. *Refer to 4.5.*

**THE DELIVERY FOCUS AREAS ARE THE MAIN MECHANISMS THROUGH WHICH THE PLAN WILL ACHIEVE ITS OBJECTIVES AND TARGETS. IN SUMMARY THESE ARE:**



Living Colour 2010 – QVB

### PUBLIC DOMAIN

#### Greening to provide quality Streetscapes and Public Spaces

Focuses on improving the amenity of the City's streets and public spaces to increase liveability and activation.

The greening of streets and public spaces is an important part of greening the City by contributing to the city's urban canopy. The greening of public domain creates an amenity that is more pleasant to use for walking and encourages social interaction.

Greening arterial roads and utility corridors also provide the opportunity in increase canopy and biodiversity. *Refer to 4.3.*



City Quarter – Green Wall

### NEW DEVELOPMENT

#### Maximising greening opportunities

Privately owned land makes up 62% of the City of Sydney but contributes to 42% of the City's urban canopy. By providing policy and guidelines on how to provide greening in the new development, the City will increase its overall urban canopy and deliver associated environmental, economic and social benefits. *Refer to 4.4.*



Community Greening – Sydney Park

### COMMUNITY GREENING

#### Empowering the community to green our City

One of the City's greatest resources for greening the urban landscape is our community. Interest and participation in community gardens, LandCare groups, and habitat special interest groups provide many social capital benefits as well as greening outcomes. *Refer to 4.5.*

## 4.1 URBAN CANOPY – DEVELOPING AND PROTECTING THE CITY’S URBAN FOREST

The City’s urban forest consists of all trees located throughout the local government area; irrespective of its origin, ecosystem type, location or ownership.

Urban forests play a vital role in the health, social framework and economic sustainability of a city. Like other vegetation, trees improve our air, soil and water quality; they improve mental health and wellbeing, reducing anger and aggression, and associated health operating costs; they provide a sense of place and reduce property operating costs, and enhance property values.

Canopy coverage has specific benefits for the City’s asset management. Over paved surfaces, it is a cost-effective means of mitigating urban heat islands (Akbari et al. 1992; Asaeda et al. 1996), reducing emissions of hydrocarbons involved in ozone formation (Scott et al. 1999), controlling stormwater runoff (Xiao et al. 1998), and increasing pavement longevity (McPherson et al. 1999b).

These environmental, social and economic benefits underpin the City’s desire to develop an urban forest policy.

### OBJECTIVES

The City will protect and enhance the urban forest by:

- Developing a comprehensive Urban Forest Policy
- Improving the quality and quantity of the City’s urban forest
- Providing and integrating strategic / systematic planning processes to maximise the benefits of the urban forest
- Educating and promoting the benefits of the urban forest to the community.

The development of an Urban Forestry Policy will assist the City in managing the conceptual shift from dealing with our trees on an individual basis, to managing the vegetation as collective canopy.

Under this unified management approach, the City’s tree population will be managed as a number of stands, with canopy coverage measured and future targets set for our street, park and private trees, and eventually for each City village. Canopy targets and improved tree protection measures will be incorporated into the development planning framework. Other projects for the development, protection or enhancement of the urban forest will be identified and implemented to achieve the 2030 targets.



Urban canopy in Woolloomooloo (Photo: Arterra 2011)



## ISSUES

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### TARGETS AND TIMING

The City has 15.5% of its area covered by urban canopy. Of this, 42% of canopy cover is from private property, 32% from the City roads and 26% from the City's parks. Determining an appropriate tree canopy cover target is complicated. Consideration must be given to the age and condition of the tree population, the species composition and the surrounding existing and future land use.

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### REALISTIC AND ACHIEVABLE TARGETS

It is important that the City's 2030 canopy coverage targets be realistic and achievable. Given the numerous benefits that trees provide, it is understandable that setting targets for 2030 may be considered too long a wait. However, this timing is considered appropriate as it takes many years, if not decades, for most trees to reach their mature size.

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### LIFE CYCLE OF TREES

Canopies increase as trees mature, with their overall size dependent on their species and life cycle. The location of the tree and the associated land use is also important, as trees in the CBD require removal and replacement on a higher rotation than those located in suburban areas. Selective removal and replacement programs, over many years, with similar sized trees allow canopy cover to be managed at a sustained level.

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### UTILITY SERVICES

Services located both above and below ground restrict space in the City's streets for trees and limit the benefits urban trees can provide. A program of aerial bundling overhead services and undergrounding services, whilst allowing sufficient depth for tree planting, can help maximise the benefits of street trees.

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### COMPETITION FOR SPACE

Canopy trees need room to grow, and competition for the space to grow mature trees is increasing. The average private property size and associated green space within the LGA is small. This limits the available space for planting canopy trees.

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### IT SYSTEMS AND AUSTRALIAN DATA

The technical aspects of measuring and analysing the City's canopy coverage will require the development and use of new technology and systems in order to provide accurate data. This includes initial measurement and subsequent updates, measured at a suitable frequency (every 5 years). Research organisations in Australia are increasing the research in specific Australian tree / urban forestry data, as currently there is an 'information gap' in some areas.

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### POLICY INTEGRATION

An Urban Forest policy can not work in isolation. Links to other Council policies and procedures will be required to achieve the 2030 targets. In particular, a review of the Street Tree Master Plan and the completion and ongoing implementation of the City's Development Control Plan (DCP) for protection of existing trees on private property, and promoting future canopy coverage targets.





Photo: Arterra 2011



# IN 2002, AMERICAN FORESTS IDENTIFIED CANOPY COVER TARGETS BY LAND USE— (15% IN CENTRAL BUSINESS DISTRICTS AND INDUSTRIAL AREAS, 25% IN URBAN RESIDENTIAL AND LIGHT COMMERCIAL AREAS, AND 50% IN SUBURBAN RESIDENTIAL AREAS). THE CITY'S VISION IS FOR AN INCREASE OF 50% BY 2030 AND 75% BY 2050.

## BEST PRACTICE

Urban Forestry is widespread in the United States and is increasing in Europe and Asia. In 2002, American Forests identified canopy cover targets by land use (15% in central business district and industrial areas, 25% in urban residential and light commercial areas, and 50% in suburban residential areas).

Leading international city targets include:

**LONDON** – 20 to 25% in 2025

**CHICAGO** – 14 to 17%

**TORONTO** – 17-34% by 2050

**SEATTLE** – 18 to 30% in 30 years

Within Australia, Brisbane City Council's target for residential areas is to increase from 27% to 35% by 2026. In addition, Brisbane has a 'Neighbourhood Shade Ways' program which aims to provide 70% canopy coverage on key streets, to the local shops and schools.

Newcastle City Council is the first local government authority to develop a comprehensive Urban Forest Policy; however targets were not specified. Melbourne City Council is currently developing their policy and canopy targets.

Direct comparisons can not be made between different city's existing canopy cover and their targets. Each city has different factors affecting their urban forest, with key differences being history, planning and establishment, surrounding land use (central business district, residential, rural), climate (rainfall, temperature), soil types and maintenance budgets.

## PROGRAMS AND ACTIONS

PROGRAM	ACTIONS
<b>URBAN FORESTRY POLICY</b>	<ul style="list-style-type: none"> <li>Measure the City's urban canopy (&gt;20m, 10-20m, 5-10m and 3-5m).</li> <li>Set 2030 and 2050 targets to increase canopy.</li> <li>Prepare tree management plans for iconic parks.</li> </ul>
<b>STREET TREE PLANTING</b>	<ul style="list-style-type: none"> <li>Implement Street Tree Master Plan Planting Program.</li> <li>Build road blisters and plant trees into roads and lanes – Cowper Wharf Road, Swanson Street.</li> <li>Investigate WSUD opportunities.</li> </ul>
<b>TREE PROTECTION</b>	<ul style="list-style-type: none"> <li>Strengthen tree protection through the inclusion of canopy coverage targets in the City Plan DCP.</li> <li>Review Significant Tree Register.</li> </ul>

## 4.2 URBAN ECOLOGY – GREENING TO ENHANCE HABITAT AND PROMOTE BIODIVERSITY

The ecological health of urban areas influences not only the diversity and abundance of plant and animal species, but also the health and quality of life of urban residents. Improved urban ecosystems can therefore have both environmental and social benefits.

Like many urban areas, the ecosystems of the City of Sydney have been dramatically altered from their original state. No substantial natural areas remain, and many locally-indigenous plant and animal species no longer exist in the LGA. Many of the plants that are now found in the City are introduced species, or species not indigenous to the Sydney area. Most of the animals present are common indigenous and introduced species that are well-adapted to urban environments.

Nevertheless, through improving existing and creating new habitats, there is potential to improve the diversity and abundance of locally-indigenous plants and animals in the City. Although competing land use demands or other site considerations may restrict the potential for habitat improvement or creation at many locations, there is nonetheless potential for a network of habitat patches comprising locally-indigenous vegetation and other features to be created throughout the City. While providing habitat in their own right, these will also have the potential to act as 'stepping stones' or corridors that link larger areas of habitat, facilitating dispersal of flora and fauna species throughout the LGA and thereby improving the ecological health of the City.

Land that is managed by other agencies, such as the Botanic Gardens Trust and Centennial and Moore Park Trust, currently provides some of the most extensive areas of habitat within the City of Sydney LGA. Some of the larger City of Sydney parks also have potential in this regard. Smaller areas such as new developments, pocket parks, street tree plantings, raingardens, and even residential backyards and balconies and green roofs and walls will be important in providing linkages between these larger areas.

Increased areas of locally-indigenous vegetation will not only contribute to improved ecological health but will contribute to increased urban canopy and vegetation cover generally – improving water and air quality and reducing urban heat island effects, contributing to visual amenity and enhancing recreation opportunities – and thereby promote better health and quality of life for people who live in the City.

An Urban Ecology Survey is being undertaken to obtain baseline information about the current biodiversity of the LGA, and the results are being used to develop an Urban Ecology Strategic Action Plan. This Plan will identify and prioritise specific actions to enhance habitat and promote biodiversity throughout the LGA.

### OBJECTIVES

The overall objectives of greening to enhance habitat and promote biodiversity are to:

- Increase the current diversity, abundance and distribution of locally-indigenous flora and fauna species
- Increase the existing extent of locally-indigenous vegetation across the LGA
- Establish a network of wildlife corridors linking key habitat areas
- Increase the number of community volunteers and volunteer groups participating in habitat creation and enhancement activities.



### URBAN ECOLOGY STRATEGIC ACTION PLAN

Baseline data will be obtained from the Urban Ecology Survey (currently in progress) and specific targets against which the City's performance will be measured in terms of enhancing habitat and promoting biodiversity will be presented in the Urban Ecology Strategic Action Plan (due for completion in mid-2011).

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### COMMUNITY INVOLVEMENT AND PARTICIPATION

A framework needs to be established to provide resources and insurances for volunteers, and to ensure volunteer activities are consistent with Council programs and community expectations. Involving the community in biodiversity monitoring programs.

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### MAINTENANCE SKILLS AND RESOURCES

To ensure that habitat areas are maintained in accordance with best practice, it is essential that City staff, contractors and volunteers have the right skill sets.

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### OTHER LAND MANAGERS

There is a need to collaborate with other land managers within and adjoining the City of Sydney LGA to identify potential for and create a broader network of habitat corridors within the Sydney metropolitan area. It will also be important to work with other land managers to control pest and weed species such as *Celtis sinensis*.

The City will continue its support of community nurseries, including the activities of Rozelle Bay Community Nursery when it relocates to the nearby Whites Gully, in the Leichhardt Council area.





# THERE IS GROWING RECOGNITION INTERNATIONALLY OF THE ROLE OF CITIES AND LOCAL GOVERNMENTS IN SUPPORTING AND PROMOTING BIODIVERSITY.

## BEST PRACTICE

This is demonstrated by the recent establishment of initiatives such as:

- The Global Partnership on Cities and Biodiversity, established in 2008
- The City Biodiversity Index, a tool developed in 2010 to assist cities in the evaluation of biodiversity conservation efforts over time.
- The 2011-2020 Plan of Action on Sub-national Governments, Cities and Other Local Authorities for Biodiversity.

Many cities worldwide, including Singapore, Nagoya (Japan), Montreal (Canada), and Bonn (Germany), have developed and commenced implementation of actions to promote biodiversity under these and other initiatives.

Within Australia, while no other capital city councils currently have specific, stand alone biodiversity management strategies, most are implementing programs aimed at promoting biodiversity. These include:

- Brisbane City Council's Habitat Brisbane Program, Wildlife Conservation Action Statements, and

Biodiversity Research Partnership Program

- The City of Melbourne's quarterly 'Canopy' forum for the discussion of green roofs and walls and other urban ecology initiatives.

Examples of best practice biodiversity management strategies in New South Wales include:

- Gosford City Council Biodiversity Strategy 2008
- Cooks River to Iron Cove GreenWay Revegetation and Bushcare Plan 2010
- Sydney Olympic Park Biodiversity Management Plan.

Examples of best practise community biodiversity education programs include:

- Birds in Backyards
- Backyard Buddies
- Habitat Network.

## PROGRAMS AND ACTIONS

PROGRAM	ACTIONS
<b>URBAN ECOLOGY SURVEY</b>	<ul style="list-style-type: none"> <li>• Establish baseline data for fauna and flora diversity and abundance in the Council area.</li> </ul>
<b>URBAN ECOLOGY ACTION PLAN</b>	<ul style="list-style-type: none"> <li>• Identify and prioritise specific actions to enhance habitat and promote biodiversity throughout the LGA, including:               <ul style="list-style-type: none"> <li>– establishment of wildlife corridors</li> <li>– creating habitat in under-utilised parks, new developments etc</li> <li>– increasing community awareness and engagement.</li> </ul> </li> <li>• Identify performance targets and measures.</li> <li>• Increase skills of staff and contractors in managing urban bushland.</li> </ul>

## 4.3 PUBLIC DOMAIN – GREENING TO PROVIDE QUALITY STREETSCAPES AND PUBLIC SPACES

### A. STREETS AND PUBLIC SPACES

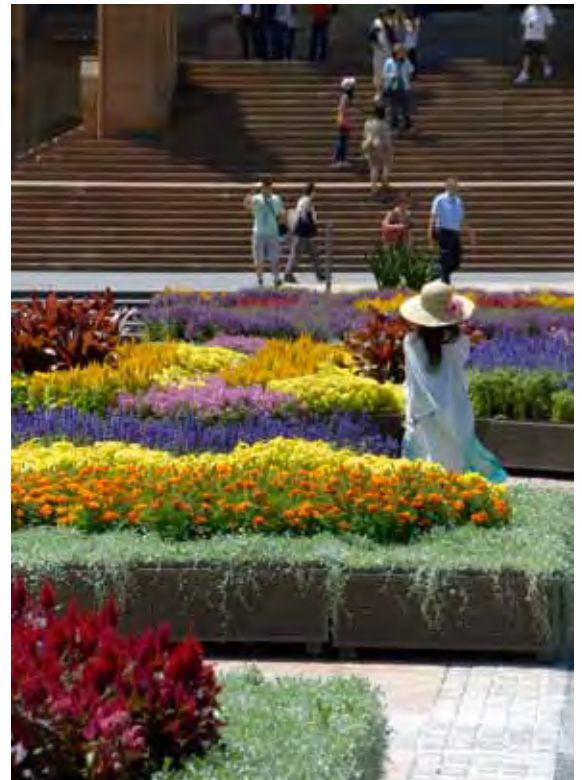
The greening of local streets and spaces is an important part of greening the City. These are the public domain elements that are used to move around the City and connect our open space network. They also make up 32% of our City area and can contribute greatly to the City's urban canopy and greening. The greening of local streets and spaces also makes them more pleasant to use as a resource for improving health and wellbeing through exercise and improving social opportunities.

The City has street tree planting and public domain landscaping programs which have seen over 7,500 street trees and 28,000 square metres of landscaping installed throughout the City's streets. The City's Living Colour program also contributes to the greening of Sydney by providing annual floral displays and hanging baskets in areas that can not provide permanent landscaping or planting. These programs are improving the appearance of the City and there is still more that can be achieved.

### OBJECTIVES

The objectives for the greening of local streets and spaces are to:

- Maximise the public domain areas of the City and villages that can be planted with trees, gardens and turf
- Soften and improve the appearance of the City's streets and villages
- Improve the environmental performance of the City's streets and villages by absorbing and filtering stormwater through landscaping
- Ensure the design and use of landscape materials is sustainable.





## ISSUES

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The key issues to consider in the greening of local streets and spaces are:

## CITY ENVIRONMENT AND MICRO-CLIMATE

The City is a challenging environment in which to grow trees and plants. The microclimatic conditions created by tall buildings and narrow streets mean that rainfall doesn't always meet the ground and there are also short periods, and sometimes no access to sunlight which is a limitation to tree and plant growth.

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## SPECIES SELECTION

City greening needs to fulfil a range of functions including shade, colour, wind protection, screening, and soft places to sit. Due to the sometimes harsh planting conditions, the use of a range of plant species will be required and this will mean that they will be both native and exotic.

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## WATER

Water is a valuable resource and a very important element for City greening. Irrigation is expensive to provide and maintain and where possible hardy, water wise species will be used. Water Sensitive Urban Design (WSUD) will also be incorporated where appropriate.

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## MAINTENANCE

All plants whether they are trees, shrubs or turf require maintenance. This includes regular cleaning as well as horticultural care, and in summer when there are drought conditions this will require water tankers to hand water street plantings. Increased greening will mean increased maintenance costs.





# THE CITY HAS STREET TREE PLANTING AND PUBLIC DOMAIN LANDSCAPING PROGRAMS WHICH HAVE SEEN OVER 7,500 STREET TREES AND 28,000 SQUARE METRES OF LANDSCAPING INSTALLED THROUGHOUT THE CITY'S STREETS.

## BEST PRACTICE

**Singapore** commenced implementation of their strategy to become a 'Garden City' in the 1960s. They have achieved a 47% canopy cover through ongoing streetscape upgrades that include canopy trees and streetscape gardens.

**Chicago** Council 'Landscape Ordinance' has achieved a dramatic increase in quantity and quality of streetscape gardens throughout the CBD. Private property developers are required to plant and maintain the community open space adjacent to their property. Coupled with an annual competition, this policy facilitates the installation and ongoing maintenance of high quality landscapes that provide visual interest along with environmental benefits to Chicago streets.

**Glebe Foreshore** The City of Sydney has connected and landscaped 1.6km of harbour foreshore which is now publicly accessible and providing recreation and habitat creation opportunities for local residents and volunteers.

## PROGRAMS AND ACTIONS

PROGRAM	ACTIONS
<b>PUBLIC DOMAIN LANDSCAPING</b>	<ul style="list-style-type: none"><li>• Landscaping Pedestrian, Cycle and Traffic Calming (PCTC) Schemes.</li><li>• Landscape of footpaths, traffic islands, medians, roundabouts.</li><li>• Install more "green footpaths" with nature strips.</li></ul>
<b>LIVING COLOUR</b>	<ul style="list-style-type: none"><li>• Install vibrant floral displays each year in locations where landscaping can not otherwise be provided.</li><li>• Install hanging floral baskets in the City's villages and high streets.</li></ul>
<b>WELLNESS WALKS</b>	<ul style="list-style-type: none"><li>• Establish landscaped walks with safe footpaths, crossings and furniture around local streets and public housing estates.</li><li>• Investigate WSUD opportunities.</li></ul>

## B. ARTERIAL TRANSPORT AND UTILITY CORRIDORS

Arterial transport and utility corridors occupy large tracts of land within the City and provide linkage opportunities for urban canopy and wildlife habitat. Greening these spaces will improve the appearance of the public domain, while increasing the City's urban canopy.

The City will assess appropriate sites, such as major vehicle transport, light and heavy rail, and service utility corridors for landscape improvement works in these largely under utilised areas. Opportunities exist on the fringes of the Eveleigh rail yards, the main line to Newtown, the Bankstown line to St Peters, the Light Rail corridor, Alexandra canal, Shea's Creek canal, Johnson's Creek, Gardeners Road, Parramatta Road and South Dowling Street.

Consultation and the forming of partnerships to improve land management with the relevant land owners and managers will need to be undertaken. In some instances, community groups will be encouraged to assist with project planning and delivery.

### OBJECTIVES

The objectives for greening the City's transport and utility corridors are to:

- Plant large avenue trees along the main roads in and out of the City
- Underground or aerial bundle the over head services on the main roads in and out of the City
- Plant trees along the rail corridors in and out of the City
- Plant trees and shrubs along the Sydney Water water supply and stormwater canal and channel corridors that traverse the City.

### ISSUES

The issues to be addressed for the greening of the City's transport and utility corridors are:

**Partnerships** – working in partnership with the state government will be important as they own and manage the assets on which urban canopy can be increased and managed. The key agencies will be the Energy Australia, Sydney Water, Roads & Traffic Authority and State Rail.

**Protecting Infrastructure** – the state government agencies have significant assets and services to provide and need assurance that the greening of their land and assets will not provide a long term liability for them.

**Management and Maintenance** – the City provides best practice maintenance and management systems for its tree management and will need to work with the various state government agencies to ensure these systems are implemented on their property assets.

**Urban Ecology** – the linear nature of the road and utility corridors means they are ideal for establishing wildlife corridors and links between habitat areas. This needs to be done in a way that will not affect the use of the land for transport or utility services.

### BEST PRACTICE

**The Greenway – Cooks River to Iron Cove** – use of the Rozelle freight rail and Hawthorne canal corridors to provide a safe pedestrian and cycling path in a greenbelt which links the Cooks River Cycleway at Earlwood to the Iron Cove Bay Run.

**City of Vancouver Greenways Program** – a network of 16 routes approximately 140km long with goals of making walking more interesting, cycling safer and convenient, using art and making greener streets. This links to a local Wellness Walks program.

## PROGRAMS AND ACTIONS

PROGRAM	ACTIONS
<b>LANDSCAPING OF RAIL CORRIDORS</b>	<ul style="list-style-type: none"><li>• Native tree and understorey planting along southern and western railway lines.</li></ul>
<b>LANDSCAPING OF ARTERIAL ROADS</b>	<ul style="list-style-type: none"><li>• Tree planting and landscaping of Eastern Distributor, Parramatta Road and William Street.</li><li>• Landscape redundant road reserves – Botany Road, Euston Road and Erskineville Road.</li></ul>
<b>LANDSCAPING OF UTILITY CORRIDORS</b>	<ul style="list-style-type: none"><li>• Native tree and understorey planting along Alexandra Canal and Sydney Water service corridors.</li></ul>



## 4.4 NEW DEVELOPMENT – GREENING NEW DEVELOPMENT

Privately owned land makes up 62% of the City of Sydney but only contributes to 42% of the City's urban canopy. Apart from the City's greening efforts in the public domain, parks and streets, significant improvements can be achieved through the provision of green space in new developments. This can include deep soil landscaping, on slab landscaping, green walls and green roofs. By providing policy and guidelines on how to provide greening in new development the City will increase its overall urban canopy and deliver the associated environmental, economic and social benefits.

### OBJECTIVES

The objectives for greening new development are:

- Develop a comprehensive Landscape Code to guide developers in how to achieve quality and sustainable landscapes.
- Improve the quality and quantity of the City's urban forest on privately owned land.
- Increase the number of green roofs and walls in the City.
- Provide minimum ratios of soft and deep-soil landscaping to be provided in new development.
- Increase the amount of tree planting and canopy cover on private land.

### ISSUES

The key issues to consider in greening new development are:

**Planning controls** – the City requires appropriate planning controls to require and encourage developers to provide soft landscaping within their sites that benefits both the occupants of the development and the broader community.

**Urban canopy** – developers and property owners are seeking advice on appropriate landscaping for their sites to provide increased urban canopy. Guidelines and advice need to be provided to ensure appropriate species are planted, particularly where development is boundary to boundary or on small land parcels.

**Native species** – there is significant interest in native species, their benefits and suitability in urban environments. There is also strong interest in biodiversity and how urban environments can be improved to improve the city's ecology.

**Sustainability** – greening of new development can reduce energy costs and carbon footprint, as well as opportunities for improved stormwater and grey water reuse. Information needs to be provided on how these benefits can be provided through greening of new development.

### BEST PRACTICE

**Chicago Landscape Ordinance** – 1 street tree per 8.5m, car park setbacks and screening, (5-6 metres back, 1 metre high), 1 tree per 30 square metres, landscape minimum 5% of car park areas.

**Chicago green roofs** – As part of Mayor Richard Daley's goal for Chicago to be America's greenest city, the Chicago City Hall is leading by example and has built a 4,300 square metre roof garden on its roof filling an entire city block 12 stories above street level.

**City of Toronto Green Roofs By-Law** – mandatory green roofs for development over 2,000 square metres with minimum requirements of 20-60% depending on development size. They currently have 492 green roofs in their City and expect this to grow by 75-80 per year.

**Newcastle Council** - Car parks to achieve a 50% shade cover within 15 years, and car park to incorporate gap graded soils and WSUD for healthy tree establishment.

### PROGRAMS AND ACTIONS

PROGRAM	ACTIONS
<b>LANDSCAPE CODE</b>	<ul style="list-style-type: none"> <li>• Develop a policy that sets minimum targets for delivery of successful landscapes in private spaces, including minimum areas of landscaping and canopy coverage on development sites.</li> <li>• Specify species types and habitat creation for new development.</li> </ul>
<b>GREEN ROOFS POLICY</b>	<ul style="list-style-type: none"> <li>• Prepare a policy that promotes and encourages green roofs and walls for new development.</li> </ul>
<b>SYDNEY DCP</b>	<ul style="list-style-type: none"> <li>• Strengthen landscape provisions through on development sites as part of the City Plan review.</li> </ul>

## 4.5 COMMUNITY GREENING – EMPOWERING THE COMMUNITY TO GREEN OUR CITY

One of the City's greatest resources for greening the urban landscape is our community. Greening the City is one of the core elements of the **Sustainable Sydney 2030 Strategy** and the community has shown a strong interest and passion in planning and doing this work.

This is reflected in the rising interest and participation in community gardens, the establishment and operation of the Rozelle Bay Community Nursery, the inspiring work of the Pyrmont Ultimo LandCare group, and the habitat initiatives of special interest groups such as the Glebe Society's Blue Wren Group.

There are also social capital benefits to this work and the ongoing participation by the community in environmental events such as National Tree Day demonstrate the community's desire to not only green the City, but to work together to achieve this goal.

### OBJECTIVES

The objectives for empowering the community to green our City are:

- Engage with City communities to support and facilitate the green visions they wish to achieve.
- Continue to develop and support the provision of community gardens.
- Assist the community in researching and developing new greening projects.
- Continue to support the work of volunteers in enhancing the greening of our urban landscape.
- Investigate the establishment of a formal Bushcare program





### COMMUNITY ENGAGEMENT

is a key element to ensure we are developing and supporting greening initiatives that the community want to see and want to participate in. It is also important to ensure the projects are widely accepted and where possible to encourage a sense of ownership.

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### COMMUNICATION AND EDUCATION

Ensuring communication between the City and volunteer groups is clear and ongoing, and to provide continuing education and awareness to the broader community.

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### GRANTS AND RESOURCING

Grant programs need to be easy to access and understand with clear goals about the City's expectations and the timeframes in which community groups can expect to have their applications assessed. This is often not understood and the processes for spending and allocating public funds needs to be better explained.

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### TECHNICAL SUPPORT

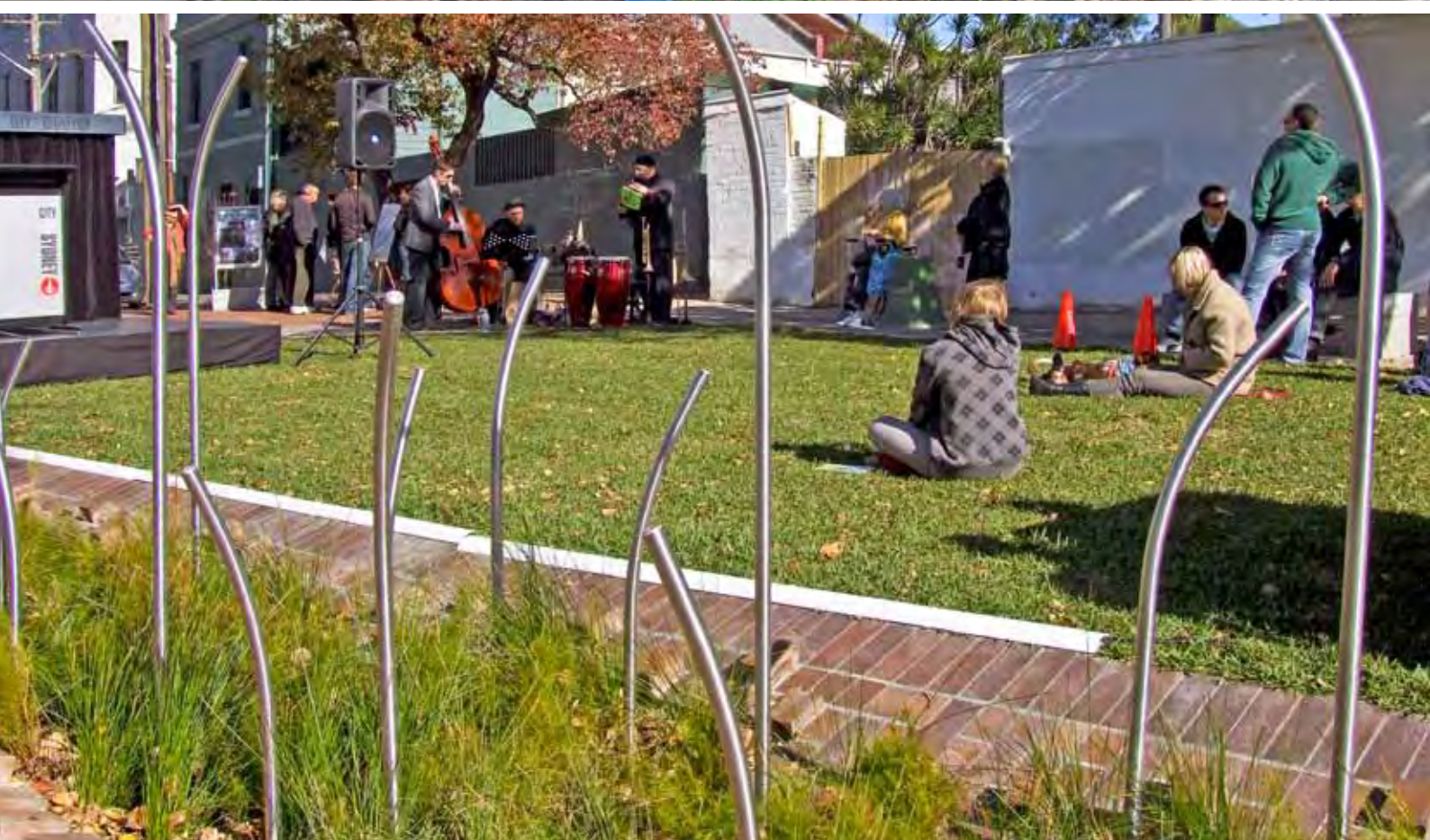
The City needs to allocate sufficient resources to assist volunteer groups. The value of work by volunteer groups is significant and to maximise this asset, adequate resources need to be allocated to provide direction and assistance with approvals, access, training and technical support.

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### SELF MANAGED GROUPS

Many groups like to work independently of the City with access to support when required. This is an important goal to pursue in empowering the community as it provides them with the responsibility and autonomy to undertake greening projects in partnership with the City without directing resources away from core City business.







## BEST PRACTICE

**Seattle Department of Neighbourhoods matching grants program** – connecting people, communities and government. The program provides neighbourhood groups with City resources for community-driven projects that enhance and strengthen their own neighbourhoods. All projects are initiated, planned and implemented by community members in partnership with the City. Every grant is matched by communities' resources of volunteer labour, donated materials, donated professional services or cash.

**Golden Gates National Parks** – Parks for all forever – have developed a volunteering program which contributed 430,000 volunteer hours into the parks network in a variety of areas including bush regeneration, planting days park maintenance tour guiding, junior rangers and environmental programs.

**CERES Community Environment Park** – a not for profit education and environmental and urban farm located in East Brunswick, Melbourne. The park grows organic food, hosts weekend markets, a permaculture nursery, social wellbeing and connectedness courses and workshops on bee keeping, composting, worm farms and bread baking.

**LandCare programs** – a program started by the federal government to support volunteers looking after the environment. There are over 4,000 LandCare groups across urban, rural and bushland settings who are repairing and protecting our natural environment, halting soil salinity and erosion, stabilising coastal landscapes, breathing life into waterways and creating habitat for native and urban wildlife.

**BushCare** – a national heritage trust program which aims to reverse the long term decline of Australia's native vegetation. This program has supported more than 250 local councils on a range of projects both within and across Council boundaries and on public and private land.

## PROGRAMS AND ACTIONS

PROGRAM	ACTIONS
<b>COMMUNITY GARDENS</b>	<ul style="list-style-type: none"> <li>Support the establishment of a community garden network within the City.</li> <li>Provide training and resources to support the development of new community gardens.</li> <li>Support the establishment of edible verge gardens.</li> </ul>
<b>SUSTAINABILITY AND EDUCATION</b>	<ul style="list-style-type: none"> <li>Complete a feasibility study to establish a City Farm within the City of Sydney Council area.</li> </ul>
<b>STREETSCAPE GARDENING POLICY</b>	<ul style="list-style-type: none"> <li>Assist residents and businesses to green their local streets by providing nature strips gardens, planter boxes.</li> </ul>
<b>COMMUNITY LANDSCAPING</b>	<ul style="list-style-type: none"> <li>Assist Pyrmont Ultimo LandCare to create and enhance bushland patches in and around the Light Rail corridor.</li> <li>Assist the Rozelle Bay Community Native Nursery to propagate locally-indigenous species and to create and enhance bushland patches in the Federal Park and Glebe foreshore areas.</li> <li>Support the initiatives of the Blue Wren Group.</li> <li>Support community participation in National Tree Day.</li> <li>Investigate establishment of a formal Bushcare program.</li> </ul>
<b>TREE DONATION POLICY</b>	<ul style="list-style-type: none"> <li>Provide a means for the community to donate money for tree planting and be recognised on the City's Community Care web page.</li> </ul>
<b>COMMUNITY GREENING GRANTS</b>	<ul style="list-style-type: none"> <li>Matching Grants program to support local greening initiatives and projects.</li> <li>Donate plants and landscape materials to local schools and public housing estates.</li> </ul>
<b>COMMUNITY ENGAGEMENT AND RECOGNITION</b>	<ul style="list-style-type: none"> <li>Support the holding of a garden competition or an open garden scheme.</li> <li>Develop or join an open garden scheme.</li> </ul>
<b>GREEN VOLUNTEER NETWORK</b>	<ul style="list-style-type: none"> <li>Training and sharing of strategies and information for all green volunteer groups.</li> </ul>

## ACTION PLAN

### URBAN CANOPY – DEVELOPING AND PROTECTING THE CITY’S URBAN FOREST

#### PROGRAM – URBAN FOREST POLICY

<b>Action</b>	<b>Measure the City’s urban canopy</b>
Current/New	New
Timeframe	Dec 10 and ongoing
Responsibility	City Operations

<b>Action</b>	<b>Set 2030 targets to increase</b>
Current/New	New
Timeframe	Dec 11
Responsibility	City Operations

#### PROGRAM – STREET TREE PLANTING

<b>Action</b>	<b>Implement Street Tree Master Plan Planting Program</b>
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Current/New	Current
Timeframe	October 11
Responsibility	City Operations

<b>Action</b>	<b>Plant in all available footpath locations</b>
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Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations

<b>Action</b>	<b>Build road blisters and plant trees into roads and lanes – Cowper Wharf Road, Swanson Street</b>
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Current/New	Current
Timeframe	June 15
Responsibility	City Operations

<b>Action</b>	<b>WSUD opportunities</b>
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Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations/City Strategy

#### PROGRAM – TREE PROTECTION

<b>Action</b>	<b>Strengthen tree protection through the inclusion of canopy coverage targets set in a City Plan DCP</b>
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Current/New	Current
Timeframe	June 12
Responsibility	City Operations

<b>Action</b>	<b>Review Significant Tree Register</b>
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Current/New	Current
Timeframe	June 13
Responsibility	City Operations

#### PROGRAM – URBAN ECOLOGY SURVEY AND STRATEGIC ACTION PLAN

<b>Action</b>	<b>Establish baseline data for fauna and flora diversity and abundance in the LGA</b>
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Current/New	Current
Timeframe	Dec 11
Budget	\$100k
Responsibility	City Strategy

<b>Action</b>	<b>Identify and prioritise specific actions to enhance habitat and promote biodiversity</b>
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Current/New	Current
Timeframe	Dec 11
Budget	\$100k
Responsibility	City Strategy

<b>Action</b>	<b>Landscape to create habitat in under-utilised parks, new developments etc</b>
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Current/New	New
Timeframe	June 12
Responsibility	City Operations

<b>Action</b>	<b>Increase community awareness of urban ecology and habitat</b>
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Current/New	New
Timeframe	June 12
Responsibility	City Strategy/City Engagement



## GREENING LOCAL STREETS AND SPACES

### PROGRAM – PUBLIC DOMAIN LANDSCAPING

<b>Action</b>	<b>Landscaping new Pedestrian, Cycle and Traffic Calming (PCTC) Schemes</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations
<b>Action</b>	<b>Landscaping of footpaths, traffic islands, medians, roundabouts</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations
<b>Action</b>	<b>Installing more nature strips</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations

### PROGRAM – WELLNESS WALKS

<b>Action</b>	<b>Establish landscaped walks with safe footpaths, crossings and furniture around local streets and public housing estates</b>
Current/New	New
Timeframe	December 13
Responsibility	City Operations
<b>Action</b>	<b>Investigate WSUD opportunities</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations

### PROGRAM – LIVING COLOUR PROGRAM

<b>Action</b>	<b>Install vibrant colourful floral displays in high profile and well visited locations throughout the City</b>
Current/New	Current
Timeframe	Annual
Responsibility	City Operations
<b>Action</b>	<b>Extend the hanging basket displays to the urban village high streets and the City Centre, e.g. George Street</b>
Current/New	New
Timeframe	September 11
Responsibility	City Operations

## GREENING SYDNEY'S ARTERIAL TRANSPORT AND UTILITY CORRIDORS

### PROGRAM – LANDSCAPING OF RAIL CORRIDORS

<b>Action</b>	<b>Native tree and understorey planting along southern and western railway lines</b>
Current/New	New
Timeframe	June 14
Responsibility	City Operations

### PROGRAM – LANDSCAPING OF ARTERIAL ROADS

<b>Action</b>	<b>Tree planting and landscaping of Eastern Distributor, Parramatta Road and William Street</b>
Current/New	New
Timeframe	June 12
Responsibility	City Operations
<b>Action</b>	<b>Landscaping of redundant road reserves – Botany Road, Euston Road and Erskineville Road</b>
Current/New	New
Timeframe	June 16
Responsibility	City Operations

### PROGRAM – LANDSCAPING OF UTILITY CORRIDORS

<b>Action</b>	<b>Native tree and understorey planting along Alexandra Canal and Sydney Water service corridors</b>
Current/New	New
Timeframe	June 14
Responsibility	City Operations

## ACTION PLAN

### NEW DEVELOPMENT – GREENING NEW DEVELOPMENT

#### PROGRAM – LANDSCAPE CODE – CITY PLAN DCP

<b>Action</b>	<b>Require minimum areas of landscaping and canopy coverage to be provided on development sites;</b>
Current/New	Current
Timeframe	December 11
Responsibility	City Strategy
<b>Action</b>	<b>Specify species types and habitat creation for new development</b>
Current/New	Current
Timeframe	December 11
Responsibility	City Strategy

#### PROGRAM – GREEN ROOFS AND WALLS

<b>Action</b>	<b>Develop a policy that promotes and encourages green roofs for new development</b>
Current/New	New
Timeframe	December 14
Responsibility	City Strategy

#### PROGRAM – SUSTAINABLE STREETS DEMONSTRATION PROJECT

<b>Action</b>	<b>Promote sustainability innovation and best practice in local streets</b>
Current/New	New
Timeframe	December 12
Responsibility	City Operations/City Strategy

### COMMUNITY GREENING – EMPOWERING THE COMMUNITY TO GREEN OUR CITY

#### PROGRAM – COMMUNITY GARDENS

<b>Action</b>	<b>Support the establishment of a community garden network within the City</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations
<b>Action</b>	<b>Support the establishment of verge gardens</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations

#### PROGRAM – STREETSCAPE GARDENING POLICY

<b>Action</b>	<b>Assist residents and businesses to green their local streets through providing nature strips gardens, planter boxes</b>
Current/New	Current
Timeframe	June 11
Responsibility	City Operations

#### PROGRAM – COMMUNITY LANDSCAPING

<b>Action</b>	<b>Assist Pyrmont LandCare with the bush regeneration of the Light Rail corridor</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations
<b>Action</b>	<b>Assist Rozelle Bay Community Nursery with local endemic plant production and landscaping of parks</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations
<b>Action</b>	<b>Support community participation in National Tree Day</b>
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations
<b>Action</b>	<b>Green Volunteer Network</b>
Current/New	New
Timeframe	2013 and ongoing
Responsibility	City Operations



## COMMUNITY GREENING – EMPOWERING THE COMMUNITY TO GREEN OUR CITY

### PROGRAM – TREE DONATION POLICY

Action	Implementation of Tree Donation Policy – a means for the community to donate money for tree planting and be recognised on the City's Community Care web page.
Current/New	New
Timeframe	December 11
Responsibility	City Operations

### PROGRAM – COMMUNITY GREENING GRANTS

Action	Matching Grants program to support local greening initiatives and projects
Current/New	Current
Timeframe	Ongoing
Responsibility	City Projects

Action	Donations of plants and landscape materials to local schools and public housing estates
Current/New	Current
Timeframe	Ongoing
Responsibility	City Operations

### PROGRAM – OPEN GARDEN SCHEME/ GARDEN COMPETITION

Action	Simple scheme to promote and reward inner City greening and habitat creation
Current/New	New
Timeframe	July 12
Budget	\$50k
Responsibility	City Operations

Action	Encourage businesses to green their local high street
Current/New	New
Timeframe	July 12
Responsibility	City Operations

## APPENDIX – POLICY CONTEXT

### 1. SUSTAINABLE SYDNEY 2030

The Sustainable Sydney 2030 Vision is the City's guiding strategic plan for the coming 25 years.

The City undertook 18 months of consultation with the community and other stakeholders to develop the Vision, which provides 'step change' progressions toward a more sustainable Sydney.

The Vision for Sydney is a Green, Global and Connected City.

**GREEN** with a minimal environmental impact, green with trees, parks, gardens and linked open spaces, green by example and green by reputation.

**GLOBAL** in economic orientation, global in links and knowledge exchange, global and open-minded in outlook and attitude.

**CONNECTED** physically by walking, cycling and high quality public transport, connected 'virtually' by world-class telecommunications, connected to communities through a sense of belonging and social well being, and connected to other spheres of government and to those with an interest in the City.

The key 2030 Strategic Directions and the implications for the Greening Sydney Plan are outlined in the Table below.

#### PROGRAMS AND OUTCOMES

2030 STRATEGIC DIRECTION	RELEVANT OBJECTIVES/ ACTIONS	CONTRIBUTION OF GREENING SYDNEY PLAN ACHIEVING OBJECTIVES
<b>DIRECTION 2 A LEADING ENVIRONMENTAL PERFORMER</b>	<p><b>Objective 2.2</b> Reduce waste generation and stormwater pollutant loads to the catchment.</p> <p><b>Objective 2.3</b> Improve the Environmental Performance of Existing Buildings.</p> <p><b>Objective 2.4</b> Demonstrate leadership in environmental performance through the City of Sydney's operations and activities.</p>	<p>Greening Sydney Plan to promote WSUD measures , roof gardens and vertical wall landscapes.</p> <p>The Greening Sydney Plan is an example of the City demonstrating leadership in environmental performance with the Plan's focus on urban canopy, biodiversity and tree and park management.</p>
<b>A CITY FOR WALKING AND CYCLING</b>	<p><b>Objective 4.1</b> Develop a network of safe, linked pedestrian and bicycle paths integrated with green spaces throughout the city and inner Sydney.</p>	<p>Greening Streets will create a high quality public domain that will encourage walking and cycling.</p>
<b>SUSTAINABLE DEVELOPMENT RENEWAL AND DESIGN</b>	<p><b>Objective 9.2</b> Define and improve the City's streets, squares, parks and open space, and enhance their role for pedestrians and in public life.</p>	<p>Greening actions for public domain and new development will improve amenity.</p>

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## APPENDIX – POLICY CONTEXT

### 2. THE ENVIRONMENTAL MANAGEMENT PLAN

The City of Sydney Environmental Management Plan establishes the City's environmental vision, goals, targets and actions for the next ten years and beyond. It addresses the themes of energy and emissions, water, waste, plants and animals. Prioritised actions have been developed to improve the health and function of our environment, and reduce environmental impacts of Council and the community.

The Environmental Management Plan recognises that urbanisation of Sydney has had a significant impact on plant and animal species and ecosystems. The City is creating and managing parks and streetscapes to protect and enhance natural systems.

#### KEY FOCUS AREAS ARE:

- Energy and emissions.
- Water.
- Waste.
- Plants and animals.

#### RELEVANT ASPECTS FOR THE GREENING SYDNEY PLAN ARE:

- Tree planting for sequestration of carbon.
- Urban heat island.
- Water sensitive urban design.
- Increasing / maintain open space for residents.
- Increased tree and vegetation canopy coverage.
- Use of local native plant species.
- New partnerships with public land managers.



## APPENDIX – POLICY CONTEXT

### 3. CITY OF SYDNEY PLANS AND POLICIES

The Greening Sydney Plan also integrates with other City of Sydney policy and strategy documents which are required to deliver environmental outcomes. A summary of relevant programs, reports, and policy is listed below.

#### 3.1 TREE MANAGEMENT PLANS AND POLICY

The City has developed a suite of tree management policies to ensure the protection and enhancement of the City's urban forest.

##### Volume 1 – Urban Tree Management Policy

The Urban Tree Management Policy provides an overview of all the City tree management policies and sets forth principles and processes for management of our trees within the LGA. The policy covers the following areas:

- Tree Protection
- Tree Planting/Selection
- Tree Asset Management
- Tree Replacement/Removal
- Community Consultation

##### Volume 2 – Tree Preservation Order

The City's Tree Preservation Order provides a regulatory tool aimed at the preservation and management of trees within the LGA. This will be the main tool to regulate and assess applications to prune and remove trees within the City.

The aims of the Order are:

- Preservation and management of existing suitable trees in a safe and healthy condition.
- Planting and management of new suitable trees that will be safe, healthy and beneficial.
- Management and/or removal of dangerous and unsuitable trees (e.g. weed species causing irreparable structural damage).

##### Volume 3 – Street Tree Master Plan

The Street Tree Master Plan guides the controlled development of street tree planting delivering streetscapes that are coordinated and robust. The Master Plan provides a clear vision for the City's streetscapes and ensures that species selected for planting are rigorously assessed to establish the "right tree for the right location".

The Master Plan is developed according to the City's precincts and villages. The Master Plan covers the following:

- Introduction/vision statement
- Tree species selection
- Precinct plans
- Street tree master list
- Technical guidelines

##### Volume 4 – Register of Significant Trees

The Council of the City of Sydney resolved to adopt the Register of Significant Trees on the 12 December 2005.

The Register identified that 1931 significant trees are located in the City's public spaces, parkland, reserves, streetscapes and privately owned properties.

The aim of the Register is to identify and recognise the importance of significant trees in the City's changing urban landscape. The Register will help to guide the management of these trees and to ensure their continued protection for the benefit of the community and for future generations.

These trees are integral parts of the City's historic, cultural, social, aesthetic and botanical heritage. Many of these trees have a story to tell and may have strong associations with past events and people.

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### **3.2 OPEN SPACE AND RECREATION NEEDS STUDY 2007**

The City of Sydney Open Space and Recreation Needs Study provides Council and other stakeholders with strategic direction and framework through which to enhance and develop the provision of open space and recreation facilities.

The aim of the study is to assist the City to deliver a cohesive, linked well-managed system of open space, sporting and recreation facilities to meet a range of recreational needs over the next 10 to 20 years.

### **3.3 CITY OF SYDNEY PUBLIC DOMAIN CODES**

The City is preparing a series of public domain codes (Sydney Streets, Sydney Lights and Sydney Signs and Sydney Parks) that together illustrate and help to realise the vision for the public domain of the City of Sydney.

The Sydney Streets Design Code provides a set of specific design objectives and technical information for the streets and footpaths in the Local Government Area, enabling the City, its community, designers, consultants and contractors to understand and deliver the vision. The Code supports the Greening Sydney objectives by encouraging landscape treatments and opportunities for tree planting in roadways.

### **3.4 CITY PLAN**

The new City Plan will be a package which includes a single Local Environmental Plan (LEP) and Development Control Plan (DCP) and supporting information that will apply to the City of Sydney Local Government Area (LGA).

This project involves the review of existing DCPs and establishing an approach to amalgamate these into one consistent DCP for the whole LGA. This project involves an amalgamation (and some review) of the existing three large DCPs, the numerous issue and area focused DCPs and incorporation of new provisions and policies.

The Draft Development Control Plan 2010 recognises the importance of providing quality landscape outcomes from new development including increased tree canopy and encouraging use of new technology such as green roofs and vertical wall gardens to increase landscape treatments.

### **3.5 LANDSCAPE CODE**

The development of the new City Plan and DCP provides the opportunity to develop a Landscape Code that guides the design, installation and maintenance of landscape treatments arising from building work across the entire City area. The Code will ensure new development contributes to canopy cover and biodiversity strategies outlined in the City's Greening Sydney Plan. The Landscape Code supports the new City Plan and will inform relevant sections of the Plan and other Council Policies.

