

**City of Melton**  
**Environment Plan 2017-2027**

**DRAFT**

**March 2017**

## **Acknowledgement of Country**

Melton City Council acknowledges local Aboriginal Indigenous Australians, recognising the Wurundjeri people of the Kulin Nation as the original custodians of the land now known as City of Melton. On behalf of ratepayers and citizens of the municipality, Council pays respect to indigenous elders, past, present and future.

## **Message from the Mayor**

To be completed after public exhibition.

## **Executive Summary**

To be completed after public exhibition.

## **Environmental snapshot**

- >> The area of the City of Melton is 527.3 km<sup>2</sup>, compared to 36.2km<sup>2</sup> for the City of Melbourne
- >> Current population is 143,003, projected to more than triple over the next 40 years
- >> Average annual growth rate of 4.4%, the equivalent of about 38 new families per week
- >> 102 conservation sites managed by Council covering a total of 1,010 hectares
- >> Approximately 300 recreation reserves and parks within the municipality
- >> 33 threatened species listed under the federal *Environmental Protection and Biodiversity Conservation Act 1999* (the EPBC Act) call the City of Melton home
- >> Average waste diversion rate of 48%

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## The Plan at a Glance

### Our Vision

In 2036, the City of Melton is a clean, green, sustainable city that meets the needs of its current and future population while valuing and protecting its unique environmental assets. Melton City Council is accountable for its environmental impacts and leads by example, supporting an environmentally aware and engaged community.

### Our Guiding Principles

The following guiding principles have been used in the development of this document and will be used to guide Council's planning and decision-making:

**Leading by example:** Council will choose to demonstrate environmental leadership in its own activities.

**Accountability:** Council will be accountable for the environmental impacts resulting from its planning, decision-making and activities.

**Sustainable development:** Our development will aim to meet the needs of the present population without compromising the needs of future generations. Development will be in balance with the natural environment.

**Live within ecological limits:** We will not use resources faster than the earth can replace, or create waste faster than the earth can assimilate.

**Integration:** Environmental, social and economic considerations will be integrated into planning and decision-making.

**Precautionary principle:** If there are threats of serious or irreversible environmental damage, lack of full scientific certainty will not be used as a reason for postponing measures to prevent environmental degradation.

**Systems view:** The environmental decisions we make have implications far beyond the City of Melton's borders and negative effects may not be immediate. Decision-making will consider regional, national and international impacts as well as those that are cumulative and long-term.

**Partner, collaborate and advocate:** Where Council shares responsibility with other agencies, we will seek to partner and collaborate to influence improved environmental outcomes aligned with this Plan. Where responsibilities lie outside Council's control, we will advocate on behalf of the community and environment.

The Environment Plan provides Melton City Council with high level policy direction. It will guide the municipality towards becoming a sustainable city that protects its ecological values and provides a healthy environment to support a growing population.

The Plan was developed by examining Council’s environmental impacts through three interconnected themes: Built Environment, Natural Environment and Resource Use.

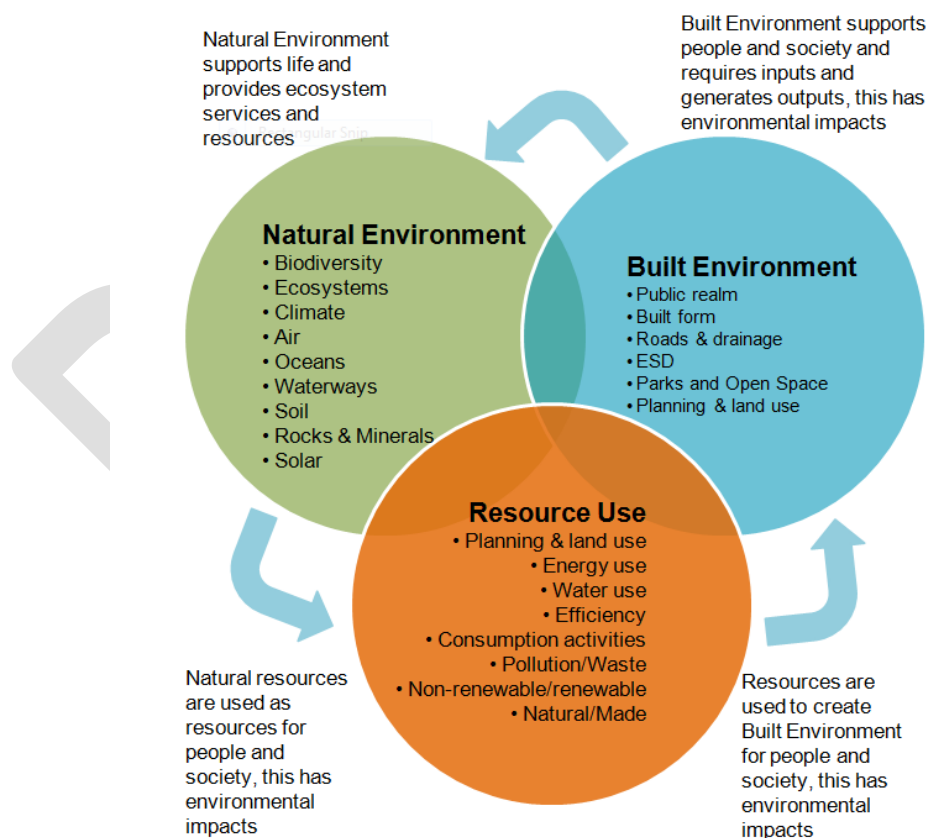
The Plan outlines goals, objectives and actions that address key issues across those three spheres to help us become:

- A city growing and developing sustainably
- A city with healthy waterways, biodiversity and ecosystems
- A resource efficient city

## Themes

Council recognises that in ecological systems everything is connected, and challenges can best be addressed through taking an integrated approach to environmental management.

The diagram below demonstrates the relationship between the Environment Plan’s three themes:



## Introduction

### Purpose of the Plan

The purpose of Melton City Council's Environment Plan 2017-2027 is to guide planning, decision-making and activities that impact on the City of Melton environment. The Plan provides a framework to address current and future environmental issues facing the municipality and outlines actions to respond to these challenges.

The purpose of the Plan is to:

- Define Council's vision and principles for environmental management in the municipality
- Set goals to direct Council towards improved environmental outcomes
- Outline environmental objectives to achieve those goals
- Outline a range of actions to achieve those objectives
- Act as a reference and guiding document to help inform future policies and programs that relate to environmental management

As a key policy document, the Environment Plan is strongly aligned with the Council Plan and the Municipal Strategic Statement. More detailed plans and strategies will be developed based on directions provided in this Plan.

### Co-benefits of environmental action

The focus of the Melton City Council Environment Plan is on reducing the environmental impacts of Council's corporate operations and service delivery. It is important however to recognise that many actions that seek to improve environmental management will provide a range of social, economic and health benefits as well.

For example, a city with abundant green space provides habitat for flora and fauna and a range of other ecosystem services, such as stormwater treatment and provision of clean air. In addition, residents enjoy increased opportunities for exercise and recreation and their associated benefits to health and well-being. Installing solar photovoltaic (PV) systems on Council buildings provides a low-carbon source of energy, but also assists in cutting costs associated with energy bills, allowing Council to invest in improvements elsewhere.

Although social, economic and health issues are best addressed through other Council plans, acknowledging these co-benefits will enable Council to prioritise projects that achieve multiple benefits across the municipality.

### Council's role and policy context

Council has a(n):

- Legislated set of powers to protect, manage and restore the environment
- Leadership role to reduce the organisation's environmental footprint
- Advocacy role to support changes outside its immediate control, such as through other levels of government and across the community
- Duty to respond to the expectations of the community to protect the long-term environmental values of the city for current and future populations

This Plan's focus includes issues relating to:

- water use
- water quality
- biodiversity
- waste management
- resource recovery
- energy use
- greenhouse gas emissions
- climate change adaptation
- sustainable built environments

The Plan acknowledges that Council can only have direct control over some of these issues, and environmental sustainability will only be achieved through the combined efforts of individuals, households, businesses, industry and other government and non-government organisations.

As Council's first Environment Plan, its focus is on providing a framework to assist Council in managing the environmental impacts from its service delivery and operations. For those issues that fall outside Council's control, Council has a role in influencing or advocating for better outcomes.

## **Environmental challenges**

Many communities are facing similar environmental challenges. Addressing these challenges requires a response from all tiers of government, as well as businesses, communities and individuals.

The following section provides an overview of the key environmental challenges the City of Melton faces and opportunities that lie within Council's control to meet these challenges.

### **Growth**

Between 2001 and 2016, the estimated residential population of the City more than doubled. As of March 2017, the City of Melton population is 143,003, with projections indicating that it will be more than 315,908 by 2036. Ultimately, the City of Melton will support a population of over 400,000 people, larger than the size of Canberra today.

This represents a huge challenge for Council in many ways, one of which is the impact this level of development has on the natural environment and shaping the anticipated built environment that stems from this growth. Council will be required to respond through increased service and asset provision. By considering the environmental implications of the increased service delivery, Melton City Council will be able to plan how it will manage its resource use into the future.

### **Biodiversity management**

The City of Melton is located on the Victorian Volcanic Plains (VVP). The VVP is Victoria's only biodiversity hotspot, and one of only fifteen in Australia, making it an area of national and global biological significance. The VVP supports many species of native plants and animals that are protected under Commonwealth and State laws. Over 150 years of agriculture, grazing and urban

development has radically transformed the landscape, and as little as only 1% of the former extensive grasslands and grassy woodlands of the VVP survive today, and therefore the remaining areas are of particular significance.

The remnant patches of VVP support a number of rare or threatened flora and fauna species, including Spiny Rice-flower (*Pimelea spinescens*), Growling Grass Frog (*Litoria raniformis*) and Striped Legless Lizard (*Delma impar*). In addition to being required under Commonwealth and State legislation, the protection of these and other species is essential to ensure resilient ecosystems that provide a range of services, including provisioning (food, shelter, materials), regulating (climate regulation, pest control) and cultural services (recreational, cultural, aesthetic).

The City of Melton's already reduced biodiversity continues to be threatened on many fronts, including through the clearing of native vegetation for land development, the spread of weeds, predation by invasive species and the impacts of climate change.

#### **Council's role**

Council plays a key role in conservation and land management decisions that impact on flora and fauna. As land use planners and public land managers, Council has responsibility for planning and regulating many activities that can impact upon threatened species and biodiversity. Council also plays a role in translating national and state policies and legislations into local action, including the Environment Protection and Biodiversity Conservation Act 1999 and the Flora and Fauna Act 1988.

Council currently has a number of processes and programs aimed at protecting and enhancing biodiversity in the City. For example, the Environmental Enhancement Program sees Council work with rural landowners to improve land management practices, and the Environmental Education program builds partnerships with community groups to promote the health of native vegetation and wildlife. In addition, a number of targeted plans, including the Western Plains North Green Wedge Management Plan, have been designed to ensure biodiversity concerns are considered in land-use planning decisions.

Many other Council strategies reflect a commitment to conserving and enhancing native flora and fauna in the City of Melton. The Environment Plan provides further direction to ensure the municipality's biodiversity is protected now and into the future.

#### **Climate change**

Climate change is already being felt in the City. According to the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Bureau of Meteorology, in the future the City of Melton can expect higher average temperatures and increased frequency of hot days, reduced rainfall, higher risk of extreme weather events, and increased bushfire risk days.

As climate change profoundly affects many aspects of the environment, as well as our lifestyles, Council has a responsibility to mitigate climate change through reducing its greenhouse gas emissions, as well as adapting to impacts through forward-thinking, climate-resilient planning.

#### **Council's role**

Council's services and activities have both an impact on and are impacted by climate change. Council manages a number of assets that contribute to the City's carbon emissions, including street lights,



buildings and Council's fleet vehicles. As the City's population increases, Council will be required to respond with additional assets to ensure service levels are maintained for the growing population. The challenge for Melton City Council will be to meet future demands for services with climate resilient assets while decreasing net greenhouse gas emissions.

In 2011, Council adopted its Greenhouse Action Plan, which outlined 69 actions to help Council reduce its emissions. As a result, Council has changed over 3,800 mercury vapour streetlights to energy efficient T5 and LED technology. It has also seen a wide range of energy efficiency upgrades into many of Council's buildings, including Melton Waves and other sports facilities, as well as the Melton Civic Centre. Moving forward, the Environment Plan provides Council with strategic direction and key actions to reduce the organisation's greenhouse gas emissions.

## **Water management**

The City of Melton is located within the Werribee Catchment in the Port Phillip and Westernport Management Authority. The main waterways flowing through the City are the Werribee River and Toolern Creek, with other major waterways including Kororoit Creek and the Djerriwarrh Creek. The Melton Reservoir, which is primarily used for irrigation, is a major storage basin for the Werribee River basin. These water systems provide essential ecosystem services including sustaining many species of native flora and fauna, providing water for agriculture and industry and supporting recreational activity.

Water quality in the City of Melton is affected by various agricultural and urban land uses in the region. Land clearing for urban growth places particular pressure on the system by increasing the cover of impervious surfaces, changing the rate of water flow and contributing pollutants in runoff into rivers and streams. Further, the encroachment of urban development onto the waterway corridor itself can cause additional localised effects including habitat loss and altered water courses.

As the City of Melton is located in an area of low rainfall, with increasing water demands from competing uses such as irrigation for agriculture and urban areas, water quality and availability is a critical issue in the City. These pressures are likely to be exacerbated in coming years by the effects of climate change.

### **Council's role**

Council plays a key role in water management and conservation. Civic buildings and public facilities such as leisure centres are significant water users, as is irrigation for the maintenance of open spaces. In addition, Council controls and influences decisions and assets that impact stormwater runoff and the quality of waterways, including roads, public buildings, drainage, urban planning, landscape architecture and open spaces. The Environment Plan provides direction to enable an integrated approach to water management in the municipality.

## **Waste management**

As the City of Melton's population continues to grow, there will be increased pressure to minimise and manage waste in the City. Reducing waste at the source and diverting waste from landfill has a number of benefits, including reducing greenhouse gas emissions, conserving natural resources and reducing energy and water use. High landfill rates lead to high greenhouse gas emissions and potential contamination of soil and water, with associated impacts on flora and fauna.

### **Council's role**

Council plays a significant role in reducing and managing waste within the City. Through its operations and service delivery, Council generates waste, as well as being responsible for collecting, reusing, recycling and disposing of waste.

In 2011, Council adopted its Waste Management Strategy 'It Starts With Zero' (currently under review), committing Council to the waste hierarchy; prioritising avoiding, reducing, reusing, recycling, recovering and treating waste, before using disposal as a last resort. The strategy contained a number of actions to improve Council's waste management practices. Council's Greenhouse Action 2011-2015 additionally outlined a number of actions to reduce greenhouse gas emissions through improved waste reduction and diversion activities, including installing Bokashi bins for organics diversion at the Melton Civic Centre and installing recycling systems at Council owned sporting facilities.

Council also implements a number of waste avoidance practices in its daily operations. The use of a digital file storage system reduces the need to keep hard copies of files, and recently Council trialled publishing its waste services guide and its newsletter Moving Ahead as an interactive digital version, drastically reducing the number of hard copies printed.

There is also considerable potential for Council to include environmental specifications in capital works projects and contracts, in addition to the use of environmentally proactive criteria in the evaluation of tenders. The Environment Plan explores these and other avenues for Melton City Council to minimise the environmental impacts associated with waste management activities, while reducing waste generation in its operations.

## **Approach to implementation**

The Environment Plan provides a 10-year framework supported by rolling three year action plans. Progress on the Plan will be reported on annually.

The Plan will be implemented through the responsible Council departments and monitored by the Implementation Working Group.

The actions are prioritised according to whether they are:

- An ongoing priority
- Short-term (1-3 years)
- Medium-term (4-6 years)
- Long-term (7+)

Ongoing priorities are those that may already be occurring and are expected to continue into the future. Short-term priorities are those that are most likely to deliver key sustainability outcomes for the municipality and therefore are of highest urgency. They may also be those actions that are relatively simple and inexpensive to implement. Medium- and long-term priorities are those that may be less urgent, or rely on securing longer term financial planning. They also may be more

complicated to implement due to a dependency on external stakeholders or on the completion of multiple steps and projects before implementation can occur.

Many of the actions will be implemented using existing Council resources, as part of general staff responsibilities or through recurring budgets (E). Other actions will be funded through the Annual Budget process and subject to funding availability (S).

## Monitoring, reporting and evaluation

### Monitoring and reporting

Monitoring and reporting on the Plan will comprise of:

1. Reporting on the achievement of individual actions
  - a. Reporting to the Implementation Working Group
  - b. Annual reporting on the Action Plans. The annual report will be developed to monitor the progress towards completing the actions within the Plan. Council's existing reporting mechanisms will be used to collect the data.
  - c. A review of the Action Plans every three years to set new targets for the following three years. The reviews will allow Council to revisit emerging trends and changing priorities in environmental management from a local, state, national and global perspective, and provide the opportunity to adapt to new policy positions at the state or national level.
2. Review and update (if required) of the Plan's Framework at five years.
3. Fully reviewed at nine years. New Plan to be developed by ten years (2027).
4. Public reporting on environmental indicators through an annual State of the Environment report.

### Targets

The setting of targets in each of the Plan's strategic themes will assist Council to work towards timely, meaningful and significant environmental outcomes. Establishing targets additionally provides a platform to benchmark and report against Council's performance and will provide accountability to the community and other key stakeholders.

In order to develop effective and challenging targets for Council, a number of detailed studies will be required to be completed to provide the data and information needed. These are detailed through the Plan and targets will be updated through the Plan's monitoring process as the information becomes available.

### Indicators

Indicators are measures of physical, biological or socio-economic factors that provide us with information on the state or condition of the environment. Collecting information on indicators over time allows us to measure our progress towards our goals and objectives.

Potential indicators have been suggested for each of the key themes. These will be used to form the basis of an annual public State of the Environment report. Once established, this report will outline

trends in environmental issues, help us determine whether the goals of the Plan are being achieved and will assist in informing future strategies and approaches.

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## THEME 1: BUILT ENVIRONMENT

### *A city growing and developing sustainably*

*The way a city, its suburbs, its buildings and transport are designed, built and managed can have a large impact on long-term environmental sustainability, and how inhabitants live, work, commute and play in the municipality.*

**Responsibility:** Key Business Unit\*, Supporting Business Unit

**Timeline:** Short = 0-3 years  
Medium = 4-6 years  
Long = 7+ years  
Ongoing

**Resourcing:** E = Funded within existing budget  
S = Subject to approval by Council as part of annual budget process

#### **Key targets:**

- >> Complete Ecologically Sustainable Design (ESD)/Sustainable Infrastructure Policy by 2020/2021.
- >> Commence Planning Scheme Amendment to have an ESD policy as a Local Planning Policy by 2020/2021.
- >> Complete review of Planning Scheme mechanisms to ensure adequate protections on biodiversity by 2020/2021.

#### **Potential indicators:**

- > Number of Council buildings meeting or exceeding ESD standards as set out in the ESD policy
- > Number of planning applications assessed for ESD best practice
- > Number of planning applications assessed for ESD best practice that are meeting best practice standards
- > Number of ESD training sessions held annually
- > Number of staff participating in ESD training sessions
- > Percentage of Council buildings audited and upgraded for energy and water efficiency

| 1.1 Council uses its strategic and statutory planning functions to achieve environmental sustainability in urban development. |  |   |   |                   |            |
|---|--|---|---|-------------------|------------|
| Objective   |  | Action  | Responsibility  | Timeline          | Resourcing |
| 1.1.1   | <p>Pursue opportunities for environmental sustainability to be incorporated within the Planning Scheme.</p> <p>The Melton Planning Scheme is a statutory document which sets out policies and provisions for the use and development of land. Through its role in strategic planning, Council has the opportunity to advocate for amendments to the Planning Scheme to improve environmental outcomes, though it understands that actions will require involvement and approval from the state government.</p> | a. Seek to update the MSS to improve environmental sustainability outcomes.   | City Design, Strategy and Environment*  | Short and ongoing | E          |
|   |  | b. Review the clauses in the local planning policy to identify opportunities to strengthen environmental protection and enhancement.    | City Design, Strategy and Environment*  | Medium            | E          |
|   |  | c. Advocate for strengthening of ecologically sustainable design (ESD) principles in the Planning Scheme where appropriate.             | City Design, Strategy and Environment*  | Ongoing           | E          |
|   |  | d. Review Planning Scheme mechanisms to ensure adequate protections on biodiversity.  | City Design, Strategy and Environment*  | Short             | E          |
|   |  | e. Ensure the provisions, policies and tools of the Planning Scheme consider climate change risks.                                      | City Design, Strategy and Environment*, Planning Services, Engineering Services       | Medium            | E          |
| 1.1.2   | <p>Seek to incorporate environmental sustainability improvements in requirements and guidelines in Precinct Structure Plans (PSPs).</p> <p>The development of new urban areas presents opportunities to address environmental issues through applying principles of sustainability, including ESD and WSUD, as well as increased access to local employment and community services through co-location of amenities and improved transport options.</p>  | a. Advocate for co-location of services and facilities within PSPs as appropriate to reduce transport-related greenhouse gas emissions. | City Design, Strategy and Environment*  | Ongoing           | E          |
|   |  | b. Advocate for the investment and delivery of sustainable transport options.   | Engagement and Advocacy*, City Design, Strategy and Environment, Engineering Services | Ongoing           | E          |

|       |   |  |   |        |   |
|-------|---|--|---|--------|---|
| 1.1.3 | <p>Consider environmental performance in the planning permit approvals process to achieve more sustainable building outcomes.</p> <p>Sustainable design can be most effective and have the least cost when it is considered at the earliest stages of a development. In its role as statutory planner, Council has the opportunity to assess and advise on sustainable development matters during the planning permit application process. By establishing the consistent inclusion of key environmental performance considerations into permit decision processes Council can support improved building outcomes for the long-term benefit of the wider community.</p> | a. Investigate the use of preferred environmental assessment tools to be used during planning applications (i.e. Green Star, BESS).  | Planning Services*, City Design, Strategy and Environment                   | Short  | E |
|       |   | b. Consider adopting the Sustainable Design Assessment in the Planning Process (SDAPP) program as a voluntary process with the view of formalising into a Statutory Planning requirement in the form of a Local Policy Clause (see c). | Planning Services*, City Design, Strategy and Environment                   | Medium | E |
|       |   | c. Develop a Planning Scheme Amendment to introduce an ESD Local Planning Policy (in conjunction with other councils where appropriate) to enable planning applications to be assessed against a range of ESD objectives.              | City Design, Strategy and Environment*, Planning Services                   | Long   | S |
| 1.1.4 | <p>Build staff and industry understanding of ecologically sustainable design (ESD).</p> <p>In order to effectively deliver sustainable built environments, those involved in the planning process need to have a strong understanding of ESD principles.</p>  | a. Develop the ESD skills and knowledge of Council staff to effectively assess applications for sustainability through training.   | City Design, Strategy and Environment*, Planning Services, Capital Projects | Short  | S |

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|  |  | b. Seek to incorporate ESD skills and knowledge in PDs for new planning staff.   | Planning Services*, City Design, Strategy and Environment                          | Ongoing | E |
|  |  | c. Develop an online toolkit of resources to assist developers to achieve environmentally sustainable best practice, including information on preferred tools. | City Design, Strategy and Environment*, Planning Services, Engagement and Advocacy | Medium  | S |

1.2 Council infrastructure is designed, built, maintained and operated using ecologically sustainable design (ESD) and water sensitive urban design (WSUD) best practice principles.

| Objective   | Action   | Responsibility   | Timeline | Resourcing |
|---|--|--|----------|------------|
| 1.2.1 Design and build future Council infrastructure along ESD principles.<br><br>Council is responsible for designing and building new infrastructure to service the City's growing population. There is an opportunity for Council to reduce the ecological impact of buildings by employing design that follows the principles of ecologically sensitive design (ESD). | a. Complete and implement ESD/Sustainable Infrastructure Policy, checklist and guidelines for Council infrastructure.      | City Design, Strategy and Environment*, Capital Projects, Operations                         | Short    | E          |
|   | b. Embed Climate Resilient Infrastructure checklists into relevant processes for designing and maintaining infrastructure. | Engineering Services*, Capital Projects*, Operations*, City Design, Strategy and Environment | Short    | E          |
| 1.2.2 Design and build future Council infrastructure along WSUD principles.<br><br>As the City of Melton continues to expand, there will be increasing pressure to manage the interactions  | a. Develop Council specific WSUD Guidelines to enhance those prepared by Melbourne Water.                                  | Engineering Services*, City Design, Strategy and Environment                                 | Short    | E          |



|       |   |  |   |         |   |
|-------|---|--|---|---------|---|
|       | between the urban built form and the urban water cycle. Water sensitive urban design (WSUD) aims to integrate stormwater, groundwater, wastewater and potable water to minimise environmental degradation and improve public amenity.   | b. Include best practice water sensitive urban design (WSUD) principles and tools within relevant capital works and asset renewal projects.  | Capital Projects*, Engineering Services*, Operations                      | Ongoing | E |
| 1.2.3 | Improve energy and water efficiency of existing Council infrastructure.<br><br>Buildings are high consumers of energy and water. For Council's existing infrastructure, there are a range of upgrades and retrofits that will reduce energy and water consumption and lower associated bills. | a. Develop a program to audit Council facilities for energy and water efficiency opportunities.  | City Design, Strategy and Environment*, Operations                        | Short   | S |
|       |   | b. Develop a program of works to implement recommendations from completed energy and water audits.   | Operations*, City Design, Strategy and Environment                        | Short   | S |
|       |   | c. Incorporate ESD criteria as outlined in the ESD/Sustainable Infrastructure Policy (see 1.2.1a.) into asset condition and auditing processes, including seeking to embed into the Asset Management Plan. | Operations*, Engineering Services*, City Design, Strategy and Environment | Medium  | E |

1.3 Ecological values of adjoining land are maintained and protected during development stages.

| Objective | Action  | Responsibility  | Timeline  | Resourcing |   |
|-----------|---|---|---|------------|---|
| 1.3.1     | Ensure the environment is protected during the construction phase of development.<br><br>As a growth council, major construction works will continue to be an important part of delivering services for the community. During construction such projects pose a significant risk to the environment. Council, developers and contractors should seek to | a. Develop information sheets or training materials to ensure Construction Supervisors are able to identify species to be protected out in the field. | City Design, Strategy and Environment*, Engineering Services, Planning Services | Short      | E |
|           |   | b. Review "Guidelines for temporary environmental protection measures for subdivision construction sites" that contractors follow.                    | City Design, Strategy and Environment*, Engineering Services*                   | Short      | E |

|  |  |  |  |       |   |
|--|--|--|--|-------|---|
|  | minimise these impacts where possible. | c. Review and formalise internal processes (i.e. documents, processes, communication, training) to ensure sufficient guidance is provided to the land development industry to meet Council expectations. | City Design, Strategy and Environment* | Short | E |
|  |  | d. Prepare guidelines and procedures for Council internal projects around environmental legislative obligations, the planning approval process, mitigation measures and where exemptions may apply.      | City Design, Strategy and Environment* | Short | E |

| 1.4 Council encourages sustainable urban development through communication, advocacy and partnerships.   |   |  |          |            |  |
|--|---|--|----------|------------|--|
| Objective  | Action  | Responsibility   | Timeline | Resourcing |  |
| 1.4.1 Demonstrate practices that encourage sustainable urban development.<br><br>Council can support and strengthen sustainable built environments by providing leadership through demonstration of good design, using Council's assets as demonstration projects. | a. Encourage sustainable design within the community by demonstrating best practice ecologically sustainable design (ESD) in all Council building and infrastructure projects.  | Capital Projects*, Engineering Services  | Medium   | S          |  |
|  | b. Demonstrate leadership by sharing and promoting sustainable urban development outcomes with the community, other local government professionals, non-government organisations, State Government and developers, through website, social media and other means. | City Design, Strategy and Environment, Engineering Services                    | Ongoing  | E          |  |
| 1.4.2 Develop partnerships and advocate where possible to improve urban sustainability outcomes.   | a. Participate in cross-municipality initiatives that contribute to the development of improved sustainable urban development where appropriate.  | Capital Projects*, City Design, Strategy and Environment*, Planning Services*, | Ongoing  | E          |  |

|   |  |   |        |   |
|---|--|---|--------|---|
| <p>Many of the drivers that determine the outcomes for our environment are outside Council's control, however Melton City Council plays a key role in connecting all forms of government, business, education and community. Council should seek where possible to participate in partnerships that will facilitate the exchange of information and best practice in ecologically sustainable development (ESD) and advocate to key agencies where appropriate.</p> |  | Engineering Services  |        |   |
|   | b. Influence developers to incorporate best practice sustainability into development by working in partnership with the development industry and conducting advocacy programs.                       | Planning Services*, City Design, Strategy and Environment, Engineering Services | Medium | E |
|   | c. Identify opportunities to advocate for the enhancement of sustainability requirements as legislated with the Building Code of Australia (BCA) to improve sustainability outcomes in developments. | Engagement and Advocacy*, Capital Projects, Planning Services, Compliance       | Short  | E |

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## THEME 2: NATURAL ENVIRONMENT

### *A city with healthy waterways, biodiversity and ecosystems*

*The City of Melton is home to a number of significant waterways, wetlands, native grasslands and woodlands. These natural assets face continuous pressure from urban development and climate change. As most native vegetation types these ecosystems support have been lost elsewhere, the protection and enhancement of those remaining is of particular importance.*

**Responsibility:** Key Business Unit\*, Supporting Business Unit

**Timeline:**  
Short = 0-3 years  
Medium = 4-6 years  
Long = 7+ years  
Ongoing

**Resourcing:** E = Funded within existing budget  
S = Subject to approval by Council as part of annual budget process

#### **Key targets:**

- >> Complete Biodiversity Strategy by 2020/2021.
- >> All waterway maintenance agreements reviewed by 2020/2021.

#### **Potential indicators:**

- > Stream Index Rating from Melbourne Water
- > Percentage of Council conservation reserves managed with Reserve Management and Monitoring Plans
- > Staff participation in environmental and sustainability events
- > Weed mapping to monitor changes over time
- > Native vegetation mapping to monitor changes over time
- > Rural landholder participation in sustainable land management events
- > Number of sustainable land management events organised by Council
- > Stormwater quality (suspended solids, total nitrogen, total phosphorous)

| 2.1 Council protects and enhances ecosystems, improves habitat connectivity and increases ecosystem resilience. |  |  |  |                   |   |
|---|--|--|--|-------------------|---|
| Objective   | Action   | Responsibility   | Timeline   | Resourcing        |   |
| 2.1.1   | <p>Establish a whole of organisation approach for biodiversity management.</p> <p>The City of Melton’s unique biodiversity needs to be maintained, enhanced and protected for its ecological values and the enjoyment and appreciation of the community.</p>                   | a. Develop a Biodiversity Strategy.  | City Design, Strategy and Environment*, Operations                       | Medium            | S |
| 2.1.2   | <p>Improve mapping and understanding of flora and fauna in the municipality.</p> <p>Improved understanding of the location and quality of flora and fauna in the City of Melton will help inform effective management strategies and facilitate monitoring of our impacts.</p> | a. Advocate for updated mapping of flora and fauna assets by DELWP.  | City Design, Strategy and Environment*, Operations, Engineering Services | Short             | E |
|   |  | b. Seek to partner with universities and community groups as appropriate to collate biodiversity data, identify gaps in existing understanding of biodiversity assets, and build a database of local assets. | Operations*, City Design, Strategy and Environment*                      | Short             | E |
|   |  | c. Seek to collect data where gaps have been identified, in partnership with community groups as appropriate.  | Operations*, City Design, Strategy and Environment*                      | Short             | E |
|   |  | d. Assess and map all areas of significant roadside vegetation and weeds with the view of developing a Roadside Management Plan to maintain local biodiversity and habitat values.                           | City Design, Strategy and Environment*                                   | Medium            | S |
|   |  | e. Seek to collect data on biodiversity assets on private land through the EEP program.  | City Design, Strategy and Environment*                                   | Short and ongoing | E |

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|-------|--|--|--|---------|---|
| 2.1.3 | <p>Increase connectivity between remnant and other native vegetation.</p> <p>In fragmented landscapes such as cities, providing connections between larger areas of habitat is important to maintain biodiversity. These wildlife corridors, which can range from street trees, roadside vegetation or larger patches of vegetation, enables the movement of animals, colonisation of plants and the continuation of viable populations of flora and fauna. Ensuring there are green spaces throughout the City additionally enhances liveability by reducing urban heat island effect and providing aesthetic and health benefits to residents.</p> | a. Develop criteria for land with high biodiversity values that Council would seek to acquire, manage or protect in new growth areas (non-Biodiversity Conservation Strategy areas).   | City Design, Strategy and Environment*, Operations                         | Medium  | E |
|       |  | b. Develop a process to protect land with high biodiversity values (as identified in the Biodiversity Strategy), for example by acquisition to add to Council's existing reserve network, or through updating planning zones, overlays and covenants.  | City Design, Strategy and Environment                                      | Medium  | E |
|       |  | c. Work with private landowners, especially properties adjoining Council's conservation reserves, for increased connectivity and improved biodiversity outcomes (see 2.4 for related actions).   | City Design, Strategy and Environment*, Operations*                        | Ongoing | E |
|       |  | d. Complete a Street Tree Strategy, to be included in the Public Realm guidelines.   | City Design, Strategy and Environment*, Operations                         | Short   | S |
| 2.1.4 | <p>Develop, maintain and strengthen relationships and partnerships with key government departments and other organisations to facilitate improved landscape scale land and water management outcomes.</p> <p>Landscape scale approaches to land and water management recognise that larger, connected areas may increase ecosystem resilience. In order to plan on a landscape scale, Council needs to seek to work with neighbours and other land and water managers for a coordinated approach to conservation and restoration.</p>  | a. Continue to participate in regional advocacy groups, to advocate for State agencies to invest in our city, with a view to improve coordination of resources and activities to realise common land and water management goals.   | City Design, Strategy and Environment*, Operations, Engineering Services   | Ongoing | E |
|       |  | b. Develop, strengthen and maintain long-term working relationships with relevant stakeholders for effective land and water management, including DELWP, Melbourne Water, City West Water, Southern Rural Water, Western Water, and Port Phillip and Westernport Catchment Management Authority. | Operations*, City Design, Strategy and Environment*, Engineering Services* | Ongoing | E |

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|--|--|--|---|---------|---|
|  |  | c. Develop, strengthen and maintain long-term proactive partnerships with neighbouring councils to collaboratively manage adjoining land with a view to achieving landscape scale goals. | Operations*, City Design, Strategy and Environment* | Ongoing | E |
|--|--|--|---|---------|---|

## 2.2 Long-term biodiversity outcomes and ecological resilience are achieved on Council owned and managed conservation reserves.

| Objective  | Action  | Responsibility                                      | Timeline | Resourcing |
|--|---|---|----------|------------|
| 2.2.1 Continue to manage Council's conservation reserves in accordance with best practice conservation and land management practices.<br><br>Council manages over 100 conservation reserves. These areas allow for community interaction with nature, provide corridors that connect larger natural areas and support the City's unique biodiversity, and need to be protected and enhanced. | a. Apply best practice and adaptive management approaches to conservation reserves which aim to maximise local biodiversity outcomes and ecological resilience.                                     | Operations*, City Design, Strategy and Environment  | Ongoing  | E          |
|  | b. Develop a minimum of two Reserve Management and Monitoring Plans for Council owned or managed reserves per year until all are covered.   | Operations*, City Design, Strategy and Environment* | Ongoing  | E          |
|  | c. Establish internal guidelines to ensure allocation of budgets to execute on ground works across the conservation reserve system are based on Reserve Management and Monitoring Plans (as above). | Operations*, City Design, Strategy and Environment  | Short    | E          |

## 2.3 The ecological health of waterways, wetlands and catchments is recognised, valued and protected.

| Objective  | Action   | Responsibility                         | Timeline | Resourcing |
|--|--|--|----------|------------|
| 2.3.1 Improve management and monitoring of waterway health.<br><br>City of Melton's waterways are some of our community's most valued natural areas, | a. Review waterway maintenance agreements to clarify jurisdiction and responsibilities with third parties. | Operations*, Engineering Services      | Short    | E          |
|  | b. Consolidate data currently collected through catchment management and water authorities                 | City Design, Strategy and Environment* | Short    | E          |

|       |   |   |  |         |     |
|-------|---|---|--|---------|-----|
|       | providing habitat for a diversity of flora and fauna and frequently visited areas for recreation and wildlife appreciation.   | and establish ongoing monitoring along priority waterways to collect data required to measure performance.  |  |         |     |
| 2.3.2 | Improve the quality of stormwater entering waterways.   | a. Undertake outfall assessment studies for creeks not currently evaluated.   | Engineering Services*  | Short   | S   |
|       | As City of Melton develops, increased impervious surfaces will lead to larger flows of stormwater into waterways. Stormwater needs to be treated to prevent degradation of waterways. | b. Continue capital works program to upgrade drainage outfalls to improve river health, incorporating assessment results (2.3.2a).                                | Engineering Services*  | Short   | S   |
|       |   | c. Seek to introduce planning controls in targeted areas to require new developments to maximise quality of runoff.   | City Design, Strategy and Environment*, Engineering Services               | Medium  | E   |
| 2.3.3 | Increase community appreciation of waterways for improved stewardship.  | a. Seek to explore options for shared trails along waterways to increase community access through sale, negotiation with landowners or conditions of subdivision. | Operations*, Planning Services, Engineering Services, Youth and Recreation | Long    | E/S |
|       | Increased appreciation of City of Melton's waterways will allow the community to develop a stronger sense of stewardship towards them.  | b. Continue to support local water conservation and waterway initiatives, community groups and activities.  | City Design, Strategy and Environment*, Operations                         | Ongoing | E   |

#### 2.4 The ecological health of rural land is maintained and improved.

| Objective  | Action   | Responsibility                         | Timeline | Resourcing |
|--|--|--|----------|------------|
| 2.4.1<br>Continue to support local landowners as primary agents in managing rural land.<br><br>City of Melton's rural land needs to be maintained and managed to reduce the impacts of weeds, feral animals and soil erosion on environmental values. Improved environmental outcomes will be achieved through supporting rural landowners in protecting and enhancing their land. | a. Continue to deliver the Environmental Enhancement Program (EEP), including:<br>-Rate Rebate Scheme<br>-Free land management advice to rural landholders | City Design, Strategy and Environment* | Ongoing  | E          |
|  | b. Develop an EEP monitoring and reporting program to ensure it is meeting the needs of participating landholders and achieving its land management needs. | City Design, Strategy and Environment* | Short    | E          |
|  | c. Develop and implement EEP improvements as   | City Design, Strategy                  | Short    | E          |



|       |   |  |   |                   |   |
|-------|---|--|---|-------------------|---|
|       |   | required to ensure continued effectiveness of the program.   | and Environment*  |                   |   |
| 2.4.2 | Increase community capacity, knowledge and understanding of sustainable land management practices.<br><br>Improved understanding of City of Melton's rural landowners' needs will allow Council to provide the most relevant and effective information to assist private landowners in managing their land. | a. Work with landowners to commence development of rural landholder profile groups, to better understand needs, level of awareness, motivations and capacity to address land management issues, to inform land management programs that are responsive to community needs. | City Design, Strategy and Environment*                          | Ongoing           | E |
|       |   | b. Incorporate landholder profile information into communications program as it becomes available, to provide regular and topical land management information to rural landholders.  | City Design, Strategy and Environment*                          | Ongoing           | E |
|       |   | c. Support the creation of an online Information Portal to provide relevant information and web links regarding land management to rural landholders.  | City Design, Strategy and Environment*, Engagement and Advocacy | Medium            | S |
|       |   | d. Develop, deliver and support local field days, forums and events, with a focus on locally relevant land management and rural land issues.   | City Design, Strategy and Environment*,                         | Short and ongoing | E |

| 2.5 Staff and community understand and appreciate the City of Melton's unique biodiversity and ecosystems.  |  |  |          |            |  |
|---|--|--|----------|------------|--|
| Objective   | Action   | Responsibility                         | Timeline | Resourcing |  |
| 2.5.1 Increase staff knowledge and appreciation of the City of Melton's unique biodiversity and ecosystems.<br><br>Increased understanding of the City of Melton's biodiversity and ecosystems will help build a sense of pride and stewardship towards the | a. Develop and deliver educational and behaviour change programs related to biodiversity to staff.                 | Green Team*                            | Ongoing  | E          |  |
|   | b. Organise field days for staff to visit areas of local importance, including guided visits with the Councillors. | City Design, Strategy and Environment* | Short    | E          |  |
|   | c. Seek to include educational materials on the  | City Design, Strategy                  | Short    | E          |  |

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|       | environment.  | municipality's biodiversity into the induction process for new staff and Councillors.  | and Environment*  |         |     |
| 2.5.2 | <p>Increase local knowledge and appreciation of the City of Melton's unique biodiversity and ecosystems.</p> <p>Increased knowledge and appreciation of the City's natural areas will lead to a more engaged community that seeks to protect and enhance the municipality's ecosystems.</p>   | a. Review the Environmental Education program to ensure alignment with this Plan.  | City Design, Strategy and Environment*                                      | Ongoing | E   |
|       |   | b. Investigate the potential for the creation of an Environmental Destination to showcase the City of Melton's unique natural assets.  | City Design, Strategy and Environment*, Operations, Engagement and Advocacy | Long    | S   |
| 2.5.3 | <p>Continue to support local environment groups, including Friends of and Landcare groups.</p> <p>Local environment groups have a significant positive impact on the City of Melton's natural environment. Supporting these groups in their efforts to protect and enhance natural areas greatly complements Council's conservation work.</p> | a. Continue to offer environmental grants for community groups wishing to develop and implement environmental projects, and facilitate access to external grants through promotion and provision of support. | City Design, Strategy and Environment*, Community Planning                  | Ongoing | E   |
|       |   | b. Review Council's grants program for opportunities to incorporate environmental and sustainability criteria into the application process.  | Community Planning*, City Design, Strategy and Environment                  | Short   | E   |
|       |   | c. Provide additional support to groups through promotion of activities, provision of materials or equipment and opportunities to come together for knowledge sharing.                                       | City Design, Strategy and Environment*, Engagement and Advocacy             | Ongoing | E/S |
|       |   | d. Advertise and promote volunteer opportunities on Melton City Councils social media and website with the view of increasing participation within environment groups.                                       | City Design, Strategy and Environment*, Engagement and Advocacy             | Short   | E   |

## THEME 3: RESOURCE USE

### *A resource efficient city*

*The planet has a limited amount of resources available for human use. The way we use energy, water and materials impacts on our natural environment, depleting resources, creating waste and generating greenhouse gas emissions. Council should strive to be energy and water efficient while reducing waste to landfill.*

**Responsibility:** Key Business Unit\*, Supporting Business Unit

**Timeline:** Short = 0-3 years  
Medium = 4-6 years  
Long = 7+ years  
Ongoing

**Resourcing:** E = Funded within existing budget  
S = Subject to approval by Council as part of annual budget process

#### Key targets:

>> 20% reduction in greenhouse gas emissions on 2015/2016 levels by 2020/2021.  
>> Zero-net emissions by 2040.  
>> Complete Waste Management Strategy with waste reduction and diversion targets by 2018/2019.

>> Develop a standard set of procurement questions for contracts by 2018/2019.  
>> Complete Integrated Water Management Plan by 2018/2019.

#### Potential indicators:

> Council water usage  
> Percentage of Council assets obtaining water from alternative sources  
> Percentage of Council water use from alternative water sources  
> Kilowatts of renewable energy installed on Council assets  
> Waste diversion rates from Council's buildings

> Spending on sustainable products and services  
> Number of Green Team programs or events  
> Number of participants that engage in Green Team programs or events

| 3.1 Best practice water reduction and water reuse principles are included in all Council's corporate and operational functions. |  |   |   |          |            |
|---|--|---|---|----------|------------|
| Objective   |  | Action  | Responsibility  | Timeline | Resourcing |
| 3.1.1   | <p>Reduce potable water use and increase water use from alternative water sources in Council operations.</p> <p>The City of Melton is located in an area of low rainfall, with pressures expected to be exacerbated by climate change and increased demands from the growing population. Council has an opportunity to strategically manage its water resources to reduce use of potable water and maximise fit-for-purpose water use.</p> | a. Develop an Integrated Water Management Plan.   | City Design, Strategy and Environment*, Operations, Engineering, Recreation and Youth, Capital Projects | Short    | S          |
|   |  | b. Review agreements on leased properties to require lessees to meet water conservation objectives.   | Recreation and Youth*, City Design, Strategy and Environment, Legal and Governance                      | Short    | E          |
|   |  | c. Ensure all new service contracts include the requirement for monthly management reporting to Council on water usage, including water reduction clauses where possible. | Operations*, Legal and Governance   | Ongoing  | E          |
| 3.1.2   | <p>Reduce water use in irrigation of open space.</p> <p>Irrigation is by far Council's biggest user of water, comprising 82% of usage. Reducing water use in irrigation is therefore Council's largest water saving opportunity.</p>   | a. Manage community expectations around the irrigation of public parks by developing a Council position and a targeted communications plan.                               | Operations*, Recreation and Youth   | Ongoing  | E          |
|   |  | b. Continue to implement best practice water saving upgrades for parks and open spaces, including changing to warm season grasses and using aeration techniques.          | Operations*, Recreation and Youth   | Ongoing  | E/S        |
|   |  | c. Audit irrigation systems with the view of implementing a program of upgrades works and investigating the potential to  | Operations*   | Short    | S          |

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|       |  | implement a centrally controlled irrigation system.                        |             |         |   |
| 3.1.3 | <p>Increase the understanding and application of water conservation practices of Council staff.</p> <p>Council can reduce water use through changing water use behaviours in Council buildings. Educating Council staff on the best processes and practices for managing water consumption can ensure that buildings are achieving their maximum efficiency.</p> | a. Develop and implement water conservation initiatives for Council staff. | Green Team* | Ongoing | E |

### 3.2 Council views waste as a resource and adheres to the waste hierarchy.

| Objective  | Action  | Responsibility  | Timeline | Resourcing |
|--|---|---|----------|------------|
| <p>3.2.1 Implement strategic approaches to waste management across the organisation.</p> <p>All functions of Council produce waste. A strategic approach will enable improved resource management across the organisation.</p> | a. Develop a revised Waste Management Strategy, ensuring alignment with relevant State policies (eg Metro Resource Recovery Implementation Plan).             | Operations*, City Design, Strategy and Environment  | Short    | E          |
|  | b. Develop a Plastic-Wise Events policy to establish Council's position on single-use plastic and minimise its consumption on council owned and managed land. | City Design, Strategy and Environment*, Operations  | Short    | E          |
|  | c. Incorporate the Litter Prevention Strategy into the new Waste Management Strategy.   | Operations*   | Short    | E          |
|  | d. Include litter monitoring and prevention as appropriate in other council strategies, including a to-be-developed Integrated Water Management Plan.         | Relevant departments with support from Operations and City Design, Strategy and Environment | Ongoing  | E          |

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| 3.2.2 | <p>Reduce waste going to landfill from Council owned, managed and leased buildings.</p> <p>Council has the most control of waste from its own buildings. Waste going to landfill can be minimised through providing appropriate waste facilities and informing and encouraging building users to utilise them correctly.</p> | a. Develop and implement a waste and recycling audit, management and monitoring program for Council owned, managed and leased buildings.  | Operations*, City Design, Strategy and Environment  | Short   | E                             |
|       |  | b. Establish a minimum standard for waste facilities based on building types. Continue roll-out of recycling bins and services at Council facilities to ensure buildings meet minimum standard. | City Design, Strategy and Environment*, Operations, Planning Services, building owners as appropriate | Short   | S for new waste facilities, E |
|       |  | c. Ensure waste facilities minimum standards as above are included in capital works projects.   | Capital Projects*   | Ongoing | E                             |
|       |  | d. Develop a recycling policy for leased buildings to be included in lease agreements/license agreements.   | Recreation and Youth*, City Design, Strategy and Environment, Legal and Governance                    | Short   | E                             |
|       |  | e. Develop and implement behaviour change initiatives for staff waste minimisation.   | Green Team*   | Ongoing | E                             |
| 3.2.3 | <p>Advocate for improved product stewardship.</p> <p>Council has limited influence on how products are produced and how they can be recycled. By advocating for more responsibility along the supply chain Council can help reduce product packaging and increase resource recovery opportunities.</p>                       | a. Support and participate in appropriate initiatives that advocate for reduced product packaging and resource recovery opportunities.  | Operations*, City Design, Strategy and Environment  | Ongoing | E                             |

| 3.3 Best practice sustainable procurement and lifecycle approaches are considered in Council purchases. |  |  |   |          |            |
|---|--|--|---|----------|------------|
| Objective   |  | Action   | Responsibility  | Timeline | Resourcing |
| 3.3.1   | <p>Improve staff understanding and capacity to consider sustainability in their procurement functions.</p> <p>Ensuring best practice sustainable procurement is a responsibility of all staff with procurement functions. Council needs to ensure staff are informed and have access to the tools that will enable them to make best practice sustainable procurement decisions.</p> | a. Ensure relevant staff undertake the Sustainable Procurement online training module, available on the Intranet.  | People and Culture*, City Design, Strategy and Environment            | Short    | E          |
|   |  | b. Review Healthy Food and Drink Guide to include sustainable catering options and recommendations.  | Community Planning*, City Design, Strategy and Environment            | Short    | E          |
|   |  | c. Develop and provide sustainable procurement workshops specific to different areas of operations (eg. Buildings, stationary, etc), and encourage relevant staff to attend workshops. | Legal and Governance*, City Design, Strategy and Environment          | Medium   | S          |
|   |  | d. Develop a guide to assist staff in finding green suppliers.   | City Design, Strategy and Environment*                                | Short    | E          |
| 3.3.2   | <p>Facilitate sustainable procurement through internal processes.</p> <p>Sustainable procurement can be facilitated through establishing standard processes within Council.</p>  | a. Investigate potential of becoming a member of Eco-Buy to assist in improving internal processes relating to sustainable procurement.  | Legal and Governance*, Finance, City Design, Strategy and Environment | Short    | E          |
|   |  | b. Establish an integrated method of recording and reporting on sustainable spending.  | Legal and Governance*, City Design, Strategy and Environment          | Short    | E          |
|   |  | c. Embed sustainable procurement policies and practices in all relevant policies and strategies.   | All staff with procurement functions                                  | Medium   | E          |
|   |  | d. Develop sustainable purchasing standard questions and criteria to include in tender documents.  | City Design, Strategy and Environment*, Legal and Governance          | Short    | E          |

| 3.4 Best practice climate change knowledge and action is incorporated into Council planning and decision-making for effective mitigation and adaptation. |   |   |  |              |            |
|--|---|---|--|--------------|------------|
| Objective  |   | Action  | Responsibility   | Timeline     | Resourcing |
| 3.4.1  | Establish a whole of organisation approach for effective and efficient climate change action.   | a. Develop a Climate Change Adaptation Plan.  | City Design, Strategy and Environment*   | Medium       | S          |
|  | All of Council's services and operations will be affected in some way by climate change. It is important that Council has an organisation wide approach to responding to the impacts of climate change.   | b. Include climate change considerations in project criteria within Project Management Framework.   | Capital Projects*, City Design, Strategy and Environment                       | Short        | E          |
|  |   | c. Continue to work with WAGA on regional climate action projects, as well as other local, state and federal government organisations.  | City Design, Strategy and Environment*   | Ongoing      | S          |
| 3.4.2  | Build staff understanding of climate change impacts and opportunities.  | a. Continue to work with relevant Council staff to implement WAGA's How Well Are We Adapting project.   | City Design, Strategy and Environment*   | Ongoing      | E          |
|  | Climate change will have different impacts across the organisation's operations, from affecting public infrastructure, impacting health services for vulnerable members of the community and making it harder to maintain parks and gardens. Effective responses will require that staff across the organisation understand how it will impact their work and how to respond appropriately. | b. Ensure Council is kept up to date on current climate change science, research and technologies to ensure innovative and timely responses.  | City Design, Strategy and Environment*   | Ongoing      | E          |
|  |   | c. Develop staff climate change training for Council-wide understanding of how the impacts of climate change will affect Council operations and service delivery, and how to plan and respond to these risks. | City Design, Strategy and Environment*   | Medium       | S          |
| 3.4.3  | Increase use of renewable energy for Council.<br><br>Decreasing technology costs and emerging business models will provide opportunities for  | a. Pursue renewable energy project recommendations as outlined in renewable opportunities pre-feasibility study.  | City Design, Strategy and Environment*, Capital Projects, Engineering Services | Short/Medium | S          |



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|       | scaling up renewable energy on Council's assets. Council has already installed solar PV on a number of buildings, and there are significant opportunities to increase the amount of renewable energy produced.  | b. Investigate regional renewable energy opportunities in collaboration with neighbouring councils.                                      | City Design, Strategy and Environment*   | Medium  | E/S |
|       |   | c. Ensure renewable energy technologies, including battery storage, are continually monitored for financial and technological viability. | City Design, Strategy and Environment*   | Ongoing | E   |
| 3.4.4 | Reduce greenhouse gas emissions from current and future public lighting.<br><br>Council has already commenced the street light retrofit process by replacing all standard lights. Completing this retrofit across the municipality will result in a significant reduction on Council's greenhouse gas emissions.  | a. Develop a program of works to improve the efficiency of sports lighting.  | Engineering Services*, Operations, City Design, Strategy and Environment, Recreation and Youth | Short   | S   |
|       |   | b. Develop a program of works to changeover decorative public street lighting to energy efficient technologies.                          | Engineering Services*, City Design, Strategy and Environment                                   | Short   | S   |
|       |   | c. Develop a Business Case to complete the bulk changeover of public streetlighting.   | Engineering Services*, City Design, Strategy and Environment*                                  | Short   | S   |
| 3.4.5 | Reduce greenhouse gas emissions from Council's fleet.<br><br>Petrol passenger vehicles are the largest source of emissions from Council's fleet, followed by diesel passenger vehicles. Combined, Council's passenger vehicles account for approximately 85% of total emissions from Council's fleet. This presents an enormous opportunity for Council to explore reducing emissions from fleet through the introduction of hybrid vehicles or electric vehicles, which are rapidly maturing technologies. | a. Review incentives for staff to select greener vehicles in next review of Motor Vehicle Policy.  | Legal and Governance *, City Design, Strategy and Environment                                  | Short   | E   |
|       |   | b. Review current preferred vehicle list with the view of improving efficiency of fleet.   | Legal and Governance *, City Design, Strategy and Environment                                  | Short   | E   |
|       |   | c. Ensure hybrid and electric vehicle technologies are continually monitored for financial and technological viability.                  | City Design, Strategy and Environment*   | Ongoing | E   |

|       |   |   |   |         |   |
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| 3.4.6 | <p>Encourage staff behaviour change to reduce greenhouse gas emissions.</p> <p>Council encourages its staff through a number of programs to adopt greater levels of sustainable living into work life and hope that it also has an influence on their private life. This is important for creating organisational capacity to lead by example and move toward sustainability. Education is also a key to integrating sustainability effectively into the Council culture and enabling the delivery of key emissions reduction actions.</p>  | a. Encourage staff to use public or alternative transport, for example through participation in Carpool the West, providing Myki cards and supplying bikes for use for short trips.               | Green Team*                                     | Ongoing | E |
|       |   | b. Develop and implement behaviour change programs to support staff in reducing greenhouse gas emissions.   | Green Team*                                     | Ongoing | E |
| 3.4.7 | <p>Reduce broader greenhouse gas emissions from carbon sources that fall outside Council's measured emissions boundary, including through divestment.</p> <p>Council works with banks in two different ways: through the banking services and through Council's investments. Both provide an opportunity for Council to influence emissions reductions. With regards to banking services, Council can include in their selection criteria performance around emissions reductions and with regards to investments Council can review their investment policy to include a preference for investment in low or no emissions funds.</p> | a. Review Council's investment policy to include a preference for investment in low or no emissions funds once regulatory, operational, risk and return requirements are met.                     | Finance*, City Design, Strategy and Environment | Short   | E |
|       |   | b. Include performance around emissions reductions in Council's selection criteria for banking services when current contract expires.  | Finance*, City Design, Strategy and Environment | Medium  | E |
| 3.4.8 | <p>Improve greenhouse gas emissions data management processes to enable the collection, organisation, monitoring and reporting of emissions.</p> <p>Although not currently required, it is likely that in the future Council will have a legislated</p>   | a. Evaluate current data capture and reporting system (Planet Footprint), to determine if it is suiting our monitoring and reporting needs. Develop and evaluate alternative systems if required. | City Design, Strategy and Environment*          | Short   | E |

|  |   |  |  |         |   |
|--|---|--|--|---------|---|
|  | responsibility to report on its emissions. Having a comprehensive greenhouse gas inventory will prepare Council for this future requirement, while allowing us to monitor progress on our carbon reduction targets, identify priority areas for action and measure our contribution to state and federal efforts to keep temperature rise to below 2°C. | b. Ensure data capture and reporting system (Planet Footprint or other) is actively maintained and improved with a view to developing a robust greenhouse gas emissions inventory. | City Design, Strategy and Environment* | Ongoing | E |
|  |   | c. Monitor and report on greenhouse gas emissions in alignment with National Greenhouse Emissions Reporting scheme standards.  | City Design, Strategy and Environment* | Short   | E |

DRAFT

## Subordinate and related strategies and plans

Council Plan and Municipal Public Health and Wellbeing Plan 2017/2021

Municipal Strategic Statement

Greenhouse Action Plan 2011-2015 (now expired)

Open Space Plan

Waste Management Strategy 2011-2016 (now expired)

Public Realm Guidelines (in development)

Stormwater Guidelines

Procurement Policy/Guidelines

Western Plains North Green Wedge Management Plan

Moving Melton - Integrated Transport Strategy

Asset Management Plan

Sustainable Infrastructure Policy (in development)

WAGA Climate Change Adaptation Plan

10-year Capital Works Plan

Motor Vehicle Policy

WSUD Guidelines

Tree Removal Guidelines

Significant Landscape Strategy

Street Tree Strategy (in development)

## Glossary

**Adaptation:** The ability to adapt to the impacts of climate change. For example, designing buildings to withstand exposure to more extreme future weather events.

**Alternative water sources:** The sourcing of water from non-potable water sources including rainwater, stormwater, recycled water and groundwater.

**Biodiversity:** The variety of flora and fauna.

**Catchment:** A natural drainage area which collects water, especially rainwater.

**Climate change:** a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

**Ecological resilience:** In ecology, resilience is the capacity of an ecosystem to respond to a perturbation or disturbance by resisting damage and recovering quickly.

**Ecosystem:** A system of living organisms including plants, animals and bacteria that interact with each other and with the non-living components of their environment such as air, water and soils.

**Ecosystem services:** The benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational and cultural benefits; and supporting services such as nutrient cycling that maintain the conditions for life of Earth.

**Ecologically Sustainable Development (ESD):** Planning and design ideas for the building environment that supports environmental protection, reduced use of natural resources and results in enhanced indoor thermal comfort.

**Green Star:** A rating system for the design, construction and operation of sustainable buildings, fitouts and communities.

**Green Team:** A voluntary team comprised of Council staff that delivers sustainability education and behaviour programs.

**Greenhouse gas emissions:** Emissions from gases which are causing an enhanced greenhouse effect by creating an atmospheric barrier that reduces the loss of heat from Earth to space. The result is the 'greenhouse effect'.

**Integrated Water Management:** Integrated water management is a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising sustainability of ecosystems.

**Mitigation:** Used with regards to climate change, mitigation refers to action that is taken to reduce or mitigate the effects of human activity on climate systems.

**National Greenhouse and Energy Reporting (NGER):** A single national framework for the reporting and dissemination of company information about green gas emissions, energy production, energy consumption and other information specified under NGER legislation.

**Potable water:** Drinking water; water that is safe to drink or to use for food preparation without risk of health problems.

**Renewable energy:** Energy that is produced from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, and geothermal heat.

**Solar photovoltaic (PV):** Solar photovoltaic panels use energy from the sun to generate electricity; a renewable, low-carbon energy source.

**Stormwater:** Water originating from rainfall which runs off surfaces such as roofs and pavement. Stormwater is captured in constructed drainage systems.

**Sustainability:** Sustainability is planning and providing for the needs of current and future generations, creating resilient and prosperous communities and protecting the environment and ecosystem services.

**Sustainable development:** Balancing the needs of human development with the requirements to maintain healthy and sustainable natural systems.

**Sustainable procurement:** An effort to buy greener, healthier and more sustainable products from greener, more sustainable companies.

**Waste hierarchy:** A set of priorities with the objective of achieving optimal environmental outcomes in waste management. Avoiding is the preferred approach and disposal should be only a last resort.

**Water sensitive urban design (WSUD):** Integration of water cycle management into urban planning and design with the aim to protect and improve waterway health.

**Waterway:** A natural channel in which water regularly flows, whether or not the flow is continuous, such as a river, creek, stream or watercourse.

**Western Alliance for Greenhouse Action (WAGA):** A group of eight councils collaborating on climate action for the western region.

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