Greening Whittlesea City Forest Strategy 2020-2040





Acknowledgement of Traditional Owners

The City of Whittlesea recognises the rich Aboriginal heritage of this country and acknowledges the Wurundjeri Willum Clan as the Traditional Owners of this place.

Artwork by Mandy Nicholson, Wurundjeri artist, contains traditional Wurundjeri motifs and represents how we are connected to the Earth, just like our fingerprints.

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Our city forest

Whittlesea's city forest is all around us.

It's the trees on our farms, that line our streets, fill our parks, shade our yards, and make up our National Parks.

It's the shrubs and garden beds that brighten up our public spaces and make us proud of our homes.

It's the soils that support a green city.

It's the water that falls on our land and flows in our creeks and rivers.

It's the green elements we incorporate into our homes and commercial & public buildings.

It's all these things working together to improve our environment, increase liveability, and help make Whittlesea a *place for all*.





Why greening our city matters

Council currently manages tree assets with an amenity value in excess of \$600m. The social, health, environmental and economic benefits of street trees make them a naturally valuable asset requiring far less investment than other elements of civic infrastructure.

All green cover provides benefit, but trees provide the greatest scope for a lasting impact. Trees are valued by the community for their beauty, shade, and character.

They provide a range of benefits including improved mental and physical health and wellbeing, increased property values, and reduced heating and cooling costs. They also reduce air pollution, store carbon, slow and filter storm water run-off, and provide habitat for wildlife. Trees help the community adapt to a changing climate by cooling the air on hot summer days. Trees have a role to play both in connecting communities within liveable neighbourhoods, and in our response to changing climate conditions.

FIGURE 1. BENEFIT OF TREES



- 1 CLEAN AIR
- 2 OXYGEN
- 3 CARBON STORAGE
- MANAGE AND CLEAN STORM WATER RUN-OFF
- 5 WILDLIFE HABITAT AND RESOURCES
- 6 COOLER ENVIRONMENT
- 7 ENERGY SAVINGS
- 8 REDUCE SOIL EROSION
- 9 PHYSICAL AND MENTAL WELLBEING
- 10 COMMUNITY CONNECTION

A changing global climate affects local conditions across Australia by increasing average temperatures, altering rainfall patterns, and generating more frequent and intense natural disasters. Climate Ready Whittlesea outlines the local impacts, opportunities, and challenges of a changing global climate on the city, and the actions to be taken to protect services and assets and increase resilience. It recognises the importance of our trees and city forest.

Within Whittlesea, the changing climate is creating warmer and drier conditions. By 2050, it is projected that: annual average temperatures will increase by 2-3 degrees; the number of extreme heat days and number and duration of heatwaves will increase; droughts will be longer and harsher; the fire season

will last longer and bushfires will be more frequent and intense; winter, spring and autumn seasons will be drier and summers wetter; and flooding and storm events will be more severe.

Urban development and population growth cause additional stress, impacting existing green cover and reducing opportunities to grow our city forest.

Greening matters everywhere. The United Nations Decade on Ecosystem Restoration, the Greener Spaces Better Places national initiative, the Living Melbourne: our metropolitan urban forest strategy, and the strategic initiatives within local government across Australia all speak to the benefit trees and green cover provide and advocate for action to protect, reinstate, and expand our city forests.





View our climate change adaption plan at: www.whittlesea.vic. gov.au/about-us/news-publications/plans-strategies-and-policies/climate-ready-whittlesea-our-climate-change-adaption-plan/

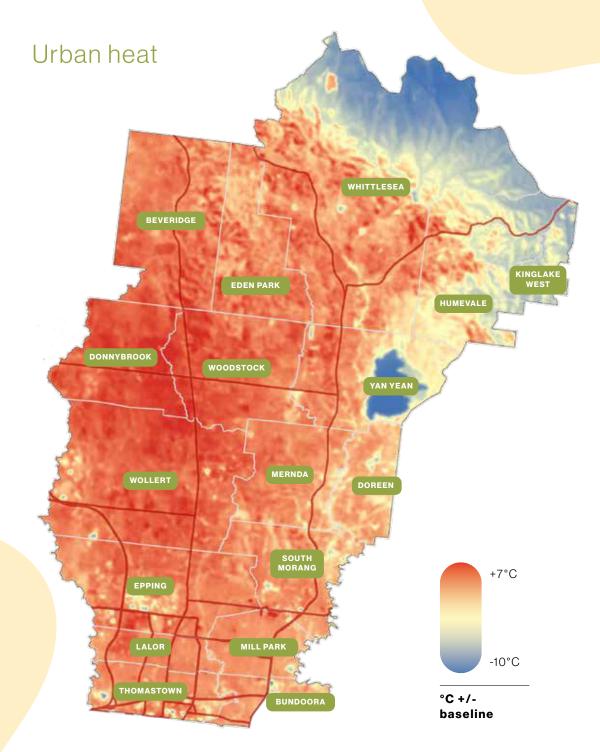


FIGURE 2. WHITTLESEA HEAT PROFILE

Much of our city is hotter than average due to the large areas of unirrigated dry grass in rural and growth areas, and the impervious surfaces in established urban areas. The coolest locations in our city are the heavily forested Kinglake National Park (which covers portions of Whittlesea, Kinglake West, and Humevale) and Yan Yean Reservoir.



For more information on the effects of extreme heat, who is at risk, and how you can prepare yourself and others visit www.betterhealth.vic.gov.au/heat

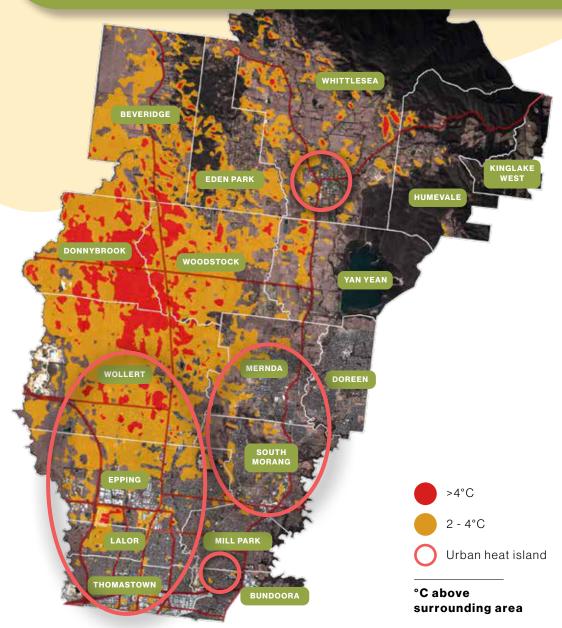


FIGURE 3. HEAT ISLANDS

Within our heat profile there are areas that are significantly hotter than those surrounding it. These represent heat islands which can have significant detrimental impacts on individual and community health and wellbeing, economic productivity (e.g. people working outdoors), and the health and wellbeing of plants and animals. While heat islands occur across the whole city, the importance of achieving tangible liveability improvements for our residents means we need to focus on heat within our more densely populated urban areas as shown on the heat island map.

Urban growth

Considerable growth over the last decade has seen the City of Whittlesea's population increase by just over 80,000 - a change of around 50%. This growth is forecast to continue with the population expected to increase to around 388,000 by 2041- a change of just over 60% from 2021 to 2041 (Figure 12).

Growth will take two general forms, urban expansion and infill.

Urban expansion will occur mainly through the north west corridor of the urban growth boundary, with the areas of Donnybrook, Wollert, and Epping North accounting for around 72% of the city's projected population growth to 2041 (+105,215 residents). While the suburb of Beveridge is not expected to experience high levels of population growth, significant investment in transport infrastructure and related industry is expected to drive development within the urban growth boundary.



Urban infill impacts existing urban areas generally taking the form of dual occupancy, multi-unit, and commercial/industrial developments, as well as special purpose developments like retirement villages. The image below highlights both the loss of existing green cover and the opportunity to increase green cover.





Both urban expansion and infill growth are driving an increase in the housing/population density of our city. Melbourne's housing lots continue to shrink, with their median size decreasing by approximately 11% between 2015 and 2019, and 26% between 2009 and 2019- the 'quarter acre block' is well and truly a thing of the past.

This growth and increased density places increasing stress on our existing green cover and impacts the availability of plantable areas, but it also provides an opportunity to work with developers to maximise greening outcomes in areas of urban expansion.



You can explore the City of Whittlesea's population information at: www.forecast.id.com.au/whittlesea





Overview

A key driver for this Strategy is our City's long-term vision 'Whittlesea 2040: a place for all', which calls for us:

"...to be ready for the challenges and opportunities that the future will bring, ensuring that the City of Whittlesea is a great place to live now and in the future."

Through development of the City vision, our community shared their aspirations for our City. These aspirations are reflected in the four goals below that guide Council's work and partnerships with the community and others.



The high value our community places on natural landscapes including attractive, leafy, treed, and green neighbourhoods, and the support displayed during development of this strategy, provide the community mandate to protect and grow our city forest. A changing climate, urban expansion (including population growth), and urban heating are the challenges we face together, and provide the imperative to act. The Greening Whittlesea City Forest Strategy contributes to all four Whittlesea 2040 goals but most directly impacts Goal 4 'Sustainable Environment', and Goal 1 'Connected Community'.

Our Goal

Our residents and our environment benefit from a diverse, colourful, and healthy City Forest that connects people to people, people to nature, and people to place.

Our outcomes for success





Protected

Our city forest is protected from building and subdivision activity.





Managed

Our city forest is planned and managed using up to date data and industry best practice.





Enhanced

Our city forest grows and thrives year on year.





Engaged

Our community and partners value trees and green cover, and work together to improve our city forest.

The GWS has a 20-year lifespan with progress reviews every five years. A detailed implementation plan has been developed, outlining the actions required to achieve our strategic Outcomes and Goal, and contribute to realising our City vision. A Project Steering Group will be established to oversee the Strategy's implementation.

Working in partnership

The GWS recognises that greening plays a significant role in addressing current and emerging environmental issues, including a changing climate, and that achieving necessary change will require the involvement of various state agencies and the broader indigenous, local, and business communities. Each of these groups have a key role to play in the successful delivery of this strategy.

STATE GOVERNMENT AND AGENCIES	LOCAL GOVERNMENT AREAS (LGA)
Set state-wide policies and strategies.	Manage green cover within LGA.
Manage green cover on government land.	Participate in regional interest groups.
Joint greening and education projects.	Joint greening and education projects.

WURUNDJERI	LOCAL COMMUNITY AND BUSINESSES
Represent the traditional owners.	Manage green cover on private land.
Management and extension of our city forest.	Participate in public greening events.
Joint greening and education projects.	Joint greening and education projects.

CITY OF WHITTLESEA	
Develop local policy and strategy for the city forest, urban design, waterways, and biodiversity.	Increase green cover on Council land.
Manage green cover on Council land.	Advocate for increased greening on non-council land.
Joint greening and education projects.	Advocate for, and enforce, the protection of our city forest.
	Monitor the health and size of our city forest.

How was this strategy developed?

This strategy was developed following consultation with a broad range of stakeholders representing our community, the Wurundjeri Narrap Team, state government and agencies, special interest and environmental groups, local business including developers, academics, industry specialists, and Council officers.

Consultation was conducted under the overarching theme of 'protecting the existing city forest while finding ways to extend our forest cover'. Through their feedback, our community and external stakeholders have helped us clarify the the benefits and challenges related to greening, and establish the target, goals, and outcomes needed to realise our strategic vision.

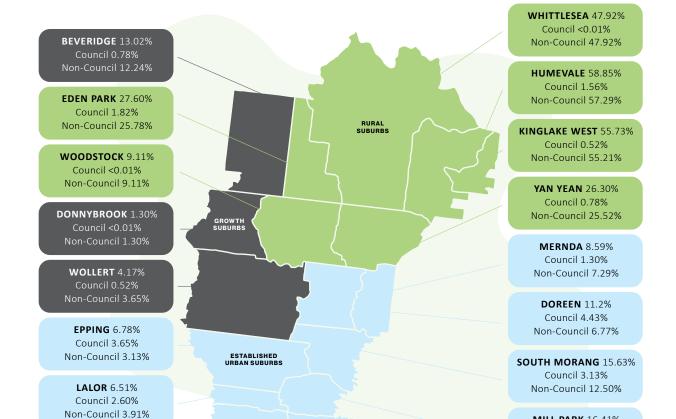
Consultation on this strategy reinforced our community's strong connection to, and love of, the City's natural environment, which was communicated through the Whittlesea 2040 consultation process.



Green cover in the City of Whittlesea

Today our City Forest provides around 27% green cover, with tree canopy representing 19.72% (116.5 km²) of our total green cover. 17.78% (110.2 km²) of the City's canopy falls on non-council land (private, other Government Agencies, and Crown Land).

City of Whittlesea Canopy Cover



All of city 19.71% Council 1.93% Non-Council 17.78%

Canopy cover values +0.97% at the 95% confidence level

MILL PARK 16.41% Council 4.95%

Non-Council 11.46%

BUNDOORA 19.01% Council 3.65% Non-Council 15.36%

Our total canopy cover of 19.72% is largely influenced by heavily forested areas in the north and north east of the city- without these areas our canopy cover would be closer to 9% (44 km²).

THOMASTOWN 7.02%

Council 3.13% Non-Council 3.91%

Established urban suburbs

Total canopy cover for these suburbs is 11.39%. Epping, Lalor and Thomastown have the lowest green cover with canopy of 7% or less, and Bundoora has the highest at 19%. The overall inadequacy of canopy cover and the lack of equity across suburbs is evident and impacts the majority of our community.

Growth suburbs

Total canopy cover for these suburbs, consisting largely of pastoral land and open grasslands, is 6.16%. Over the coming years these areas will be extensively developed providing improvement in green cover.

Rural suburbs

Total canopy cover for these suburbs is 37.58% and is largely influenced by the heavily treed Kinglake National Park and Yan Yean Reservoir catchment.



How we got here

Our current City Forest is largely a product of our development history and vegetation protection efforts. Urban development guided by legislation of the day has resulted in both the removal and planting of green cover within new street scapes and open space areas, while approximately 35% of the original extent of native vegetation remains within Whittlesea.

Council contributes to the scale and health of our City Forest through the maintenance and renewal of our green cover while also carrying out its own planting programs and working with landowners to facilitate the revegetation of private property.

Development and Building

Building and subdivision activities are subject to controls that seek to protect native vegetation by applying a three-step approach to **avoid** removal, **minimise** the impact of removal, and **offset** removal.

The provision of public and private open space, and trees is also a key requirement, with many developers delivering high quality street scapes and open space to provide a point of difference for their estates. In areas consisting mainly of open paddocks, development can have a transformative impact with positive outcomes for our city forest.

Whittlesea's Planning Scheme was recently updated to include a requirement for at least one canopy tree in both the front and rear setbacks of new residential developments. In addition to this, one canopy tree is required for every two dwellings on development sites of 1,000 square metres or more.

Council

Council delivers thousands of trees annually through its Street Tree Replacement and Infill programs. Complementing these programs are plantings that occur in conjunction with the delivery of new community facilities, street scape upgrades, road and pathway projects, revegetation projects, and community planting events.





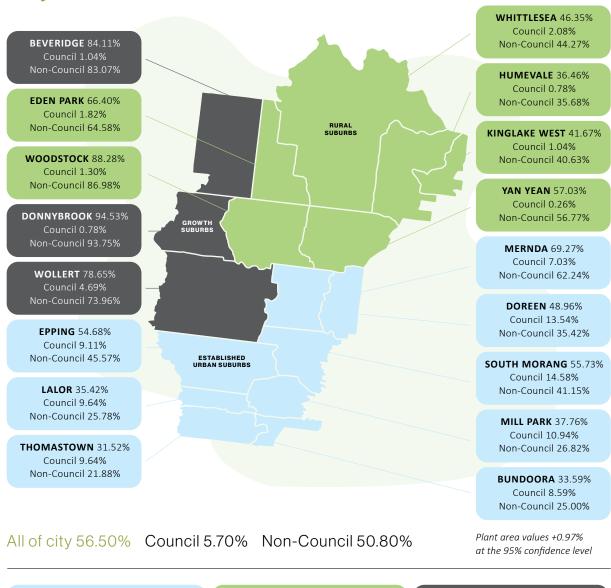




Room to grow

Increasing the size of our city forest is dependent on the availability of land unencumbered by existing infrastructure such as buildings, roads, paths, playgrounds, sports fields and courts, and water bodies. We call this plantable area.

City of Whittlesea Plantable Area



ESTABLISHED URBAN SUBURBS 45.86% Council 10.38% Non-Council 35.48% RURAL SUBURBS 56.03% Council 1.22% Non-Council 54.81% GROWTH SUBURBS 85.76% Council 2.16% Non-Council 83.60% While 56.50% of our total city area is categorised as plantable, there are other factors limiting our capacity to fully utilise this land. These include:

- Facilitating passive recreation.
- Providing suitable buffers between trees and existing infrastructure.
- Respecting formal easements.
- Land ownership/management responsibility.

Land containing existing infrastructure is classified as *impervious* (allowing little or no water penetration). It covers 19.53% of our city and like canopy cover occurs mainly on non-council land. Despite the existence of infrastructure, impervious areas can contribute to our City Forest through more novel approaches such as pop up parks in road reserves and the inclusion of plantings in building design (e.g. roof top and vertical gardens).



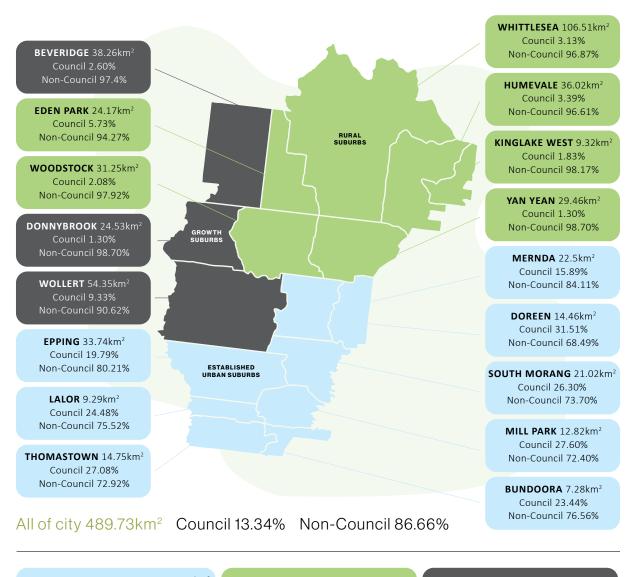


City of Whittlesea Land Ownership

The Greening Whittlesea City Forest Strategy is a city-wide strategy and in this context it is important to understand who owns and manages the land within our city.

At 13.34% of our total city area, Council is a minority landowner – just under 10% of our total canopy cover, just over 10% of our total plantable area, and 26% of impervious areas fall on Council land.

Engagement and partnership with landowners will be critical if we are to realise our strategic goal.



ESTABLISHED URBAN SUBURBS 135.86km² Council 24.51% Non-Council 75.49% RURAL SUBURBS 236.73km² Council 2.91% Non-Council 97.09% **GROWTH SUBURBS** 117.14km² Council 4.43% Non-Council 95.57%

Our vision for the future

Our goal

Our residents and our environment benefit from a diverse, colourful, and healthy City Forest that connects people to people, people to nature, and people to place.

OUTCOME	INDICATOR	MEASURE
Protected Our city forest is protected from building and subdivision activity. Improved retention of to and green cover.	Improved retention of trees and green cover.	By 2030 at least 80% of trees and green cover on building and subdivision sites will be retained.
		At least 80% of River Red Gums on building and subdivision sites will be retained.
Managed Our city forest is planned and managed using up to date data and industry best practice.	Improved health and lifespan of Council trees and green cover.	By 2025 at least 90% of Council trees and green cover will be rated as 'healthy'. By 2040 at least 90% of Council trees and
Enhanced	Increased tree canopy cover.	green cover will achieve their useful life. By 2040 tree canopy cover will increase by
Our city forest grows and thrives year on year.	Increased green cover.	a minimum of 20% across the City*. By 2040 total green cover will increase by a minimum of 20% across the City.
Engaged Our community and partners value trees and green cover, and work together to improve our city forest.	Increased community stewardship of trees and green cover.	Effective participation in existing and emerging greening groups, with new community groups established by 2030.

- * The following focal area increases will contribute to our total tree canopy target.
- Established urban suburbs: 57.45% increase in tree canopy cover (includes 37.5% on non-council land)
- Growth suburbs: 39.86% increase in tree canopy cover (includes 30% on non-council land)
- Rural: 3.09% increase in tree canopy cover (includes 1.5% on non-council land)



Our priorities for action across the City

Delivery of the Greening Whittlesea City Forest Strategy will be guided by a detailed implementation plan outlining the actions required to realise our strategic goals and targets over the life of the strategy.

Council will prioritise making people's lives better by improving liveability within connected communities across our city. The hierarchy of principles below will be applied.



Our first priority is to provide benefit at the local level.





Our second priority is to provide benefit at the suburb level.



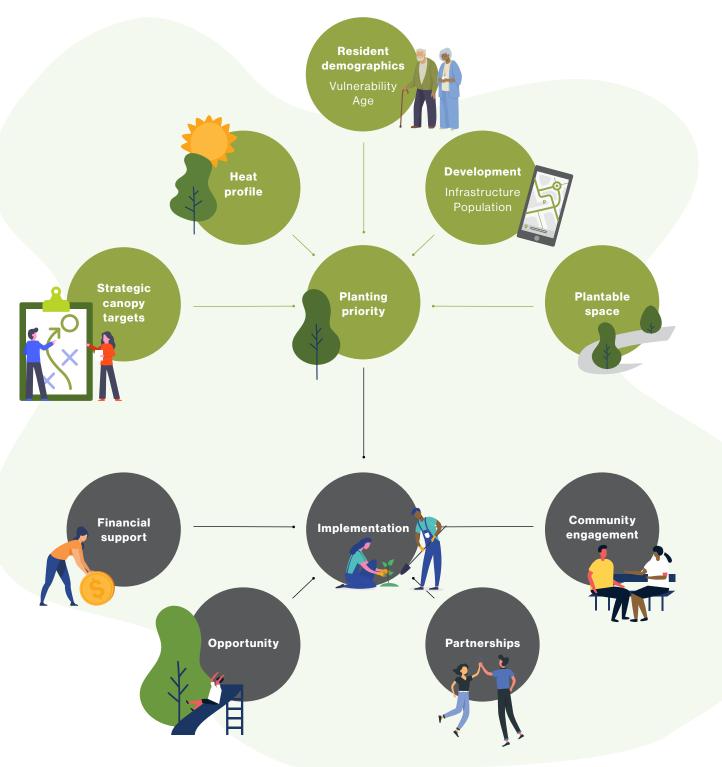


Our third priority is to provide benefit at the regional level.

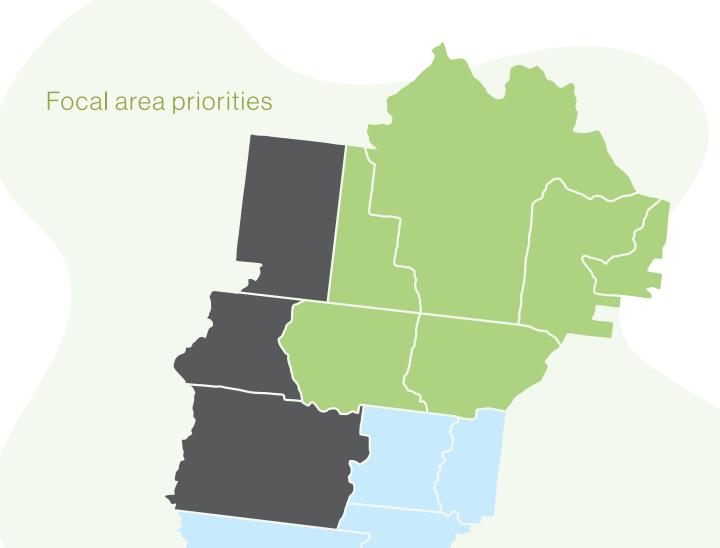


Multiple factors as shown below will influence the design, prioritisation, and delivery of our greening efforts.

FIGURE 4. **SETTING PRIORITIES**









GROWTH SUBURBS

Protect existing trees and green cover.

Work with developers to achieve best possible liveability and environmental outcomes.



RURAL SUBURBS

Work with land owners to revegetate rural areas, especially along waterways.

Protect existing trees and green cover.



ESTABLISHED URBAN SUBURBS

Targeted greening to deliver liveability improvements, especially heat mitigation.

Protect existing trees and green cover.

Protected

Our city forest is protected from building and subdivision activity.

Community and Partnership

- Understand community behaviours, perceptions, and barriers regarding green cover retention and protection on private land.
- Apply incentive programs to encourage the retention and protection of green cover on private land.

Legislation, Design, and Assessment

- Review existing planning controls to identify where tree and green cover protection measures can be strengthened at all development stages. Where appropriate, develop an evidence-base to seek changes to local policy or provisions as part of the preparation and review of strategic land use plans for development areas.
- Enhance supporting guidelines to ensure planning applicants understand the decision criteria that will be applied when considering Landscape Plan Approvals. Seek to establish a trigger or incentive for applying these guidelines to projects where planning approval is not needed.
- Develop organisational processes and systems that promote green cover retention.
- Develop and implement a mechanism to ensure road-widening proposals are subject to detailed analysis of tree protection opportunities to prevent removal and damage wherever possible.
- Identify and implement appropriate controls to protect existing vegetation in waterway corridors.
- Ensure local laws and enforcement are effectively used to provide green cover protection at all development stages.

Asset Management

- Incorporate decision-making criteria into work processes to ensure existing mature trees are not removed until all possible solutions to protect the trees are exhausted.
- Establish an easy to use tracking system for Planners to log tree removal and tree planting numbers contained in development applications.

Program Planning and Delivery

 Investigate if income from vegetation related bonds, fines, and fees (including tree removal fees) can be allocated solely to greening programs. Develop processes for the transparent collection, tracking, and transfer of income as relevant.







Managed

Our city forest is planned and managed using up to date data and industry best practice.

Community and Partnership

- Engage with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation and relevant fire ecology experts to advise on landscape and fire management practices.
- Invite the Wurundjeri Woi Wurrung Cultural
 Heritage Aboriginal Corporation to self-determine
 their involvement in Whittlesea's ongoing greening
 program. Explore opportunities for Traditional
 Owner advice on tree significance, ceremony
 and culture.
- Increase pathways and opportunities for indigenous employment.

Legislation, Design, and Assessment

 Develop best practice guidelines with supporting technical documents to protect existing vegetation, facilitate healthy vegetation growth, enhance biodiversity outcomes including habitat connectivity, and consider sustainable water use options in all built form and infrastructure works.

Asset Management

- Record data for all existing and future trees on Council land in Council's asset management system, including species, size, canopy spread, and health/ condition.
- Establish workflows for tree maintenance through Council's asset management system in collaboration with Council's contractors.

- Develop routines and responsibilities for the tracking of tree canopy and green cover progress.
- Develop an interactive mapping platform with both internal and public-facing interfaces that incorporates relevant environmental data to support integrated evaluation and decision making, communications, and education.

Program Planning and Delivery

- Develop a City Landscape Masterplan to guide planting programs across the City.
- Develop an open space planting program guided by the City Landscape Masterplan and incorporating plantable opportunities analysis, increased park plantings, habitat connectivity, urban heat amelioration, better use of transmission easements, and greater planting around and within sporting facilities, wetlands, waterways, and reserves.
- Develop a comprehensive ten-year Street Tree
 Planting Program which increases annual tree
 planting through main road and residential street
 programs. The program should prioritise urban
 heat amelioration and be aligned with the Road
 Rehabilitation program (road renewals) where
 appropriate.
- Develop routines and responsibilities for the tracking of urban heat data and establish new processes to ensure hot spots and heat islands are prioritised for increased greening to improve social and health equity.
- Undertake an Equity-Focussed Health Impact
 Assessment on the Strategy to ensure benefits
 reach vulnerable groups / priority locations in
 the community.

Enhanced

Our city forest grows and thrives year on year.

Community and Partnership

- Understand community behaviours, perceptions, and barriers regarding green cover planting on private land.
- Apply incentive programs to encourage the planting of green cover on private land.

Legislation, Design, and Assessment

- Work with developers to achieve better-thanlegislated outcomes where practical through the provision of additional information and guidance as part of the assessment approval process that helps identify additional opportunities for tree and vegetation planting.
- Include increased greening (with emphasis on tree retention and planting) in all Urban Design Frameworks, Integrated Community Facilities Planning, Public Space Planning and New Works Public Space projects.
- Advocate for an evidence-based review of setback requirements of service providers that limit canopy and vegetation planting (for example, Ausnet Services).
- Review existing planning controls to identify opportunities for increased tree and green cover planting at all development stages. Where appropriate, develop an evidence-base to seek changes to strategic land use plans and policy via planning scheme amendments.
- Investigate opportunities for requiring/prioritising offset planting associated with vegetation removal to be met within the City of Whittlesea.
- Assess all development and capital works projects against the Sustainable Subdivision Framework.

Program Planning and Delivery

- Work with developers to achieve better-thanlegislated outcomes where practical by developing showcase projects with progressive developers to maximise tree planting and biodiversity sensitive design solutions.
- Advocate for the adoption of green roofs, walls, and facades [natural greening incorporated into building design].
- Implement planting in line with the City Landscape Masterplan, and the Open Space and ten-year Street Tree Planting Programs.







Engaged

Our community and partners value trees and green cover, and work together to improve our city forest.

Community and Partnership

- Develop a communications plan aimed at increasing awareness and support for trees and greening, and to explain the benefit of greening to community wellbeing, environmental resilience, and economic health.
- Consult with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation on opportunities to communicate connection to Country.
- Continue to actively expand opportunities for community engagement with trees and vegetation as part of Council's new works projects, existing community programs and events, citizen science projects and public art programs, inviting and encouraging culturally diverse community and business involvement in planning and implementation of planting programs.

- Develop an Advocacy Prospectus inclusive of a targeted Partnership Engagement Plan to guide focused advocacy, and the pursuit of grant and partnership opportunities with Government, business, and philanthropic organisations.
- Work with major non-Council landowners (private and public) to develop a portfolio of greening projects.
- Identify and target current and emerging offset programs to support mass planting opportunities within the City.
- Participate in local and regional initiatives to deliver greening outcomes.

Program Planning and Delivery

 Develop 'shovel-ready' concepts and supporting business cases to anticipate grant opportunities.





If you would like to get involved, visit our website at www.engage.whittlesea.vic.gov.au/greening-strategy

Governance and reporting

Governance

The Greening Whittlesea Lead is the custodian of this Strategy, however its successful delivery requires strong collaboration across the organisation which will be facilitated through the Greening Whittlesea Practitioner Group. This group is crucial to the effective governance of the Strategy, and its membership will be made up of departments whose work impacts current and future green cover. The Greening Whittlesea Practitioner Group's main purpose is to the drive implementation of actions established to deliver the outcomes of this Strategy. The group's establishment and ongoing management will be undertaken by the Greening Whittlesea Lead.

Reporting

The Greening Whittlesea City Forest Strategy Implementation Plan will be incorporated into relevant Service Plans, and will be reported on through the Service delivery process. In addition, Council Officers will monitor the Strategy outcomes and report to Council on a 2 year cycle.

The Greening Whittlesea Lead will be responsible for implementation oversight and reporting.

The Strategy will be reviewed every 5 years (commencing 2025), with a final review at year 20 (2040).













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