

Open Space Tree Strategy



June 2016

Contents

1	Introduction	2
2	Benefits of Trees	3
3	Tree Planting Priorities	3
3.1	Tree replacement program	4
3.2	Open space classification and provision of trees	4
3.3	Planting identified in Open Space Master Plans or Management Plans	5
3.4	Replace Galah damaged trees	5
3.5	Building on existing pockets of trees	6
3.6	Highlight existing park features	6
4	Species Selection and Planting Themes	6
4.1	Tree species percentage	8
5	Tree Donations/Memorials.....	10
6	Planting.....	10
7	Management of Existing Park Trees	11
7.1	Proactive and reactive maintenance	11
7.2	Risk management	11
7.3	Galah damage.....	12
7.4	Pruning.....	12
7.5	Tree removal	13
8	Revision	13
9	References	14
	Appendix A: Benefits of Trees	15
	Health	15
	Social	15
	Aesthetic.....	16
	Economic	16
	Environmental	16

1 Introduction

Trees are regarded as an essential and important asset, providing significant economic, social, environmental, ecological and aesthetic benefits to our community. They also assist in creating a sense of place, identity and neighbourhood character.

The Council recognises trees as a living asset, and understands ongoing maintenance, renewal and management is required for long-term sustainability and community benefit.

The purpose of the Open Space Tree Strategy (the Strategy) is to provide a coordinated, consistent and strategic approach to the establishment, preservation and management of trees within the Council's open space, recreation and parkland areas.

The aim of the Strategy is to:

- . Improve the aesthetic quality of the parkscape for residents and visitors.
- . Ensure trees are planted and preserved for future generations.
- . Provide a strategic and consistent approach to identifying and managing tree related problems.
- . Increase tree coverage and overall sustainability of our park trees within budget constraints.
- . Identify tree planting priorities.

The Strategy will provide a long-term direction for the implementation of new appropriate and desirable trees and the preservation of existing trees.

The Strategy is comprised of three parts including:

- . identifying tree planting opportunities and priorities;
- . appropriate species selection; and
- . the preservation and management of existing trees.

The Strategy will be a progressive document and will continue to assess other areas where the establishment of new trees would provide maximum benefit to the community.

Whilst trees play an important role in our open space/park environments, it is also recognised that trees of the incorrect type or growing in an inappropriate location can create problems and risks. Generally, trees growing within a park setting have minimal negative impacts, particularly compared with trees planted within a built-up environment. Substitution of inappropriate or unsafe trees will be carried out on an as needs basis.

Through planning and the use of sound planting and tree care practises, this Strategy endeavours to minimise:

- . risk to the public;
- . interference with overhead services;
- . damage to private property;

- . damage to footpaths;
- . damage to underground services;
- . interference with sightlines for intersections, driveways and signage;
- . lighting;
- . birds roosting; and
- . excessive shading.

2 Benefits of Trees

An understanding of the types of benefits trees provide to the community is fundamental in highlighting the need to provide a strategy which ensures trees within the Council's open space, recreation and parkland areas are established and protected for future generations. Increasing amounts of information are now available on the diverse range of social, economic and environmental benefits trees provide. Some of these include:

- . Wildlife habitat and food sources and preservation of biodiversity.
- . Much needed shade during our warmer summer months, providing great areas for picnics and places to sit and contemplate.
- . Trees play a significant role in shaping the appearance and characteristics of a park.
- . Buffers/wind breaks from strong winds.
- . Improved air quality, by removing carbon dioxide and airborne pollutants from the air and replacing them with oxygen.
- . Seasonal interest with changing foliage colour, the production of fruit/flowers and the loss of leaves.

For more information on the benefits trees provide please refer to Appendix A.

3 Tree Planting Priorities

A list of priority areas has been determined to ensure we are allocating our time and resources in establishing trees in the necessary areas. The list below must be exhausted in the specified order before establishing trees elsewhere.

- 3.1 Tree replacement program;
- 3.2 Open space classifications and provision of trees;
- 3.3 Plantings identified in Open Space Master or Management Plans;
- 3.4 Replacement of Galah damaged trees;
- 3.5 Build on existing pockets of trees; and
- 3.6 Highlight existing park features.

3.1 Tree replacement program

The Council's tree replacement program was developed to help ensure the sustainability of the Council's tree population. All trees removed over a 12-month period are recorded and during planting season the majority of these trees will be replaced. The same species does not necessarily have to be used and the location can be changed slightly if required.

A list is compiled by the Road Maintenance and the Open Space & Recreation Team Leaders. The list is then provided to the Parks/Recreation Officer who, with input from on-ground staff, will select appropriate replacement trees and locations.

3.2 Open space classifications and provision of trees

The provision of trees within parks has been identified in the Central Coast Open Space and Recreation Plan 2012–2022.

Classification:	Local	Specific Purpose	District	Regional	Linear/Passive
Tree planting requirements:	Minimum of two trees.	Optional to provide adequate shade, shelter and amenity.	At least 5% coverage to provide adequate shade, shelter and amenity.	At least 5% coverage to provide adequate shade, shelter and amenity.	As per Open Space Master Plan or Management Plan.

The table above provides a guide for the provision of trees within each open space classification.

To find the classification of a specific park refer to the Central Coast Open Space and Recreation Plan 2012–2022.

- . Local Parks must have a minimum of two trees.
- . District and Regional Parks must have a minimum of 5% tree coverage.

Tree coverage for District and Regional Parks – 2016

(Those listed below with fewer than 5% coverage are a priority for planting.)

District and Regional Open Space	Park size (m ²)	Tree coverage (m ²)	Percentage of tree coverage
Penguin			
Hiscutt Park	21,870	1,400	6.40%
Johnsons Beach	15,652	2,010	12.85%
Penguin Sports Complex/Dial Precinct	89,232	7,500	8.40%

District and Regional Open Space	Park size (m ²)	Tree coverage (m ²)	Percentage of tree coverage
Turners Beach			
Turners Beach Recreation Ground	47,050	2,800	5.95%
Ulverstone			
Anzac Park	35,131	4,267	12.15%
Bicentennial Park North (Foreshore)	35,000	30,000	86%
Bicentennial Park South (Open Space)	55,000	9,160	16.65%
Fairway Park North (Foreshore Reserve)	33,585	20,797	62%
Fairway Park South (Open Space)	79,500	9,190	11.55%
Haywoods Reserve (outside playing area)	43,801	575	1.30%
West Ulverstone			
Batten Park Rodeo Complex	62,100	18,900	30.43%
Tobruk Park	12,130	3,693	30.45%
Ulverstone Showgrounds (outside playing area)	68,402	110	0.16%
West Beach Reserve	55,038	19,804	35.98%
West Ulverstone Recreation Ground (outside playing area)	45,695	165	0.36%
Forth			
Forth Recreation Ground Park	17,031	2,605	1.523%

3.3 Planting identified in Open Space Master Plans or Management Plans

The Open Space and Recreation Plan 2012–2022 identified that the open spaces categorised as Regional or District will require the development of a Master Plan to guide development of those areas.

As these Master Plans are developed the requirements for tree planting will be identified and considered as part of the developments.

3.4 Replace Galah damaged trees

Increase the indigenous tree populations in parks which have been and continue to be affected by Galah damage and under plant Eucalypt trees with exclusion zones. The planting of indigenous understorey plants will help to restrict access to beneath the canopy of affected trees. Replacement trees can be planted in existing clumps or can be planted as stand-alone trees.

Fairway Park, Shropshire Park and Bicentennial Park are the main priorities for planting.

3.5 Build on existing pockets of trees

It is important to retain and restore existing clumps of vegetation throughout our parks. These areas can often be easily restored or improved by the addition of mulch and additional plantings. Some trees, particularly native trees, tend to have a better success rate if planted together in clumps rather than individually within the parkscape.

3.6 Highlight existing park features

Existing park features can be enhanced with the planting of trees along boundary lines, at park entrance points, tree avenues along pathways etc., and stand-alone specimen trees.

4 Species Selection and Planting Themes

The main purpose of establishing trees is to provide an asset that makes a positive contribution to the amenity of an area, creating a pleasant parkscape where character is lacking, or to further enhance the existing character of a park. Tree species selected may occupy their planting site for 50 or more years, therefore species selection and location is very important.

Identification of areas requiring trees and the selection of suitable species will be undertaken by the Council's Parks/Recreation Officer and/or a suitably qualified horticulturalist within the Open Space and Recreation Team. Species will be selected for planting depending on suitability for the site, aesthetics, functional and biological attributes, proximity to infrastructure and services and potential to contribute to the parkscape and community.

It should be noted that there is no perfect tree and that every selection has some compromise between positive and negative values. The key is to minimise the negative values and ensure that the tree makes a positive contribution. The aim is to use the criteria below to ensure the species selection is the most desirable and appropriate for the location.

Criteria that will be assessed include:

- . Environmental tolerance and impact – this criterion includes suitability with climate, geology and soils, topography, tolerance to sealed areas and pests and diseases, potential for wildlife habitat and native versus exotic species.
- . Functional and biological attributes – this criterion assesses performance record, stock availability at the selected nursery, leaf and fruit litter, chance of becoming an environmental weed, safety aspects, life expectancy, chance of infrastructure damage, sun/shade requirements and maintenance.
- . Aesthetics and design criteria – this criterion investigates appearance, form and scale (including canopy size), relationship with distinctive landscape characters, any historical and cultural associations and deciduous versus evergreen.
- . Proximity to infrastructure – this criterion assesses distance of the planting location to infrastructure and underground services.

During the selection process Council staff will assess each location and determine whether a local native species (species that originally grew in the area), an Australian native (native to other parts of Australia) or an exotic ornamental species is selected.

It is important to maintain a high percentage of local indigenous species throughout our parks for several reasons; natives tend to suit our local environmental conditions, including soil conditions and climate, they are well adapted and generally establish quickly. They help create wildlife corridors and support local biodiversity as well as reinforce an “Australian” sense of place.

Exotics can be more formal and showy as many are deciduous providing ever changing landscapes, with leaf fall in autumn and new growth in spring. Exotic species also come in a wider range of shapes and provide a wider range of leaf colour and flower display. Exotics which lose their leaves provide greater sun access during winter. In summary, natives and exotics both have strengths and weaknesses for use as park trees. So where possible a mix of evergreen, deciduous, exotic and Australian native species should be planted to provide variety and diversity.

4.1 Tree species percentage

The following table details some of the Council's high use high community valued open spaces and the types of trees you would expect to plant at these sites.

Please use this table as a guide.

Note: Tree size – small 8m and under, medium 8–15m, large 15m and over.

OPEN SPACE NAME	DESCRIPTION	TREE SIZE	SPECIES %
Anzac Park (Leven River bridge to train bridge)	Highly visual, high profile memorial park and playground.	Med/Large	Anzac bank north – Tasmanian and Australian natives. Anzac bank south – local native species. Lawn areas – 80% ornamental species, 20% Tasmanian/Australian natives. Opportunities: tree avenue – along river edge.
Wharf and surrounds	Highly visual, high profile area.	Med/Large	Banks and lawn areas: 75% local indigenous species and 25% Australian native species.
Shropshire Park	High profile, formal memorial park.	Small/Med	95% ornamental/feature trees. 5% indigenous native species.
Bicentennial Park	Large open parkland bordered by foreshore reserve to the north.	Med/Large	Park area – 80% local native indigenous species, 20% Australian native and exotic species. Opportunities: tree avenue – following paths and Dial Street boundary.
Fairway Park	Large open parkland with many recreational facilities.	Med/Large	Park area – 60% indigenous native species, 40% Australian native and exotic species. Opportunities: tree avenues – following paths and Water Street boundary.

OPEN SPACE NAME	DESCRIPTION	TREE SIZE	SPECIES %
Fairway Park – <i>continued</i>			Planting of additional indigenous native trees on the northern side of Beach Road.
Tobruk Park	Formal memorial park on the western side of the Leven River, featuring recreational facilities.	Med/Large	Duck pond enclosure: indigenous species. Lawn areas: 25% indigenous species, 75% Australian native and exotic species.
West Beach Reserve	Large open space coastal reserve, bordered by coastal vegetation to the north and pockets of native vegetation throughout.	Med/Large	Tasmanian indigenous species. Opportunities: establish groups of trees and stand-alone specimen trees.
Hiscutt Park	Formal, centrally located park designed around a section of Penguin Creek.	Med/Large	Lawn areas – ornamental/feature trees. Riparian zone along creek edge – Tasmanian indigenous species. Garden southern side of pond – conifer varieties.
Johnsons Beach	Narrow Open Space foreshore reserve, which includes the landmark ‘the Nut’.	Med/Large	‘The Nut’ – Tasmanian indigenous species. Narrow garden following coastline – Tasmanian indigenous species. Lawn areas – 50% indigenous species, 50% Australian native and exotic varieties.
Local parks/playgrounds	Generally small parcels of land catering for the surrounding neighbourhood.	Small/Med/ Large	50% local native indigenous species, 50% Australian native and exotic.

Please note that in all District/Regional local and open spaces adequate space must be retained to provide users with a kick around area/space.

5 Tree Donations/Memorials

The Council welcomes the donation of trees from members of the public and community organisations. Allowing donations encourages community participation in the greening of our park spaces and creates the opportunity for additional trees to be planted at a reduced cost to the Council.

The Council carefully considers all requests and determines suitable species/site location/maintenance requirements and donor recognition in conjunction with the donor.

Trees can be donated directly to the Council and can be planted by the donor, or the Council can arrange for the purchase and installation of a tree at the expense of the requester.

When a tree is being planted as a memorial and a plaque or recognition is requested, the selection criteria set out in the Guidelines for the Installation of Plaques and Memorials in Parks and Open Space within Central Coast needs to be met.

6 Planting

Trees can be purchased in many different sizes from tube stock to advanced trees. Advanced trees, generally 45L, are used when planting stand-alone specimen trees in open lawn areas. Tube stock and smaller trees are often used for revegetation or mass planting within a mulched area.

Trees purchased are to be in excellent condition with good shape and growth, trees should have one central leader, be free from pest and diseases and be in overall good health. Damaged or unsatisfactory stock must be returned to the supplier.

Before planting, all underground and overhead services are to be located. Trees should not be planted within close proximity to services or infrastructure if avoidable. If it is thought that the tree (once mature) has the potential to negatively impact on services and other built infrastructure, another location should be selected.

The correct planting of trees and ongoing maintenance is crucial in ensuring the newly planted trees get off to the best start. Given the sandy soil conditions of our coastal parks it is preferred that additional organic matter such as mushroom compost is added to the planting hole/back fill material. New trees should not require fertilising but do need to be mulched to help retain soil moisture and prevent damage from mowers and machinery. Trees will be securely staked and fitted with tree ties to provide support until roots develop and in some cases, tree guards will be fitted to help protect trees from vandalism and grazing animals. Newly planted trees will often require a small amount of formative pruning to encourage the tree to grow in a desirable shape. All advanced trees will be fitted with a PVC watering tube for ease of regular watering.

For further information on tree planting and maintenance please see the Council's Tree Maintenance Manual.

7 Management of Existing Park Trees

7.1 Proactive and reactive maintenance

The ongoing management and maintenance of the Council's trees is crucial for the long-term sustainability of the Council's tree population. Poor maintenance regimes can reduce the life expectancy of trees and increase the risk to public safety. Regular proactive maintenance will get newly planted trees off to the best start and increase the life expectancy of our older tree populations. Regular maintenance will promote mature, attractive, safe and healthy trees which become important living assets within our community.

The following programs are undertaken by the Council:

- . Annual tree assessment program.
- . Tree works program, undertaking pruning and removal works identified in the annual tree assessment program.
- . Canopy lifting for vehicle clearances.
- . Tree maintenance program which includes mulching/staking/pruning.
- . Tree watering program.
- . Annual tree planting program.
- . Galah damage inspections and associated works.

Reactive works are undertaken as identified, this may include requests from the public to assess the safety of a tree, remove a branch which has failed or clean up after storm damage.

Tree maintenance activities are further detailed in the Council's Tree Maintenance Manual.

7.2 Risk management

To minimise the risk to the public associated with trees, the Council conducts an annual tree inspection program, this program is a requirement of the Central Coast Council's Risk Management Strategy. During this program all park trees are inspected by a suitably qualified arborist, trees that require works, whether risk related or for maintenance reasons, are given a risk rating and prioritised. Priority works are budgeted for and works are undertaken the following financial year.

Requests from the public concerning tree safety are investigated by Council staff; if the risk cannot be determined by Council staff an assessment and report will be undertaken by a suitably qualified arborist.

7.3 Galah damage

Galah damage to trees is an ongoing issue for the Council. The issue of the increased Galah population was identified in 2005 and a report detailing the impacts Galahs were having on Council trees and the extent of the damage was undertaken in 2009. Through this report a large number of the Council's mature Eucalypts were identified for removal and many more required extensive pruning in order to reduce the public safety risk.

Considerable works have been undertaken since and ongoing works are required to continually monitor and reduce the risk.

Annual inspections are undertaken by a suitably qualified arborist, of trees known to be affected by Galah damage; the works identified are prioritised and undertaken by the Council. Tree removal should be the last resort, with signage and exclusion zones installed where appropriate in preference to complete tree removal.

The Council has investigated options to reduce the number of Galahs but has not implemented any physical control measures to date due to community opposition to Galah control.

Until such time as the numbers can be reduced the Council will undertake the following:

- . Community education and signage and installation of signage in parks to deter people from feeding Galahs.
- . Sending letters to residents known to be feeding Galahs.
- . Plant replacement and additional trees in areas affected by Galah damage.
- . Continue to undertake annual inspections, monitor damage and undertake removal/pruning works where required.
- . Install exclusion zones and signage beneath damaged trees where required.

7.4 Pruning

All pruning undertaken on trees within the municipal area will, as a minimum, comply with Australian Standard AS4373-2007: Pruning of amenity trees. All staff undertaking pruning works must be suitably qualified.

This Standard describes methods for the pruning of trees and encourages correct and uniform practices. This Standard is intended for use on amenity trees and includes formative pruning, hazard reduction, selective pruning and thinning.

Pruning is undertaken for a wide range of reasons including:

- . Removal of any dead, dying, dangerous or defective branches to maintain tree health and safety.
- . To uplift the canopy (prune lower branches) to allow pedestrian and vehicle clearance.

- . Selective pruning around light poles and powerlines for clearances.
- . Formative pruning to improve structural stability, health and appearance.
- . Selective pruning to allow sightlines for vehicles and traffic signs.
- . Pruning in accordance with Australian Standard AS4373–2007: Pruning of amenity trees.

Trees will not be pruned or removed to:

- . allow or improve a view;
- . reduce fruit fall, leaf litter, sap drop, bird droppings or similar;
- . increase street lighting onto private property.

Falling leaves, twigs, fruit and flowers are considered normal and expected tree behaviour and therefore are not reason enough alone for removal or pruning. Trees will, however, be maintained in a safe and appropriate manner to reduce nuisance issues.

Any requested work for park tree pruning from the public that is not of an emergency nature (such as a hazardous limb) will be carried out as part of the tree assessment and maintenance program.

More specific guidelines for pruning and the protection of existing trees (including Australian Standard AS4373–2007: Pruning of amenity trees) is documented in the Council's Tree Maintenance Manual – May 2016.

7.5 Tree removal

Park trees may be removed due to:

- . Tree has been identified for removal through the Council's annual tree inspection program.
- . A report received from a suitably qualified arborist identifying a tree with potential structural weakness, decay or other diseases.
- . Severe and damaging impact on infrastructure/services and no alternative solutions are available such as relocation of tree/services/infrastructure or the installation of a root barrier to be determined by the Council's Parks\Recreation Officer.

In some instances, where a tree is a poor performer and will not grow to maturity, offers little aesthetic value or fails to maintain acceptable health, then consideration for removal and replacement is appropriate.

8 Revision

This document is a working document and may be subject to review at any time, however, a complete review should be undertaken within five years.

9 References

Websites

<http://www.burnside.sa.gov.au>

[http://www/cityofsydney.nsw.gov.au](http://www.cityofsydney.nsw.gov.au)

Books/Reports/Strategies/Policies

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Appendix A: Benefits of trees

The many benefits that trees provide can often be under-estimated and unknown. However, trees provide more than just aesthetic values; although trees do enhance our open space and streetscapes they also provide a wide variety of social, environmental and economic benefits. Please find listed below some of the many benefits trees provide:

Health

- . Views of nature can relate to feelings of satisfaction, wellbeing, coping, personal effectiveness and optimism.
- . Green surroundings reduce mental tiredness while enhancing concentration and attention, leading to an improved ability to cope and make positive decisions.
- . Creating positive psychological benefits, including lower rates of mental illness, violence and crime.
- . Trees reduce exposure to ultraviolet light, lessening risk of associated health problems such as skin cancer and cataracts.

Social

- . Residents walk more on streets that are lined with trees.
- . Greenery helps people to relax and renew, reducing aggression leading to less violence.
- . The proximity of trees to dwellings has an effect on residents' use of outdoor space – the closer the trees, the higher the usage.
- . Many more people are involved in social activities in green environs than in areas that have few or no trees and shrubs.
- . Gardens and other plantings contribute to residents feeling safer, more supported and satisfied with their surroundings.
- . Green spaces bring residents together more often, promoting chance meetings and encounters. Residents get to know one another, producing stronger, more cohesive neighborhoods.
- . Public safety – areas with higher levels of planting experience lower levels of crime because it creates pride and care of place which results in ownership.
- . Road safety – tree-lined streets are perceived as narrower, resulting in reduced speeds. Trees along streets provide a buffer between pedestrians and vehicles.
- . Large shady trees in open space areas create great spots for gatherings, picnics or just to sit and contemplate.
- . Surveys of landscaped and non-landscaped community areas have shown that the incidence of crime, vandalism and graffiti is many times lower in areas planted out with greenery.

Aesthetic

- . Beautifying and softening streetscapes and open space areas, the appearance and general environment of many streets and open space areas is improved considerably by the presence of trees.
- . Frame good views and vistas.
- . Trees provide seasonal interest and natural beauty through foliage and their interesting leaf patterns, flowers, bark, fruit and canopy.
- . Play a significant role in determining the urban character of a street or open space area.
- . They enhance architecture; there are few buildings which do not look better in the company of suitable trees.

Economic

- . Research indicates an increase in property values from high amenity, well-treed areas. A garden adds to the aesthetic appeal of your home and neighbourhood, and it adds real monetary value to your home. It is estimated that property value can increase between 5% and 20%.
- . Roads and footpaths with good tree canopy cover are protected from the sun and last longer.

Environmental

- . Provide wildlife habitat and food sources and preserve biodiversity.
- . Trees are critical in the maintenance of a healthy environment as they produce oxygen, trap airborne pollutants in their leaves (such as nitrous oxide and ozone) and absorb carbon dioxide.
- . Large trees have a greater benefit in terms of reducing pollution than small trees.
- . Trees have a positive effect on the environment by the transpiration of water and the emission of oxygen by photosynthesis.
- . Tree roots keep the soil porous which allows the stormwater to be absorbed rather than flow into the drain and sea.
- . Plantings around buildings are a proven method of reducing the demand for artificial heating and cooling with a resultant, and important, lower use of fossil fuels.
- . They provide shade in summer, cooling the air and ground temperature.
- . Provide buffers/wind breaks from strong winds.