Sustainable Wodonga
Sustainability Strategy
Companion 2014 - 2020
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This report contains the background information necessary for a complete understanding of the Sustainable Wodonga: Environmental Sustainability Strategy. It provides information on the environmental issues and drivers of change inherent to each of the six themes of the Strategy. It also goes into more detail on the reasons and processes behind the development of the Strategy.

What is the council’s role in environmental management?

Wodonga Council has a major role in managing the environment of the local government area. However, it is not specifically an environmental organisation and only one of many organisations with a charter for environmental action in the area.

Local government can lead community environmental initiatives through corporate example, public infrastructure and land planning decisions or by managing demand for community services. Further, the council can facilitate community and business action through education, labour, equipment, venue or financial support.

By working co-operatively with other institutions, organisations or individuals, the council can avoid duplication of effort and ensure that environmental management is integrated and moves towards agreed common outcomes. Co-operative action and formation of alliances is important because it allows work at a larger regional, catchment, state and national scale. In particular, where environmental assets are more broadly valued, this allows for a more powerful lobbying for resources and funding of actions for the community.

Why does the council need a strategy?

This strategy was developed to:

- Provide a focus on sustaining resilience of environmental systems;
- Define how the council is to incorporate and consider environmental impacts in all decisions;
- Develop a framework to consider sustainability actions against a simple concept: Do we consume more or less of our share of one planet’s worth of resources?;
- Define support tools needed to help the council have efficient and reliable discussions about environmental issues. These tools also need to focus council environmental actions on reliable delivery of agreed targets and key environmental outcomes;
- Engage with the community and facilitate community action;
- Communicate how the policy and strategic approach to environmental decisions is to be integrated across different internal organisational levels and into external networks;
- Be the guiding document for all strategies and policies that influence environmental sustainability for the city of Wodonga; and,
- Co-ordinate the capacity and resilience building needed to prepare for the expected impacts of climate change.
Federal and State Government policies are also working to encourage a strategic approach to planning for environmental sustainability within local governments. Both the federal government’s paper *Climate Change Adaptation Actions for Local Government* (DCCEE website) and the Victorian Government’s *Climate Change in the North East Region* (DSE, 2008) recognise the need for significant change in community business and lifestyle over the next decade. They also recognise the need for local government leadership and innovation in managing for these and other changes in the environment. Some examples of work that the council has been involved in to date as a result of these initiatives include the Heatwave Strategy, investigating the impacts of climate change on council operations and a review of flooding and bushfire management plans. These are examples of ongoing adaptive responses that will be required as the climate changes are felt in the region.

The Victorian Climate Change Adaptation Plan is the leading state strategy guiding local governments and other organisations on climate change and is connected with the work of the Victorian Adaptation and Sustainability Partnership (VASP) that facilitates practical actions through local governments and communities to build resilience.

**What does this strategy cover?**

This strategy describes the broad framework of what the council will do about environmental issues and why it has adopted the chosen approach. The strategies and priorities assist in describing how the strategy will be delivered operationally. In scoping the strategy the term “environmental” includes both the concept of natural ecological assets and of the liveability of Wodonga’s built environment.

The strategy includes six broad environmental management themes. These themes are **ecosystems**, **energy**, **food**, **infrastructure**, **waste** and **water**. For each theme a set of regionally relevant “drivers of change” has also been identified. These help clarify what needs to be done to clarify the direction and trend behind environmental issues. It also allows the council to address the cause and not just the symptoms of environmental problems. This strategy considers population growth, climate change (mitigation and adaptation), education and land use planning as key drivers relevant to all environmental themes. They are not considered themes because they are processes affecting all environmental issues.
What are environmental themes?

The six environmental themes presented in the Environmental Sustainability Strategy have been distilled from the work to date so that a common or integrated approach can be undertaken. They allow for management of issues under sub-programs within a broader environmental action plan, and they align with the 10 principles of One Planet sustainability presented in the Environmental Sustainability Strategy.

Why do we need environmental themes?

This strategy includes themes because they:

- Help people understand what Wodonga Council considers to be key topics which require environmental management intervention by the council;
- Classify and order projects into logical groups where synergy and leverage considerations can be managed;
- Allow strategic planning and actions at a program level rather than only at a project level:
- Allow priority setting using group specific criteria for projects which work towards a common outcome and which are likely to compete for the same implementation resources, and,
- Allow for program-level target setting, monitoring, reporting and progress assessment.

How were environmental themes chosen?

Themes used in this strategy were chosen after an analysis of:

- The principles to be applied in the strategy;
- Theme choice by other local government organisations;
- Wodonga Council’s organisational charter and Council Plan; and,
- Community leader and sustainability expert advice.

The Environmental Sustainability Strategy is structured to ensure that there is an analysis of key factors or drivers of environmental change associated with each theme. For example, leadership and education, land use planning and management, population growth and climate change are all generically important to each theme and have been embedded in all themes as drivers of change, rather than separate themes themselves. Analysis of these drivers and how they relate to each theme is presented in this Companion Document.
Who developed the set of community aspirations?

A Project Advisory Group (named Critical Friends Group) was appointed by council to inform decision-making in relation to the development of its environmental strategy.

The Critical Friends developed the set of community aspirations for each theme and its role is one of providing advice. It is not delegated to make decisions on behalf of the council.

Membership of the group was made up of representatives from a broad cross-section of the community, including:
- Youth
- Farming
- CFA
- Wodonga TAFE
- La Trobe University
- DPCD
- CMA
- DPI
- DSE
- Transition Towns Albury/Wodonga
- Albury/Wodonga Environmental Centre
- Wodonga Albury Towards Climate Change (WATCH)

The local community expects Council to not only be aware of the relationship between its operations and the environment, but to actively work towards minimising negative impacts and enhancing positive ones. Numerous surveys indicate that the local community highly value the local environment, and are concerned about environmental sustainability issues. The community is interested in and wishes to be informed of the nature and impact of Council operations. At a minimum the community expects Council to comply with legislation.

What is included in each environmental theme chapter?

Theme chapters are all presented using the same group of headings.

1. Local context of each environmental theme; and,
2. Theme sub-strategy representing:
   - Scope of the theme strategy;
   - The issues and their underlying causes;
   - One Planet international vision – allows action plans to be benchmarked internationally and to other local governments in Australia and sets out goals for 2020; and,
   - The council’s aspirations and view of achievable outcomes (Strategic Directions).

Acknowledgements

This version of Sustainable Wodonga and the Strategy Companion is the culmination of the efforts of many dedicated council staff, technical advisory committee, Bioregional Australia (One Planet) and many partner organisations, who have provided a wealth of background information used to shape the action plan and strategy contents and whose expertise assisted to review theme contents and key issues. It also recognises the community interest and input in supporting the process to enable the shaping of a living strategy for the people of Wodonga. These efforts are greatly valued and reflected in the board scope of the strategy.”
“Protecting and restoring existing biodiversity and natural habitats through appropriate land use and integration into the built environment.”

The **ecosystems** theme

**Local context**

Wodonga is a city within a small local government area surrounded by relatively large and sparsely populated rural councils. Ecologically this makes it highly affected and likely to be an “exporter” rather than “absorber” of ecological impacts such as feral animals, weeds and pollutants. The small area with an expanding population also means that particular care is needed to recognise the significance and sensitivity of local ecological assets and to provide for their preservation or enhancement.

The **Council Plan** undertakes to develop a Greening Wodonga Strategy, and Wodonga Retained Environmental Network (WREN) management and maintenance plan as well as facilitate community involvement in the city’s environmental lands.

This work builds upon the premise of retaining, restoring and protecting significant existing native vegetation.

The hills and woodlands surrounding Wodonga have long been recognised as a strong visual component of the city and are one of the most widely identified and supported environmental, lifestyle and community assets. Work initiated in 1997 from community meetings regarding the special protection of Albury-Wodonga Corporation (AWC) owned hill lands resulted in the council taking ownership of the hills, above the 220m contour, in 2000.

The protection of these areas has provided an opportunity to preserve unique ecosystems like the threatened White Box ecosystem and demonstrates leadership and an excellent outcome for local biodiversity, particularly in areas of land yet to be developed in rural Victoria.
In addition the Council and the AWC completed a study of the natural environment resulting in preparation of the Wodonga Retained Environment Network Strategy (WRENs) in 2006. This was the first Victorian Native Vegetation Precinct Plan (NVPP) identifying and applying methods to protect native vegetation within an urban growth corridor. In 2013 this plan was incorporated into the Wodonga Planning Scheme as the Leneva Valley and Baranduda NVPP. While the NVPP does not cover the whole local government area or all ecosystem issues, its strategic framework, detailed plan and comprehensive works program for priority conservation areas provides a sound foundation for further ecosystem work and consolidates the council’s position on sustainable development.

In total about 2200 hectares of land is managed by Wodonga Council for environmental purposes. This includes Huon Hill, Federation Hill, Mahers Hill and Klings Hill reserves, Middle Creek and the WREN land, a significant biodiversity network containing threatened and sensitive ecosystems, now protected and retained.

This environmental land provides a natural framework for existing and proposed future urban development. In addition to providing significant ecosystem services, the beauty of the natural environment will form an integral part of the distinct urban character of Wodonga. Some of this land has strategic planning and management in place (for example land managed as offsets for development and WREN land) but there is a need to co-ordinate this strategically for all environmental lands in Wodonga, and to understand how it links with other council-managed parkland and open space. The challenge for the council and the community is to recognise and celebrate the work to date developing and managing these significant areas and to develop a strategic framework that acknowledges this and builds on it for the benefit of the local environment as a whole.
**Scope of the ecosystems theme**

For this strategy, “ecosystems” means natural groups of native animals and plants within the local government area and the way they interact with the landscape and each other. Ecosystems are individually identified by where they occur in the landscape and the large or dominant plant species. For example, wetlands and hilltop communities or White Box-Yellow Box-Blakely’s Red Gum Grassy Woodlands.

**Issues**

Key drivers of changes to ecosystem management in Wodonga are:

- Reduced habitat availability and increased fragmentation resulting from an increasing Wodonga and regional population;
- Local climate change impacts on species biology (range shift, growth, feeding and reproduction rates);
- Climate change induced disturbances/stress events including heat waves, drought, fire, introduced or plague species and storm damage;
- Feral and introduced (domestic) plant and animal species including livestock and garden escapees; and,
One Planet international vision: Goals

To develop a comprehensive environmental lands strategy that encompasses:

- Recognition of the planning and management of some areas of environmental lands that has resulted in significant ecosystem wins;

- Promote and celebrate the protection and retention of threatened and unique ecosystems within the community; and,

- Undertake to develop a strategic framework for all environmental lands that builds on the good work to date and allows for a co-ordinated and planned approach to the management of local ecosystem as a whole.
One Planet principle 10: “Making buildings more energy efficient and delivering all energy with renewable technologies.”

The energy theme

Energy conservation has positive impacts on the environment, the community and the economy. Environmentally, measures that reduce energy use therefore reduce greenhouse gas emissions and air pollution and in the long term aim to contribute to redressing climate change impacts.

Since the majority of the energy the council and the community uses is sourced from fossil fuels, there is also the opportunity to investigate sourcing energy from more sustainable sources.

The management of energy is economically important and topical due to carbon taxes, emissions trading, infrastructure upgrades and global demands on energy resources. The economics of energy are not primarily an environmental issue but are strongly aligned with generating positive environmental outcomes.

Local context

The council has about 150 main buildings within its municipality including administration facilities, childcare facilities, community/aged care centres, waste and civic centres, sport and recreational parks, Scout and public halls, villages, saleyards, a racecourse, aquatics centre and showgrounds, exhibition centres, barbecue facilities and public toilets. An understanding of the main energy uses within the organisation has not been well-established and without this data, decisions about future energy saving or renewable generation cannot be targeted for maximum return on investment.
Through previous successful strategic projects (for example, Understanding Climate Change Impacts) climate change-related energy issues have been identified as a priority in this plan. Actions should be assessed according to the following priorities:

- Avoid by design
- Conserve
- Improve efficiency
- Generate from waste
- Protect other resources
- Use renewables
- Eco-switch
- Technology
- Offset

**Figure two:**
Prioritising approaches to energy management for environmental outcomes

Buchan, 2011
An example of this would be to reconsider the council purchasing a percentage of its energy supply as green power and consider using this saving to address energy conservation and efficiency given that these activities are higher on the priority scale.

**Scope of the energy theme**

The energy theme includes consideration of issues related to reduction of the environmental impacts of energy access or production, transport or distribution, and energy use. It includes consideration of managing energy demand, use efficiency and pollution according to the energy use hierarchy.

**Issues**

Key drivers of change for energy management in Wodonga are:

- Increasing energy demands from council assets;
- Increasing demand from Wodonga and regional population growth;
- Ongoing price rises for fossil fuels associated with diminishing global supplies (peak oil and gas);
- Increasing regional costs due to energy distribution infrastructure limitations;
- Federal and state energy management policy;
- Carbon emissions and national carbon pricing mechanisms;
- Regional bio-waste production and management;
- Climate events (heat waves, fire, storms and tempest); and,
- Suitability for renewable energy production.
**Strategic Direction**

The council will lead by example, in addition to working with the community, in a transition towards zero carbon buildings and develop an energy management plan to:

- Assess council energy use and build upon existing knowledge to implement a system that identifies energy efficiencies and enables greater access to day-to-day energy management information by all building users;
- Detail a process of retrofit that uses savings from energy management to further increase energy efficiency of buildings and infrastructure; and,
- Apply the energy management principles and "whole of life" energy costs to the design of any retrofits, upgrades and new developments to improve the future resilience to energy costs and demands.
Is food an environmental issue?

The definition of environment adopted in this strategy includes the concept of human liveability within the local government area. While food supply and accessibility may not be traditionally managed within the environmental context, there is little doubt that food issues are intimately linked to human physical and psychological well-being. Further, food management is an integral part of addressing the core environmental issues of land use planning, climate change, atmospheric carbon, ecosystems, energy, water, infrastructure and waste.

Food security implies a holistic approach to life and the concept extends to all human affairs. It calls attention to the ecological impact of agricultural practices. This theme is about defining Wodonga Council’s role in assisting the community to get on with food production in and around the city, especially for or by those who are financially disadvantaged.

As a committed health-promoting organisation the council aims to bring together all organisations working on achieving the goal of healthy and sustainable food that is accessible to all people in the community.

Understanding food

Food is essential and will inevitably have an embedded environmental impact through its reliance on land, water and energy. However, a sustainable food system would have to be one that continues to supply the nutritional demands of the population without diminishing the stock of natural capital on which it relies. That will only be possible if there is relevant knowledge on the life-cycle impacts of the food system and if investment and policy is framed with sufficient foresight regarding environmental, technological and social trends.

The food footprint

The biggest impact that most individuals have on the environment is through the food we eat – food choices could make a much bigger difference to household sustainability than direct water and energy use. About 50 per cent of an Australian urban household’s water use has been estimated to be through their food, 28 per cent of greenhouse emissions, and 47 per cent of municipal waste to landfill is organic (food and green waste), with the new three bin kerbside organics service aiming to address this.

One Planet principle six: “Choosing low-impact, local, seasonal and organic diets and reducing food waste.”

The food theme

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1 Vic Eco-Innovation Lab, 2008
3 ACF (2007a), Consuming Australia - Main Findings, Australian Conservation Foundation, p5
4 EcoRecycle Victoria (2005), Information Sheet 2 - Waste Facts, last modified March 2005
Local context

There is a long list of potential drivers of food insecurity in the region. Many are not under the control of the council or the local community. The distinction between the security of regional production and security of supply to a disadvantaged sector within the urban centre of Wodonga is important. There appears to be variety of opportunities for action that could significantly influence the local security issues even if broader regional and national insecurity drivers persist. These are being explored within the council and with partner agencies such as Gateway Community Health and Foodshare. The health and well-being plan is a strategic document aimed at underpinning the direction of these alliances in the future and will set out the council’s role in the process.

The recently completed Wodonga Food Security Scan highlights the challenges and opportunities of access to affordable, healthy and locally grown food and these prioritise goals and targets for future work in this area.

Scope of the food theme

For this strategy, food means the entire food system from inputs and impacts of production, through to transport, processing, packaging, storage, retail, consumption and waste disposal. It also includes food security as it applies to the health and well-being of at risk social and cultural groups within the Wodonga community.

For consistency we will refer to food throughout the action plan as: healthy, sustainable food.
- **Healthy Food** = As defined by the Australian Dietary Guidelines
- **Sustainable Food** = Fresh, local (as close to home as possible) and seasonal produce

**Food Security** = The Term food security can have many different meanings and can be applied in local, national and global contexts. For the purpose of this strategy food security is defined as: Consistent and equitable access (availability, affordability) to healthy, culturally appropriate, foods (including fruit and vegetables) for all communities.

*Source: Healthy Food Connect a support resource.*
**Issues**

Key drivers of change for food management in Wodonga are:

- Increasing local and regional population;
- Global and Australian economics;
- Policy responses to environmental risks and the need to reduce the environmental impacts of the food system (for example Murray-Darling water availability);
- Increasing energy costs, particularly oil based fuels;
- Climate events, uncertainty and shift to warmer and drier conditions;
- Increasing fertiliser and agricultural input costs;
- Social and economic adjustments aimed at mitigating climate change (for example, emissions trading and soil sequestration);
- Supermarket retail dominance;
- Urban land availability and accessibility;
- Technology for food waste resources capture;
- Continual adaptation to complex change; and,
- Impact of food choices (for example, climate change, de-forestation and marine stewardship).

**Strategic Directions**

The sustainable food policy (2008), health and well-being plan and sustainable event management plan provide detailed actions to progress council operations and encourage the community to adopt more sustainable food practices.
One Planet principle seven: “Using sustainable and healthy products, such as those with low embodied energy, sourced locally, made from renewable or waste resources.”

One Planet principle eight: “Encouraging low carbon modes of transport to reduce emissions, reducing the need to travel.”

The **infrastructure** theme

**Understanding infrastructure**

Infrastructure generally includes:
- Buildings - public and private;
- Transport systems for people and goods including roads, rails and pathways; and,
- Services infrastructure such as pipelines, dams, levees, lighting, communications and electricity supply networks.

The infrastructure theme links with the One Planet themes of sustainable transport and materials as these considerations are inherit in the application of sustainable building, infrastructure and other development designs and strategies.

This theme also links closely with the waste, water and energy themes by highlighting that choices in materials and infrastructure can heavily influence waste, water and energy outcomes.
Wodonga Council Integrated Transport Strategy

A successful sustainable transport strategy provides good accessibility. The emphasis is on the need for communities to be well-connected with facilities to encourage safe walking and cycling, innovative traffic management measures, the provision of good public transport and easy access to high-quality local services.

Steps taken now to make new developments more accessible in a sustainable manner will influence the travel patterns of these communities far into the future. They should also help reduce pressure of additional traffic on surrounding roads, while creating more attractive and liveable neighbourhoods.

Typical benefits of sustainable transport include:
- Reduced traffic congestion;
- Improved safety on roads;
- Financial savings through reduced vehicle operating costs;
- Improved health and well-being through greater levels of physical activity;
- Reduced air pollution and greenhouse gas emissions;
- Increased social connectedness and safer communities; and,
- Increased community resilience and preparedness for expected climate change and peak oil impacts.

Local context

Wodonga has already developed a comprehensive and detailed integrated transport infrastructure strategy. This has many environmental principles embedded and focuses on the sustainability of the system as a means of providing access to the city. The Council Plan key area “planning for the sustainable growth of our city” aims to facilitate education and information provided to the building industry and home owners to improve sustainability in new developments.

The energy theme details actions for increasing the energy efficiency of buildings and infrastructure. The council can play a significant role in developing actions toward these goals as a lead in many local infrastructure project developments.

The realignment of the railway line in 2010 has provided a rare opportunity for major infrastructural change in Wodonga with a focus being directed on transport and pedestrian routes during that redevelopment. Priority pedestrian and bicycle networks have been planned as part of these central business area (CBA) integrated transport network plans. The city’s Municipal Strategic Statement is being reviewed under the Planning and Environment Act. These developments should form a sound basis for the city to encourage sustainable future development (for example, Leneva Valley) with planned and strategic infrastructure built as part of each development (for example, linking to upgrades detailed in the CBA integrated transport network plans).

The success of a fully sustainable integrated transport system for the whole city is dependent upon key planning and policy decisions being applied uniformly and with full appreciation for these transport network developments across the city. Missing any opportunity to facilitate sections of the network development will be akin to missing a link in a chain.
Many actions to increase access to healthy food will be difficult to achieve without implementation of the integrated sustainable transport policy as its key infrastructure improvements provide access and ease for the community to travel via bicycle and walking.

State, federal and regional legislative planning may also require or impact directly on infrastructure development as a greater focus is placed on sustainability issues.

The way in which infrastructure development will be influenced by the listed drivers is highly varied and specific to the type of infrastructure involved. Clearly the infrastructure issues and suite of projects for council involvement go well beyond engineering responsibilities and well beyond concern for managed public infrastructure. The council is also working towards a review of future direction for management of council assets under climate change predictions to better prioritise upgrades and new assets to withstand the challenges that future climatic situations may present.

The idea of “triple bottom line” as applied to materials procurement is not a new issue but has not been applied uniformly as part of a procurement policy. The One Planet targets and visions make it easier to review procurement and guidelines for material uses that will assist the council to work towards reducing, reusing and purchasing more materials from sustainable sources.

Decisions guiding these development plans have a key stewardship role for the future sustainable development of the city. The success of these sustainable communities and infrastructure is key to many sustainability and liveability targets in the city that achieving the development of them would likely contribute to attaining more sustainability measures than any other single action the council could undertake in the foreseeable future, including:

- Reduced reliance on fossil fuels (reduced motor vehicle use);
- Improved community connectedness and inclusiveness;
- Improved air quality; and,
- Improved health outcomes.
Scope of the infrastructure theme

Infrastructure means all permanent human installations and constructions in the local government area and strategies and policies that influence planning decisions for all development in the city.

Issues

Key drivers of change for infrastructure management in Wodonga are:

- The need to manage energy consumption;
- Increasing Wodonga and regional population;
- Long-term global shortages and regional price increases across all energy sectors (including peak oil);
- Climate change effects on event risk (heat wave, hail, wind, fire/smoke, storm and flooding);
- Rail corridor land availability; and,
- Business and residential development policy (including public housing, industrial and central business area).
**Strategic Direction**

To develop and manage Wodonga's infrastructure and assets to minimise environmental footprint and maximise social and economic serviceability and longevity. Considering:

- All council infrastructure and assets;
- Sustainable transport (application of the *Integrated Transport Strategy* including pedestrian priority areas and linked bicycle networks across all development approvals processes);
- Materials and resources in council assets and procurement chain (review of procurement policy against One Planet benchmarking) to ensure that energy use and material sources are a key consideration of materials and infrastructure procurement processes; and,
- Impact of climate change on assets and infrastructure.
There are numerous changes occurring in waste management theory and practice. The view that refuse is a waste rather than a resource is slowly reversing. The waste management hierarchy as noted below shows that avoidance is the most desirable method of managing waste with disposal being the least desirable method of managing waste.

In 2013 the Victorian Government released *Getting full value – the Victorian Waste and Resource Recovery Policy* which aims to move forward from “Towards Zero Waste” by addressing the barriers to reducing waste and encouraging resource recovery.

The waste theme

These include:
- Reducing the waste Victorians generate (currently every Victorian generates more than two tonnes of waste per annum which is sent to landfill);
- Facilitating strong resource markets;
- Maximising economic value of these resources;
- Reducing environmental and public health issues of waste;
- Reducing illegal dumping and littering; and,
- Reforming waste policies across other institutions.

One Planet principle nine: “Reducing waste, reusing where possible, and ultimately sending zero waste to landfill.”

Figure three – waste hierarchy
While the best solution would be avoidance in generating waste, the majority of purchased goods are heavily packaged, resulting in large amounts of waste. Households dispose of about 45% of foods and behavioural changes in this area are challenging. As the custodian of waste collection services and the operator of the waste transfer station, Council can greatly influence those activities such as disposal, containment, recovery, recycling and reuse. The council also has a role to play in the education of the community to ensure suited behavioural change occurs.

**Local context**

Environmental laws for the management of solid wastes continue to improve the quality of waste management and raise costs. There is very limited good quality landfill space locally and the cost of access and transport of solid wastes will continue to rise. Energy and labour cost increases also apply to transporting and improved processing of recyclable materials. Local recycling is limited, with many materials simply collected, sorted and then transported outside the region for processing. Waste management is commonly a major environmental issue for local government and Wodonga is no exception.

All levels of government have policies and/or targets relating to waste reduction and generally in direct correlation with the waste hierarchy. The Federal Government has responsibility for packaging and product stewardship requirements and has released the *National Waste Policy*. The Victorian Government, mainly through Sustainability Victoria (SV), has adopted waste diversion targets from its *Towards Zero Waste* (TZW) campaign and the new policy aims to move beyond these targets.

At a regional level, SV requires all councils to be part of regional waste management groups. Wodonga Council is a member of the North East Regional Waste and Resource Recovery Group trading as NEWRRG. This group is made up of members from seven nearby councils and three Alpine resorts. NEWRRG is required to develop a regional plan which is required to be adopted by members and then is audited by the Victorian Government. The regional plan details regional and local priorities for those member councils and resorts. Victorian local government areas have a landfill diversion target of 65% by June 2014.

The waste management hierarchy shows that avoidance is the most desirable method of managing waste with disposal being the least desirable method of managing waste. Hence, disposing of waste to landfill should be avoided. In time disposal to landfill may be prohibited by legislation. To achieve the state target of 65% diversion, a step change in local practices will be necessary. A key focus on reuse, recycling and recovery to energy will aid the council’s efforts to improve waste management in Wodonga. The use of methane is becoming a viable alternative over the longer term. The introduction of an organics waste bin service to all households will support a reduction in the production of methane locally.

Gains in recycling rates and great reductions in material going to Albury landfill can be achieved by implementing new and improved processes at the waste transfer station and supporting statewide and national behavior change campaigns.

Locally, the Halve Waste education campaign focuses on increasing awareness of recycling behaviours after research showing recycling diversion rates stalling in recent years.

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In Vic: The Waste Hierarchy provides a framework for setting strategic directions for waste and resource efficiency as detailed in Towards Zero Waste 
*Food Waste Prevention Project* in Myrtleford to investigate the household behaviors that lead to food waste in partnership with the Sustainability Fund, Charles Sturt University, the North East Greenhouse Alliance and the Albury-Wodonga food security group released by NevRwaste.
This strategy also recognises the largest contributor to waste as a region is construction and demolition and commercial and industrial waste. As a board member of NEWRRG, the council is committed to the regional planning and implementation of strategies that address these waste sources. This is a holistic approach to waste stream management and driving these initiatives at a regional level will generate leverage with key industry stakeholders.

The council has a role to play as an instigator of major projects and contracts to review its procurement process to encourage the use of recycled materials, particularly where there is the potential or an existing local market for these resources.

**Scope of the waste theme**

Waste means all solid materials which the owner does not want to keep or use, and for which there is no established viable and competitive market. Resources are materials that can be recovered from the waste stream and have a viable market for reuse and/or recycling.

**Issues**

Key drivers of change for waste management in Wodonga are:
- Victorian and Federal governments waste reduction targets;
- Greenhouse gas emissions;
- Increasing Wodonga and regional population;
- Long-term global shortages and price increases across all energy sectors;
- A shortage of safe, low-cost landfill sites locally;
- Regional industrial capacity for recycling; and,
- Significant proportion of construction and demolition (C&D) and commercial and industrial (C&I) waste (80% of the waste stream ending up in landfill) but little is known about the proportion of materials making up this waste stream compared to residential waste.
**Strategic Direction**

To manage waste and value it as a resource:

- In accordance with priorities set out in the waste management hierarchy;
- In accordance with state and federal policy and legislation;
- To reduce the social, environmental and economic liability of accumulated waste to the community;
- To treat waste management as a resource recovery exercise;
- To build on improvements in residential recycling behaviours to further encourage resource diversion through organics separation;
- To build on residential waste separation behaviours to increase public place recycling opportunities;
- To work with commerce and industry locally to improve resource use and recovery rates; and,
- Work with the procurement team to maximise opportunities for materials reuse.
Climate change and population growth forecasts indicate that communities face an increasing water supply deficit as a result of reduced and fluctuating water availability. Exposure to more frequent extreme events may also impact water supply and quality. Water use efficiency in domestic and commercial/industrial context and the uptake of fit-for-purpose alternative water supplies need to be continually monitored and improved. The transition of regional and rural communities to more sustainable models of water management will also require innovative science and technology solutions.

The challenge resides in being able to accommodate population and economic growth, and environmental water needs while maintaining people’s quality of life, taking into account the added complexity and uncertainty that climate change impacts bring to the big picture.

Local governments have an important role to play in helping their communities understand and plan for the changes that lower water availability will bring. Local governments also need to assess the implications for their own operations and update and develop new plans to adapt to the new conditions.

This plan directs the activities of Wodonga Council to ensure there is a clear direction for future water programs within the water cycle management (WCM) state framework.

The North East Victoria – Adapting to a Low Water Future project funded by the Federal Government’s Strengthening the Basin Communities program produced recommendations to:

- Assist local governments in community-wide planning for reduced water availability; and
- Help communities understand and plan for changes that lower water availability brings including:
  - Taking action on climate change;
  - Using water wisely;
  - Securing sustainable long term water supplies to benefit all; and
  - Supporting healthy rivers.

One Planet principle five: “Using water more efficiently in buildings and in the products we buy, tackling local flooding and water course pollution.”
Local context

The City of Wodonga is supplied with potable water by North East Water, which holds a bulk water entitlement (licence) to draw water from the Murray River system. The city's water is extracted from Wodonga Creek (an anabranch of the Murray River channel) and treated at the Huon Hill water treatment plant.

Stormwater runoff is increased and accelerated in urban environments by the increased area of hard surfaces such as roofs and roads. Hard surfaces increase the shedding of rainfall to drainage but also create many opportunities for intercepting and using this water. Flow volumes and rate in the Murray are not significantly affected by the very small area of catchment within Wodonga, although there is risk of significant effects on Murray water quality should pollution of local waterways not be well-managed. Stormwater systems in Wodonga have been developed mainly to reduce local flooding. Some buildings in Wodonga also use roof runoff to fill rainwater tanks.

North East Water collects and treats urban wastewater. Sewage treatment facilities are at Baranduda with the main treatment facility in West Wodonga. Treated reclaimed water is returned to the community and industry for irrigation of open space and industrial uses. High quality reclaimed water is also returned to the river system. North East Water has developed two (50-year) water strategies; supply and demand and wastewater strategies. These strategies cover potable supply and recapturing of the value of wastewater. North East Water is also developing a One Resource strategy which uses a customer driven approach to deliver water of a quality that is fit for purpose.

Wodonga Council recognises the importance of working collaboratively with North East Water and other organisations involved in the strategic planning of water management for the city. The Water Smart Cities project which applies a water sensitive cities approach to Wodonga’s development is an example of this co-operation. The project aims to use sustainable urban development processes to make Wodonga more liveable and more resilient.

A key recommendation of the Adapting to a Low Water Future report is to pursue options for integrated water cycle management (now WCM). This framework was used to integrate a water management plan into the development plans for the Leneva growth corridor and demonstrates a suburb planned with water as a key consideration.

Given the context of likely but unpredictable event extremes and likely reduced overall water availability and reliability, Wodonga must plan for both conservative and resilient water use arrangements.
Scope

This section includes:
- All natural wetlands, waterways, floodway drainage lines and aquifers;
- Piped supplies of water from any source or of any quality;
- Water-borne waste streams including piped aqueous industrial waste and sewage;
- Stormwater in gutters, water tanks, retention ponds and drains; and,
- Irrigation of garden, recreational grounds and commercial premises.

This section does not include:
- Onsite commercial and industrial liquids processing; and,
- Management of bottled drinking water below the policy level.

Key issue drivers

- Increasing Wodonga and regional population
- Climate change
- Climate events
- National and Murray Darling Water planning legislation
- Highly vulnerable surface water and groundwater resources
- Limited installation of currently fit-for-purpose water use
**Scope of the water theme**

For this strategy, water means all natural waterways, floodways drainage lines and aquifers. It includes reticulated supplies of any quality, water-borne waste streams and storm water in associated infrastructure management. It includes garden and commercial irrigation.

**Issues**

Key drivers of change for water management in Wodonga are:

- Climate change induced disturbances/stress events including increased risk of damage from drought, fire, storm or flood and higher heatwave based demand;

- Uncertainty about the impact on water availability of regional climatic trend and variability projections;

- Potential for significant reductions in water availability arising from climate change and Murray Darling Basin water redistribution policy;

- Development driven reduced water quality within the catchment (local and regional);

- An increasing population with associated cumulative impacts and demand; and,

- Limited past implementation of fit-for-purpose water use, reclaiming and capture schemes.
Strategic Direction

Resilient water smart and sensitive community systems, maximising environmental, social, economic benefits from urban water planning and management based on the water cycle planning principles:

- Implement a water reduction and re-use strategy for all council-owned properties (including monitoring and leak detection);
- Maintain surface water systems to minimise pollution of urban waterways; and,
- Adopt a target for the reduction in the council’s overall water use and benchmark.