Sustainable Environment Strategy 2022-2032

City of Whittlesea

Acknowledgement of Traditional Owners

We recognise the rich Aboriginal heritage of this country and acknowledge the Wurundjeri Willum Clan and Taungurung People as the Traditional Owners of lands within the City of Whittlesea.

Contents

Left page photo:
Smoking Ceremony

About this document

The Sustainable Environment Strategy 2022-2032 (the Strategy) outlines the City of Whittlesea's contribution toward securing a sustainable, net zero emissions, and climate resilient future for all.

Informed by the analysis of trends impacting our environment and engagement with communities, local businesses, institutional stakeholders, and partner organisations, the Strategy:

- Sets out the environment we want and outlines how this will positively impact our community
- Provides an overview of the City of Whittlesea's existing environment
- Identifies the challenges and opportunities facing our local environment – including the recent impact and ongoing effects of COVID-19
- Defines Councils' priority areas for action and what we will do to contribute to protecting and enhancing our local environment between 2022-2032
- Outlines how we will monitor our environment to ensure our actions respond to what our community needs
- Aligns and contributes to the following Sustainable Environment 'key directions' as outlined in Council's vision 'Whittlesea 2040: A place for all':
  1. Valued natural landscapes and biodiversity,
  2. Climate ready, and
  3. Leaders in clean, sustainable living.

The Strategy builds on and has been prepared to support the national, state and regional priorities for sustainable practices as set out in the Federal Plan for Net Zero Emissions by 2050 and the Powering Australia plan, Strategy for Nature 2019-2030, Water for Victoria 2016, Victoria's Environment – Biodiversity 2037, Port Phillip and Western Port Regional Catchment Strategy, Victorian Traditional Owner Cultural Landscapes Strategy, Plan Melbourne 2017-2050, Recycling Victoria Policy 2020, Victoria's Climate Change Strategy 2021, and Victoria's Adaptation Action Plans 2022.

It also synthesises and streamlines Council's endorsed positions from the Biodiversity, Whittlesea Water for All, Greening Whittlesea City Forest, Rethinking Waste, Climate Change and Green Wedge Management Plans.

This Strategy is provided in three parts:

- *The Sustainable Environment Strategy 2022-2032* (this document) – outlines Council's overall strategic direction toward securing a sustainable, net zero emissions, and climate resilient future.
- The *Sustainable Environment Action Plan 2022-2024* – A two-year Action Plan which sets out Council's commitments to deliver on the Strategy. The Action Plan will be reviewed bi-annually.
- Long term thematic plans for Biodiversity, city forest (greening), climate change, Green Wedge, waste and recycling, and water. These plans provide detailed supporting evidence including consultation outcomes and in-depth analyses of the trends, challenges and opportunities explored in the Strategy.

How we engaged

- **Thematic sustainability engagement:** Direct stakeholder and community engagement on strategy specific topics: Biodiversity, Water, City Forest, Waste and Recycling, Green Wedge, and Climate Change.
- **Community Plan 2021-25:** Let's Talk: Shaping the Community Plan 2021-25 consultation program which included community surveys, online and face to face events, pop-up stalls and targeted focus groups.
- **Targeted local business discussions:** Online business breakfast and targeted engagement to understand local vulnerability and aspirations for climate action.
- **Climate change workshops:** Institutional stakeholder workshops and small focus groups.
- **Engage City of Whittlesea website:** Final engagement included a survey, two interactive activities, and five pop-up stalls. Attracted more than 800 views and 292 downloads of the Strategy and Action Plan.

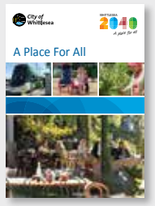
980+
contributions were received directly related to sustainable environment in the Let's Talk Program

390+
completed surveys on the Whittlesea 2040 Sustainable Environment Goal in the Let's Talk Program

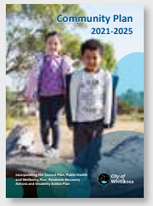
Photo: Community consultation at the Mill Park All Abilities Play Space

How we plan – an integrated people focused approach

Level 1: Vision
Council's overaching vision



Whittlesea 2040



Community Plan

Level 2: Strategy
Strategic direction and action plan

Sustainable Environment Strategy

Sustainable Environment Action Plan

The Sustainable Environment Strategy is one of seven strategies that outlines Council's commitments, the outcomes we strive for and the actions we will deliver for our community.

The seven strategies are known as Council's Integrated Planning Framework. Each strategy expands on our long-term 20-year community vision, Whittlesea 2040: A place for all and our Community Plan 2021–2025, to provide our community with more information on Council's priorities and our overall strategic direction.

Using this plan

The City of Whittlesea's approach to creating a sustainable environment is provided in three parts:

Sustainable Environment Strategy 2022-2032 – Outlines Council's overall strategic direction across six areas related to environmental sustainability: biodiversity, city forest (greening), climate change, Green Wedge, waste and recycling and water.

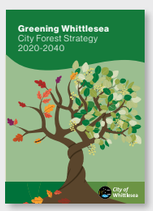
Sustainable Environment Action Plan 2022-2024 – A two-year Action Plan which sets out Council's commitments to delivery on the Sustainable Environment Strategy 2022-2032. The Action Plan will be periodically reviewed.

Climate Change Plan 2022-2032 – Detailed supporting evidence including consultation outcomes and an in-depth analysis of the trends, challenges and opportunities for climate change action explored in the Sustainable Environment Strategy 2022-2032.

Level 3: Approach
Long term plans, detailed analysis and detailed rationale

Biodiversity

Water For All



City Forest

Rethinking Waste

Green Wedge

Climate Change

Level 4: Operations
Operational programs, guidelines and technical documents

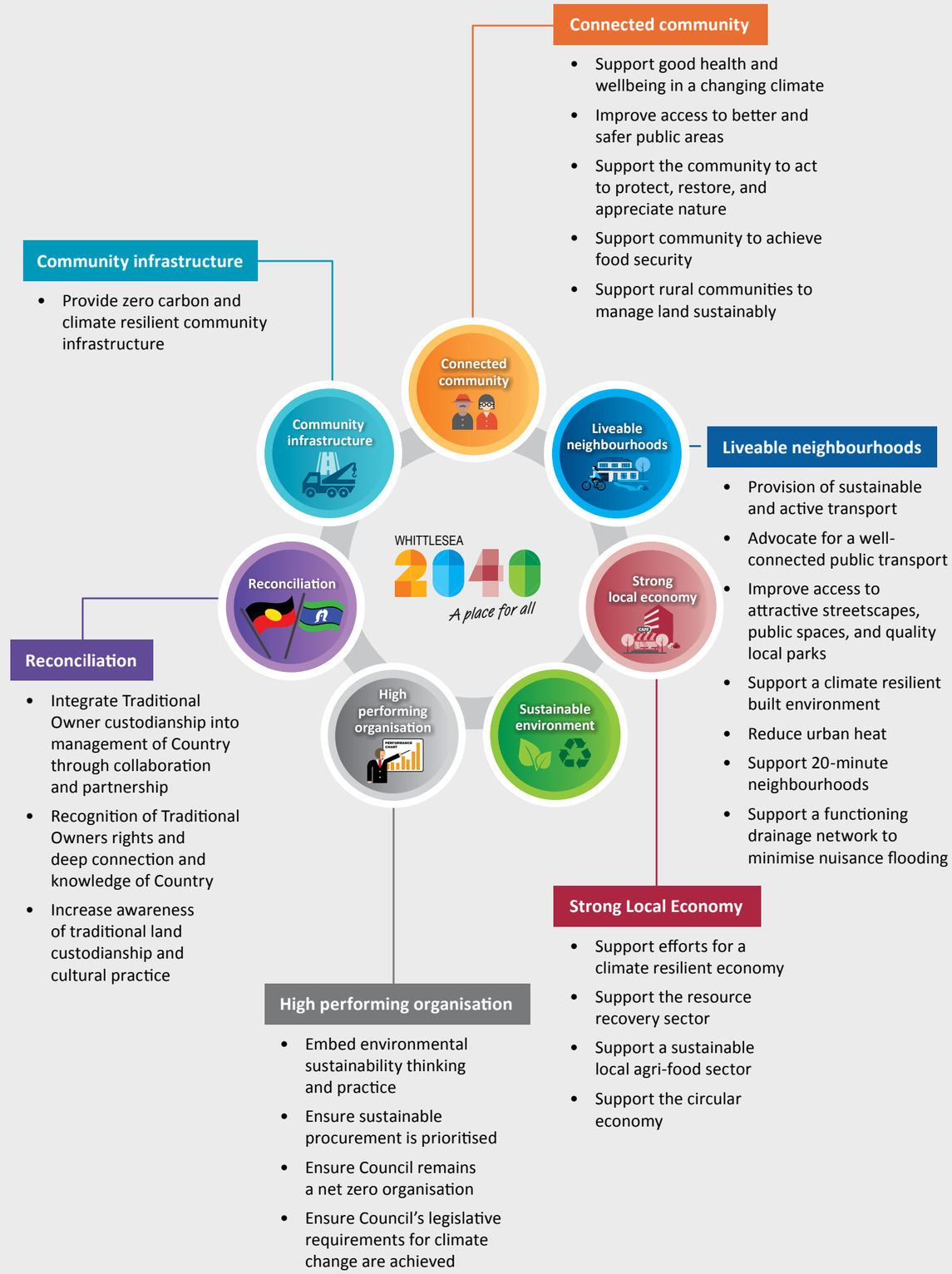

Processes


Systems

Professional Development Plans


Environmentally Sustainable Design Guidelines

Sustainable Environment links in other strategies



The Sustainable Environment we want

'In 2040 the City of Whittlesea's superb landscapes and natural environment are an enduring source of pride. Our iconic River Red Gums, local biodiversity and precious natural assets are protected for future generations. Locals and visitors enjoy spending time in our natural environments and our leafy suburbs. Together, we are working to reduce our impact on the environment and adapt to the changing climate.' Whittlesea 2040: A place for all

Key direction 1: Valued natural landscapes and biodiversity

- Our landscapes, waters, and species are protected, improved, and valued
- Our land management and land use are sustainable
- Our natural environment and biodiversity are resilient to climate change

Community benefits:

1. Increased access to natural reserves and parks
2. Clean and healthy waterways
3. Protected landscapes and biodiversity
4. Recognition of Traditional Owners
5. Rural land health and productivity

Key direction 2: Climate ready

- Our city's green cover is enhanced to reduce the risk of extreme heat
- Our communities and businesses are supported to become climate ready
- Our built environment and infrastructure are built to support safe and healthy communities in a changing climate

Community benefits:

6. Increased access to green cover and shade
7. Reduced exposure and vulnerability to climate risk
8. More adaptive and resilient communities and businesses
9. Improved ecosystem services
10. Access to climate resilient infrastructure

Key direction 3: Leaders in clean, sustainable living

- Our city becomes a net zero emissions municipality
- Our water resources are managed in an integrated way
- Our city is low waste and transitions to a circular economy

Community benefits:

11. Cost savings in energy and water consumption
12. Access to clean and renewable energy
13. Better access to sustainable modes of transport
14. Clean city
15. Human health and wellbeing

Community benefits of a Sustainable Environment

The City of Whittlesea environment

The City of Whittlesea is located on the lands of Wurundjeri and Taungurung in Melbourne's northern suburbs, about 20 kilometres from the Melbourne Central Business District.

It is one of Melbourne's largest and fastest growing municipalities, covering a land area of 489 square kilometres. The population is diverse with more than 41.8 per cent of residents born overseas and the second largest Aboriginal and Torres Strait Island population in metropolitan Melbourne. It is projected to continue to grow with more than 150,000 new residents to 2040, making it the third most populous local government area in Victoria.

The City of Whittlesea has established urban areas across Bundoora, Epping, Lalor, Mill Park, South Morang, and Thomastown; rapidly growing precincts in Donnybrook, Doreen, Epping North, Mernda and Wollert and rural areas which are characterised by farming, water catchments, extractive industry, conservation alongside rural living in Beveridge, Eden Park, Humevale, Kinglake West, Whittlesea Township, Woodstock, and Yan Yean.

The City of Whittlesea features a wide range of:

- Landforms including the Western Basalt Plains, the Plenty Valley and the Plenty Ranges which support ecological vegetation communities with high habitat value for native species
- Native species including River Red Gums, Growling Grass Frog, Golden Sun Moth, Matted Flax-lily, and Sugar Gliders
- Waterways and catchments such as the Plenty River, Merri Creek and Darebin Creek
- Manmade waterbodies such as Yan Yean Reservoir, Toorourrong Reservoir, stormwater wetlands, and farm dams.

City of Whittlesea environmental and sustainable living profile

521
hectares of Council managed conservation land

60%
of the City as protected Green Wedge

20%
total canopy cover for our City

52
threatened flora and fauna

151
litres of water used by our residents each day

12
tonnes of annual carbon emissions per capita

994kg
of annual waste generation per capita

90%
of participants in Council's environmental programs learnt something new

Place overview

Challenges facing our environment

Population growth

More people will be contributing to our energy and water usage, greenhouse gas emissions, waste generation, and demand for transport and infrastructure.

Covid-19

The pandemic has increased demand for access to nature and open spaces but limited opportunities for programs, events and collective environmental action.

Biodiversity loss

Flora and fauna species are under pressure due to urban expansion, habitat fragmentation, , poor land management practice, lack of investment, pests, natural disasters, and climate change.

Climate action

Immediate action to reduce greenhouse gas emissions and action carbon removal solutions is required to meet the 1.5°C Paris agreement temperature goal.

Urbanisation and land use change

Increased conversion of rural land to housing is resulting in loss of green space, canopy cover, species loss and soil degradation. Urbanisation also causes changes in land's hydrology, e.g. more stormwater runoff due to more hard surfaces introduced. In the face of climate change, climate resilient housing and infrastructure can save lives, reduce trauma, improve cost of living and minimise economic damage from disasters and the associated recovery costs.

Financial impacts

Disaster preparedness and climate change mitigation initiatives (such as new technologies) come with economic impacts which need to be well understood. However, the economic impacts of compounding climate events on an unprepared community far outweigh the upfront costs to prepare and mitigate. The impacts are also felt with biodiversity decline, for instance increases in pest plants and animals have significant costs for rural landowners.

Increased risk of extreme weather events

Extreme weather events (e.g. heatwaves, bushfires, grassfires, floods, storms) are expected to increase in a changing climate.

Environmental inequality

Vulnerable populations, such as those with inadequate health care, poor quality housing, and unstable employment, are likely to be more impacted by environmental change, and experience limited access to nature and quality open space.

Limited community environmental stewardship

Volunteer fatigue and limited access to resources, support and opportunities are impacting the ability to conduct community driven environmental activities such as plantings, litter clean ups, water quality monitoring, and bird surveys.

Limited awareness

There is a need to support awareness of local environmental issues with our diverse community, including how they can take action locally.

Key focus areas

Our environment is a complex system comprising of dynamic and interacting natural, built, and human elements. This Strategy covers seven key focus areas related to environmental sustainability.

Biodiversity

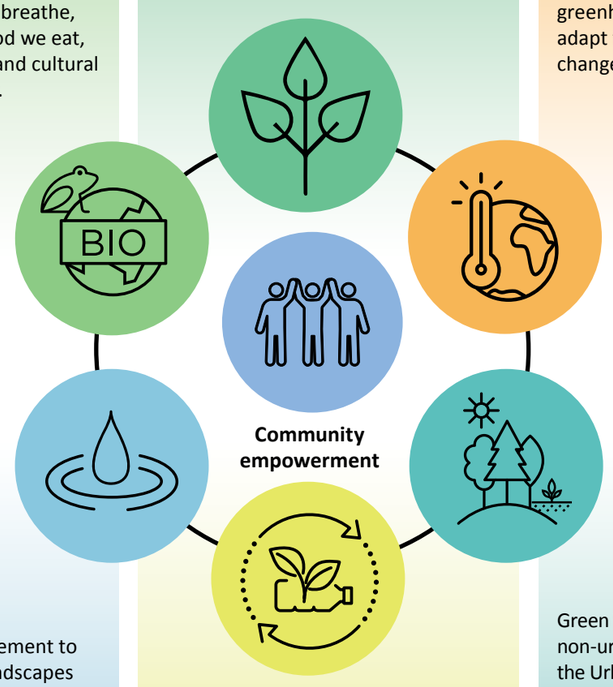
Biodiversity is the number and variety of living things on the planet. It is the mix of plants, animals, and other organisms that make up landscapes from deserts to oceans. The ecosystem services provided by natural areas are vital for human health and wellbeing by providing the air we breathe, water we drink, and food we eat, as well as recreational and cultural opportunities we enjoy.

City forest

City forest is made of trees, vegetation and the soil and water that supports our city. Greening refers to increasing the amount of green cover including trees and other vegetation. Greening delivers multiple benefits for the community including improved mental and physical health and wellbeing.

Climate change

Climate change is the long-term shift in the Earth's temperature and weather patterns, primarily caused by human activities such as burning fossil fuels, waste generation, land clearing and farming. We must work together to reduce our greenhouse gas emissions, and adapt to, and prepare for climate change impacts.



Water

Water is an essential element to support life, healthy landscapes and ecosystems, as well as the community's wellbeing. Humanity's interference with the water cycle demands this precious resource to be managed in an integrated way, considering freshwater security, stormwater management and wastewater treatment amongst priorities.

Waste and recycling

Waste is a product or substance which is no longer suited for its intended use. Council plays an important role in supporting the community to avoid unnecessary waste to landfill, improving resource recovery and supporting the circular economy.

Green Wedge

Green Wedge is the rural and other non-urban land sitting outside the Urban Growth Boundary and protected from further urban development, which accounts for over 60% of our city. Our Green Wedge supports productive agricultural land, scenic landscapes, heritage places, rural living, National Parks, forests, waterways, reservoirs and nationally significant flora and fauna.

Community empowerment

Empowered communities are people of all ages, genders, cultures and abilities, with a shared vision who have the knowledge, skills, access, connections and motivations to take environmental action and influence others, driving positive environmental change. Community empowerment is nurtured through programs, events, information, and conversations which build skills and knowledge, celebrate the environment, connect people, and create pathways for a sustainable future.

Biodiversity

‘Two species of blue banded bees (*Amegilla asserta, A. chlorocyanea*) would visit daily during the summer months. They are incredible creatures and brought immense joy to my life, bringing me out of one of my darkest periods… We are so lucky to have them in our area…’

- Quote from the Biodiversity Asset Mapping Project, 2021

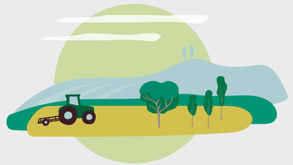
Why is biodiversity important?

- Contributes to nutrient cycling, air and water purification, soil stabilisation, flood control and climate regulation
- Provides us with essential resources such as air, water, and food, contributes to overall wellbeing, as well as recreational opportunities and a strong cultural connection to place
- Provides vital habitat and food resources for native wildlife
- Approximately 47 per cent of our City ranked as areas of biological significance
- Over the last 30 years, 52 threatened species have been found to call this City home
- Home to many assets of environmental significance such as River Red Gums, Growling Grass Frog, Matted Flax-lily, and the Brush-tailed Phascogale
- Biodiversity is critical to human health and wellbeing, however local species face many threats, such as climate change, land clearing and urbanisation, which cause habitat and species loss, soil degradation, weed invasion, and changes to hydrological regimes
- Understanding which plants and animals live in our region is fundamentally important. Ongoing data collection is essential to improve understanding and protect what is there
- With a large portion of local biodiversity assets located within privately owned rural property, our community has a key role in protecting and enhancing biodiversity in Whittlesea.

What have we done so far?

Protected and managed 570 hectares

of conservation areas on public land



Provided support to over 150 rural landowners

through the Sustainable Land Management Rebate Scheme and the Environmental Works Grants Program

Created additional jobs

to prioritise safeguarding the diverse values of our Green Wedge

Managed rural roadsides

for conservation values and weed threats

Strengthened Council’s policies to support biodiversity

and enhance the protection habitat corridors and the green wedge through fauna surveys, and biodiversity asset mapping

Secured 1,100 ha of public open space

for conservation and biodiversity improvement through a plan for the Quarry Hills Regional Park

Our priorities for the future

Knowledge and research

In 2021, baseline data was collected on the species that already exist locally. It is vital that we continue to collect and maintain data so that we understand what we are trying to protect and how to best protect populations into the future. The more that is understood about current conditions, the better we can navigate and manage changes to local biodiversity. Council will improve data and knowledge to better understand, maintain and protect local biodiversity.

Land use planning

As the planning and responsible authority for the Whittlesea Planning Scheme, Council has a degree of influence over how biodiversity is protected at both a landscape scale and at a lot level. Well thought-out strategic and land use planning will enable local species to move throughout the landscape and mitigate the impacts associated with urbanisation, land use change and climate change. Council will continue to strengthen the Planning Scheme and Council’s commitment to protecting biodiversity, to mitigate the impacts associated with urbanisation, land use change and climate change.

Community support

A large portion of the City of Whittlesea is contained in privately owned rural property. This means that there are considerable biodiversity assets on private land in rural areas. Council will support the community and rural landowners in particular, to protect, manage, and improve biodiversity assets, such as remnant vegetation, landscaping, and steppingstones, on private land.

Awareness and capacity

There are numerous co-benefits to a biodiversity rich urban environment including improved waterway health, improved health and wellbeing outcomes for people, and a reduction in the urban heat island effects. Council will encourage awareness and build community capacity to increase community participation in urban biodiversity, soil health and improvement.

Management of Council land

Council managed reserves provide vital habitat and food resources for native wildlife and important opportunities for residents to observe and appreciate the natural environment. Council will continue to improve Council land management practices to reduce biodiversity threats, increase habitat quality, connectivity, promote the natural environment, and increase the involvement of the community.

Partnerships, collaboration and advocacy

Several other agencies are responsible for managing significant sites of biodiversity value both within and adjacent to the City of Whittlesea. Council will continue to advocate, collaborate with other land management agencies and neighbouring councils to circulate new ideas, problem solve, maximise the benefits of individual efforts, and manage complex issues that cross different jurisdictions (such as waterways and kangaroo management).

City forest (greening)

‘Wouldn’t it be cool for our kids to grow up with trees around that they planted?’

- Quote from community consultation for the Greening Whittlesea Plan, 2019

Why is city forest (greening) important?

- Provides improved mental and physical health and wellbeing, increased property values, and reduced heating and cooling costs
- Reduces air pollution, stores carbon, slows and filters storm water run-off, and provides habitat for wildlife
- Our canopy cover represents 19.72 per cent of our city, including 17.78 per cent falling on non-council land (private, other Government Agencies, and Crown Land)
- Planting native trees and retaining remnant trees like river-red gums can enhance biodiversity and habitat for wildlife
- Council currently manages tree assets with an amenity value in excess of $600 million
- Both urban expansion and infill growth are driving an increase in the housing and population density of our city, which place increasing stress on our existing green cover and impacts the availability of plantable areas
- Opportunities to increase canopy cover by working with developers.

What have we done so far?

Developed the Greening Whittlesea Plan

to set out plans for the protection, growth and management of the city’s trees and green cover

Increased trees in low-income suburbs

through adopting an equity focussed approach to tree planting

Planted more than 20,000 canopy trees and shrubs

at Quarry Hills Regional Park
(in collaboration with Victorian Department of Environment, Land, Water and Planning)

Planted over 50,000 indigenous trees and shrubs

within local conservation reserves

Our priorities for the future

Protection from building and subdivision activity

This priority aims to identify gaps, strengthen, and develop processes and systems that promote tree retention and protect our City Forest from building and subdivision activity. Projects may include reviews of local laws pertaining to trees and vegetation and their enforcement; vegetation protection appeals and processes; existing vegetation planning controls; and vegetation related bonds, fines, and fees.

City forest management

This priority looks to plan and manage our City forest using up to date data and industry best practice to improve the health and longevity of Council trees and green cover throughout the municipality. Projects include auditing, reviewing and updating Council tree planting lists to increase the resilience of our City forest, working with fire ecology experts on fire management practices that help protect trees from severe bushfire impacts, and the development of planting frameworks and precinct plans for our planting programs.

City forest planting

This priority aims to enhance our City forest by increasing plantable space, the number of trees, and the percentage of tree canopy and vegetation cover within the municipality. Projects include advocacy for an evidence-based review of setback requirements of service providers that limit canopy and vegetation planting, provision of additional information and guidance to developers as part of the landscape assessment approval process that helps identify additional opportunities for tree and vegetation planting, investigating opportunities for requiring offset planting associated with vegetation removal, and the implementation of tree planting programs throughout the municipality.

City forest stewardship

This priority aims to empower the community and partners to lead city forest improvement initiatives. Projects include the development of a communications plan aimed at increasing education, awareness and support for trees and greening; continued programs and partnerships with our residents, community groups, Traditional Owners, neighbouring councils, major public and private landholders; and Council participation in broader-scaled regional initiatives to deliver greening outcomes.

Canopy justice

This priority aims to continue to identify and address tree canopy inequalities throughout the municipality to maximise community health benefits. Projects include the development and integration of equity measures for planting programs, maximising the health co-benefits of the Greening Whittlesea Strategy, the creation of cool routes and cool public spaces, and targeted consultation and engagement with groups identified as being at higher risk to the impacts of the Urban Heat Island Effect.

Climate change

‘(A climate-ready neighbourhood is) a neighbourhood that can cope with a worsening climate that results in more heat stress, more dangerous fires, damaging storms and flooding rain.’

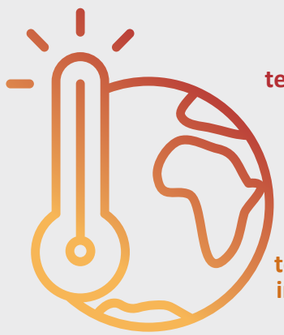
- Quote from community consultation for the Climate Change Plan, 2021

Why is climate change important?

- Our city is exposed to a range of climate risks, including extreme heat, fire, and changes in rainfall patterns and storms leading to floods and droughts. Extreme weather events can also lead to food shortages as a result of interruptions in supply chain
- Climate risk facing our city is increasing. By mid-century, we could see the number of extreme heat days (above 30°C) in our city almost double compared to the 1990s
- The impacts of climate change affect vulnerable populations disproportionately. Statistics show that 21.5 per cent of our city’s total households are considered low income, significantly higher than 12.8 per cent of Greater Melbourne
- In the 2018-19 financial year, our entire municipality’s community emissions have been 2,422 kt CO_2-e. Our per capita emissions are 2.4 times higher than the global average
- To align with the 1.5°C Paris agreement temperature goal, our city will need to achieve net zero emissions by 2036.

What have we done so far?

- Saved 560 megawatt hour of electricity per year through upgrades to Council buildings
- 60 per cent of Council’s streetlights (16,000) were converted to energy efficient T5 Fluorescent, Compact Fluorescent (CFL), and Light Emitting Diode (LED) lamps
- 100 per cent renewable electricity is now used to power Council facilities, service and streetlights, reducing 66.5 per cent of Council’s annual organisational emissions
- Approximately 16 per cent of Council’s organisational emissions have been offset annually on average since 2011/12
- Developed and implemented Climate Ready Whittlesea, Council’s first adaptation plan including completion of a heat vulnerability mapping to understand the municipality’s vulnerability to heat risk.



2.3ºC
temperature increase by 2050s

1.2ºC
temperature already increased since 1910

What we can expect:

Double the number of heatwave days

Longer fire season. More high fire danger days.

More intense downpours. Less cool season rainfall.

Our priorities for the future

Renewable energy and energy efficiency

Electricity and gas consumption is our City’s largest source of greenhouse gas emissions, accounting for 81 per cent of our total municipal emissions. Reducing this stationary energy use and switching to renewable energy sources are our biggest emissions reduction opportunities. The City of Whittlesea will focus on eliminating stationary energy emissions in Council operations, support the community to reduce energy consumption, improve energy efficiency, and adopt renewable energy, and promote zero emissions buildings through advocacy and partnership.

Sustainable and active transport

On-road transport is 15 per cent of our total municipal emissions, making it our city’s second biggest source of emissions. Great opportunities exist to reduce emissions and promote health and wellbeing benefits for our community through sustainable and active transport. Council will work on transitioning its fleet and plant to zero emissions vehicles, supporting the community to adopt sustainable and active modes of transport, and promoting sustainable and active transport through advocacy and partnership.

Sustainable farming practice and carbon sequestration

As an interface local government area with 60 per cent of its land being the Green Wedge, our city has great potential to capitalise on carbon sequestration options in the agriculture, forestry and other land use (AFOLU) sector, which can also deliver co-benefits for biodiversity and ecosystem conservation. Council will explore carbon sequestration potential of our public land, and also support landowners and local farmers to contribute through sustainable farming practice and vegetation cover enhancement.

Low waste and circular economy

The waste sector is a major source of methane emissions, a greenhouse gas far more potent than carbon dioxide. A circular economy approach has great potential to reduce our dependence on new raw materials, minimise waste, and maximise the use of existing assets. We will contribute to creating a circular economy in our city by implementing our Rethinking Waste Plan, and supporting businesses to adopt circular economy principles and practices through technology innovation and investment.

Climate resilient environments and communities

The changing climate has significant impacts on human health, public safety, infrastructure, primary production, settlements, the natural environment, and biodiversity, which are all being felt across the society. We will advance Council’s understanding and planning for climate risks so that we can continue to effectively service our community in a changing climate, enhance our city’s green cover to reduce heat risk and protect biodiversity, and support communities and businesses to better understand and prepare for climate risk and build resilience.

Green Wedge

‘Responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality and increased community interactions, improved living standards and manageable growth.’

- Quote from community consultation for the Green Wedge Management Plan, 2021

Why is Green Wedge important?

- Over 60 per cent of the City of Whittlesea is rural or non-urban land currently protected as the Green Wedge
- Green Wedge is part of a connected ecosystem where biodiversity, natural assets and resources are enhanced and protected from urban encroachment
- Provides for rural uses, and supports economic opportunities in sustainable agricultural and the visitor economy. Greater Melbourne’s Green Wedge and peri urban area contributes to over $2.45 billion worth of economic value annually
- Home to a diverse range of native plants and animals, including native grassland of National and State significance, River Red Gum Grassy Woodland, and forested areas such as Kinglake National Park and Mount Disappointment State Forest
- Supports the upper and middle catchment areas of the Plenty River, Darebin Creek and Merri Creek, and is home to the Toorourrong and Yan Yean water storage reservoirs
- The Wurundjeri Willum clan and Taungurung people are the Traditional Owners of the land that now forms our Green Wedge, which protects and promotes its rich Aboriginal and post contact heritage.

What have we done so far?

Supported the agri-food sector

Increased the differential farm rate of 40 per cent from 2017

Created additional jobs

to safeguard the diverse values of our Green Wedge

Northern Regional Trails Strategy

Worked with partners to deliver the Strategy

Implemented a pest plant local law

education and compliance program

Partnered with Deakin University

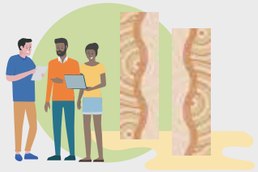
to investigate how regenerative agriculture can enhance climate resilience in peri-urban areas

Supported the Wollert Community Farm and Whittlesea Food Collective

Combines local food and farming, food distribution, sustainable resource use, and education and employment opportunities

Potential development of a Food Hub

Obtained support from State Government to develop the business case for the Melbourne Food and Innovation Export Hub



Commenced an Aboriginal Heritage Study

in partnership with the Wurundjeri and Taungurung Registered Aboriginal Parties to identify Aboriginal cultural values for the lands and waters of the municipality

Our priorities for the future

Partner with landowners and other government agencies to improve soil health

Healthy and stable soil is the foundation of sustainable environment and managing soil health is an emerging issue of national significance. The City of Whittlesea has long recognised the environmental importance of soil conservation and has been actively working with landowners to enhance soil quality via a framework of sustainable land management. It is crucial that Council continues to partner with landowners, community groups, and various levels of government to manage risk and improve overall soil health.

Protect non-urban breaks and enhance landscape amenity and rural character

There is need to strengthen the planning controls as they relate to landscape amenity, rural character and to preserve the non-urban breaks for conservation, cultural and recreational purposes. The type of development and land use occurring in the rural areas of the municipality should respect the visual sensitivity of the land scape.

Protect Green Wedge from further urban encroachment and improve management of the urban and rural interface

It is important for Council to work with the State Government to safeguard the Urban Growth Boundary (UGB), support landowners in sustainable land management and, where possible, create public green space and conservation areas as permanent and enduring buffers on the urban side of the UGB. It is also crucial to implement the Whittlesea Township Plan to limit intrusion into the Green Wedge, protect desired township character and further support the township’s role in being the social and economic centre of rural communities in the municipality.

Improve understanding of the value of agriculture in the Green Wedge to provide for appropriate use and development

Agriculture in the Green Wedge is under threat from pressure to convert land to other uses including housing and smaller non-agricultural uses, leading to land use compatibility issues. Council needs to raise the profile of agriculture in the Green Wedge and continues working with the State Government to communicate the purpose of the Green Wedge and the importance of protecting land for existing and future agriculture opportunities.

Support the local agri-food sector and the visitor economy to grow, be sustainable and prepared for climate change

Council will work with farmers, businesses, institutions, other Green Wedge councils and government agencies to support a sustainable agri-food sector and the visitor economy via knowledge sharing, incentives, partnership, advocacy and policy direction.

Partner with Traditional Owners in various practices that care for Country, and engage and empower community members on various aspects of caring and managing for the Green Wedge

The future of our Green Wedge relies on a strong community of dedicated individuals and groups who have already been actively looking after our Green Wedge land. Council will continue to partner with community members and groups, support community-led initiatives, explore ways to further remove the barrier for our rural community to access Council information and participate in conversations that will shape the future of our Green Wedge.

Waste and recycling

‘It would be good to see this council be a leader in this field and act as a role model for other council.’

- Quote from community consultation for the Rethinking Waste Plan, 2020

Why is waste and recycling important?

- Waste management is rated as one of the most important services that Council provides and is a major component of Council’s annual budget. The total cost of managing Whittlesea’s municipal waste now exceeds $13 million a year
- Council collected 45,000 tonnes of garbage, 18,000 tonnes of recycling, and 17,000 tonnes of garden waste, 1,900 tonnes of hard waste, 4,780 tonnes of bundled branches, and 1,240 tonnes of e-waste in 2019/20
- There were 83,000 properties as part of the City of Whittlesea’s bin collection services in 2020, which are projected to increase to 129,551 properties in 2040
- Projections show that the preceding decade will see an average annual growth rate of 2.4 per cent for waste to landfill, and a 3.3 per cent increase in material recycled, aligned with projected annual population growth.

What have we done so far?

Establishment of the City’s first Repair Café

Located at Mernda Community House

Provided the pop up recycling station

A mobile solution to recycle and dispose of items usually associated with moving into a new home

Introduced the user pays service for food and garden waste

Around 49,000 households have opted-in since 2020, diverting 399 tonnes of food and garden waste per week from landfill

Trialled using reusable plates, cups and cutlery at four major community events in 2018-19

This initiative saved over 2,600 pieces of food packaging from being manufactured and disposed of

Ran an anti-littering education campaign along Council’s waterways

Winners of the 2015 Keep Australia Beautiful Victorian Sustainable Cities award for the Raspberry Pi Program

Used recycled and sustainable materials for civil infrastructure projects

such as the trial of an asphalt product in Yale Drive, Epping, that contained 95 per cent recycled materials from kerbside recycling, crushed concrete and crushed rock

Our priorities for the future

Avoid waste generation

The City of Whittlesea will work with the community to avoid waste generation in the first place. To do so, Council will implement a variety of household educational programs, behaviour change campaigns and low waste initiatives. Council will also show leadership and innovation by becoming a waste free organisation that supports local community leadership and community led solutions.

Value waste by recovering and recycling and encouraging repair and reuse

The City of Whittlesea considers waste a valuable resource and will commit to increasing the volume of waste diverted from landfill by enhancing resource recovery systems. Recovery is the process of recovering resources from waste for reuse or reprocessing. This includes the introduction of the residential glass recycling service and the extension of the food and garden organics recycling services. Council will also trial a home collection service for e-waste, clothing, and small household items.

Protect the health and safety of our community and the environment from the impacts of waste

It is our responsibility to protect our environment and health from the impact of waste. Litter, illegal dumping and inappropriate waste management practices not only cost the community money, but also causes environmental, public health and safety risks. Council will adopt best practice waste management principles and advocate for great environmental protection of local land and waterways. Council will introduce a litter enforcement team to protect the environment from litter and dumped rubbish, encourage sustainable procurement and select products that generate economic, social and environmental benefits.

Support businesses to move towards a circular economy

Partnering with our businesses, community groups and social enterprises, Council will support local businesses to minimise waste, use recycled materials in manufacturing and encourage local partnerships. Through assisting with grant applications and local collaboration, Council will help our community move towards a localised circular economy.

Water

‘Waterways in Doreen are beautiful with the birdlife and paths. Please keep them clean.’

- Quote from Community Plan consultation, 2021

Why is water important?

- Water is essential to our wellbeing and is imperative to the healthy functioning of our communities and our environment
- The overall need for water in our municipality will increase substantially as our population grows, from 15.2 GL/yr currently to 19.6GL/yr in 2040
- Our water supply is likely to decline as the climate changes due to decrease in annual rainfall. Increase in water use also means there will be more wastewater created
- The amount of stormwater will increase significantly as more homes are built in our municipality, from 71.2GL/yr currently to 81.8GL/yr in 2040, that needs to be managed to reduce pollution and flooding
- Our rainfall patterns have changed as a result of climate change, which lead to longer dry spells and flashier rain events which increase the risk of flooding during summer months
- The City of Whittlesea is an important regional water catchment, and home to Toorourrong and Yan Yean Reservoirs
- Our local creeks, rivers and their tributaries are home to many native plants and animals, can play a key role in mitigating flood impacts, and are important natural places for community to enjoy.

What have we done so far?

Adopted the ‘Whittlesea Water For All’ strategy

Adoption in 2020 marked a major milestone in Council’s commitment to water management practices

Improving water management practice

Increased staff resourcing and training to support integrated water management

Alternative water irrigating public open space

Alternative water supplies were installed in suitable public open spaces which use recycled and reclaimed stormwater

Flood risk project

Worked with Melbourne Water to identify areas at risk of being affected by flooding events. Flood modelling was completed for the Plenty River, Darebin Creek, Edgars Creek, and Mernda and Laurimar Catchments

Secured federal grants and constructed the Melbourne Markets Stormwater Harvesting Scheme

Designed to save more than 48 million litres of drinking water every year to supply our sporting grounds in Mosaic Recreation Reserve, Whittlesea Public Gardens and the RGC Cook Recreation Reserve

Our priorities for the future

Cleaner – Our local waterways are healthy and clean

The City of Whittlesea will improve on its asset management practices to secure the long-term restoration and maintenance of the municipality’s stormwater treatment infrastructure such as wetlands, ponds and raingardens. Council will further pave the way to adopt new and innovative approaches to stormwater management in our growth areas, as well as enhance our protection measures for our creeks from harmful construction activities in these zones. The Merri Creek, Darebin Creek, and the Plenty River run from the north to the south of the municipality. Council will work with its partners and community to improve the water quality of its local creeks and rivers for all to enjoy, and to protect the significant plant and animal species that live there, like the Growling Grass Frog.

Greener – Our priority urban and rural landscapes are green and healthy

Council will seek opportunities to use stormwater and recycled water instead of potable water for the greening of our urban areas. Where possible the runoff water from roads, car parks and roofs will be used to water our trees, enhancing tree canopy cover. Sports field irrigation is one of Council’s largest water users. To reduce water use, more sports fields will be irrigated with stormwater where there is space for infrastructure and the quality of water is suitable.

Smarter – Our community uses potable water for drinking and alternative water is available for all other purposes

The City of Whittlesea will invest in smart technologies, education programs and incentives schemes to support and empower the community’s uptake and self-sufficiency in water cycle management. In the public realm Council is committed to join and adopt the trends of integrated water management by planning and constructing multi-benefit blue-green infrastructure.

Prepared – Our city is prepared for droughts and floods

Leaning on smarter technologies and practices in water cycle management and empowering our community to practice the principles of sustainable water use, our municipality will increase its resilience in drought and flood scenarios which are a real threat to human safety and wellbeing. The City of Whittlesea will identify opportunities to mitigate the causes of flooding in mapped hotspots, and endeavour to have the necessary water resource available and fit for purpose when prolonged dry periods create strains on the region’s supplies.

United – Our community and partners value water and work together to improve water planning, use and management

Whittlesea will strengthen existing partnerships and establish new synergies with other government authorities, community groups, businesses, and Traditional Owners to achieve Council’s overall aspiration to become a water sensitive city. We will identify the opportunities and initiate the engagement in our activities where we identify the opportunity to ‘team up’ and deliver actions in partnership.

Community empowerment

‘Whittlesea should focus more on what they do with the community to teach and practice sustainability…the real change happens when you act.’

- Quote from Let’s talk about our City’s environment survey, 2017

Why is community empowerment important?

- Community empowerment is a cross-cutting element that enables us to deliver the outcomes identified for each of the previous six focus areas
- Empowered communities have the power to drive environmental change through a shared vision, collective voice and personal action
- Increasing time spent in nature improves human health, happiness and wellbeing
- Creating a sustainable environment is a shared responsibility. Every single person can make positive changes, like walking or cycling instead of driving, planting trees or a vegetable garden, joining a Friends’ group to look after a piece of nature or choosing sustainable investments
- Communities play a vital role in the health and resilience of Whittlesea’s natural environment and people, particularly though environmental stewardship activities like water quality monitoring, litter clean-ups and community plantings.

What have we done so far?

Annual environment events

Celebrations such as National Recycling Week, National Tree Day, Children’s Week Pop-up Nature Play, and World Environment Day

Engagement with schools, students and young children

Learning programs such as Hume Whittlesea Teachers’ Environment Network, waterway and waste education programs, early years educator sustainability training, and nature play for children

Sustainability Outreach Whittlesea (2012-2019)

Outreach education programs delivered with more than 23 local community organisations and over 2000 residents

Whittlesea Waste Busters Program (2019-2021)

Supported 35 households to reduce their waste at home through workshops, tools and tailored advice

Community nature/gardening programs

Nature Stewards (since 2021) fostering connection to nature and building environmental skills. Gardening Together Again (2022) supported community gardens to establish and thrive

Caring for Climate community art (2021-2022)

Artworks with personal climate action commitments by 330 residents. Exhibited as 17 murals, 800 road foil stickers and banners

Our priorities for the future

Empower climate action

Support residents, businesses and community to take sustainable action through practical training or re-skilling (e.g. bike repair, preserving and growing food and foraging workshops) and education programs and resources (e.g. solar and battery storage, energy, waste and water minimisation). Ensure support for climate action is inclusive and equitable, and empowers the communities most affected by climate change impacts.

Amplify environmental stewardship

Build environmental skills for people of all abilities, ages and stages in life, including children and young persons. Strengthen partnerships with key organisations who do this important work, particularly Darebin and Merri Creek Management Committees. Support rural landowners to improve sustainable land management practices, and to protect and enhance the biodiversity of their land. Foster community connection to local natural places, celebrate aboriginal culture and Caring for Country practice.

Improve biodiversity and greening in urban areas

Deliver programs which enhance native wildlife habitat in urban areas, and support growing food and indigenous gardens at home and in public open spaces e.g. community gardens.

Improve Traditional Owner engagement

Celebrate Wurundjeri and Taungurung peoples culture through programming and seek opportunities to strengthen relationships with Traditional Owners.

Listen, strengthen and support

Council will strive to hear community needs and aspirations to strengthen and support communities to take positive environmental action through its programs, projects and initiatives.

Making it happen

The Strategy will be delivered through implementation of a Sustainable Environment Action Plan, which will be developed every two years.

The Action Plan clearly outlines the actions Council is committed to delivering and how we will track our performance over time. The Action Plan will also help to facilitate and strengthen our partnerships and collaborations with key stakeholders.

Service description:

Climate Change

Council provides services to support the community's adaptation and mitigate climate change risks. We work to reduce the urban heat island effect and support urban greening, deliver walking and cycling paths supporting active travel for the community. Council shows leadership by avoiding, minimising and offsetting our greenhouse gas emissions within its operations and developments it builds and maintains. Council improves its infrastructure, and helps the community prepare for the unavoidable impacts of our changing climate, including increases in extreme weather events. Council educates and empowers the community to reduce greenhouse gas emissions.

Integrated Water Management

Council works alongside state government agencies and utility providers to develop and deliver integrated water management services for our community, protecting and restoring our natural waterways. Council manages its water assets to ensure that they are planned, delivered, and maintained effectively. We are committed to ensuring water is used efficiently throughout our city. We support the community to understand and appreciate the water cycle and use water wisely.

Biodiversity, Land Management, Sustainable Planning and Design

Through its role as a statutory authority, Council plays a crucial role in delivering an environmentally sustainable city. Council facilitates sustainable land management and biodiversity conservation on public and private land across urban and rural areas. Council educates and empowers the community to undertake biodiversity conservation activities and sustainable land management.

Resource Recovery and Waste Management

Council provides sustainable solutions for the collection, disposal and recovery of waste materials generated within the community and through our own operations. We develop strategic policy, education programs and operational maintenance activities to avoid, minimise and recover waste and keep our city clean, healthy and safe. We undertake compliance and enforcement for illegal waste dumping in our municipality. We support and empower the community transition to a circular economy.

Monitoring progress

Council has prepared an evaluation framework to monitor the trends and performance of our work in sustainable environment.

The Strategy will be reviewed in 2027 and 2032 at which time the sustainability needs and aspirations for the City of Whittlesea will be re-assessed for appropriate action.

The priority indicators below will help us to track the health of our environment and progress towards the outcomes identified in this Strategy. They have been nominated with consideration of access to regular, accurate data.

Council will continue to monitor these indicators and will work with other levels of government as well as partners in the private and non-for-profit sectors and our broader community to influence these indicators for the better.

Key direction 1: Valued natural landscapes and biodiversity

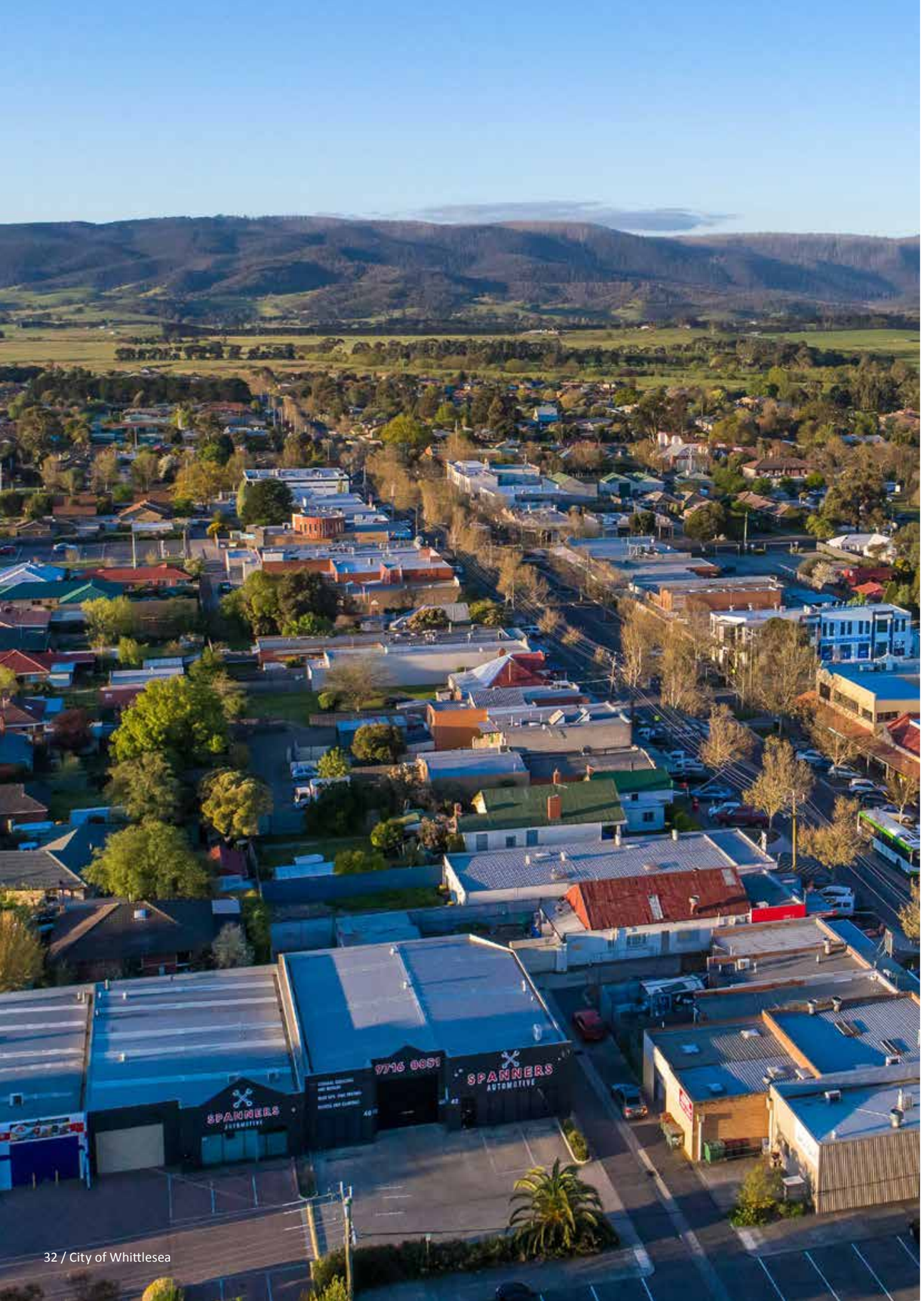
- Improved biodiversity protection and management (public and private land)
- Improved rural land management practices
- Increase in water quality in local waterways and wetlands
- Increased riparian vegetation
- Increased opportunities for community to act for nature
- Improved connection between Traditional Owners and Country
- Improved collaboration and partnerships

Key direction 2: Climate ready

- Improved health and lifespan of Council trees
- Increased tree canopy cover
- Reduced areas of heat risk hotspots
- Decreased property impacts with floods
- Increased community resilience to climate change
- Increased Council operations and services that consider climate change risks
- Increase in the number of sustainable developments
- Improved collaboration and partnerships

Key direction 3: Leaders in clean, sustainable living

- Reduced Greenhouse Gas Emissions (both Council and community)
- Reduced energy consumption (both Council and community)
- Increase in uptake of renewable energy (both Council and community)
- Increase in sustainable transport use
- Reduction in potable water consumption
- Reduced waste and litter generation
- Increase in sustainable procurement
- Improved collaboration and partnerships



Glossary

Aboriginal – Throughout this document, the term 'Aboriginal' is taken to include people of Aboriginal and Torres Strait Islander descent. 'Aboriginal' is used in preference to 'Indigenous', 'First Nations', and 'Koori'.

Agri-food – The agri-food sector encompasses all stages of the food and beverage life-cycle, from the on-farm production of primary commodities, through to manufacturing, retail, consumption and recycling (organics and packaging).

Alternative water – Any source of water other than potable water that is deemed to be of sufficient quality to serve the application purpose.

Biodiversity – The number and variety of living things on the planet. It is the mix of plants, animals, and other organisms that make up landscapes from deserts to oceans.

Bioregion – Geographic areas defined by natural boundaries rather than political or governmental boundaries.

Blue-green infrastructure – Natural landscape elements which are harnessed by humanity as infrastructure and use water as a resource to sustain itself and flourish.

Carbon sequestration - The removal of carbon from the atmosphere by capturing or storing it through biological, chemical and physical processes.

Caring for Country – a term used to describe the different sustainable land management practices and initiatives that Aboriginal and Torres Strait Islander people undertake, and the key role these practices play in continuing culture.

Circular economy – A model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.

City forest – All the trees and other vegetation and the soil and water that support them. Urban forest is an alternative term. It incorporates vegetation in streets, parks, gardens, plazas, campuses, river and creek embankment, wetlands, railway corridors, community gardens, green walls, balconies, and roofs.

Climate change – Long term change in global or regional climate patterns attributed largely to the increased levels of greenhouse gases in the atmosphere, particularly carbon dioxide, produced by the use of fossil fuels.

Ecosystems – A geographic area where plants, animals, and other organisms, as well as weather and landscapes, work together to form a network of life.

Ecosystem services – the benefits provided to humans through the transformations of resources (or environmental assets, including land, water, vegetation and atmosphere) into a flow of essential goods and services such as clean air, water, and food.

Environmentally Sustainable Design (ESD) – Design that seeks to improve building performance, reduce environmental impact, resource use and waste, and create healthy environments for occupants and users.

Greenhouse gases (GHG) – Gases such as carbon dioxide, methane, nitrous oxide, and others that cause the greenhouse effect by increasing the amount of solar radiation absorbed in the atmosphere, leading to global temperature rise.

Green Wedge – Non-urban land that is described in a metropolitan fringe planning scheme as being outside an urban growth boundary.

Green Wedge Management Plan – A Council adopted strategy that identified a vision, objectives and actions for the sustainable management and development of each Green Wedge area.

Integrated Water Management – A collaborative approach to the management of all elements of the water cycle to contribute to water security, public and environmental health, as well as urban amenity.

Land use – The primary purpose for which the land is used or may be developed.

Net zero emissions – A state where greenhouse gas emissions are produced but balanced out with equivalent offsets. Net zero carbon dioxide emissions is interchangeably used with carbon neutral or carbon neutrality.

Portable water – Drinking water, or process water which meets quality standards for human consumption.

Stormwater (runoff) – Surface water runoff during and following a rain or storm event. Distinguishable from Rainwater which is runoff generated by building roofs (elevated surfaces).

Tree canopy cover – The proportion of the municipality covered by the uppermost trees or branches of trees in a forest, forming an almost continuous layer of foliage. The topmost layer of bioactivity in a forest setting.

Urban Growth Boundary (UGB) – A line drawn around a metropolitan area, defining the limits to urban growth.

Urban heat island effect – The phenomenon of dense urban areas having significantly warmer air and land surface temperatures than surrounding rural areas.

Water Sensitive Urban Design (WSUD) – An approach to planning and design of urban areas to make use of stormwater as a resource and reduce the harm it causes to our natural environment.

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