Cessnock Tree Strategy

PLANNING FOR OUR PEOPLE OUR PLACE OUR FUTURE



Contents

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Acknowledgement of Country



Cessnock City Council acknowledges that within its local Government Area boundaries are the Traditional Lands of the Wonnarua People, the Awabakal people and the Darkinjung people. We acknowledge these Aboriginal peoples as the traditional custodians of the land on which our offices and operations are located, and pay our respects to Elders past, present and emerging. We also acknowledge all other Aboriginal and Torres Straight Islander people who now live within the Cessnock Local Government Area.



The Cessnock Tree Strategy is a plan for how trees can be used in the Local Government Area to improve livability in our community. This is a plan to protect, enhance and maintain healthy urban trees throughout the entire local government area and covers Cessnock City and its towns and villages. The strategy outlines the many benefits of creating greener urban areas, which provide social, health, environmental, economic, and cultural benefits.

The strategy identifies where to plant trees and what kind of trees should be planted in order to maximise their benefits and increase biodiversity. A greener, cooler and more visually appealing Cessnock Local Government Area makes our region a more attractive place to live, visit and do business, and that benefits our entire community.



Mayor Foreward

This is a plan to protect, enhance and maintain healthy urban trees throughout the entire local government area and covers Cessnock City and its towns and villages.



Executive Summary

Cessnock City Council's very first Tree Strategy provides an overarching framework for how we manage our public trees. Our trees are one of the most important influencing factors that shape our urban landscapes and township characters. They provide much needed shade, intercept stormwater and provide habitat and connectivity for our local biodiversity. They are also one of the most cost effective and efficient mechanisms for adapting our townships to climate change.

Cessnock's townships house approximately 20,000 street and park trees all together and our average township tree canopy cover is 18%, with Branxton recording the highest at 44% and Aberdare the lowest at 8.7%. We have identified around another 20,000 vacant street tree sites which provides a clear opportunity to increase our tree planting program.

Our existing tree population, however faces some key challenges such as ongoing conflicts with other pieces of infrastructure, extreme weather caused by climate change, low species diversity and ongoing development pressures. We also recognise as a Council that we have some clear opportunities in the way we manage our trees.

This Strategy aims to achieve a healthy, diverse and valued urban tree population that is adaptable to climatic changes; providing green, cool towns full of colour and amenity for future generations to enjoy. We'll do this by embedding the following key objectives into our everyday decision making and programs:

- 1. Protect and maintain our existing trees.
- 2. Investigate opportunities to increase tree canopy cover and species diversity.
- 3. Investigate opportunities to enhance biodiversity corridors.
- 4. Embed urban tree management into Councils' strategic and operational frameworks.

We have also developed individual township plans specifying priority areas for tree planting in consideration of the local context, biodiversity and bushfire. These township plans will guide our tree planting program and our future species selection to ensure we are selecting the right species for the right location to minimise future risks and conflicts.



Introduction

Strategy Scope & Purpose

INTRODUCTION

'Green is great. Green makes places cooler in summer, stunning in spring and autumn and provides places to sun ourselves in winter. Green is where we exercise, relax and take time to breathe.'

(Where Will All the Trees Be? The 2020 Update of Green Cover Benchmarking in Our Cities, Green Spaces. Better Places, 2020.)

Trees are critical for the liveability of cities and towns and for tackling the impacts of climate change such as the urban heat island effect. They shield buildings from the sun and provide shade for cyclists and walkers. They absorb stormwater and provide habitat and connectivity for biodiversity. However, as our cities and suburbs grow the ability to maintain and increase tree canopy cover diminishes as there is less space for trees.

Cessnock City Council is feeling the effects of climate change through increased temperatures, long periods of dry and extreme weather events. Some of the trees that have been planted throughout the city in the past may no longer be suitable for the changing climate. Our streets currently have a relatively low level of tree species diversity which leaves the city susceptible to the risks of decline from a changing climate and a population of ageing trees.

To often trees are treated as a cost burden and liability, rather than an important component in the liveability rating of our urban areas. Repeatedly the focus on trees are concerns about risk, operating costs and engineering problems, without fully appreciating the value trees can provide to our cities and towns.

Cessnock City Council has a prominence of existing urban trees throughout its towns, villages and urban centres. These trees help define and characterise individual villages, providing seasonal colour and overall amenity. Given the above mentioned issues and challenges, we now have the opportunity to review our approach to the protection and management of existing trees and the planning for future trees. Based on local experience, our township masterplans will utilise a tree species list that will best suit our local climate and predicted changes. We also have a great opportunity to better communicate the benefits of trees to our community. In doing all of this, we can maintain and enhance the identity and sense of place of each of our villages while creating cool green spaces for our community.

STRATEGY SCOPE & PURPOSE

The Strategy encompasses all trees within our townships along streets, roads, parks and open spaces. The Strategy excludes trees on private properties, rural land, along rural roads or trees in bushland reserves outside of townships, as Council manages these in a different management regime.

New development areas such as Cliftleigh, Huntlee and others are not included in this Strategy as they are required to plant trees as part of their development approvals and specific DCPs. Towns included in the Strategy, in alphabetical order, are:

	1.	Aberdare	10.	Heddon Greta
	2.	Abermain	11.	Kearsley
	3.	Abernethy	12.	Kitchener
	4.	Bellbird	13.	Kurri Kurri
	5.	Branxton	14.	Millfield
	6.	Cessnock	15.	Mulbring
	7.	East Branxton	16.	Neath
	8.	Ellalong	17.	North Rothbury
	9.	Greta	18.	Nulkaba
			19.	Paxton
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The purpose of this Strategy is to promote and plan for the protection and management of existing urban trees, as well as investigating opportunities to increase tree canopy cover through the planting of more trees in areas where they are most needed. It will also assist Council in raising awareness within the community of the many benefits trees provide to community health, wellbeing and the environment.

This Strategy and the township master plans will directly support the intended outcomes of the Cessnock Urban Tree Canopy Policy. It does this by providing the detail on how and where we should be planting more trees.

Strategy Scope & Purpose

REGIONAL CONTEXT PLAN



Aerial image source: Metromap 2022

- East Branxton
- 0 Heddon Greta
- 7 North Rothbury
- 21 Stanford Merthyr

Vision & Objectives

VISION & OBJECTIVES

Vision

'Cessnock - Thriving, attractive and welcoming' Cessnock Community Strategic Plan, 2036.

The Tree Strategy will help deliver on the vision formulated by the community in the Cessnock Community Strategic Plan, 2036, by adopting the following vision for Cessnock's urban trees.

Cessnock City Council will consist of a healthy, diverse and valued urban tree population that is adaptable to climatic changes; providing green, cool towns and villages full of colour and amenity for future generations to enjoy.

Objectives

To achieve the vision, four key objectives have been established. These objectives will be backed by a set of priority Actions as outlined below.

- 1. Protect and maintain our existing trees
- 2. Investigate opportunities to increase tree canopy cover and species diversity
- 3. Enhance biodiversity corridors
- 4. Embed urban tree management into Councils' strategic and operational frameworks



2023

Strategic Context

STRATEGIC CONTEXT

The Tree Strategy will support Council's Vision and Objectives outlined within existing strategic plans. Particular objectives that align with the Tree Strategy are listed below.

Cessnock Community Strategic Plan, Cessnock 2036
Key alignment statements
Outcome 3: A sustainable and healthy environment
Objective 3.2 - Better utilisation of open spaces
Strategic Direction:
We have green corridors connecting our open space areas
Our open spaces have plenty of shade
Cessnock Local Strategic Planning Statement (LSPS)
Key alignment statements
Planning Priority 18: Our areas of biodiversity and biodiversity corridors are enhanced and protected.
Action 16: Prepare A Greener Places, Urban Forest Policy and Street Tree Policy
Cessnock Development Control Plan C7: Vegetation Management in Non-Rural Areas
Key alignment statements
Preamble
Vegetation is an important part of urban and natural landscapes. Vegetation contributes to the identity of urban areas.
reduces the impacts of heat, and provides shelter and habitat.
Key Objectives
• To protect and preserve the biodiversity values and amenity of trees and vegetation across the Cessnock Local
Government Area
• To maintain trees in urban areas that contribute to the amenity and identity of this area
• To identify other approval pathways and exemptions for the removal or pruning of vegetation
 To ensure the cleaning of vegetation for safety of hazard reasons is adequately justified To minimise the loss of habitat for native animals
 To provide a means to offset the loss of habitat for native animals
Vegetation Management (Heritage Items or Significant Trees)
Preamble
Vegetation that is identified as a heritage item or is located on the site of a heritage item contributes to the cultural and heritage significance of the area or the amenity or integrity of a heritage item. Similarly, a tree listed on Council's significant tree register has been identified as contributing to the cultural integrity or amenity of a site or area.
 To maintain significant trees in urban areas that contribute to the amenity and identity of those areas To ensure the clearing of vegetation is adequately justified
• To allow the reasonable pruning of ornamental trees that are identified as heritage items, or within a heritage

conservation area or significant trees

Recreation and Open Space Strategic Plan

Key alignment statements

Vision: A diverse and enticing network of accessible and inclusive recreation and open space areas that integrate with the built and natural environment and provide for the active and passive recreational needs of the local and regional community now and into the future.

Urban Tree Canopy Policy

Key alignment statements

Policy Statement: Council is committed to realising, protecting, enhancing and promoting the Urban Tree Canopy within the Cessnock LGA.

Provides guidance and direction regarding the enhancement and management of the Urban Tree Canopy within the Cessnock Local Government Area.



Benefits of Trees

BENEFITS OF TREES

Trees in urban areas are well known for contributing to the attractiveness of a place. Tree-lined streets, shaded parks bursting with seasonal colour and village centres with an abundance of green canopy are highly valued places. Through numerous studies and research, the benefits of trees have extended far beyond just aesthetics and it has been found they contribute significantly to the environmental, economic and social fabric of our cities and towns.

Environmental Benefits

- Provide shade and cool our townships. An increase in tree canopy and greening can reduce air and surface temperatures by 3 to 20oC (Gil et al 2007)
- Reduce storm water flows, pollution and nutrient loads. Tree canopies and root systems reduce storm water flows and nutrient runoff into our waterways. Streets with higher vegetation cover are three to six times more effective in managing storm water than conventional methods (Norton et al, 2013)
- Provide habitat and enhance levels of biodiversity. Urban and rural roadside trees support a wide range of species, even endangered animals and other species of high conservation value (Kendal et al, 2016)

Social and Health Benefits

- Encouraging outdoor activity. Well-vegetated parks, gardens and streets encourage the use of open spaces, with health benefits such as reduced obesity and increased physical activity levels and promotes more sustainable forms of transportation (van Dillen, 2012)
- Reducing sun exposure. The prevalence of skin cancer and other illnesses due to sun exposure have shown that protection from sunlight's UV rays is vital. Tree shade can reduce overall exposure to UV radiation by up to 75 per cent. (Mullaney et al., 2015)
- Reducing air pollution. Trees absorb air pollution and particulate matter, making them very effective for buffering industrial areas that are dusty (Nowak, 1994).
- Improving mental wellbeing. Access to, and views of, green spaces and trees have positive effects on people's wellbeing (Karden, 2016)

Economic Benefits

- Reducing energy costs. Energy saving benefits come through shading and sheltering buildings from the sun in summer and allowing sunlight in winter (Simpson, 1996)
- Increasing property values. T Trees in streets enhance neighbourhood aesthetics and increase property values. Properties in tree-lined streets are valued approximately 30% higher than those in streets without trees (Plant, 2017)
- Increased retail activity. Shoppers spend longer and more money in retail areas where the area is landscaped, and trees provide shade and amenity (Wolf, 2005)
- Return on investment. Cities across the world have demonstrated that trees create a positive return on investment. In the City of New York, it has been calculated that for every dollar spent on a tree, \$5.60 worth of benefits were returned. (US Forest Service, 2020)

Cultural Benefits

- Creation of local identity. A city's landscape helps define its character. Trees and vegetation can physically define a place. Trees provide landscape amenity and integrate nature into the urban environment.
- Marketing the City. Green spaces play a role in defining the culture and image of a city. A city is more competitive with an expanded political and economic influence when the built and natural urban environment is attractive and welcoming. Many regional towns and cities are investing in their street and park tree population to improve their overall image and attractiveness e.g. Orange, Newcastle, City of Melbourne and Geelong.





CASE STUDY

An article produced by the Climate Council in January of 2021 spoke about the impacts of heat being felt in the streets, homes, playgrounds and schools in Western Sydney, and in particular the effects it has having on children's play and learning. 'Playgrounds at public parks may be children's only regular access to nature. It's the place where kid's gross motor activities take place. More than running from one room to another; it's exercise, risk management, self-awareness, learning compassion for other humans and nature'. Dr Sebastian Pfautsch, Associate Professor of Urban Studies at Western Sydney University.

> Playgrounds are too often constructed with surfaces that conduct heat, creating conditions that render them unsafe and unusable. Recording temperatures of playgrounds during summer, it was common to find rubber softfall surfaces reaching above 100 degrees Celsius. Often playgrounds are located away from mature shade trees for the fear of tree failure. This does not allow the playgrounds and it's users to benefit from the cooling properties of the trees. The images above demonstrate extreme heat conditions in an unshaded playground as well as the extent of cooling provided by natural shade from trees.

Trees are a natural defence against the heat yet they are too often replaced with low maintenance landscapes and built structures. It is imperative that the management and protection of existing trees, combined with planting of new trees is front and centre when it comes to children's health and well being.

(https://www.climatecouncil.org.au/urban-heat-island-effect-western-sydney/)

Cessnock's Tree Planting History

CESSNOCK'S TREE PLANTING HISTORY

The majority of street and some park trees are the result of a State Government tree planting program over 30 years ago. The program offered a limited palette of species and there was no strategic plan for tree planting, resulting in plantings that were dominated by Callistemon and Melaleuca species.

Since then, township entries have been a key focus for signature tree and key avenue plantings. As a result, some township entries now feature Crepe Myrtles and avenues of established Jacarandas and Melaleucas have been created.

Species selection in the distant past also did not account for future conflicts with electrical power lines. As a result, some of our older trees have been pruned to make the required clearance for the electrical wire envelope which has resulted in poorly structured and disfigured trees.







Cessnock's Trees Today

CESSNOCK'S TREES TODAY

Canopy Cover

In 2011, individual trees in street and parks were identified spatially through GIS mapping. At this time, vacant street tree sites where additional trees could possibly be planted were also identified. Despite the age of the data, it is likely to remain valid, given the low levels of tree planting occurring each year since 2011. It is highly likely that some trees have been removed since then, however the data provides a good baseline for the purpose of this Strategy.

Tree canopy cover has been calculated for each township based on aerial imagery from 2021. Tree canopy cover is the extent of tree canopy that covers the urban area, so its a useful indicator of how much benefit the existing trees provide such as shade and stormwater interception. Tree canopy cover has been measured as a percentage of the urban area within each township boundary and includes private and public land. It excludes all land outside of the township boundaries.

		Canopy Cover	No. of Vacant Sites	No. of Existing Trees
1	Aberdare	8.7%	932	1,176
2	Abermain	28%	1,163	1,321
3	Abernethy	18.8%	88	187
4	Bellbird	13.6%	1,322	695
5	Branxton	44%	341	486
6	Cessnock	13.1%	5,026	4,995
7	East Branxton	7.9%	644	474
8	Ellalong	21.9%	434	465
9	Greta	17.3%	1,455	1,387
10	Heddon Greta	14.1%	800	298
11	Kearsley	28.3%	229	259
12	Kitchener	25.2%	174	351
13	Kurri Kurri	12.7%	3,117	3,585
14	Millfield	9.8%	365	344
15	Mulbring	17.6%	216	193
16	Neath	12.9%	135	65
17	North Rothbury	18.2%	186	264
18	Nulkaba	18.2%	317	595
19	Paxton	9.7%	438	209
20	Pelaw Main	12.8%	332	646
21	Stanford Merthyr	19.9%	215	194
22	Weston	28.5%	1,501	2,395
23	Wollombi	26.6%	18	172
		18.6%	19,448	20,756

Species Diversity

A sample set of species data has been collected for some of the towns including Aberdare, Abermain, Abernethy, Bellbird, Cessnock, Greta, Kearsley, Kurri Kurri and Weston. Just over 3,600 trees in total were assessed to determine the most common species planted.

This sample shows that almost half (46%) of all sampled trees are Callistemons. This validates anecdotal and on ground site inspections that Callistemon species dominate the Cessnock urban landscapes.

Diversity within a tree population is crucial to reduce the risk of impacts from pest and diseases, tree senescing at the same time and extreme weather events. This data suggests there is a severe diversity issue within Cessnock's tree population.

A general rule of thumb suggested by specialists in the field of urban forestry is that no one species should represent more than 5-10% of a tree population. Callistemons far exceed this diversity rule, as do Crepe Myrtles.

To improve the resilience and long-term viability of the urban tree population, Council aims to significantly reduce planting of both Callistemons and Crepe Myrtles, unless they are required to continue an existing high-profile avenue. It is not recommended to actively remove them, however, as they reach their end of useful life and need to be removed, they should be replaced with an alternative species.

Species	Common Name	No. Counted	% of Sample
Callistemon sp	Bottlebrush	1671	46.1%
Lagerstroemia sp.	Crepe Myrtle	440	12.1%
Jacaranda mimosifolia	Jacaranda	212	5.9%
Grevillea robusta	Silky Oak	63	1.7%
Tristaniopsis laurina	Water Gum	51	1.4%
Corymbia maculata	Spotted Gum	46	1.3%
Prunus sp	Prunus	43	1.2%
Lophostemon confertus	Brush Box	40	1.1%
Melaleuca sp	Paperbark	33	0.9%
Nerium oleander	Oleander	25	0.7%





Opportunities & Challenges

KEY CHALLENGES

Climate Change

A changing climate will affect our health, environment and function. These affects are expected to be inequitable, with our most vulnerable community members likely to be hit hardest. Extreme temperatures and more hot days as well as bushfires and flooding will increasingly impact on the health and safety of our community and impact the liveability of our city. Trees and their canopies are one of the most efficient and cost-effective mechanisms for reducing urban heat and adapting to climate change, however we must ensure that we are planting the right species that will be able to endure and even thrive in these weather extremes.

Further to this, climate change is exacerbating the already prominent issue of biodiversity loss. Cessnock is often referred to as a Biodiversity Hotspot, containing over 120 threatened flora and fauna species and threatened ecological communities. Our region forms part of the Greater Blue Mountains World Heritage Area. Our towns and urban areas play a key role in protecting and nurturing biodiversity as our natural areas face continued challenges of changing climates.

Inherited Legacies

Cessnock's towns are undeniably dominated by only a few tree species due to past practices that saw the planting of significant numbers of Bottlebrush and Melaleucas. Some of these specimens are thriving and contribute to beautiful streetscapes. Many though have not been adequately maintained or are reaching the end of their useful lives. Added to this, the dominance of so few species within our towns is a major landscape and environmental risk.

We also face the ongoing challenge of species that were incorrectly planted for their location and are now causing issues with existing infrastructure, have outgrown their location or are simply not thriving.

KEY OPPORTUNITIES

Biodiversity Corridors

As a Biodiversity hotspot, we know that some of our town's streets and open spaces have the capacity to support and buffer our natural areas. Detailed structural connectivity mapping shows us where we could be planting indigenous tree and shrub species to buffer existing corridors and enhance safe connections for wildlife.

However, we also need to be cognisant of bushfire risk and there are options for buffering bushland from residential properties through the use of exotic or fireresistant native tree species. The NSW Rural Fire Service (Standards for Asset Protection Zones) determines appropriate species for bush fire prone areas have the following characteristics:

- High moisture content
- High levels of salt
- Low volatile oil content of leaves
- Smooth barks without "ribbons" hanging from branches or trunks; and
- Dense crown and elevated branches.

Species Diversity

It will be critical for us to ensure we build much greater diversity within our urban tree population to reduce the risk of threats such as pest and disease incursions or major landscape impacts when whole streets and suburbs lose the majority of trees as they reach the end of their useful life at the same time. The introduction of a diverse palette of tree species will provide colour, interest, environmental protection and help reinforce an identifiable character for towns and villages.

We also need a diversity of tree sizes. Large canopied trees provide up to 60 - 70 times more benefits than a small tree so we must make space for large trees (Nowak, 1994) and continue to nurture and maintain them to reduce risks larger trees pose in the public domain.

Community Engagement and Advocacy

We have found that community participation in tree planting such as free tree giveaways and community tree planting days is a good way to raise awareness about urban trees.

We also realise that increasing community education is also important if we are to gain support for increased tree planting and maintenance.

The State Government has a number of initiatives and grant funding available to plant trees and increase canopy cover. They have prepared a number of documents around raising awareness and advocating the benefits of trees in our urban environments. Some of the these documents include;

- Street Tree Planting Design Manual
- Greener Places, Establishing an Urban Green Infrastructure Policy for NSW
- Greener Neighbourhoods Guide
- Urban Green Cover in NSW Technical Guidelines



Development

We recognise the challenges in planting trees in new developments, but also optimistic about the opportunities these developments provide in the extensive roll out of trees. With relevant Council staff, developers and consultants engaging early in the design and approval phase, clear objectives and targets can be agreed to, designed and budgeted for at the outset of a development.

On larger developments or new suburbs, site specific Development Control Plans would provide a level of certainty and design guidance for developers and consultants, resulting in good outcomes in regards to tree planting.

A comprehensive tree species list that specifies preferred species for different situations will ensure new developments are protected from risks from bushfires, habitat corridors are created or enhanced, species diversity is achieved, streets and parks are shady during summer and sunny in winter, hard infrastructure won't be damaged and burst of seasonal colour will be obtained.

TOWN TREE MASTER PLANS

Street trees within Cessnock City Council are a valuable community asset and are a key element in establishing the identity and character of the city. They help keep our City healthy and have a range of social, environmental and economic benefits which include reducing summer temperatures, reducing storm water run-off, providing habitat, capturing airborne pollutants and contributing to the wellbeing of the community. The following township tree master plans will ensure the importance of a resilient street tree network throughout the Cessnock LGA is at the forefront of strategic planning.

Each town master plan provides a summary of it's broad character and influencing factors in determining the proposed tree species. Due to the limitations in available data, the existing tree species for each town have not been listed, however, the abundance of Callistemon and Melaleuca species and lack of diversity are common in all of the towns.

Recommendations have been made for species within key streets, township entries and avenues within each town. In some instances, two or more species have been suggested for a nominated street to allow for lower growing species to be positioned under overhead power lines, and taller species to be aligned on the opposite side of the street where there are no power lines. The remainder of the streets in each town can be selected from the Tree Species List once a thorough investigation into site conditions has been undertaken.

Recommendations have been made for tree species that are considered fire resistant to be planted in areas prone to high bushfire risk.

When determining the preferred species for a specific town or street, the following contributing factors will influence the final decision;

- Prevalence of existing species and the need for greater diversity.
- Which species are growing well or known to perform in local conditions.
- Nominating species that provide a variety of canopy cover and form, as well as differing colour and character to assist in developing a hierarchy of streets.

- Aspect and orientation and the need to maintain sun exposure during the cool winter months.
- Improvement to the street amenity and canopy cover, increasing shade during the hot summer months.
- Local knowledge in regards to long term viability and ongoing maintenance issues.

The tree master plans do not recommend species that currently dominate the streets such as the Callistemons, Crepe Myrtles and Melaleucas, however, it is acknowledged that there will be circumstances where these species should be planted. These situations include;

- Filling in gaps in local streets with well-established trees.
- Filling in gaps in township entries where avenue planting is well-established and a contributing characteristic of the town.
- Replacement of dead or damaged trees in established avenues and streets.

HISTORIC

WOLLOMBI

Jecting Place





'The best time to plant a tree was 20 years ago. The second best time is now'

Chinese proverb

1. Aberdare

Aberdare adjoins the eastern borders of Cessnock and forms part of the arrival experience into Cessnock travelling from the east. Aberdare Road is the major arterial link and aligned with a mix of residential housing, a school, sports fields and commercial development. The residential streets are laid out in a strong grid pattern and comprise low density housing on large lots. The streets are wide with low numbers of trees. Northcote Ave contains a fine example of tree boulevard planting in the form of mature Spotted Gums. Aberdare Road is planted with Crepe Myrtles providing seasonal colour and an attractive entry into Cessnock.









Legend





PROPOSED STREET TREE SPECIES

Lagerstroemia indica Xanthostemon chrysanthus Elaeocarpus eumundii Pistachia chinensis

Corymbia torelliana Pyrus ussuriensis

Fire Resistent Species



Waterhousia floribunda

(Refer to Appendix 1 - Tree Species List, for common names of the trees)







Corymbia 'Summer Red' Leptospermun petersonii



2. Abermain

The village of Abermain is located between the village of Neath and township of Weston. Cessnock Road and the former South Maitland Railway corridor separate the village into two parts. It comprises predominantly low-density housing and some businesses along Cessnock Road. Vegetation cover within the village area is moderate and located predominantly in parks or bushland corridors. There are limited street trees, with most of the trees occurring within the private domain.









 Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk

Medium fire risk



PROPOSED STREET TREE SPECIES



Backhousia citriodora

Fire Resistent Species

Angophora hispida Pyrus calleryana 'Chanticleer' Tristaniopsis laurina 'Luscious' (Refer to Appendix 1 - Tree Species List, for common names of the trees)











3. Abernethy

The village of Abernethy is comparatively small in area compared to other villages and generally comprises low-density housing fronting wide open streets. The village area is relatively low-lying, surrounded by elevated landforms and is nestled amongst bushfire prone vegetation, including parcels of Crown Land and Werakata National Park. Trees within the village are sparse and concentrated around the southern and western portions.









Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk



PROPOSED STREET TREE SPECIES

Cupaniopsis anacardiodes 1 Acmena smithii 'Sublime'

Corymbia citriodoa Fraxinus grifithii

Fire Resistent Species

Acer negundo 'Sensation' Waterhousia floribunda

(Refer to Appendix 1 - Tree Species List, for common names of the trees)





4. Bellbird

Bellbird is one of the fastest growing townships in the Cessnock LGA with a significant amount of residential subdivision development being delivered. This creates a distinct 'old and 'new' divide in regards to urban character. The 'new' areas comprise of narrower streets with formed edges, footpaths and street tree planting. The 'old' is characterised by wide open streets, sporadic tree planting and informal edges. The busy Wollombi Road is the arterial spine through the township that carries large volumes of traffic. It is aligned





Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk

Medium fire risk



PROPOSED STREET TREE SPECIES



Gordonia axillaris Ulmus parvifolia 'Todd' Lophostemon confertus

Fire Resistent Species

Angophora hispida Cupaniopsis anacardiodes Syzygium oleosum

(Refer to Appendix 1 - Tree Species List, for common names of the trees)





5. Branxton

Branxton is a small township with a distinctive heritage character and rural landscape setting. Historic buildings aligning the New England Highway and dispersed throughout the town create an old country town atmosphere. It is laid out in a traditional grid pattern with a number of streets displaying good examples of street tree planting. Recent main street upgrades have included new ornamental tree planting as recommended in the Branxton CBD master plan.







PROPOSED STREET TREE SPECIES



Elaeocarpus eumundii

Fraxinus grifithii

Elaeocarpus reticulatus

Area subject to existing master plan

Cupaniopsis anacardiodes Pyrus calleryana 'Capital'

6. Cessnock

Cessnock is known as the 'gateway' to the Hunter Wine region and designated as a major regional centre. Vincent Street is the 'high street' of the CBD and aligned with retail, commercial, entertainment, eateries and services organisations. Cessnock's CBD's most distinctive feature is the large number of historic buildings which contribute to a distinct identity and local character. Cessnock has large residential areas on the outskirt of the town centre of varying age and quality. There are great examples throughout Cessnock of street tree planting contributing to a localised identity, however, the majority of streets are lacking canopy cover which attributes to it's below average canopy cover rating.





PROPOSED STREET TREE SPECIES

Lagerstroemia indica 1 Backhousia citriodora (2) Elaeocarpus eumundii Eucalyptus fibrosa Quercus palustris 'Pringreen' **Fire Resistent Species** Acer negundo 'Sensation' Angophora hispida Cupaniopsis anacardiodes

(Refer to Appendix 1 - Tree Species List, for common names of the trees)

Corymbia citriodoa Pyrus species Ulmus parvifolia 'Todd' Waterhousia floribunda









Area subject to existing master plan

7. East Branxton

East Branxton is a residential suburb surrounded by rural lands on a slightly elevated position, offering distant views of the ranges. There is a severe lack of trees which attributes to East Branxton having the lowest recorded canopy cover in the Cessnock LGA. The wide open streets are predominantly laid out in a grid pattern, dissected by Dalwood Road which forms the main arterial through the township. Tree planting is essentially contained within the private domain.









Vaca





PROPOSED STREET TREE SPECIES

Brachychiton discolour



Corymbia citriodoa Eucalyptus fibrosa Melaleuca linarifolia Pyrus betulaefolia 'Southworth Dancer'



8. Ellalong

Key features of Ellalong is Ellalong Lagoon to the west of the village and the Ellalong Hotel located on Helena Street. The village is slightly elevated above the immediate surrounding landform but is nestled within the nearby mountain ranges that surround the village to the east, south and west, including the Watagan State Forest and Watagan National Park. A number of drainage and creek lines, including Quorrobolong Creek feed into Ellalong Lagoon. It is surrounded by relatively dense bushland to the north, and grasslands on the floodplains to the south. Trees throughout the village are relatively sparse and mostly within the private domain, with the largest concentration around the public school and cemetery.









Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk



PROPOSED STREET TREE SPECIES



Gordonia axillaris Syzygium oleosum

Fire Resistent Species Quercus palustris Syzygium paniculatum

(Refer to Appendix 1 - Tree Species List, for common names of the trees)





9. Greta

The village of Greta is one of a bead of villages along the New England Highway, which is the major road linking villages within and beyond the upper Hunter Valley to the north west. The village comprises a distinct 'high street CBD' with a concentration of businesses situated along the New England Highway in the centre of town. A key feature of the village is the parkland central median between the New England Highway and the original High Street which contains an avenue of mature Silky Oak trees (Grevillea robusta). Much of the vegetation surrounding the village is bushfire prone. While the central median provides an avenue of green canopy, the remainder of the village has minimal tree planting.









Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk



PROPOSED STREET TREE SPECIES Ulmus parvifolia 'Todd' Elaeocarpus eumundii Waterhousia floribunda Tristaniopsis laurina Lophostemon confertus Fire Resistent Species Angophora hispida Fraxinus sp. Magnolia sp. Syzygium sp.

Backhousia citriodora Eucalyptus fibrosa Eucalyptus punctata Jacaranda mimosifolia Liriodendron tuliperfolia Pistachia chinensis





43



(Refer to Appendix 1 - Tree Species List, for common names of the trees)

10. Heddon Greta

Heddon Greta township is undergoing extensive growth in residential development. Different urban development typologies are recognisable in the street patterns, lot sizes, open space provision and housing styles. The older areas are defined by wide streets and large lots, with the more recent development comprising narrower streets, project home style housing and new street tree planting. Main Road is a major thoroughfare through the township that connects the local streets and attractions. The western boundary is formed by dense bushland, while the eastern boundary is created by the Wallis Creek floodplains and rural lands.







Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk



PROPOSED STREET TREE SPECIES

Pyrus ussuriensis 1 2 Pyrus calleryana 'Chanticleer' Fire Resistent Species

Fraxinus grifithii

Cupaniopsis anacardiodes







Tristaniopsis laurina 'Luscious'

11. Kearsley

The village of Kearsley is located between Aberdare, the hamlet of Elrington and the villages of Neath and Abernethy. The village comprises two distinct areas, being a large lot semi-rural residential area in the north-west, and a smaller lot residential area in the south-west. The village is surrounded by predominantly vegetated rural lands and adjoins Werakata National Park to the south-east. Kearsley Hotel is one of the most recognisable built features of the village, while Jeffrey Park is a key open space feature. Residential streets are wide and sparsley of treed.







PROPOSED STREET TREE SPECIES



Angophora hispida Melaleuca linarifolia

Fire Resistent Species

Platanus orientalis





Waterhousia floribunda

12. Kitchener

The focal points of the Kitchener village are the Khartoum Hotel and Poppethead Park. The heritage of the village is highly visible with reminders of historic mining activities situated throughout the park in the form of the dam and machinery. The village comprises three distinct areas of development, the original subdivision and village core, recent large lot subdivision and a new subdivision in the south-east. The village is surrounded on all sides by dense bushland vegetation. Trees within the area are generally sparse except for Poppethead Park and private lots along Abernethy Street.









Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk



PROPOSED STREET TREE SPECIES

Tristaniopsis laurina Quercus palustris

1

Corymbia torelliana

Fire Resistent Species Cupaniopsis anacardioides Fraxinus sp. Syzygium sp.

(Refer to Appendix 1 - Tree Species List, for common names of the trees)

Lophostemon confertus





13. Kurri Kurri

Being the second largest settlement, Kurri Kurri is a unique township and important retail, commercial and industrial centre in the Cessnock LGA. The town centre has a distinct historic character and is often identified as a gateway to the Hunter Valley Wine Region. Lang and Barton Street form the high street of the town centre and are lined with trees of varying age, size and form. Kurri Kurri is well known for its public art murals depicting the rich history of the area. The residential streets are laid out in a strong grid pattern and defined by wide roads and low density single story dwellings. Apart from a few good examples, the majority of streets are mostly bare of tree planting, contributing to the below average canopy cover.









Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk



PROPOSED STREET TREE SPECIES 1 Nyssa sylvatica Prunus cerasifera 'Nigra' Lophostemon confertus (2)Prunus cerasifera 'Nigra' 3 Tristaniopsis laurina 'Luscious' Fire Resistent Species Angophora hispida Elaeocarpus eumundii

Backhousia citriodora Eucalyptus fibrosa Magnolia grandiflora Waterhousia floribunda







Corymbia 'Summer Red' Fraxinus excelsior 'Aurea' Pyrus calleryana 'Aristocrat'

Area subject to existing master plan



14. Millfield

Millfield is located between the villages of Wollombi and Paxton and has recently seen extensive change with the development of new large lot, semi-rural residential development. A focal point of the village is the general store and cafe located on Wollombi Road. In a landscape context, Millfield is nestled within a valley, surrounded by the mountain ranges of Corrabare, Watagan and Pokolbin State Forests. The village and surrounding area is characterised by cleared pastoral land on rolling hills, floodplains and creeks. Tree planting within the village core is extremely sparse.



Legend





PROPOSED STREET TREE SPECIES

Liquidambar styraciflua



Backhousia citriodora Elaeocarpus reticulatus Liriodendron tuliperfolia

2



Acer freemanii 'Autumn Blaze'

15. Mulbring

The western boundary of Mulbring is formed by Wallis Creek and it's floodplains. It gently rises to the west where almost unobstructed views of Watagan National Park, Heaton State Forest and Sugarloaf State Conservation Area are attained. The village has a rural presence with large lot single dwellings surrounded by small farmlands. Trees within the village are limited with the largest concentration located around the school, Mulbring Park and Wallis Creek. The Uniting and Anglican Church buildings, and Mulbring House are familiar landmarks and representative of the formative years of the village.









Legend Vacant street tree sites





PROPOSED STREET TREE SPECIES

Jacaranda mimosifolia Magnolia grandiflora Quercus palustris 'Pringreen' **(**3)

Waterhousia floribunda

Fire Resistent Species

Cupaniopsis anacardiodes Fraxinus grifithii

(Refer to Appendix 1 - Tree Species List, for common names of the trees)

Zelkova serrata 'Green Vase'



16. Neath

Neath is a small, narrow village located between Cessnock and Abermain, with development on either side of Cessnock Road. The village is surrounded by bushland, with the remaining developed areas relatively cleared of vegetation, exclusive of some scattered trees and plantings within the private domain. The Neath Hotel is a fine example of a historic country pub and a popular destination on weekends. Visible remnants of the old railway line and associated infrastructure are reminders of the past mining and transport operations of the village.



Vacant street tree sites Biodiversity Structural Conner





PROPOSED STREET TREE SPECIES

Pyrus calleryana 'Capital'

Fire Resistent Species

Cupaniopsis anacardiodes Elaeocarpus reticulatus

17. North Rothbury

North Rothbury is located adjacent to the southern extremities of the new town known as Huntlee. It is accessed from the Wine Country Drive arterial road which forms part of a popular tourist drive through the Hunter Valley. The landscape of the village is characterised by large remnant Eucalyptus species retained in road reserves, parks and private properties, creating a sense of a village amongst the bush. North Rothbury is well known for the infamous miners riot in 1929 and is memorialised by the heritage listed Rothbury Riot Memorial which is visible from Wine Country Drive.

Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk

PROPOSED STREET TREE SPECIES

Xanthostemon chrysanthus

Angophora hispida Elaeocarpus eumundii

Fire Resistent Species Elaeocarpus reticulatus Fraxinus grifithii

Corymbia 'Summer Red'

18. Nulkaba

The village of Nulkaba is situated on the northern outskirts of Cessnock, accessed from the popular Wine Country Drive tourist route. The village core is centred around the school and old residential areas laid out in a grid pattern on standard size blocks. The remainder of the residential development comprises of large-lot, semi rural housing and new project home style buildings. Expanses of remnant native trees in the private and public domain creates a leafy outlook and a sense of a village amongst the trees.

Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk

PROPOSED STREET TREE SPECIES

Pyrus calleryana 'Chanticleer' 2 Syzygium oleosum

Fire Resistent Species

1

Magnolia grandiflora 'Exmouth' Ulmus parvifolia 'Todd' Waterhousia floribunda

(Refer to Appendix 1 - Tree Species List, for common names of the trees)

Lophostemon confertus Pyrus calleryana 'Aristocrat' Tristaniopsis laurina 'Luscious'

19. Paxton

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The village of Paxton is a fine example of a community developed in response to mining activities that no longer operate. Historic buildings and mining operation structures are visible throughout the village, a reminder of it's heritage. It is surrounded by bushland, however it's slightly elevated position provides views of distant ranges. The wide open streets are mostly bare of trees creating a place with extremely low canopy cover. There are two distinct residential areas within the village, the old and the new. The new development is situated in the north east portion and is characterised by project home style dwellings, kerb and guttering and some street tree planting.

Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor

PROPOSED STREET TREE SPECIES

Nyssa sylvatica 2 Corymbia torelliana

Fire Resistent Species

1

Tristaniopsis laurina 'Luscious'

Elaeocarpus reticulatus

(Refer to Appendix 1 - Tree Species List, for common names of the trees)

Acer freemanii 'Autumn Blaze'

20. Pelaw Main

Pelaw Main enjoys an elevated position, offering distant views of the Watagan Mountains and the Kurri Kurri CBD. The village is surrounded by dense bushland, however tree canopy cover within the village is sparse. It is characterised by low density residential housing setout in a grid pattern on wide open streets. Given it's elevated position and dense bushland surrounds, it is identified as a high risk bushfire prone area. The village comprises a number of parks and sports fields, and combined with the surrounding bushland, provides a variety of recreational offerings.

Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk

PROPOSED STREET TREE SPECIES

Gordonia axillaris Pyrus ussuriensis Prunus cerasifera 'Nigra' (3) Fire Resistent Species Tristaniopsis laurina Waterhousia floribunda

Eucalyptus fibrosa Fraxinus raywoodii Lophostemon confertus Syzygium australe

N

Cupaniopsis anacardiodes

21. Stanford Merthyr

Despite it's close proximity to neighbouring villages, Stanford Merthyr stands alone separated by bushland on all sides. It is a small village characterised by low density residential housing within a traditional urban grid street pattern. The streets are wide and predominantly bare of trees, with the majority of trees situated on private property and the surrounding bushland. For it's size and population, the village is well-provisioned for open space with a number of parks, sports field, bushland reserves and the open grounds of the public school all combining to create a sense of an open, expansive village.

Legend Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park **Bushfire Prone Land** High fire risk Medium fire risk

PROPOSED STREET TREE SPECIES

1

Elaeocarpus eumundii Waterhousia floribunda

Fire Resistent Species

Angophora hispida Cupaniopsis anacardiodes Magnolia grandiflora 'Little Gem' Quercus palustris 'Pringreen'

22. Weston

The Weston commercial centre is characterised by wide streets, historic buildings and a scattering of street trees. The main street, Cessnock Road, is a mixture of small workers cottages and mixed use shop fronts with views of historic railway infrastructure, a reminder of a once bustling mining town. The original residential areas are laid out in a traditional grid pattern, dissected by a riparian corridor cutting the town in two. The streets are wide and sparse of tree planting. A key feature of the town is Maybury Peace Park and Chinaman's Hollow, creating a visually attractive entry to the town from the west, accentuated by the row of Liquidambar trees that radiate with colour during Autumn.

Legend

PROPOSED STREET TREE SPECIES

Corymbia 'Summer Red' 2 Corymbia citriodora

1

Pyrus sp.

Fire Resistent Species Acmena smithii 'Sublime' Angophora hispida Elaeocarpus reticulatus Prunus cerasifera 'Nigra' Waterhousia sp.

(Refer to Appendix 1 - Tree Species List, for common names of the trees)

Cupaniopsis anacardiodes Elaeocarpus eumundii

Area subject to existing master plan

23. Wollombi

Wollombi is one of the most significant villages in the Cessnock LGA, given both its history in the establishment of the LGA, it's highly visible preservation of European heritage and key tourist destination centred around the village and Wollombi Pub. The village has a distinct core characterised by historic buildings, narrow road corridor and cultural tree plantings. Travelling from the south the entry is signified by the ornamental lake, recreation reserve, cemetery, rows of trees and the school. Travelling from the east the entry is formed by ornamental tree plantings and a welcome sign. Trees throughout Wollombi are an eclectic mix of historic tree planting, ornamental exotic species and remnant native trees.

Vacant street tree sites Biodiversity Structural Connectivity Cleared corridor Road corridor Park Bushfire Prone Land High fire risk

Medium fire risk

Legend

PROPOSED STREET TREE SPECIES

 1
 Nyssa sylvatica

 Fire Resistent Species
 Acer sp.

 Corymbia maculata
 Ficus sp.

 Ulmus parvifolia

Wollombi Road

z-

Area subject to existing master plan

TREE PLANTING PRIORITISATION

Priority based planting plans for each township have been developed with consideration given to how to best achieve the vision and objectives of the Strategy. It has been recognised that each township has a unique character which is reinforced in some cases through its tree planting programs. The priority plans aim to build upon and enhance the overall appeal of each township through a staged roll out of tree planting when funds become available.

The priority plans are not attached to any time frames or annual budgets and will be used as a guide when allocating funds for tree planting in specific townships. The current data has identified over 20,000 vacant sites for street tree planting opportunities, and it is acknowledged that Council aims to increase the overall canopy cover and species diversity throughout the city. Recognising that it will take many years to plant the trees to fill the nominated vacant sites and increase the canopy coverage, the priority plans aim to focus on the areas that will provide the most benefit to each township in the short to long term.

Typically, the Useful Life Expectancy (ULE) of individual trees would be included in the identification of priority planting, however, the current tree data does not include ULE information which could be used for this Strategy. It was decided that the following priority ratings would be used for each township.

Gateway roads and township entries including infill tree planting	
Secondary link roads	
Vacant sites	
Infill existing road and avenue planting	
Parks and open space	

1. Aberdare

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

2. Abermain

Gateway roads and township entries including infill tree plant
Secondary link roads
Vacant sites
Infill existing road and avenue planting
Parks and open space

ng	1
	2
	3
	4
	5

3. Abernethy

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

4. Bellbird

Gateway roads and township entries including infill tree plant
Secondary link roads
Vacant sites
Infill existing road and avenue planting
Parks and open space

ng	1
	2
	3
	4
	5

5. Branxton

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

6. Cessnock

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

7. East Branxton

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

8. Ellalong

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

9. Greta

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

10. Heddon Greta

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

11. Kearsley

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

12. Kitchener

Secondary link roads
Vacant sites
Infill existing road and avenue planting
Parks and open space

ng	1
	2
	3
	4
	5

13. Kurri Kurri

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

14. Millfield

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

15. Mulbring

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

16. Neath

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

17. North Rothbury

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

18. Nukulba

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

19. Paxton

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

20. Pelaw Main

Gateway r	oads and township entries including infill tree plant
Secondary	/ link roads
Vacant site	es
Infill existi	ng road and avenue planting
Parks and	open space

ng	1
	2
	3
	4
	5

21. Stanford Merthyr

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

22. Weston

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

23. Wollombi

Gateway roads and township entries including infill tree planting	1
Secondary link roads	2
Vacant sites	3
Infill existing road and avenue planting	4
Parks and open space	5

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Cessnock Tree Strategy – CESSNOCK CITY COUNCIL

Appendix

APPENDIX 1 - TREE SPECIES LIST

CESSNOCK CITY COUNCIL T	REE SPECIES LIST									
Botanic Name Common Name	Common Name	Evergreen	Deciduous	Native	Fire	Mature Size	Suitable Location			
				Resistant	h x w	Small tree, o/h powerlines, 4m wide verge	Large tree, no o/h powerlines, 6-8m wide verge	Park Tree	Biodive corridor planti	
Acacia mearnsii	Black Wattle	Х		Х		6m x 4m				х
Acer freemanii 'Autumn Blaze'	Autumn Blaze Maple		х		Х	10m x 7m		х	Х	
Acer negundo 'Sensation'	Sensation Box Elder		Х		Х	8m x 5m	Х			
Acer rubrum 'October Glory'	Canadian Maple		Х		х	10m x 7m			Х	
Agathis robusta	Queensland Kauri Pine	Х		Х		20m x 8m			Х	
Araucaria cunninghamii	Hoop Pine	Х		Х		20m x 10m			Х	
Acmena smithii 'Sublime'	Lilly Pilly	Х		Х	Х	5m x 2m	Х			
Angpohora costata	Sydney Red Gum	Х		Х	х	15m x 8m			Х	Х
Angophora hispida	Dwarf Apple	Х		Х	Х	7m x 5m	Х			Х
Backhousia citriodora	Lemon Myrtle	Х		Х		8m x 3m		Х	Х	
Brachychiton discolour	Kurrajong	Х		Х		13m x 7m		Х	Х	
Callistemon species	Bottlebrush	Х		Х		3m-5m	Х			Х
Corymbia 'Summer Red'	Red Flowering Gum	Х		Х		5m x 3m	Х			
Corymbia maculata	Spotted Gum	Х		Х	Х	20m x 8m			Х	Х
Corymbia torelliana	Cadagi Tree	Х		Х		20m x 10m		Х	Х	Х
Corymbia citriodoa	Lemon Scented Gum	Х		Х		8m x 4m		Х	Х	
Cupaniopsis anacardiodes	Tuckeroo	Х		Х	х	8m x 5m	Х		Х	
Elaeocarpus eumundii	Quandong	Х		Х	х	8m x 6m		Х	Х	
Elaeocarpus reticulatus	Blue Berry ash	Х		Х	Х	6m x 4m	Х			Х
Eucalyptus fibrosa	Red Iron Bark	Х		Х		20m x 15m		х		х
Eucalyptus microcorys	Tallowood	Х		Х		20m x 15m			Х	х
Eucalyptus pilularis	Blackbutt	Х		Х		20m x 15m			Х	х
Eucalyptus punctata	Greygum	Х		Х		20m x 15m		х	Х	х
Eucalyptus robusta	Swamp Mahogany	Х		Х		15m x 8m		х	Х	Х
Eucalyptus sideroxylon	Iron Bark	Х		Х		25m x 10m			Х	Х
Eucalyptus tereticornus	Forest Red Gum	Х		Х		20m x 15m			Х	х
Ficus macrophylla	Moreton Bay Fig	Х		Х	Х	25m x 20m		Х	Х	
Ficus mircrocarpa var hillii	Hills Weeping Fig	Х		Х	Х	20m x 20m		Х	Х	
Ficus rubiginosa	Port Jackson Fig	Х		Х	х	15m x 12m			Х	
Fraxinus raywoodii	Claret Ash		Х		Х	10m x 8m		Х	Х	
Fraxinus grifithii	Himalayan Ash	Х			Х	8m x 6m	Х		Х	
Fraxinus excelsior 'Aurea'	Golden Ash		Х		Х	10m x 6m		х	Х	

Appendix

Botanic Name	Common Name	Evergreen	Deciduous	Native	Fire Resistant	Mature Size h x w	Suitable Location			
							Small tree, o/h powerlines, 4m wide verge	Large tree, no o/h powerlines, 6-8m wide verge	Park Tree	Biodive corridor planti
Fraxinus pennslyvanica 'Urbanite'	Urbanite Ash		Х		Х	12m x 7m		Х	Х	
Gordonia axillaris	Fried Egg Plant	Х				5m x 3m	Х			
Jacaranda mimosifolia	Jacaranda					8m x 10m		Х	Х	
Largerstroemia indica var	Crepe Myrtle		х			6m x 4m	х		Х	
Leptospermun petersonii	Lemon Scented Tea Tree	х		Х		5m x 3m	х			Х
Liquidambar styraciflua	Liquidambar		х		Х	15m x 10m		х	Х	
Liriodendron tuliperfolia	Tulip Tree		х			15m x 10m		х	Х	
Lophostemon confertus	Brush Box	х		Х		15m x 8m		х	Х	
Magnolia grandiflora	Southern Magnolia	х			х	15m x 8m		х	Х	
Magnolia grandiflora 'Little Gem'	Little Gem Magnolia	х			х	12m x 8m		Х	Х	
Magnolia grandiflora 'Exmouth'	Evergreen Magnolia	х			Х	12m x 8m		х	Х	
Melaleuca linarifolia	Flax Leafed Paperbark	х		Х		8m x 5m	х			x
Melaleuca quinquinervia	Swamp Paperbark	х		Х	1	15m x 8m	ĺ	х	х	х
Melaleuca stypheloides	Prickly Paperbark	х		Х	1	8m x 5m				x
Nyssa sylvatica	Blackgum		х		1	8m x 6m	İ	Х	Х	İ
Pistachia chinensis	Chinese Pistachia		х			6m x 5m	х		Х	İ
Platanus orientalis	Cherry Plum		х		Х	15m x 6m	İ	х	Х	
Populus simonii	Poplar		х			15m x 3m	1	х	Х	
Prunus cerasifera 'Nigra'	Cherry Plum		х		х	5m x 3m	х		Х	
Pyrus betulaefolia 'Southworth Dancer'	Dancer Pear		х			7m x 4m	х		Х	
Pyrus calleryana 'Aristocrat'	Aristocrat Pear		х			11m x 7m		х	Х	
Pyrus calleryana 'Capital'	Ornamental Pear		х			8m x 4m	х		Х	
Pyrus calleryana 'Chanticleer'	Chanticleer Pear		х			8m x 6m	х		Х	
Pyrus ussuriensis	Manchurian pear		х			8m x 6m	х		Х	
Quercus palustris	Pin Oak		х		Х	15m x 10m		Х	Х	
Quercus palustris 'Pringreen'	Green Pillar Pin Oak		х		х	14m x 3m		Х	Х	
Quercus robur	English oak		Х		х	20m x 10m		Х	Х	
Quercus suber	Cork Oak	х				15m x 12m		Х	Х	
Syncarpia glomulifera	Turpentine	х		Х		15m x 8m			Х	Х
Syzygium australe	Bush Cherry	х		Х	Х	8m x 6m	х			X
Syzygium oleosum	Blue Lilly Pilly	х		Х	х	8m x 6m	х			Х
Syzygium paniculatum	Margenta Lilly Pilly	Х	1	Х	Х	8m x 6m	Х			Х
Tristaniopsis laurina	Watergum	Х		Х	Х	6m x 4m	х		Х	X
Tristaniopsis laurina 'Luscious'	Luscious Watergum	Х		Х	Х	6m x 4m	х		Х	1
Ulmus parvifolia	Chinese Elm		Х		Х	10m x 8m		Х	Х	

Appendix

Botanic Name	Common Name	Evergreen	Deciduous	Native	Fire	Mature Size	Suitable Location			
					Resistant	h x w	Small tree, o/h powerlines, 4m wide verge	Large tree, no o/h powerlines, 6-8m wide verge	Park Tree	Biodive corridor planti
Ulmus parvifolia 'Todd'	Todd Chinese Elm		Х		х	10m x 11m		Х	Х	
Waterhousia floribunda	Weeping Lilly Pilly	Х		Х	Х	10m x 7m		Х	Х	Х
Waterhousia floribunda 'Amaroo'	Weeping Lilly Pilly	Х		Х	х	10m x 7m		Х	Х	
Waterhousia floribunda 'Green Avenue'	Weeping Lilly Pilly	Х		Х	х	10m x 7m		Х	Х	
Waterhousia floribunda 'Sweeper'	Weeping Lilly Pilly	Х		Х	х	10m x 7m		Х	Х	
Xanthostemon chrysanthus	Golden Penda	Х		Х		10m x 7m		Х	Х	
Zelkova serrata 'Green Vase'	Japanese Zelkova		Х		Х	13m x 9m		Х	Х	

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