



ATTACHMENTS

Development and Infrastructure Services Committee

10 May 2017

6.00pm

City of Albany Council Chambers

DIS COMMITTEE
ATTACHMENTS – 10 MAY 2017

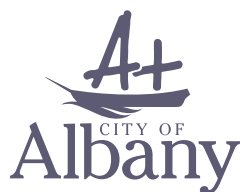
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ALBANY CITY

2017

URBAN
TREE
STRATEGY



**'OUR URBAN
TREE NETWORK
WILL BE
RESILIENT,
HEALTHY,
DIVERSE &
SUSTAINABLE'**

130 YEAR OLD OAK TREES,
DREW STREET, LAKE SEPPINGS

EXECUTIVE SUMMARY

The Urban Tree Strategy is a strategic plan for the expansion, protection and management of trees in our urban environment. It aims to engage and educate the community about the social, economic and environmental benefits of trees.

The vision of the Urban Tree Strategy is to create a tree network that will be resilient, healthy, diverse, and sustainable. This strategy aims to promote long-term health benefits, city liveability, complement our natural surrounding landscape and mitigate the effects of climate change.

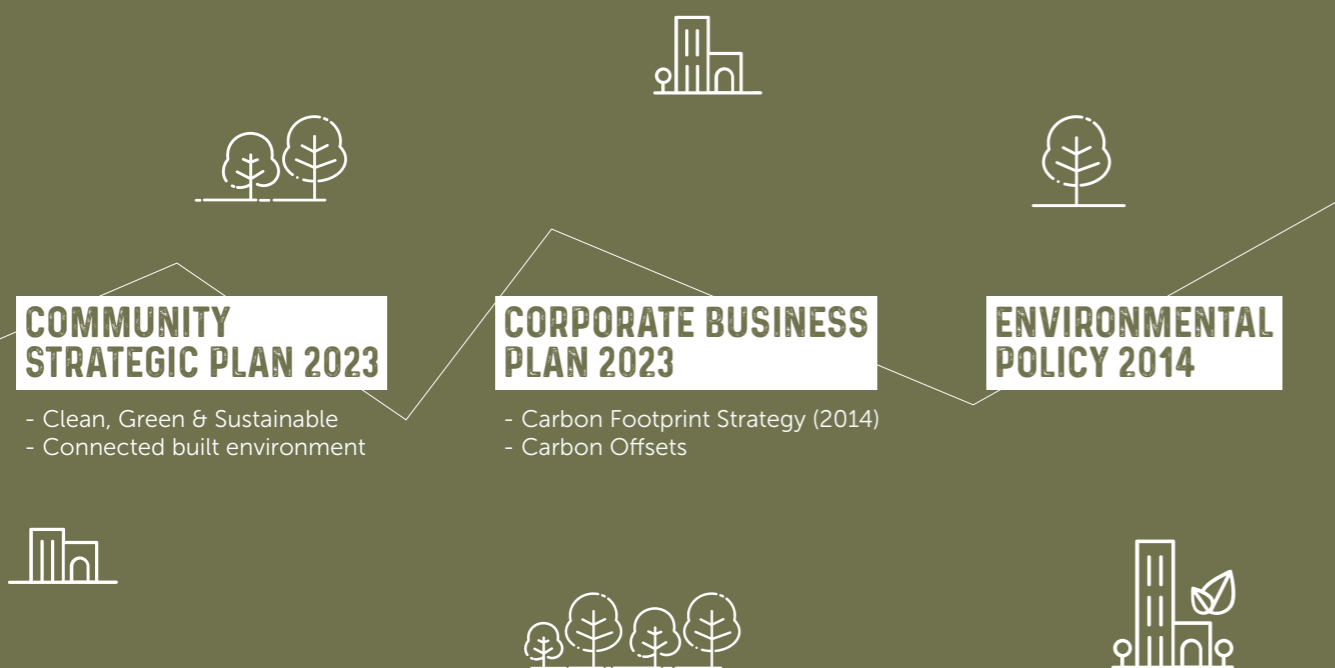
By developing this strategy through on ground data collection and research, it has allowed the city to apply a holistic approach to urban tree management that addresses the many challenges of urban development.

Much of Albany's unique landscape is natural biodiverse remnant vegetation that is slowly disappearing through urban expansion. Now is the perfect time to design green cities and ensure healthy and liveable communities.

The goal of this strategy is to engage with the community and build an understanding of the importance of trees in our urban streetscapes and open space.

STRATEGIC CONTEXT

The Urban Tree Strategy is a part of a broader policy and strategic planning framework developed by the City of Albany. The key driver in the Community Strategic Plan is for a Clean, Green & Sustainable Albany.



A KEY DRIVER OF THE COMMUNITY STRATEGIC PLAN IS TO BE A CLEAN, GREEN & SUSTAINABLE ALBANY.



INTRODUCTION

The City of Albany is a regional council with an opportunity to be innovative with our natural green assets and enhance the urban environment. The challenges are urbanisation, smaller residential lots, sedentary lifestyles and the effects of climate change.

The community values the City's natural environment and green spaces. They want it protected, maintained and enhanced. In line with the Community Strategic Plan 2023 commitment, to be Clean, Green & Sustainable "we will value and maintain the natural beauty of our region and the infrastructure that supports this".

Evidence of climate change is overwhelming. Researchers predict severe global economic, environmental and social impacts. Predictions indicate increases in temperatures, extreme weather patterns, changes in rainfall, and negative impacts on future generations.

Increasing trees in our urban environment will mitigate impacts of climate change by providing oxygen and sequestering carbon. The amount of carbon sequestered is dependent on tree species, size and condition of the tree. With the average tree absorbing as much as 22 kilos of carbon each year, every tree planted helps! It will also improve community well-being and contribute to urban liveability.

Another key driver for this strategy is to improve community perception of urban trees. The community, the natural environment and the built environment (i.e. buildings, Roads and paths) interact on a daily basis. It is critical that we find a balance across these competing priorities.

WHAT IS A TREE STRATEGY?

The Urban Tree Strategy encompasses all "managed" tree populations. Whether they are planted or natural, including streetscapes, carparks, parks, sporting fields or important biodiverse corridors.

Effective and meaningful cooperation between the city, community groups, developers and business owners will shape and grow strong resilient communities.

This strategy outlines the challenges and proposed solutions to meet the vision for a tree network that is resilient, healthy, diverse and sustainable.

A STAGED APPROACH

The overall strategy will be developed and implemented in three stages, with this strategy represent stage one.

Stage 1 – Strategy

The overall focus of the strategy is to identify the key drivers for the expansion, management and protection of trees in our urban environment.

Stage 2 - Management Plan

The Management Plan will focus on developing internal organisational processes.

Stage 3 – Urban Tree Enhancement Plan

The Urban Tree enhancement plan is to establish planting programs within priority areas in consultation with the community.



ALBANY URBAN TREE POPULATION

WHAT THE DATA SAID

8,700

CITY OF ALBANY STREET TREES WERE RECORDED

44%

TOTAL TREE POPULATION

18

SUBURBS AUDITED [2014/15]

LOW DIVERSITY

PREDOMINATELY PEPPERMINT TREES AND BOTTLEBRUSHES

1-5 METRES

AVERAGE HEIGHT OF TREES ARE



LOWEST STREET TREE POPULATION

21%

MIRA MAR

23%

MT MELVILLE

34%

MCKAIL

40%

LOCKYER



HIGHEST STREET TREE POPULATION

140%

EMU POINT

80%

GLEDHOW

[CALCULATED WITH TREE PER LAND PARCEL RATIO]

98%

RECORDED AS IN GOOD HEALTH

MOST CONFLICTS WERE

30%

WITH POWERLINES

2.9%

WITH ROADS

2.8%

WITH FOOTPATHS

BIGGEST THREATS

INCREASING URBAN DEVELOPMENT AND INFRASTRUCTURE UPGRADES



BENEFITS, CHALLENGES & OPPORTUNITIES

Trees in the urban environment provide a range of social, environmental and economic opportunities to local communities, but they also create a number of challenges that need to be overcome to meet the communities and other key stakeholder needs.

BENEFITS

SOCIAL BENEFITS

Creates a sense of identity and character

Well-designed streets and parklands connect the urban environment to green spaces through road and pathway networks. This enables the city to create a positive connection and ownership for their local community.

Improves physical & mental wellbeing

Trees promote a range of health benefits that improve mental health and well-being. This improves individuals ability to cope with normal stresses of life, work productively and make a contribution to their community.

Social behaviour

Trees in the urban environment can have a positive effect on the social behaviour of communities. Research has shown that areas with higher vegetation cover have reduced crime rates.

ENVIRONMENTAL BENEFITS

Improved air quality

Trees in the urban environment are able to improve air quality by absorbing pollutants and producing oxygen.

Fixing of CO2 (carbon sequestration)

Trees capture and store carbon by removing CO2 from the atmosphere. This helps to mitigate the impacts of climate change.

Reduces storm water runoff

Trees capture and filter stormwater through their canopies and root systems.

ECONOMIC BENEFITS

Reduces Energy Use

Trees can reduce energy use by cooling homes in summer and sheltering homes from cold winds in the winter. This reduces reliance on heating and cooling.

Improves amenity & property value

Trees naturally improve street and community amenity. Studies show that green spaces and trees have a positive impact on residential property values.

Decreases health costs

Research suggests that a healthy, green city encourages the community to move more which increases fitness, reduces obesity, and improves mental health.

CHALLENGES & OPPORTUNITIES

The life of an urban tree is a challenging one with limited access to water and space to grow. Urban trees are constantly under threat from a changing climate, poor maintenance practices, construction projects, and utility works. Identifying and acknowledging these challenges allows us to find appropriate solutions.

CHANGING CLIMATE

Our climate is changing. Carbon is found in almost everything, from the air we breathe to soil and rocks beneath our feet. Whenever we burn fossil fuels such as coal, oil and gas – whether it's to drive our cars, use electricity or make products – we are producing carbon dioxide. Australia alone has recorded an increase in average temperatures of 1.5 degrees Celsius in the last 100 years.

The Urban Tree Strategy provides the opportunity to put measures in place to minimise the communities impact and on climate change, by increasing our urban tree populations in street-scapes and parks.

TREE PROTECTION

Trees in the urban environment need to be protected. Urban trees are constantly under threat from sprawling high density urban living. Risk from development and construction works result in poor tree health. Compounding the issue is the local communities perception that trees are dangerous and inconvenient.

The City has an opportunity to regulate tree pruning and tree removal through an urban tree management plan. These management plans will ensure a consistent approach to tree management and protect trees under threat.

TREE PLANTING AND SPECIES SELECTION

Tree planting and species selection is critical to ensure the health and longevity of our urban trees. Tree planning needs to carefully consider tree location, species, suitability and diversity. Trees can often be a case of the wrong tree in the wrong location, or simply viewed as being in the way.

Opportunities exist to increase tree populations within the urban environment and ensure that there is a consistent approach. Tree planting needs to coexist and enhance the built environment.



“THE COMMUNITY PERCEPTION OF TREES IN THE URBAN ENVIRONMENT CAN BE ONE OF LOVE, HATE OR FEAR.”

TREE REMOVAL & REPLACEMENT

Like all living things, trees grow, age, and eventually die. Although tree removal should be seen as the last option, public safety is a priority, and trees will be removed where necessary. Historically, trees have been removed as they were viewed as messy or dangerous without being professionally assessed.

Tree removal and replacement programs will ensure the benefits of trees are kept for future generation. Any trees that require removal would be required to undergo a risk assessment. If deemed unsafe or at the end of its natural life cycle, the tree would then be replaced.

TREE ASSET MANAGEMENT

Trees are a major asset and play a very important role in increasing the city's liveability. However, they have no economic value in the city's financial position. This creates a challenge in providing asset management resources.

Urban Tree Management Plans will guide continued data collection, consistent decision making, and prioritisation of actions to be resourced.

COMMUNITY PERCEPTION

The community perception of trees in the urban environment can be one of love, hate or fear. The community is often polarised on this subject! Communication is the key for encouraging the community to get involved and value this important asset.



ALBANY'S URBAN TREE STRATEGY



THIS STRATEGY HAS UNVEILED 5 MEANINGFUL OBJECTIVES TO MEET THE VISION OF A RESILIENT, HEALTHY, DIVERSE & SUSTAINABLE URBAN TREE NETWORK.

KEY OBJECTIVES

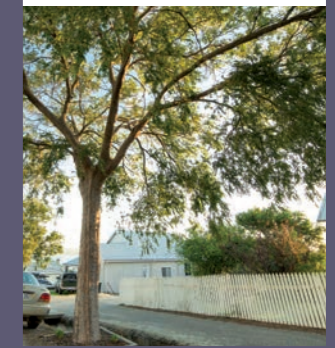
GREENER URBAN PARKS



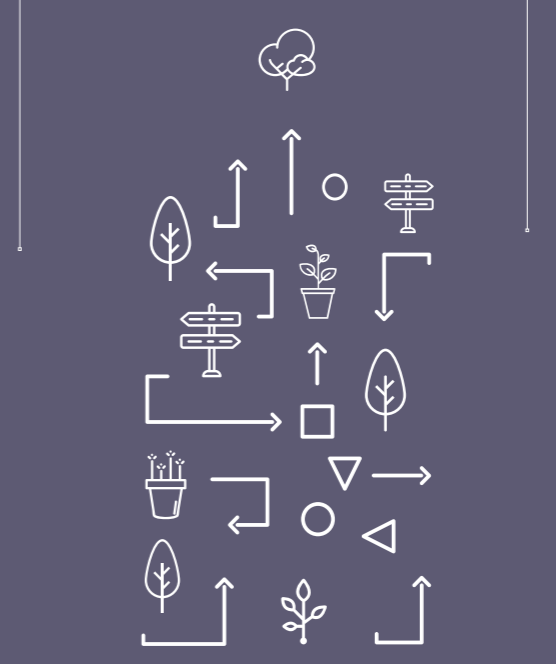
RECOGNISE IMPORTANT BIODIVERSITY GREEN LINKS




EXPAND OUR URBAN STREET AND PATHWAY NETWORKS



MAINTAIN AND PROTECT OUR EXISTING TREES



PROMOTE THE VALUE OF URBAN TREES





TREES ON DUKE STREET

GREENER URBAN STREET AND PATHWAY NETWORKS

The City's Urban Tree Strategy focuses on increasing canopy cover to enhance road and pathway networks. Growing trees in the urban environment is a challenge due to intense micro climates created by hard built infrastructure such as buildings, roads and footpaths. Infrastructure raises surface temperatures significantly and restricts the available space for trees.

Infrastructure is very expensive and has a clear economic value to the community. Transport and pedestrian corridors provide green linkage opportunities often determined by the road network. Distributor roads enable the use of larger trees with slim trunks to allow adequate sightlines and continuous flow. Local roads are more suited to trees with fuller canopies that slow traffic and allow pedestrian access.

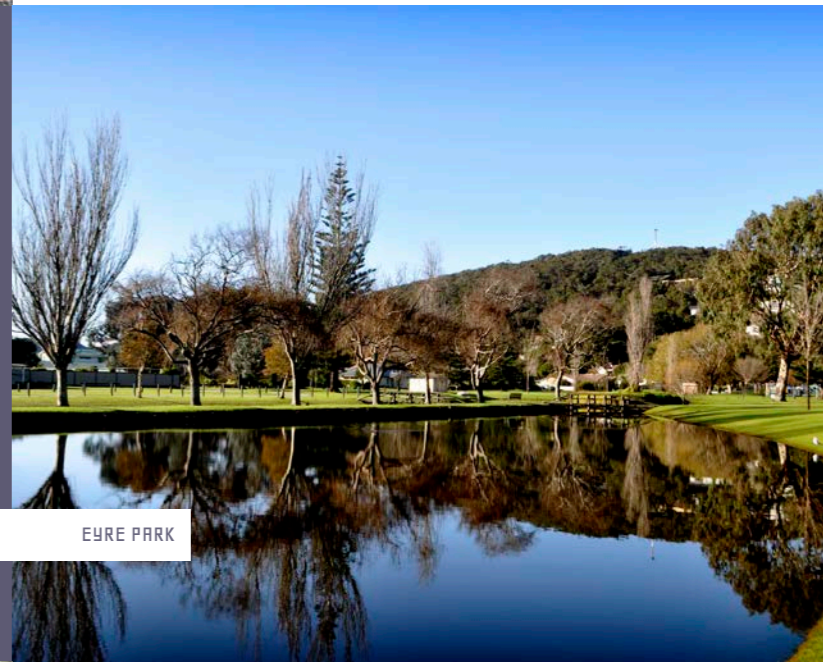


MEMORIAL TREES ON MT CLARENCE

GREENER URBAN PARKS

Parks are areas that can be used by a wide range of people in urban areas. Parks are valuable community assets essential for health, amenity, and liveability. They provide the community with space for recreational, resting and play.

Greening urban parks can limit criminal activity, provide nature play and shade for playgrounds and pathways. Consideration in the design stages can include tree planting with Water Sensitive Urban Design and create biodiverse corridors.



EYRE PARK

RECOGNISE BIODIVERSITY & GREEN LINKS

The ecological health of our urban environment is influenced by the diversity and abundance of native flora and fauna. These green-links not only provide habitat and food sources for native fauna, but are an opportunity for human connection to the natural environment. Recognising, securing, improving, restoring and creating green-links is another focus of this strategy.

Albany is unique, it is surrounded by large areas of natural bushland. Over the years the traditional landscapes have been altered by extensive clearing for urban development. Alterations also include the introduction of pest plants and fire management practices. Urban development has led to pockets of remanent vegetation and drainage reserves. These areas are often well suited for future biodiversity corridors and connectivity

Weedy Plants establish themselves in areas of native vegetation that has been cleared or is prone to fire. The introduction of environmental weeds such as Sydney Golden Wattle and Victorian Tea Tree from urban backyards, has a significantly detrimental effect on economic, social and conservation values.

This strategy shall encourage biodiversity, preservation of threatened fauna and flora and connect communities via green links.



OAK TREES ON DREW STREET



COMMUNITY EVENT – NATIONAL TREE PLANTING DAY 2013, BOB THOMPSON GARDENS, ALBANY

VALUING URBAN TREES

Many of us are drawn to beautiful natural settings because we value and appreciate its beauty. Fortunately Albany has no shortage of natural beauty to enjoy!

As we move towards a more urbanised built environment, public and private greening projects are more important than ever. Most of us are unaware of the incredible economic, social and environmental benefits that trees provide. Changing community attitudes of urban trees through community engagement and education opportunities, will enable us to protect, create, and co-invest in a number of tree management initiatives.

MAINTAINING & PROTECTING TREES

The management, maintenance and protection of our urban trees requires an integrated approach. This strategy will guide short term activities, to ensure tree health and sustainability. Trees are a valuable but vulnerable asset to the community. Any changes to their environment will affect the natural balance.

Trees in the urban environment are often under threat from removal or declining health. Often removal is thought to be required due to conflict with the surrounding built environment. To ensure the health of our trees, it is important that we apply a whole of forest approach with sound tree management practices.

Good tree management, maintenance and protection guidelines for all urban trees will allow them to reach their full potential without negatively impacting other assets.



ASSOCIATED DOCUMENTS

City of Albany (2011)
Community Strategic Plan 2023

City of Albany
Corporate Strategic Plan 2023

City of Albany (2014)
Connected Communities 2014 to 2018, City of Albany

City of Albany (2000)
Municipal Heritage Inventory, City of Albany

City of Albany (2010)
Local Planning Strategy, City of Albany

City of Albany (2014)
Carbon Footprint Strategy, City of Albany

City of Albany (2014)
Community Access and Inclusion Plan 2012 to 2017, City of Albany

City of Albany (2013)
Asset Management strategy, City of Albany

City of Albany (2005)
Environmental Weed Strategy for the City of Albany Reserves 2005-2010, City of Albany

City of Albany (2014)
Council Policy - Environmental Impact Assessments

City of Albany (2014)
Council Policy - Street Tree Management

City of Albany (2013)
Street tree Community Guidelines, City of Albany

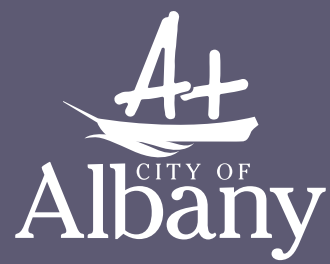
City of Albany (2009)
Subdivision and Development Guidelines, City of Albany

City of Albany (2009)
Verge Development Guidelines, City of Albany

The 2020 Vision Plan
<http://202020vision.com.au/about-the-vision/>

Plant Ark
Valuing trees: What is nature worth? (2015) <http://202020vision.com.au/media/41939/planet-ark-valuing-trees-report-full-final.pdf>

WWW.ALBANY.WA.GOV.AU



2017 URBAN
TREE
STRATEGY

GSRRG ROAD PROJECT GRANT

Program	Type	Road Name	Work Required	Section	SLK Start	SLK End	Extent	State Funding	CoA Funding	TOTAL	Seal Width	Year
ROAD PRESERVATION	RENEWAL	ALBANY HWY	Profile and Asphalt Overlay	Wellington Street to Barker St (E)	1.00	1.58	0.58	\$500,000	\$250,000	\$750,000	7.5	2018/19
ROAD PRESERVATION	RENEWAL	ALBANY HWY	Profile and Asphalt Overlay	Jeffries Street to Wellington St (W)	1	1.68	0.68	\$500,000	\$250,000	\$750,000	7.5	2018/19
ROAD CONSTRUCTION	RENEWAL	MILLBROOK RD	Reconstruct, widen & improve drainage	N/A	10.6	12.5	1.9	\$500,000	\$250,000	\$750,000	7	2018/19

BLACK SPOT PROJECTS

Program	Type	Road Name	Work Required	Section	SLK Start	SLK End	Extent	State Funding	CoA Funding	TOTAL	Seal Width	Year
NATIONAL BLACK SPOT PROJECT	UPGRADE	RUTHERFORD ROAD	TBC from safety audit	N/A	2.84	3.80	1.04	TBC from safety audit actions	\$0	TBC	TBC	2018/19
STATE BLACK SPOT PROJECT	UPGRADE	SYDNEY STREET / KAMPONG ROAD INTERSECTION	Change of priority through intersection	N/A	N/A	N/A	N/A	\$20,000	\$10,000	\$30,000	N/A	2018/19
STATE BLACK SPOT PROJECT	UPGRADE	ALBANY HIGHWAY / LOCKE STREET INTERSECTION	Change of curve radius to improve pedestrian safety	N/A	N/A	N/A	N/A	\$20,000	\$10,000	\$30,000	N/A	2018/19
STATE BLACK SPOT PROJECT	UPGRADE	REDMOND HAY RIVER ROAD	Improvement of vertical curve to increase sight distances	N/A	2.00	3.00	1	\$60,000	\$30,000	\$90,000	N/A	2018/19
STATE BLACK SPOT PROJECT	UPGRADE	EMU POINT DR, CLARK ST, MERMAID AVE INTERSECTION	Entry statements to encourage adherence to speed limits	N/A	N/A	N/A	N/A	\$10,000	\$5,000	\$15,000	N/A	2018/19
STATE BLACK SPOT PROJECT	UPGRADE	NORTH ROAD	Potential pedestrian crossing points - TBC from safety audits	MILPARA TO BETHEL	1.20	1.49	0.29	\$40,000	\$20,000	\$60,000	N/A	2018/19
STATE BLACK SPOT PROJECT	UPGRADE	NORTH ROAD	Potential pedestrian crossing points - TBC from safety audits	LION TO BARNESBY	0.50	0.84	0.34	\$40,000	\$20,000	\$60,000	N/A	2018/19

COMMODITY ROUTES SUPPLEMENTARY FUNDING (CRSF)

Program	Type	Road Name	Work Required	Section	SLK Start	SLK End	Extent	State Funding	CoA Funding	TOTAL	Seal Width	Year
ROAD UPGRADE	UPGRADE	MINDIHUP ROAD	Shoulder Widening and Reseal	Palmdale to Sand Mine	0.00	5.50	5.5	\$250,000	\$175,250	\$425,250	7.5	2018/19
ROAD PRESERVATION	UPGRADE	KOJENERRUP WEST ROAD	Reseal	N/A	0.00	13.50	13.50	\$250,000	\$175,250	\$425,250	7	2018/19