"Treat the earth well, it was not given to you by your parents, but is lent to you by your children" Kenyan Proverb

Greater Shepparton Environmental Sustainability Strategy 2014 - 2030









Greater Shepparton Environmental Sustainability Strategy Stakeholder Reference Committee



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Healthy environment

The Greater Shepparton Environmental Sustainability Strategy (2014-2030) and Action Plan (2014-2017) was adopted by Council on 15 July 2014.

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Cover photos: Three significant environmental features in the City of Greater Shepparton. The "Dookie Hills" in the east of the municipality (top) (Source: Tallis Wine Company, Dookie); Council staff at the Gemmill's Swamp bioremediation wetland, Mooroopna; and Reedy Swamp, part of the Lower Goulburn National Park (bottom) (Source: Photo 8).

Greater Shepparton City Council acknowledges the traditional owners of the land which now comprises Greater Shepparton. We pay respect to their tribal elders, celebrate their continuing culture, and acknowledge the memory of their ancestors.

Foreword

Greater Shepparton City Council (Council) acknowledges that our daily operations and the outcomes from our decision-making can impact upon our local environment.

Council has many environmental roles and responsibilities, and there are over 30 Federal and State Government environmental Legislative Acts that Council must comply with during our operations and activities.

Engagement with our community and Council staff has revealed a re-occurring expectation that Council should be leading by example through proactively seeking solutions to environmental issues and maximise the positive environmental outcomes that result from our activities and decision-making.

The implementation of the Greater Shepparton Environmental Sustainability Strategy (2014-2030) and Action Plan (2014-2017) (the Strategy) is an important step to ensure that environmental sustainability considerations are incorporated into all Council decision-making processes and operations.

Acknowledgements

This important project was funded with the support of the Victorian Government under the Victorian Adaptation and Sustainability Partnership – formerly known as the Victorian Local Sustainability Accord. Council has been a signatory to the Victorian Local Sustainability Accord since 2007.

This Strategy has been written by the Greater Shepparton Environmental Sustainability Strategy Stakeholder Reference Committee (SRC). Council would like to thank all 18 SRC members for their time, ongoing commitment and patience. The development of this Strategy would not have been possible without their expertise and enthusiasm. Appendix I contains the Council adopted SRC Terms of Reference and a list of all SRC members.

Council would also like to acknowledge and thank our community for their repeated input into the development of the Strategy. Council was very impressed with the quantity and quality of the community submissions received during the Discussion Paper and Draft Strategy consultation phases.

Howlitz

Cr Jenny Houlihan Mayor Greater Shepparton City Council



The terms "Greater Shepparton City Council" and "City of Greater Shepparton" are used throughout this strategy. "Greater Shepparton City Council" always refers to the activities or policies of Greater Shepparton City Council. "City of Greater Shepparton" refers to the geographical area of the municipality.

Document outline

The Environmental Sustainability Strategy 2014-2030 is comprised of four sections:

Section One provides an introduction to the Strategy, outlines its purpose, how it was developed and introduces the key principles to be applied during its implementation.

Section Two presents the strategic context of the Strategy. The current state of the Greater Shepparton Environment is summarised, key external drivers of change, the concerns and aspirations of our community and Council's role and capacity are discussed.

Section Three contains the strategic framework of the Strategy including an outline of the Strategy's mission, visions, strategic directions, objectives and the environmental outcomes that will result from the successful implementation of this Strategy.

Section Four contains the four-year Strategy Action Plan (2014-2017) to commence achieving the Strategy's objectives. The action plan will be updated every four years as part of the Strategy review process and reported against annually.



Figure 1: The redeveloped Victoria Park Lake (photo taken February 2012), was the equal fourth most valued environmental asset identified in the community environmental values survey (2011).

Environmental sustainability management is defined as managing human impacts upon, and interactions with the environment in order to preserve natural resources for present and future generations

Section One: Strategy introduction, purpose and development process

1. Introduction and purpose

Council has many environmental sustainability management roles and responsibilities, including compliance with over 30 Australian and Victorian Government environmental Legislative Acts. Council's current environmental sustainability activities are divided into four key environmental categories: waste management, land and biodiversity management, water management and energy management.

Council has outlined its commitment to environmental sustainability management in all of Council's high-level strategic documents (the *Greater Shepparton 2030 Strategy*, the *Council Plan 2013-2017* and the Greater Shepparton Planning Scheme).

The development of the Strategy has had a strong emphasis on community engagement and Council staff, stakeholder organisations and the Greater Shepparton community have been heavily involved in the development of this Strategy.

The Environmental Sustainability Strategy Discussion Paper (which was available for community consultation in March and April 2013) is a companion document to this Strategy. This Strategy is heavily focused on providing future direction for Council. The Discussion Paper provides further background information on the current state of, and threats, to the Greater Shepparton environment, relevant Legislative Acts and an outline of Council's pre-strategy environmental activities. The *mission* of the Environmental Sustainability Strategy is:

To improve Council's environmental sustainability performance by imbedding environmental sustainability considerations into Council's decision-making processes and operational activities.

Implementation of the Environmental Sustainability Strategy will facilitate the achievement of the following three *visions*:

- 1. <u>Our municipality:</u> Our healthy, vibrant, and resilient natural environment can sustain the long-term prosperity of our municipality for generations to come.
- 2. <u>Our organisation:</u> Greater Shepparton City Council is respected and recognised by our community, stakeholders and peers for leading by example on environmental issues and achieving positive environmental outcomes from our decision-making processes and operational activities.
- 3. <u>Our community:</u> Our environmentally conscious and well-informed community demonstrate that they value our environment by incorporating sustainability principles into their everyday activities and by their involvement in local environmental protection and enhancement activities.

"Sustainability" refers to three broad themes (economic, social and environmental) that must all be coordinated and addressed to ensure the long term viability of our community and the natural environment.

"Sustainable development" seeks to meet the needs and aspirations of the present without compromising the ability of future generation to meet theirs. The adoption and implementation of this Strategy will improve Council's environmental performance and fulfil all of the following internal (organisational) and external (community and stakeholders) focused purposes (in no particular order or importance):

- ✓ Articulate an overall environmental sustainability vision for Council and outline the key directions, actions and key indicators to achieve this vision.
- ✓ Provide direction and improve the consistency of environmental management across the organisation.
- Identify and prioritise environmental sustainability and climate change mitigation and adaptation activities with improved integration across Council strategies and plans.
- ✓ Outline Council's capacity to act upon or impact specific environmental issues.

- Provide a framework for coordinating and regularly reviewing existing environmental sustainability policies, plans and projects.
- ✓ Demonstrate accountability to our community in regards to Council's environmental performance.
- Increase the capacity and understanding of environmental sustainability across Council and the community.
- Assist Council to involve the community and cross-Council business units in local, regional and State sustainability goals and activities.
- Communicate and promote Council's environmental sustainability commitment, activities and achievements, internally, to ratepayers and the wider community.
- Explore opportunities to partner with stakeholder agencies and community groups to achieve greater environmental sustainability outcomes for our region



Figure 2: Council staff induction at the Gemmill's Swamp bioremediation wetland, Mooroopna.

2. The Greater Shepparton environment

The City of Greater Shepparton is situated in the lower floodplain country of the Goulburn Broken catchment and the confluence of three waterways (the Goulburn River, the Broken River, and the Sevens Creek) is located in the geographical centre of the municipality.

Other dominant geological features of our region include Cambrian aged volcanic rocks rising from the plains around Dookie in the east of the municipality and the north-eastern extent of the uplifted Goldfields and Box Ironbark hills in the south west of the municipality.

Some of the most significant environmental assets within the City of Greater Shepparton are the Lower Goulburn National Park, Dookie Bushland Reserve, Loch Garry, Gemmill's Swamp, Reedy Swamp, Cussen Park, the Shepparton Regional Park, Victoria Park Lake and other areas of native vegetation along roadsides and other riparian areas.

Our natural environment has provided our region with clean air, productive soils, temperate climatic conditions and a water supply that has allowed us to become one of the most productive agricultural production areas in Australia. This strategy refers to the outputs from complex natural environmental systems as "ecosystem services". Ecosystem services are the conditions and processes through which the natural ecosystems and the species that comprise them, sustain and fulfil human life (CSIRO 2003, Daily 1997) (Figure 3).

The environmental values of our current natural landscapes have been severely degraded by human imposed modifications since European settlement. These land management practice changes have degraded our soils and seriously altered the natural landscape resulting in our indigenous flora and fauna being largely restricted to refugia along roadsides and riparian bushland. A snapshot of the current condition of our environment is outlined further in chapter 7 (page 10).

Managing our environment in a sustainable manner is essential to ensure that our region remains highly productive into the future.



Figure 3: Ecosystem services provided by our natural environment that sustain human life (even by a single paddock tree!).

3. Environmental sustainability principles

This Strategy builds upon the environmental commitments outlined in the Greater Shepparton 2030 Strategy and the Sustainable Decision-Making Policy (adopted by Council in 2013). These documents include a commitment to the achievement of a sustainable way of life for current and future generations through a shared understanding of environmental sustainability.

The Strategy has a broad scope that includes all environmental sustainability considerations that will inform decision-making and the development and implementation of policies, plans, strategies and the delivery of Council services and operations.

Council recognises our community leadership roles and responsibilities and has commenced embedding sustainability principles throughout the organisation and in our interactions with the broader community.

Councillors, staff, contractors and consultants of Greater Shepparton City Council will act in accordance with this Strategy and Council's environmental commitment by ensuring that:

✓ Council activities are conducted in accordance with the environmental objectives outlined in the Council Plan 2013-17, the Greater Shepparton 2030 Strategy, the Environmental Sustainability Strategy 2014-2030 and the Sustainable Decision-Making Policy (2013).

- Council is committed to ensuring our decisionmaking processes are open, transparent, and inclusive of our community. Reliable scientific and technical evidence will be included in the decision-making process in relation to environmental impacts.
- ✓ Council will improve our communication about our environmental activities and achievements via regular and honest engagement. Council needs to provide an explanation of the rationale behind environmental decisions.
- ✓ Council will be adaptable to continuous technological advances and improvements in environmental understanding. Learning from the experiences of current and past activities.
- ✓ Council will provide leadership to the Greater Shepparton community and lead by example to achieve positive environmental outcomes.
- ✓ Council will achieve positive environmental outcomes using a collaborative approach to increase the participation of the community, stakeholders and Council staff in positive environmental activities.
- Council will achieve financial savings from the implementation of many environmental sustainability actions.
- ✓ Council will commence regular reporting and review of its environmental activities.



Figure 4: Native vegetation and animal habitat in the City of Greater Shepparton is mostly restricted to waterways and road reserves. These "environmental corridors" or "biolinks" are providing vital connectivity opportunites for native species across our landscape. Scattered remnant paddock trees provide "stepping stone" connectivity for our native species. The removal of any tree, especially on private land or road reserves, greatly reduces movement opportunuities for our already struggling native species.

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4. Strategy development process

The Greater Shepparton Environmental Sustainability Strategy Stakeholder Reference Committee (SRC) was established by Council to develop this Strategy.

The 18 member SRC is comprised of key stakeholder groups and agencies such as the Department of Environment and Primary Industries, Parks Victoria, Yorta Yorta Nation Aboriginal Corporation and the Goulburn Broken Catchment Management Authority. Three community representatives and several community groups also sit on the committee, which is chaired by Cr Kevin Ryan. Appendix I contains the Council endorsed SRC Terms of Reference and a full list of SRC members.

Figure 5 (below) provides an outline of the Strategy development process. Major steps in the development process (indicated by the bold colour and font) are all followed by a community comment and engagement period. This strong, repeated emphasis on community engagement has been a vital component of the development process. Each major step also contains a SRC and internal Council review, which, along with the community consultation then informs the next stage of the Strategy's development. An essential step in the development of the Strategy was to release a discussion paper to instigate community, stakeholder and internal staff discussions about Greater Shepparton City Council's environmental sustainability management activities.

The discussion paper was written by the SRC to provide Council, Council stakeholders and the wider community with background information relevant to the development of the Strategy. The discussion paper was available for community consultation in March 2013, but is still available to download on Council's website.

Eighty-five submissions were received during the discussion paper community consultation period. These submissions contained over a thousand specific comments, largely relating to local environmental management issues and how Council can achieve positive outcomes on these matters. Some of the key messages from the community consultation process are outlined in the "Our community and their major environmental concerns" chapter (page 14). A companion "What you said" report on the community feedback received is also available on Council's website.



Figure 5: Greater Shepparton Environmental Sustainability Strategy – development process

Section Two: Strategic context

The following section outlines the considerations that Council needs to incorporate into the development of the Strategy.

5. Policy context

The legislation that governs environmental management is very complex and continuously changing. This legislation operates at all levels of government and includes international agreements. A comprehensive list of the major environmental legislative and policy frameworks that regulate Council's environmental management and the Australian and State Government departments and agencies that implement and enforce them is provided in the **Discussion Paper.**

The key Victorian Government departments, agencies and regional environmental organisations that will assist Council to comply with relevant environmental legislations are:

- Department of Environment and Primary Industries
- Goulburn Broken Catchment Management
 Authority
- Sustainability Victoria

- Parks Victoria
- Yorta Yorta Nation Aboriginal Corporation
- Goulburn Broken Greenhouse Alliance
- Resource GV (Goulburn Valley)

The Environmental Sustainability Strategy is consistent with the objectives, strategies and actions outlined in the *Greater Shepparton 2030 Strategy*, the *Council Plan 2013-2017* and the Greater Shepparton Planning Scheme. Further details on the content of these documents are outlined in the discussion paper.

The development of the discussion paper helped to gather all of the existing Council plans and strategies relating to our environment and the Environmental Sustainability Strategy will provide a framework for the review of all Council's environmental policies and plans.

Figure 6 (below) provides a hierarchical overview of where the Environmental Sustainability Strategy sits within Council's strategic structure.



Figure 6: Hierarchical overview of where the Greater Shepparton Environmental Sustainability Strategy will sit within Council's existing strategic structure. Arrows indicate that the Strategy will incorporate environmental sustainability consideration into the MSS and other Council strategies and plans.

6. The Enviromental Sustainability Strategy's lifespan, reviewing and reporting processes

The lifespan of the Environmental Sustainability Strategy 2014-2030 (the Strategy) is deliberately aligned with Council's highest-level strategic document, The Greater Shepparton 2030 (GS 2030) Strategy. This is because the Strategy facilitates the achievement of the long-term environmental sustainability objectives contained in the GS 2030 Strategy.

The Strategy is scheduled to be reviewed every four years to ensure that the Strategy and the new Council Plan are aligned. The four-year Council Plan drives Council's strategic direction for the four years following each election of the new Council. Linking the Strategy review process with each Council Plan development process will ensure that shorter-term Council Plan objectives are aligned with the objectives of this Strategy.

The Action Plan 2014-2017 (page 29) contains the actions for implementation over the next four years to achieve the major objectives of this Strategy. The Action Plan 2014-2017 will be updated with a new four-year Action Plan at the completion of each Strategy review process.

The Action Plan 2014-2017 will be integrated throughout the Council organisation via the InterPlan System. This electronic program inserts the actions of the Strategy into the relevant business, service and work plans. Responsibility for the implementation of each action will sit with the relevant responsible manager. A key component of the review process will be to reassess the state of the environment variables outlined in chapter 7 (page 10) and the environmental outcomes the Strategy seeks to achieve via the accomplishment of the objectives outlined in chapter 15 (page 23). These variables will be assessed against the most recently available state of the environment data during each four-year Strategy review process and again when the Strategy has reached the end of its life in 2030.

The Strategy will be reported on annually. Each annual report will summarise the implementation progress of the Strategy and outline some of the major environmental sustainability achievements that Council has accomplished.

The environmental sustainability annual report will be produced during the Council Budget annual reporting process. The environmental sustainability annual reporting process will provide Council staff and the community the opportunity to monitor Council's implementation of the Strategy.

The diagram below provides a visual representation of the alignment of this Strategy with Council's highest-level strategic documents.



7. The state of the Greater Shepparton environment

The following three tables provide an overview of of the the state Greater Shepparton environment. The current state and the trend in outlined for condition are individual environmental characteristics relating to "our natural environment", and "using our resources wisely", whilst the "our climate" table contains a snapshot of our historic climate vs projected climatic conditions.

Individual government agencies collect and report on the different elements of these tables and the Goulburn Broken Catchment Management Authority and Department of Environment and Primary Industries in particular, were instrumental in collating the following information. The information contained in these tables will become a benchmark for comparison against future states and trends as part of the four-year strategy review process, then again when the life of the Strategy concludes in 2030.

Data was unavailable to determine the state and trend for several key environmental characteristics during the development of this Strategy. This information will be sourced as soon as possible, depending on the availability of data.

The Discussion Paper provides further information on the current state and the major threats to the Greater Shepparton environment.

	State^	Trend	Comment
Native vegetation cover	Poor	Decreasing	The City of Greater Shepparton has one of the lowest covers of native vegetation of any municipality in Victoria and the remaining native vegetation is heavily fragmented and in a degraded condition. Road reserves support a significant proportion of the municipality's remnant native vegetation. Scattered remnant paddock trees are of significant biodiversity importance in our largely cleared landscape. The limited quantity of native vegetation that remains is under increasing removal pressures from land development and perceived fire mitigation activities.
Land managed for conservation	Poor	Increasing	The area of land managed for conservation purposes is low but increasing in the City of Greater Shepparton. Council's rate rebate incentive program has helped increase the area of Trust for Nature covenanted land compared to other intensive agriculture dominated municipalities in the Goulburn Broken Catchment. State and Federal Government covenant incentive projects also have a major role in increasing the area of covenant-protected land.
Presence and status of threatened species and communities.	Poor	Decreasing	The diversity of flora and fauna within Greater Shepparton has greatly declined since European settlement and many native species are now rarely observed or extinct within our municipality. The limited data available for specific species indicates that habitat loss and fragmentation is resulting in a continued decline of native species. Almost all of the native vegetation communities present in the City of Greater Shepparton are listed as endangered or vulnerable.
Weed presence and cover	Poor	Static	The vast majority of the City of Greater Shepparton landscape contains non- native agricultural vegetation and weeds. Changes in water availability and land management practices has resulted in reduced weed control on some areas of private land. Weed control legislation has been conflicting so weed control along roadsides had been lacking up until three years ago. Council is currently in the process of developing a Roadside Weed Control Plan.
Stream health	Satisfactory	Improving	Goulburn Broken River Basin index of stream condition data (2010).
Environmental flows	Good	Improving	In 2012/13, 205,015 ML was delivered through GB CMA delivery via Victorian Environmental Water and the Commonwealth Environmental Water holder.

Our natural environment

^ State ratings are a comparison against other non-metro Victorian Councils

Using our resources wisely

	State^	Trend	Comment
Council greenhouse gas (GHG) emissions	High	Decreasing (slowly)	Recent GHG reporting indicates that the implementation of energy efficiency measures is reducing emissions at some Council facilities (i.e. sports stadium and Aquamoves).
Community greenhouse gas emissions	High	Increasing	The only data available is out-dated. New municipal specific data will be available around mid-2014.
Municipal waste generation	High	Increasing	Data from Council Annual Report 2012/13
Waste diverted from landfill	High	Increasing	Data from Council Annual Report 2012/13
Municipal waste to landfill	Moderate	Decreasing	Data from Council Annual Report 2012/13
Municipal waste generation	High	Increasing	Data from Council Annual Report 2012/13
Council water use	Unknown (in relation to other councils)	Decreasing	Data from June 2013, Data to be sourced from State Government agencies by 2015
Residential water use	unknown	unknown	Data to be sourced from State Government agencies by 2015
Industrial water use	unknown	unknown	Data to be sourced from State Government agencies by 2015
Staff Commute methods	unknown	unknown	Data to be sourced by 2015
Community commute methods	unknown	unknown	Data to be sourced by 2015

^ State ratings are a comparison against other non-metro Victorian Councils

<u>Our climate</u>

	Historic	Future projections
Temperature	Temperate climatic conditions	Hotter and drier overall
Rainfall	Approximately 450mm, mainly falling in winter and spring	A decrease in the overall quantity of rainfall (especially in spring). Rainfall events will be less frequent but have much higher intensities.
Extreme weather events	Periodic floods and droughts.	An increase in the frequency and severity of severe storms, floods, heatwaves, and droughts.

8. Key external drivers

Many external drivers will shape Council's future planning and operations and the ongoing prosperity of the Greater Shepparton region. It is vital that Council is prepared for the impacts and opportunities presented by the following four major drivers to achieve Council's environmental sustainability vision and objectives. The Discussion Paper provides further information on other external drivers, threats, and issues relevant to the implementation of the Strategy.

Population growth

The City of Greater Shepparton is the fourth largest provincial centre in Victoria and is one of the fastest growing regions in the State. Our municipality's population is currently 62,000 but is forecast to grow to 70,500 in 2021 and 80,000 people in 2031 (ABS 2012).

The City of Greater Shepparton is well located in terms of accessibility to Melbourne (~2hrs) and the possibility of Shepparton being a destination along the proposed high-speed rail route could greatly increase the region's appeal to Melbourne commuters.

Our increasing population will continue to place pressure on our water and energy resources, require more land for urban development and increase the production of waste.

Compounding these pressures is the fact that the average size of households is decreasing so the projected number of dwellings required to house our population will continue to increase at a greater rate than population growth.

Climate change

Over 97 per cent of peer-reviewed, published scientific papers with a position on human induced global warming agree that global warming is occurring and that humans have caused this warming via our use of fossil fuels (Cook et al. 2013). There is not a single national or major scientific institution anywhere in the world that disputes human-induced climate change (Cook 2013, Doran 2009). Global warming has a range of agreed climate change impacts including an increased frequency of severe heatwaves and warm extremes, changes in rainfall frequencies and intensities, and an increase in extreme weather events (CSIRO 2011). Both the Australian and Victorian Governments have accepted climate change as a fact and their departments and agencies have incorporated climate change objectives, opportunities and actions in their social, economic and environmental strategies and plans.

By 2030, average annual temperatures in our catchment are projected to be approximately 0.8°C warmer, with the greatest increases expected in spring and summer (DSE 2008). By 2070, the average annual temperature is predicted to increase by a further 1.4°C in the Goulburn Broken under a lower emissions scenario. Under a higher emissions scenario, this increase nearly doubles to 2.7°C (DSE 2008).

Meanwhile, annual rainfall in our catchment is expected to decline by three per cent by 2030, with the greatest reductions expected in spring and winter. Our rainfall events will be less frequent but much heavier than our region has historically experienced (DSE 2008).

The most significant impacts of climate change are more likely to be felt through changes in the frequency and intensity of extreme events, such as droughts, floods, frosts, heatwaves, storms and bushfires. These extreme events along with changes in average temperature and rainfall will affect the regional distribution of some species, water availability and the agricultural crops suited for production in our region.

Scientists agree that the recent prolonged drought and extreme storm events are a result of climate change and these events will become more regular (DAFF 2013).

A range of measures have already commenced to mitigate and adapt to these impacts throughout

the community. These measures include innovations in farming practices, food production and processing to reduce our dependence on water and non-renewable energy consumption.

Council is continuing to implement climate change mitigation and adaption activities. Methane emitted from the Cosgrove landfill site has been captured and flared to generate electricity since 2010, producing enough homes. power 900 electricity to The implementation of the "Watts Working Better" streetlight replacement project will significantly reduce Council's annual greenhouse gas emissions.

Council needs to be prepared to support our community to adapt to our changing/future climate. There are going to be great opportunities to attract emerging and renewable or alternate energy industries and businesses to our region and assist our farmers to cultivate new crops.

<u>Peak oil</u>

"Peak oil" is the term used to describe the point in time where the maximum rate of oil extraction is reached and production rates there-after continue to decline ("energy descent").

A recent oil extraction analysis forecasts that oil production levels in 2030 will be 40 per cent less than in 2012 (Zittel 2013). This fall in oil production will coincide with the continued increase in oil demand along with increasing costs associated with oil extraction from diminishing reserves.

The City of Greater Shepparton is recognised as one of the largest transport and logistics hubs in Victoria and our agricultural, manufacturing and food processing industrial sectors are heavily dependent on road transport.

It is essential that Council works collaboratively with these industries, our community and the Australian and Victorian Governments to ensure that we are prepared as a municipality to adjust to declining oil production.

Economic growth and resource consumption

Our economic prosperity has traditionally been dependent on sustained growth and high resource consumption and the City of Greater Shepparton's economy has traditionally been maintained by strong agricultural, manufacturing and food processing industrial sectors.

Our limited economic diversity means that we are highly exposed to global financial market volatility; exchange rates and the future viability of these sectors are going to be heavily affected by the impacts of climate change, peak oil and population growth.

All human activities consume resources from our planet and produce waste that the planet must then contend with. This resource consumption can be measured to calculate an "ecological footprint". Overall, humanity's annual ecological footprint has exceeded the earth's annual biocapacity levels since the 1980's (EPA 2013). As a global community, we currently need about 1.3 planets to meet our average consumption levels (EPA 2013).

An average Victorian requires 6.8 global hectares of land to sustain our current lifestyle (a global hectare refers to one hectare (size of a soccer field) of biologically productive space with worldaverage productivity) (EPA 2013). If every single person on our planet lived like Victorians, the world's population would need more than four Earths to support us.

The average Victorian's ecological footprint is very high because we live in large houses; commute long distances; the quantity of goods and services we consume; and our energy needs are predominately sourced from fossil fuels (EPA 2013). The average Victorian also generates just over two tonnes of waste per year, an increase of 29 per cent in the last ten years (DSE 2012).

We are clearly using natural resources at a greater rate than they can be replenished. It is time to explore opportunities to decrease this obviously unsustainable level of consumption.

9. Community consultation and major environmental concerns

Our community

The Greater Shepparton community has a growing base of environmentally conscious community members who are actively promoting environmentally sustainable practices in our municipality.

Many of these community members are members of community environmental groups (Landcare, Transition movement etc.) and donate a significant amount of their time and resources to improve our local environment for the benefit of all residents.

The community members who have participated in Council's engagement activities have demonstrated their knowledge and commitment to improving our environment and are seeking greater leadership from Council on environmental matters. The community repeatedly communicated an expectation that Council should be leading by example with our environmental sustainability activities and a concern that Council is under-resourced in this area.

Our community supports Council in its efforts to integrate sustainable development principles throughout the organisation to improve Council's environmental sustainability performance.

Our community wants to partner with Council to achieve greater environmental outcomes for our region and acknowledges the requirement for longer-term approaches to resolve environmental issues.

Our community recognises that environmental issues and solutions are complex and that Council needs to partner with the relevant government agencies and organisations to ensure that we are all working together to improve our local environment

A strong community engagement process was recognised to be paramount to the development of a relevant and comprehensive Environment Sustainability Strategy. The Greater Shepparton community has contributed feedback to Council on the region's major environmental issues and on Council's environmental performance on four occasions over the last two years.

Community Environment Values and Behaviours Survey 2011

A total of 143 residents participated in this survey which was available via a number of avenues.

The most concerning response was to the question "What does Council currently do to protect and enhance our environment?" Thirty per cent of respondents stated that they were unsure or believed that Council does nothing or very little to protect and enhance the environment. Almost a third of the Greater Shepparton community has either a lack of knowledge or a negative perception relating to Councils environmental management.

Refer to Appendix XII of the Discussion Paper for a survey results summary report.

Auspoll Community Satisfaction Survey 2012

Sixty per cent of our residents who participated in the Auspoll Community Satisfaction Survey rated the importance for Council to be a community leader in environment and sustainability management as either very high (22 per cent) or high (38 per cent).

In contrast, only 21 per cent of the respondents gave satisfaction ratings of either very high (3 per cent) or high (18 per cent) for Council's performance in managing the natural environment. Twenty per cent of respondents gave performance satisfaction ratings of either very high (3 per cent) or high (17 per cent) to this when asked about their satisfaction with Council's performance in ensuring that the design and development of the built environment is environmentally sustainable

Environmental Sustainability Strategy - Discussion Paper

Eighty-five responses were received during the discussion paper community consultation period containing more than 1050 specific comments

relating to environmental issues, the contents of the discussion paper or ideas for the strategy's implementation.

Attendees of the four community workshops (Dookie, Shepparton, Mooroopna and Tatura) were also asked to rate both the importance of and Council's past performance at fulfilling our environmental roles and responsibilities using a similar format to the Auspoll survey.

Again, a large gap existed between the community's perception of Council's performance and the importance of fulfilling our responsibilities. Council scored quite poorly for our environmental performance overall, particularly for our performance in relation to our climate change, energy management and land and biodiversity activities.

Overall, the overwhelming majority of feedback and comments received on the discussion paper contained highly constructive remarks relating to environmental management issues and how Council can achieve positive outcomes on these matters. Comments that related to Council's efforts to develop an Environmental Sustainability Strategy were also very positive.

The major concern for our community is that Council must put this Strategy to practical use and implement its action plan. Scepticism was expressed that Council is very good at developing plans and strategies but has performed poorly when it comes to the implementation of these strategies.

Ninety-four per cent of the comments that gave a specific view on the discussion paper as an overall document and the importance of Council being in the process of developing an Environmental Sustainability Strategy were positive and the only negative comments were that the document was too long and that it would not achieve its objectives.

Draft Environmental Sustainability Strategy (2014-2030) and Action Plan (2014-2017)

Council received 33 community submissions and 22 staff responses to the Draft Strategy containing over 400 specific comments.

Of the 72 general comments received about the Draft Strategy, 69 were positive and only three were negative. Positive comments related to the comprehensiveness, structure and honesty of the document and consultation process.

The majority of the feedback received was positive about the content or identified some minor omissions so the structure of the Draft Strategy and Final Strategy are the same.

The vast majority of the comments received during all Strategy development consultation phases were very positive about Council being in the process of developing an Environmental Sustainability Strategy.

The major recurring comments and concerns of our community are:

- Improve the utilisation of Council planning controls, local-laws and legislation to achieve positive environmental outcome and improve the compliance and enforcement rates of these tools.
- There is a lack of community understanding about the different environmental roles and responsibilities of Council and Victorian Government departments and agencies.
- A disconnect exists between parts of our community and our environment. There is a substantial amount of ignorance and general malaise towards environmental issues due to a lack of understanding and awareness of the value of our environment.
- Concerns about population growth and the corresponding development and resource availability pressures.
- Illegal firewood collection, rubbish dumping and littering along road reserves and public land.

- Improve the viability of local populations of native fauna and flora via protection and enhancement activities.
- Lack of control of noxious weeds and pests on private and public land.
- Improve stormwater management to reduce the quantities of pollutants and litter that wash into our waterways.
- Reduce Council's energy usage to reduce greenhouse gas emissions and financial costs. Council should also be greatly increasing its use

10. Council capacity and role

The role of local government has traditionally been focused on providing infrastructure and service functions for their ratepayers. Over the last few decades, there has been a substantial expansion in responsibilities, in particular the provision of functions relating to community development and environmental management.

There has been a significant increase in environmental policy and legislation that local government must comply with over this time. Council is required to contend with the large scale and complexity of complying with environment legislation across all Council operations and delivering positive environmental outcomes with a limited capacity of resources.

Council endeavours to operate according to environmental best practice, undertake efforts to collaborate with, engage and educate our community to facilitate better environmental outcomes for our region and utilise our planning and enforcement powers to influence environmental behaviour.

Council acknowledges that the achievement of our environmental mission is beyond the capacity of Council to achieve on our own. Council will explore opportunities to collaborate with other agencies, organisations and the community to achieve positive environmental outcomes. of renewable energy sources, especially via the installation of solar panels on public buildings.

- A collaborative approach is required by Council, stakeholder agencies and community groups to work together with the wider community to achieve our environmental objectives.
- Lack of awareness and understanding in the community and within Council regarding the impacts that climate change will have on our region.

Greater Shepparton City Council acknowledges that we have a wide range of roles and responsibilities to perform in regards to environmental sustainability management to protect and enhance our environment. These roles include advocator, manager, educator, facilitator, provider, regulator, lobbyer, encourager and community leader.

Council will utilise the roles above depending on the degree of Council's responsibility for action.

- a) Full responsibility Council can provide leadership via our own activities, use our regulatory or enforcement powers, or provide services to support our community to act in an environmentally sustainable manner.
- b) Partial responsibility Council shares responsibility with other agencies. Council can partner, support and encourage other agencies to develop environmental solutions or undertake positive environmental behaviours.
- c) No direct responsibility Council can choose to advocate, lobby or encourage the agencies that do have the responsibility to achieve better environmental outcomes. In circumstances where no-one appears to have responsibility Council can evaluate the importance of the issue then advocate, lobby or encourage an appropriate agency to take responsibility.

11. Council's environmental commitment

Greater Shepparton City Council is committed to the achievement of a sustainable way of life for current and future generations through a shared understanding of sustainability.

Greater Shepparton City Council acknowledges that:

- ✓ The future prosperity of the residents of the City of Greater Shepparton is dependent upon a healthy environment to sustain us.
- ✓ Overall, the natural environment within the City of Greater Shepparton is currently in a poor ecological state.
- ✓ The path to improving environmental behaviours in our community requires a multifaceted approach from Council focusing on a combination of enforcement, education and awareness, and improved infrastructure activities.
- ✓ Council has a wide range of roles to perform in regards to environmental sustainability management to protect and enhance our environment (outlined on page 16).

Council will achieve our commitments by meeting our environmental sustainability management roles and responsibilities, which have been divided into the following six strategic themes throughout the Strategy.

- 1. Protecting and enhancing our natural assets (land and biodiversity)
- 2. Healthy, productive and sustainable water resources
- 3. Using our resources wisely climate change and energy efficiency
- 4. Using our resources wisely waste and resource efficiency
- 5. Sustainable planning, development and transport
- 6. Council governance and operations

1. <u>Protect and enhance our natural assets (land</u> <u>and biodiversity)</u>

Greater Shepparton City Council acknowledges that:

- ✓ Less than 2.5 per cent of the pre-European settlement native vegetation remains in the City of Greater Shepparton. This vegetation is generally in a poor ecological state and under constant threat from further degradation. The native fauna dependant on this vegetation for habitat is also under significant threat.
- ✓ Our municipality's remnant native vegetation has significant environmental and cultural value. From the larger expanses of vegetation along our waterways, to smaller patches on private land, and particularly the scattered, isolated paddock trees, this vegetation is contributing to the environmental health of our municipality and requires improved protection.
- ✓ Council has a major role to play to protect and enhance the biodiversity assets that remain in the City of Greater Shepparton.

Greater Shepparton City Council is committed to the protection and enhancement of our native flora and fauna assets.

Council has demonstrated this commitment by undertaking considerable tree planting activities including the Crouching Emu Revegetation Project, the Seeds and Trees for the Future Project and National Tree Day. Council also offers a rate rebate for landholders who have a Trust for Nature covenant site on their property.

2. <u>Healthy, productive and sustainable water</u> resources.

Greater Shepparton City Council acknowledges that:

- ✓ Past water use in the City of Greater Shepparton was largely unsustainable and has contributed to the degradation of environmental assets in our region and beyond.
- ✓ Council has an important role to ensure that the City of Greater Shepparton has healthy, productive and sustainable water resources.

Greater Shepparton City Council is committed to reducing our water use and minimising the quantity of litter and pollutants that enter our waterways via stormwater runoff.

Council activities have demonstrated this commitment through the installation of gross pollutant traps, the creation of urban stormwater treatment wetlands and the utilisation of water sensitive urban design principles at new developments.

3. <u>Using our resources wisely - climate change</u> and energy efficiency

Greater Shepparton City Council acknowledges that:

- ✓ Climate change is occurring and is beginning to have an impact on our local climate.
- ✓ Our region will face many challenges due to our climate getting hotter and drier, and that Council needs to be preparing for these impacts and identifying the opportunities that present.

Greater Shepparton City Council is committed to reducing our energy usage from fossil fuels and the implementation of climate change mitigation and adaptation activities.

Council has commenced activities that demonstrate this commitment including the methane capture and electricity generation at the Cosgrove landfill site, the installation of cogeneration technology at Aquamoves and the implementation of the "Watts Working Better" streetlight replacement project (Greater Shepparton is the lead Council for this catchment wide project).

4. <u>Using our resources wisely - waste and</u> <u>resource efficiency</u>

Greater Shepparton City Council acknowledges that:

- ✓ There are significant costs associated with sending waste to landfill and that our projected population increases will continue to put pressure on our waste reduction targets.
- ✓ Council has provided very good services and facilities to our rate payers but significant waste

management issues exist including rubbish dumping and littering.

- ✓ Opportunites to improve pre-sorting of community and industry generated waste needs to be explored further to decrease the quantity of waste going to landfill.
- ✓ Planning for landfill alternates needs to be part of Council's long-term planning.

Greater Shepparton City Council is committed to achieving the Victorian Governments landfill and resource recovery targets and identifying solutions to rubbish dumping and littering issues.

Council is recognised as an industry leader for our waste recovery efforts in rural Victoria. Council won a Keep Australia Beautiful Victoria – Towards Zero Waste Award in 2009 for providing the community with a variety of recycling initiatives at the Shepparton Transfer Station to reduce the amount of material sent to landfill.

5. <u>Sustainable urban planning, development and</u> <u>transport</u>

Greater Shepparton City Council acknowledges that:

- ✓ The urban development and infrastructure designs that have been approved by Council in past decades may restrict the lifestyle activities and choices made by future generations.
- ✓ A return to more self-sustaining, resilient local communities is a preferred option where local people purchase locally supplied goods and services, reduce their commute distances, and utilise public transport and active (walking and cycling) travel methods.

Greater Shepparton City Council is committed to maximising the environmental sustainability benefits of our urban environments including sustainable building design, improving the sustainability of land developments and increase community access to public transport and active (walking and cycling) travel methods. Shepparton's Council-maintained shared path network received recognition when Shepparton was voted Australia's second-best walking town in 2010 and the fourth best in 2012.

6. Council governance and operations

Greater Shepparton City Council acknowledges that:

- ✓ Our community looks towards Council for leadership, guidance and direction in relation to environmental management and sustainable development.
- ✓ Human activities have degraded our environment and the everyday activities and decisions made by Council and the residents of the City of Greater Shepparton can have a significant impact on the future health of our environment.

Greater Shepparton City Council is committed to embracing our community leadership role by incorporating environmental sustainability principles throughout our organisation and through our interactions with the broader community.

The decisions that Council makes regarding policies, projects, and other activities that impact upon the natural environment will be based on reliable scientific evidence and technical findings.

Council is embedding a culture of environmental sustainability within the organisation and has commenced integrating environmental sustainability considerations into decision-making policies and Chief Executive Officer (CEO) directives such as the Sustainability CEO Directive, Fleet CEO Directive, and the Procurement Policy.



Figure 7: Council staff and Mayor Jenny Houlihan celebrate the launch of the Goulburn Valley Carpooling Project.

Section Three: Strategic Framework

This section contains the strategic framework that the Strategy will operate within, including an outline of the strategy's mission, visions, key directions, objectives and consequential environmental outcomes that will result from the implementation of this strategy.

Figure 8 provides the strategic framework hierarchy that will lead to the achievement of positive environmental outcomes for the Greater Shepparton environment (identified in Chapter 15). Specific actions to achieve the strategy's objectives are outlined in Section Four, the Strategy Action Plan. The action plan contains actions to be implemented across the next four years to achieve the major objectives of the Strategy. The four-year action plan will be updated as part of the Strategy review process that will occur every four years.



Figure 8: The strategic framework heirarchy for the Environmental Sustainability Strategy

12. Our mission and visions

The *mission* of the Environmental Sustainability Strategy is:

To improve Council's environmental sustainability performance by imbedding environmental sustainability considerations into Council's decision-making processes and operational activities.

Implementation of the Environmental Sustainability Strategy will facilitate the achievement of the following three *visions*:

- 1. <u>Our municipality</u>: *Our healthy, vibrant, and resilient natural environment can sustain the long-term prosperity of our municipality for generations to come.*
- 2. <u>Our organisation:</u> Greater Shepparton City Council is respected and recognised by our community, stakeholders and peers for leading by example on environmental issues and achieving positive environmental outcomes from our decision-making processes and operational activities.
- 3. <u>Our community:</u> Our environmentally conscious and well-informed community demonstrate that they value our environment by incorporating sustainability principles into their everyday activities and by their involvement in local environmental protection and enhancement activities.

13. Strategic themes

Council's environmental sustainability management roles and responsibilities and the objectives and actions outlined in this Strategy to fulfil them are divided into the following six strategic themes. – from page 17, Section 2?

1. <u>Protecting and enhancing our natural assets</u> (land and biodiversity).

This theme includes Council activities relating to native fauna and flora, pest plant and animal control, firewood management, native vegetation offsets, cultural site protection etc. 2. <u>Healthy, productive and sustainable water</u> resources.

This theme includes Council activities that affect the water quality of our waterways and wetlands, such as stormwater and domestic wastewater management. Water consumption and flood management are also included under this theme.

3. <u>Using our resources wisely - climate change</u> and energy efficiency.

Climate change mitigation and adaptation activities such as reducing Council's energy use and greenhouse gas emissions, increasing our community's awareness of climate change impacts and opportunities, and attracting innovative renewable and alternative energy industries/businesses to our municipality sit under this theme.

4. <u>Using our resources wisely - waste and</u> <u>resource efficiency.</u>

This theme includes Council activities aiming to increase the recovery of resources to decrease the quantity of waste going to landfill, reduce incidences of rubbish dumping and littering and maximise the environmental benefits from Council's purchasing activities.

5. <u>Sustainable planning, development and</u> <u>transport.</u>

Objectives and actions to improve the environmental sustainability considerations and outcomes from urban developments, and preparing for "energy descent" by reducing the municipality's dependence on fossil fuel transportation are included under this theme.

6. <u>Council governance and operations.</u>

Activities that facilitate a cultural shift in decisionmaking to improve Council's environmental sustainability performance, providing the resources required to implement this strategy and the commencement of annual environmental sustainability reporting on our activities and achievements are key components of this theme.

14. Key directions

The objectives and actions for each strategic theme are categorised into four key directions:

1. Leading by example

The desire for Council to lead by example on environmental sustainability issues has been a strong recurring message from the Greater Shepparton community and from Council staff. Objectives and actions where Council can lead by example by improving our environmental performance are included under this key direction.

2. Using planning and regulation powers

influence the Council can activities and decisions management occurring in the community that are having a negative impact on our environment via our regulation and enforcement powers. The Greater Shepparton Planning Scheme, Australian and Victorian Government regulations, and local laws are all regulatory tools available to Council to improve environmental sustainability outcomes.

3. Enable and empower our community

Our environmentally informed, active, and passionate community are looking to Council for support and assistance to continue accomplishing positive environmental outcomes. Living sustainably is a community-wide responsibility, Council will explore opportunities to collaborate with and support our community to understand, and embrace such changes to lifestyles, individually and as communities.

4. <u>Advocate and collaborate with key</u> <u>stakeholders</u>

Many barriers and enablers for improving environmentally sustainable behaviours and outcomes in our region lie outside of Council's direct control. Council will endeavour to strengthen our partnerships with government agencies and key stakeholders to advocate for environmental improvements for our region and beyond.



Figure 9: The acheivements of the Crouching Emu Revegetation Project demonstrate the significant outcomes possible when the State Government, Council and our community work in partnership to improve our local environment. These photos show that significant environmental improvements are possible over very short time periods. This roadside was planted in 2008 (left) whilst the photo on the right was taken three years later (2011).

15. Environmental objectives and aspirational environmental outcomes

This chapter outlines the objectives of the Strategy and the aspirational environmental outcomes that Council intends to achieve during the life of the Strategy. These outcomes will be assessed against the most recently available state of the environment data (sourced mostly from State Government agencies) during the Strategy review process (every four years) and when the Strategy has reached the end of its life in 2030. The outcomes listed in the tables below provide a description of what Council seeks to achieve from the implementation of this Strategy. The performance indicators/targets listed in the action plan will measure the success of the Strategy's action plan.

Table 1: Strategy objectives for each Strategic Theme and the aspirational environmental outcomes that Council aims to achieve.

Theme	Key Direction	Objective	Aspirational environmental outcomes
and and biodiversity)	Leading by example	2.1 Protect and enhance remnant native vegetation and to maximise the biodiversity values of Council owned and managed land.	The total area of high habitat and conservation value native vegetation in the municipality is increased. The connectivity between patches of native vegetation is increased. The amount and quality of native vegetation in urban areas is increased. The presence of key threatened species in the municipality is increased. The habitat available for key threatened species to utilise in the urban areas is increased. The presence of introduced pest species is decreased. The diversity and cover of weed species is decreased.
ral assets (l	Planning and regulation powers	2.2 Regulate land use, development and amenity to achieve best practice land and biodiversity outcomes.	The total area of high habitat and conservation value native vegetation in the municipality is increased. The presence of key threatened species in the municipality is increased
cting ar	Enable and empower our community	2.3 Partner with, support and empower our community to increase the biodiversity values of private and public land.	The area of native vegetation enhanced or protected per year is increased. Connectivity between patches of native vegetation is increased. The number of people and community groups attending Landcare or other planting efforts is increased. The number of National Tree Day activity participants (schools, community members and groups) is increased. The number of corporations (SPC Ardmona, Campbell's etc.) attending planting efforts is increased.
	Advocate and collaborate with key stakeholders	2.4 Advocate and collaborate with government agencies and key stakeholders to protect and enhance the municipality's biodiversity assets.	The area of land managed for conservation is increased. The area of native vegetation in the municipality is increased. The presence of key locally threatened species in the municipality is increased. The presence of introduced pest species is decreased. The number of Council involved partnership programs is increased. The number of successful funding applications is increased.

Theme	Key Direction	Objective	Aspirational environmental outcomes
. resources	Leading by example	2.1 Reduce Council's water consumption and maximise water reuse.	Council's potable water consumption per head of population is reduced. Council's non-potable water consumption per head of population is reduced. The number of Council owned or managed buildings and facilities with rainwater storage tanks is increased.
		2.2 Utilise Council's water management responsibilities to improve water quality across the municipality.	Potential water contamination from Council owned and managed septic systems is minimised. Pollutants and contaminants that flow into our waterways from urban stormwater runoff are reduced.
ole wate		2.3 Ensure that Council is prepared for flood events.	Flood monitoring stations are maintained. Floodplain management plans are reviewed as necessary.
2: Healthy, productive and sustainable water resources	Planning and regulation powers	2.4 Utilise Council's planning and regulation powers to achieve healthy, productive, and sustainable water resources.	Community potable and non-potable water consumption is minimised at new residential and commercial buildings. Pollutants and contaminants that flow into our waterways from urban stormwater runoff are reduced. Potential water contamination from Council owned and managed septic systems is minimised.
	Enable and empower our community	2.5 Partner with, support and empower our community to achieve healthy, productive and sustainable water resources.	Reduce community potable and non-potable water consumption. Pollutants and contaminants that flow into our waterways from urban stormwater runoff are reduced.
	Advocate and collaborate with key stakeholders.	2.6 Advocate and collaborate with government agencies to improve water quality, promote efficient water use and improve flood mitigation management across the municipality.	The number of Council involved partnership programs is increased. The number of successful funding applications is increased. Flood monitoring stations are maintained. Floodplain management plans are reviewed as necessary.

Theme	Key Direction	Objective	Aspirational environmental outcomes
3: Using our resources wisely - climate change and energy efficiency	Leading by example	3.1 Reduce Council's greenhouse gas emissions and the financial costs of Council's energy use.	 Greenhouse gas emissions from Council priority facilities and plant are reduced. The number of Council owned or managed buildings/facilities using renewable energy sources is increased. The number of climate change adaption measures implemented at Council priority facilities is increased. Whole of life costs are incorporated in project planning (including Sustainability and Environment checklists, Integrated Project Management (IPM), InterPlan etc.).
		3.2 Ensure that Council is prepared for the impacts and opportunities presented by climate change .	Greenhouse gas emissions from Council priority facilities and plant are reduced. The number of climate change mitigation measures implemented at Council priority facilities is increased. The average star rating for new Council buildings is increased.
		3.3 Encourage and attract innovative renewable and alternative energy industries/ businesses development within our municipality.	Innovative renewable or alternative energy industries or businesses move to, or establish their operations in Greater Shepparton.
	Enable and empower our community	3.4 Increase the energy efficiency of existing and new residential and commercial buildings across the municipality.	Community greenhouse gas emissions are reduced. The number of new residential and commercial buildings that go beyond the minimum star rating requirements is increased.
		3.5 Support our businesses, industries and residents to live more efficiently and sustainably.	Community greenhouse gas emissions are reduced. Council support for community groups is increased. Council support for community events is increased.
	Advocate and collaborate with key stakeholders	3.6 Partner with Government agencies and regional stakeholders to support the establishment of sustainable agricultural practices.	The knowledge and capacity of our regions farmers, farm advisers and agribusiness industries to respond to the opportunities and impacts of climate change is increased
		3.7 Maximise partnership opportunities to reduce Council and community greenhouse gas emissions and respond to the opportunities and challenges of climate change.	The number of Council involved partnership programs is increased. The number of successful funding applications is increased. The Goulburn Broken Greenhouse Alliance continues to receive Council support.

Theme	Key Direction	Objective	Aspirational environmental outcomes
4: Using our resources wisely - Waste and resource efficiency	Leading by example	4.1 Minimise Council's consumption of resources.	The volume of Council generated waste going to landfill is reduced. The purchasing of recognised recycled and/or environmentally preferable products by Council is increased.
		4.2 Provide (as far as practicable) best practice waste management services to the Greater Shepparton community	Council achieves the State Government's municipal waste targets. The volume of waste going to landfill is reduced.
		4.3 Lead by example to demonstrate that our local environment is valued by voluntarily cleaning up a specific location.	The environmental value of a reach of the Goulburn River (as part of the RiverConnect Adopt-a-Reach Project) is directly improved from Council staff volunteer activities.
	Planning and regulation powers	4.4 Reduce the incidence of rubbish dumping and the prevalence of litter along roadsides and other areas of public land.	Occurrences of rubbish dumping across the municipality are reduced. Littering behaviours of the Greater Shepparton community are improved.
	Enable and empower our community	4.5 Increase the recovery of resources and minimise the quantity of waste going to landfill.	Council achieves the State Government's municipal waste targets. The volume of industry generated waste going to landfill is reduced.
		4.6 Our community discards waste responsibly by utilising Council's waste management services and facilities.	Occurrences of rubbish dumping across the municipality are reduced. Littering behaviours of the Greater Shepparton community are improved.
	Advocate and collaborate with key stakeholders	4.7 Maximise collaboration opportunities with Government agencies, stakeholders and other Local Governments.	The number of Council involved partnership programs is increased. The number of successful funding applications is increased.

Theme	Key Direction	Objective	Aspirational environmental outcomes		
ansport	Leading by example	5.1 Pursue best practice in sustainable development, planning, and transport.	Council is prepared for the impacts of "peak oil" and "energy descent". The Infrastructure Design Manual (IDM) is utilised to achieve best practice environmental sustainability development outcomes across the City of Greater Shepparton.		
		5.2 Reduce the environmental impacts of Council staff travel requirements.	Environmental impacts are minimised from Council's fleet purchases. The number of staff who commute via walking or cycling is increased. The number of staff who commute via car-pooling is increased.		
planning and tı		5.3 Reduce the municipality's dependence on personal, fossil fuel powered transportation.	Non-fossil fuel and public transport community infrastructure is improved. The number of residents who partake in (or commute via) walking or cycling activities is increased. The number of residents who commute via car-pooling is increased.		
5: Sustainable development, planning and transport	Planning and regulation powers	5.4 Embed Environmentally Sensitive Design (ESD) principles into all development, planning and transport activities within the City of Greater Shepparton.	Relevant statements/overlays are incorporated into the Municipal Strategic Statement (MSS) of the Greater Shepparton Planning Scheme.		
	Enable and empower our community	5.5 Partner with, support and empower our community to reduce vehicle use and achieve sustainable development and lifestyles across the municipality.	The number of residents who partake in (or commute via) walking or cycling activities is increased. The number of residents who commute via car-pooling is increased. The number of people growing home-grown food or using community hub and Kidstown facilities to grow food is increased.		
	Advocate and collaborate with key stakeholders	5.6 Lobby Governments and collaborate with other key stakeholders to increase sustainable development outcomes and minimise vehicle use.	The number of Council involved partnership programs is increased. The number of successful funding applications is increased.		

Theme	Key Direction	Objective	Aspirational environmental outcomes
	Leading by example	6.1 Provide open and transparent reporting on environmental sustainability performance.	Annual reports are produced on Council's environmental sustainability activities and achievements. Environmental sustainability benchmarks are established to report against.
		6.2 Ensure that Council has the culture, resources, and staff to deliver our environmental sustainability objectives.	Council supports and commits to resource the implementation of the Environmental Sustainability Strategy four-year action plan. Environmental sustainability outcomes from Council operations and activities are improved. Council supports the Sustainable Working Group to implement Environmental Sustainability Strategy actions addressing organisational culture and behaviour change.
(0		6.3 Council officers have the skills, knowledge and capacity to achieve Council's environmental sustainability objectives.	Environmental sustainability (procurement, ECO-buy etc.) training is available to relevant staff. Relevant training and professional development opportunities identified during annual Sustainability and Environment Team staff PES (Performance Evaluation System) appraisals are budgeted and approved.
operations		6.4 Ensure that environmental sustainability implications are considered in project planning and decision-making activities.	Council reports, projects, and procurement activities include environmental sustainability considerations.
Council governance and operations	Planning & regulation powers	6.5 Ensure that Council utilises the most effective and practical planning and regulation powers.	Council enforcement and compliance staff are knowledgeable about whom is in the best position to achieve the best outcomes under the relevant legislation to improve community compliance into the future.
icil govern	Enable and empower our community	6.6 Our community is well informed and knowledgeable about Councils environmental sustainability activities and achievements.	The community is knowledgeable about Council's environmental sustainability activities and achievements. Council receives an improved environmental sustainability performance rating score in the bi-annual Auspoll Community Survey.
6: Coun		6.7 Our community is well informed and knowledgeable about environmental sustainability issues in our municipality	The community has an increased understanding of the importance of Council's environmental sustainability activities and achievements. Council receives an improved environmental sustainability importance rating score in the bi-annual Auspoll Community Survey.
		6.8 Promote and/or support the environmental protection and enhancement activities currently occurring in the municipality.	Council support for community members and/or groups to undertake environmental protection and enhancement activities is increased.
	Advocate and collaborate	6.9 Stakeholders are informed and engaged in the implementation of this Strategy.	Council supports the formation of the Greater Shepparton Environmental Sustainability Stakeholder Advisory Committee.
	with key stakeholders	6.10 Advocate and collaborate with government agencies and stakeholders to improve environmental management outcomes.	The quality of state of our environment data for the City of Greater Shepparton is improved. The number of Council involved partnership programs is increased. The number of successful funding applications is increased.

The Action Plan 2014-2017 outlines the actions that Council will endeavour to implement over the next four years (subject to budget approval and external funding opportunities). This action plan will be replaced with a new four-year action plan at the completion of the Strategy review process (to be conducted in 2017). Page 46 provides an acronyms list of the partnership organisations and groups that will assist with the implementation of the Strategy.

The timelines for each performance indicator/target is listed as:

- ST = Short term Council aims to complete the performance indicator/target by the end 2014/15 financial year (within 18 months).
- MT = Medium term Council aims to complete the performance indicator/target during the 2015/16 and 2016/17 financial years.
- LT = Long term Council aims to commence the implementation of the performance indicator/target during the lifespan of the Action plan 2014-2017 but the completion of these actions may occur after the review of the Strategy in 2017.
- OG = Ongoing Implementation of the performance indicator/target will occur annually across the duration of the Action Plan.

1. Prot	1. Protecting and enhancing our natural assets (land and biodiversity)						
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch	
			Review current plans/strategies				
			- Roadside Management Strategy	ST	Operational expenditure (\$30K)		
		1.1.1 Develop, review and	- Cussen Park Management Plan		Internal staff time		
		implement key land and	Develop new plans/strategies				
		biodiversity strategies and ensure these documents	 "Mooroopna Sandhills" Management Plan 	MT		Sustainability &	
		are informed by State and	 Boulevard Bushland Reserve Management Plan 	ST	Internal staff time	Environment	
٥	1.1. To protect and	To protect and hance remnant tive vegetation and maximise the odiversity values ofFederal Government land and biodiversity policy considerations.	 Native Vegetation Risk Management CEO Directive 	51			
xampl	enhance remnant native vegetation and to maximise the biodiversity values of Council owned and managed land.		 Benefits of Large Trees, Benefits of Urban Trees factsheets 	MT	Operational expenditure (\$3K)		
Leading by example			Complete 80% of the actions identified in the Strategic Framework for Managing Native Vegetation on Road Reserves	MT	Operational expenditure /seek funding avenues		
ea			Review current plans/strategies				
			- Street Tree Master Plan	OG ST (\$48K)/seek funding avenues	Internal staff time	*Sustainability &	
		parks, gardens and other	- Urban Character Study			Environment	
		outdoor areas to encourage the community	- Roadside Weed and Rabbit Control Plan		(strategic reporting),		
		to appreciate our natural	Develop new plans/strategies:			Recreation and Parks (implementation)	
		land and biodiversity assets.	 Significant Tree Register(urban/rural, private/public) 	MT	Operational expenditure/ seek funding avenues		

1. Protecting and enhancing our natural assets (land and biodiversity)							
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch	
			 Explore the feasibility of developing an Urban Pest Control Plan Explore the feasibility of developing a Weed Management Strategy 	MT	Operational expenditure/ seek funding avenues		
		- Parks 2050 Strategy	MT		Recreation and Parks		
<u>_</u>			Adequately maintain walking/shared paths at community access sites on an ongoing basis so that community complaints (outside of intervention level) are less than fifteen per annum.	OG	Operational expenditure	Works Recreation and Parks	
Leading by example		 1.1.3 Utilise Council's Geographical Information System (GIS) to manage biodiversity and landscape assets within the City of Greater Shepparton. 1.1.4 Implement actions to reduce the incidence of illegal firewood collection. 	Commence Geographical Information System (GIS) data share agreements with government agencies and academic institutions by 2015 (free service).	ST	Internal staff time	Sustainability & Environment	
Leading k			Develop a Geographical Information System (GIS) data updating system in conjunction with relevant agencies academic institutions by 2016 (free service).				
			Develop a risk management "environmental warning system" for outdoor works programs by 2016.	MT			
			Develop an annual media campaign (including a minimum circulation of four communications per year via traditional and social media avenues).	ST	Operational expenditure/ seek funding avenues	Sustainability & Environment	
			Signs produced and placed at key locations by 2015 (in conjunction with Parks Victoria).				
			Explore the feasibility of establishing a community woodlot.	MT			
and owers	1.2 To regulate land use, development and amenity to achieve best practice land and biodiversity outcomes.	1.2.1 Investigate opportunities to utilise the Greater Shepparton Planning Scheme to protect biodiversity and landscape assets within the City of Greater Shepparton.	Complete the investigation, mapping and statements of significance process for relevant zones/overlays.	ST	Internal staff time /seek funding avenues	Sustainability & Environment	
Planning and regulation powers			Implement the above into the Greater Shepparton Planning Scheme.	MT	Operational expenditure (\$2.5K)	Planning	

Key direction	Objective	r natural assets (land and bio Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch
Planning and regulation powers	 1.2.2 Investigate opportunities to utilise the Greater Shepparton Planning Scheme to achieve best practice to minimise the removal of remnant native vegetation across the municipality. 1.2.3 Communicate with existing & prospective landholders to increase understanding of their land & biodiversity obligations & responsibilities. 1.2.4 Reduce illegal activity concerning Local Laws and the Planning Scheme and improve the enforcement of planning permit conditions – check with Planning & LL. 	opportunities to utilise the Greater Shepparton Planning Scheme to achieve best practice to minimise the removal of remnant native vegetation	Strengthen the Municipal Strategic Statement to acknowledge the significance of remnant native vegetation types and communities in the City of Greater Shepparton and the importance of applying the "avoid" and "minimise" principles to non-referred 'low risk" native vegetation removal permit applications.	MT	Internal staff time	*Sustainability & Environment (strategic reporting), Planning (implementation)
			Monitor and report annually to Council and the community on the quantity of native vegetation retained and removed across the City of Greater Shepparton.	OG		
		Explore the feasibility of introducing an over the counter native vegetation offset scheme.	MT	Operational expenditure /seek funding avenues	Sustainability & Environment	
		existing & prospective landholders to increase understanding of their land & biodiversity obligations	Develop and circulate factsheets outlining land and biodiversity related obligations and responsibilities for landholders.	MT	Operational expenditure (3K)/seek funding avenues	Sustainability & Environment
		U	Commence annual auditing and report on the outcomes from Local Law and Planning Scheme breaches.	MT	Internal staff time	Planning Local Laws
		Scheme and improve the enforcement of planning	Commence an auditing and reporting program to monitor planning permit condition compliance. Achieve a reduction in the number of Planning Scheme breaches over the life of this Action Plan.			Planning
		with Planning & LL.	Achieve a reduction in the number of Local Law breaches over the life of this Action Plan.			Local Laws
Enable and empower our community	1.3 To partner with, support and empower our community to increase the biodiversity values of private and public land.	bort and empower community toappreciation and awareness program to raise our community'sliversity values ofconnection to and	Construct interpretive and QR signage at a minimum of six sites of biodiversity significance (VPL, Reedy Swamp).	MT	Operational expenditure /seek funding avenues	
			Develop a biodiversity educational display Continue Council's rate rebate program for Trust for Nature covenanted properties.	OG		Sustainability & Environment
			A minimum of two local organisations and 20 individual community members attend Council organised land and biodiversity related events annually.			

1. Protecting and enhancing our natural assets (land and biodiversity)							
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch	
Enable and empower our community		1.3.2 Develop and implement a community environmental action program.	Support a minimum of six community (Landcare, community plan committees etc.) groups annually to undertake activities to improve local biodiversity. Support a minimum of two community biodiversity related events annually.	OG	Operational expenditure	Sustainability & Environment	
Enable			A minimum of two local organisations and 20 individual community members attend these events annually.	OG	Operational expenditure	Sustainability & Environment	
Advocate and collaborate with key stakeholders	1.4 Advocate and collaborate with government agencies and key stakeholders to protect and enhance the municipality's biodiversity assets.	with agencies teholders to enhance ality's government agencies and other key stakeholders to deliver key projects.	Develop (and implement) a strategic (catchment wide) offset program to target regionally and State threatened, FFG listed, and/or EPBC listed species and communities Develop (and implement) a strategic biodiversity connectivity protection and establishment program to target regionally and State threatened, FFG listed, and/or EPBC listed species and communities.	MT	Operational expenditure /seek funding avenues	Sustainability & Environment	
			Continue Council's support for key partnership programs (RiverConnect, Dookie Biolinks, GB LGBRG).	OG		Sustainability & Environment	
			Work with State Government departments and agencies to improve native vegetation considerations and biodiversity outcomes in Whole Farms Plans.	MT	Operational expenditure /seek funding avenues	Sustainability & Environment	
			Council applies for external funding annually for the implementation of land and biodiversity actions and activities.	OG			

2. Healthy, productive and sustainable water resources							
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch	
	2.1 Reduce Council's water consumption and maximise water reuse.	2.1.1 Review the Sustainable Water Use Plan (SWUP). Implement the recommendations and actions included in this strategy.	Review the Sustainable Water Use Plan.	ST	Operational expenditure (\$25K)	Sustainability & Environment	
			Implement 80% of SWUP actions within specified timeframes. Identify new potable and non-potable water reduction targets in the reviewed SWUP.	OG	Operational expenditure/ seek funding avenues		
	2.2 Utilise Council's water management responsibilities to improve water quality across the municipality.	2.2.1 Review the Domestic Wastewater Management Plan (DWMP). Implement the recommendations and actions included in this plan.	Review the Domestic Wastewater Management Plan	ST	Internal staff time/ seek funding avenues	Environmental Health	
			Implement 80% of all DWMP actions within specified timeframes.	OG	Operational expenditure/ seek funding avenues		
Leading by example			Initiate a Domestic Wastewater Management Program (to monitor for compliance of septic tank/septic systems)	MT	Operational expenditure (\$250K)/ seek funding avenues		
ıg by e		2.2.2 Review the Greater Shepparton Stormwater Management Plan (SWMP). Implement the recommendations and actions included in this plan.	Review the Greater Shepparton Stormwater Management Plan	ST	Operational expenditure (\$25K)		
Leadin			Implement 80% of all SWMP actions within specified timeframes. Participate in regional water quality programs. Commence annual reporting to the community on water quality monitoring results.	OG	Operational expenditure /seek funding avenues	Sustainability & Environment	
	2.3 Ensure that Council is prepared for flood events.	•	Maintain Council's flood monitoring stations as required.	OG	Operational expenditure (\$30K) /seek funding avenues	Sustainability & Environment	
			Complete reviews of floodplain management plans as required.	00	Operational expenditure /seek funding avenues		
			Continue to participate in the Northern Region Water Monitoring Partnership Program (NRWMPP)	OG	Internal staff time		

2. Healthy, productive and sustainable water resources							
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch	
Planning and regulation powers	2.4 Utilise Council's planning and regulation powers to achieve healthy, productive and sustainable water resources.	2.4.1 Investigate opportunities to utilise the Greater Shepparton Planning Scheme to ensure that land use and development across the municipality has minimal impacts on our waterways and wetland assets.	Complete the investigation, mapping and statements of significance process for relevant zones/overlays.	ST	Internal staff time /seek funding avenues	Sustainability & Environment	
			Implement the above into the Greater Shepparton Planning Scheme.	MT	Operational expenditure (\$2.5K)	Planning	
Jannin		2.4.2 Reduce Local Laws and Planning Scheme breaches and improve the enforcement of planning permit conditions.	Commence annual auditing and report on the outcomes from Local Law and planning Scheme	MT	Internal staff time	Planning	
ш. 			breaches (stakeholders such as the EPA will be involved).			Local Laws	
Enable and empower our community	2.5 Partner with, support and empower our community to achieve healthy, productive and sustainable water resources.	2.5.1 Partner with and empower our community to reduce water use and maximise water reuse.	Support a minimum of four community groups (community plan committees etc.) or local businesses supported annually to conserve water. Support a minimum of two water conservation themed community events annually.	OG	Operational expenditure /seek funding avenues	Sustainability & Environment	
		2.5.2 Support our community/ community groups and local businesses to monitor and improve the water quality of our water ways and wetlands.	Support a minimum of four community groups (community plan committees etc.) or local businesses annually to improve local water quality.	OG	Operational expenditure /seek funding avenues Operational	Sustainability & Environment	
			Support a minimum of two water quality themed community events annually.		expenditure /seek funding avenues		
		2.5.3 Enhance the community's connection to and appreciation for	Implement 80% of RiverConnect Strategic Plan actions within specified timeframes. Increase the community's participation during RiverConnect activities.	OG	Operational expenditure /seek funding avenues	Sustainability &	
		the Goulburn and Broken River environments.	Investigate opportunities to engage local businesses and organisations to participate in the "adopt a reach" program.	ST	Operational expenditure /seek funding avenues	Environment	

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2. Heal	2. Healthy, productive and sustainable water resources								
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch			
our			Explore the feasibility of expanding the RiverConnect Project to river communities beyond Shepparton/Mooroopna.	MT	Operational expenditure /seek funding avenues				
Enable and empower our community		2.5.4 Develop a community appreciation and awareness campaign to educate and raise our	Develop a community appreciation and awareness campaign.	ST	Internal staff time				
			Promote water consumption and quality issues and opportunities via social media at least twice a year.	OG	Operational expenditure /seek funding avenues	Sustainability & Environment			
inable		water consumption and quality	Circulate biannual water consumption and quality media releases to media outlets.						
ш		155065.	Monitor the use of QR (Quick Reference) signage at Council managed bioremediation wetlands	OG					
vith key	2.6 Advocate and	2.6.1 Lobby, advocate and collaborate with agencies, stakeholders and other local governments to explore opportunities to address water management issues	Continue to support water related partnership programs (Catchment Salinity Asset Works, Community Surface Water Management, GB WQWG, RiverConnect etc.).	OG	Operational expenditure /seek funding avenues	Sustainability &			
nd collaborate with key stakeholders	collaborate with government agencies to improve water quality,		Apply for external funding annually for the implementation of water management activities (including RiverConnect).			Environment			
Advocate and coll stakeh	promote efficient water use and improve flood mitigation management across the municipality.	2.6.2 Advocate agencies and stakeholders to identify and protect significant wetlands and waterways in the City of Greater Shepparton.	Advocate for an increase in the total area of protected wetlands and waterways across the City of Greater Shepparton.	OG	Internal staff time/seek funding avenues	Sustainability & Environment			
		2.6.3 Support and advocate for best practice flood and floodplain management to mitigate flood risks.	Produce and promote flooding factsheets for the Greater Shepparton community as required (in partnership with VIC SES).	OG	Operational expenditure /seek funding avenues	Emergency management			

3. Using our resources wisely - Climate change and energy efficiency.								
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch		
	3.1 Reduce Council's greenhouse gas emissions	3.1.1 Develop and implement an energy management plan to	Develop an energy management plan.	ST	Operational expenditure (\$65K)/ seek funding avenues	Sustainability &		
	and the financial costs of Council's energy use.	reduce Councils greenhouse gas emissions and financial costs of Council's Energy use.	Identify greenhouse gas emission reduction targets in the energy management plan. Implement 80% of the energy management plan's	OG	Operational expenditure/ seek funding avenues	Environment		
۵			actions within the specified timeframes.		-			
/ exampl	prepared for the impacts(based on the Victorianand opportunitiesGovernment's Adaptationpresented by climateand a review of the Goulbu	climate change adaptation plan (based on the Victorian	Develop a climate change adaptation plan (State Government requirement).	ST	Operational expenditure (\$30K)/ seek funding avenues	Sustainability &		
Leading by example		Government's Adaptation Plan and a review of the Goulburn Broken Greenhouse Alliance Adaptation Plan).	Implement 80% of climate change adaptation plan actions within specified timeframes.	OG	Operational expenditure/ seek funding avenues	Environment		
	3.3 Encourage and attract innovative renewable and alternative energy industries/ businesses	vative renewable and of alternative, sustainable sources of energy generation	Encourage the development of a minimum of two innovative renewable or alternative energy industries or businesses to set up operations in Greater Shepparton.	LT	Internal staff time	Investment Attraction		
	development within our municipality.	new Economic Development Action Plan.	Provide support and assistance to the Tatura Community Energy Project.	OG				
our			Produce a variety of factsheets promoting best practice building standards for new buildings.	MT	Operational expenditure (\$5K) / seek funding avenues	Sustainability & Environment		
Enable and empower our community	3.4 Increase the energy efficiency of existing and new residential and commercial buildings across the municipality.	3.4.1 Promote best practice building standards for new buildings.	Promote the above factsheets to increase the number of new residential buildings that go beyond the minimum star rating requirements.	MT	Internal staff time	Building Services		
Enable and con			Provide support to the community for the development and promotion of a high star rating energy efficient house.	MT	Operational expenditure/ seek funding avenues	Sustainability & Environment		

3. Using our resources wisely - Climate change and energy efficiency.								
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch		
			Identify and establish community greenhouse gas emission benchmarks to report against.	ST	Internal staff time			
		3.5.1 Encourage and support	Promote solar PV panels to increase community use.	ST				
lity		businesses, industry and the general community to reduce	Provide support and assistance with the development of Tatura's energy descent plan.	OG	Internal staff time	Sustainability & Environment		
. commun		energy costs and greenhouse gas emissions to mitigate the impacts of climate change.	Support a minimum of one energy use reduction event (Earth Hour etc.) per annum.	OG	Operational expenditure (\$6K) / seek funding avenues			
er our	3.5 Council supports our businesses, industries and		Provide support for the "Power Down" Community Energy Assessment Project	OG	Internal staff time	Neighbourhood		
Enable and empower our community	residents to live more efficiently and sustainably.	3.5.2 Raise the community's awareness of the relevance of climate change, the impacts it will have on our environment and way of life, and the opportunities it will present.	Produce a minimum of four climate change issues and opportunities media releases per annum. Circulate a minimum of four climate change issues and opportunities articles via social media per annum.		Internal staff time	Sustainability &		
Enak			Support a minimum of four community groups (Transition Tatura etc.) or local businesses annually to raise community awareness of climate change.	OG	Operational expenditure /seek	Environment		
			Support a minimum of one climate change issues and opportunities related event annually.		funding avenues			
Advocate and collaborate with key stakeholders	3.6 Partner with Government agencies and regional stakeholders to support the establishment of sustainable agricultural practices.	3.6.1 Assist with the implementation of the "Climate Smart Agricultural Development" research project to equip farmers, farm advisers, agribusiness industries with information about potential impacts of climate change scenarios for our region.	Assist with the development of reports detailing the (spatially explicit) impact of climate change on currently grown crops, new crops and potential new production areas that are viable under future climates. Assist with the development of strategic plans to help agribusinesses and local governments implement effective regional development (agricultural transformation, planning, infrastructure).	OG	Internal staff time	Investment Attraction		

3. Usin	3. Using our resources wisely - Climate change and energy efficiency.								
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch			
ı key	key	Circulate communication materials (website, flyers etc.) to inform the community and stakeholders about the findings of the project.	OG	Internal staff time	Investment Attraction				
Advocate and collaborate with key stakeholders	opportunities to reducewith GovernmentCouncil and communitystakeholdersgreenhouse gas emissionsGovernment	3.7.1 Advocate and collaborate	Continue to implement the "Watts Working Better" street lighting project and other energy efficiency measures.	OG	Operational expenditure /seek funding avenues				
		with Government agencies, stakeholders and other Local Governments to maximise opportunities to implement	Continue Council support for climate change and energy efficiency partnerships and programs (GBGA, GV Community Energy etc.).	OG	Operational expenditure (GBGA - \$20K)/seek funding avenues	Sustainability & Environment			
	opportunities and challenges of climate change.	enges of climate change and energy efficiency actions and activities.	Apply for external funding annually to implement climate change and energy efficiency actions and activities.	OG	Internal staff time				

4. Using our resources wisely – Resource Efficiency and Waste management							
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch	
		4.1.1 Maximise the environmental benefits of Council's purchasing activities by supporting recognised	Achieve environmental sustainability procurement targets annually (including the application of a 10% price advantage to encourage the purchase of environmentally sustainable products).	OG	Internal staff time/ seek funding	Procurement	
		recycled and environmentally preferable products.	Develop an Eco-buy action plan.	МТ	avenues	Sustainability &	
			Develop annual total green spend targets.			Environment	
	4.1 Minimise Council's		Establish Council generated waste benchmarks	ST	ST Internal staff time Operational expenditure/ seek funding avenues		
ample	consumption of resources.	4.1.2 Reduce the quantity of waste generated by Council operations going to landfill.	Increase the volume of Council generated waste diverted from landfill annually.	OG		Waste Services	
Leading by example			Continue to improve Council's internal departmental processes, with a focus on process improvement & making better use of electronic systems, & reducing the creation of hard copy paper records	OG	Internal staff time	Information Management	
<u>ت</u>	4.2 Provide (as far as practicable) best practice	4.2.1 Implement the Waste and	Implement 80% of WRRMS actions annually.		Operational expenditure/ seek funding avenues	Waste Services	
	waste management services to the Greater Shepparton community.	Resource Recovery Management Strategy (WRRMS) 2013-2023.	Achieve State Government waste policy targets.	OG			
	4.3 Lead by example to demonstrate that our local environment is	4.3.1 Greater Shepparton City Council to adopt a section of the	Commence adopt a reach activities.	ST	Operational expenditure/	Sustainability &	
	valued by Council staff voluntarily cleaning up a specific location.	Goulburn River as part of the RiverConnect Project for site clean- up and restoration efforts.	Conduct two staff rubbish clean-up days a year.	OG	seek funding avenues	Environment	
Planning and regulation powers	4.4 Reduce the incidence of rubbish dumping and the prevalence of litter	4.4.1 To utilise Council's regulation powers to reduce instances of	Develop a compliance and enforcement reporting system.	MT	Internal staff time	Local laws	
	along roadsides and other areas of public land.	littering and rubbish dumping.	Achieve a reduction in the number of Local Law breaches over the life of this Action Plan.	OG	Operational expenditure		

4. Using our resources wisely – Resource Efficiency and Waste management							
Key direction	Objective	Action	Performance indicators /targets	Timeline	Resource implications	Responsibility *Lead branch	
	4.5 To increase the recovery of resources and	4.5.1 Explore opportunities to reduce the amount of industrial and commercial waste material going to landfill.	Achieve Victorian Government waste policy targets.	OG	Operational expenditure/ seek funding avenues	Waste Services	
>	minimise the quantity of waste going to landfill.	4.5.2 Explore opportunities to	Achieve Victorian Government waste policy targets.		Operational expenditure/		
munit	waste going to ferrarini	increase resource recovery through transfer station activities.	Increase the volume of municipal generated waste being diverted from landfill annually.	OG	seek funding avenues	Waste Services	
r our com			Produce a minimum of four media releases per year to raise awareness about littering and rubbish dumping issues.				
Enable and empower our community	4.6 Our community discards waste responsibly by utilising Council's waste management services and facilities.	4.6.1 Develop and implement an education and awareness campaign to reduce littering and rubbish dumping.	Circulate a minimum of four social media communications per year to raise awareness about littering and rubbish dumping issues.	OG	Internal staff time	Waste Services	
able and			Work with the relevant stakeholders to calculate and publicise the costs associated with cleaning up dumped rubbish.				
ū		4.6.2 Provide support to local businesses, community groups and community members involved in resource recovery and rubbish	Support a minimum of four community groups (Transition Tatura, Landcare etc.) or local businesses annually to provide rubbish clean-up activities on public land.	OG	Operational expenditure/ seek funding	Waste Services	
		clean-up activities.	Support a minimum of one community waste related event annually.		avenues		
orate ders			Continue to support waste management partnerships (Resource GV etc.).	OG	Operational expenditure	Waste Services	
Advocate and collaborate with key stakeholders	4.7 Maximise collaboration opportunities with Government agencies, stakeholders and other Local Governments.	4.7.1 Advocate, partner and support key stakeholders, government agencies and other Local Governments to maximise opportunities to improve waste management activities.	Collaborate with relevant local stakeholders to investigate the implementation of "Blue Economy" solutions to utilise local production outputs.	OG	Operational expenditure/ seek funding avenues		
			Apply for external funding annually for the implementation of waste management actions and activities.	OG	Internal staff time		

5. Susta	5. Sustainable development, planning and transport								
Key direction	Objective	Action	Key indicators /targets	Timeline	Resource implications	Responsibility *Lead branch			
	5.1 Council pursues	5.1.1 Develop a Peak Oil Risk Assessment Study and Action Plan	Develop a Peak Oil Strategy.	MT	Operational expenditure (\$30K)/ seek funding avenues	Sustainability & Environment			
	best practice in sustainable development,	(Energy Descent Strategy)	Implement 80% of Peak Oil Strategy actions within specified timeframes.	OG	Operational expenditure/ seek funding avenues	Livionment			
	planning and transport.	5.1.2 Continue to review the Infrastructure Design Manual (IDM) to ensure it reflects best practice in environmental sustainability for Council development, planning, and transport activities.	Provide ongoing support to the Infrastructure Design Manual (IDM) Working Group and Board.	OG	Operational expenditure/ seek funding avenues	Projects			
Leading by example	5.2 Reduce the environmental impacts of Council staff travel	5.2.1 Continue Council's commitment to environmentally friendly fleet procurement.	90% of vehicles purchased annually by Council meet the CEO Fleet Directive environment specifications.	OG	Internal staff time	Works			
ρζ		5.2.2 Encourage staff commute to work or other work related events via car-pooling, public transport, walking or cycling.	Explore the feasibility of developing a "Green Travel plan"	MT	Internal staff				
Leading			Council supports the carpooling incentive program for the next four years.		time/ seek funding avenues	Sustainability &			
	requirements.		Increase the number of Council staff commuting to work (or work related activities) via walking, cycling or car- pooling.	OG	Internal staff time	Environment			
	5.3 Reduce the		100% of new developments contain adequate infrastructure to meet community non-motorised and public transport needs (where necessary).			Statutory planning			
	municipality's dependence on	5.3.1 Ensure that adequate infrastructure is available to meet	Implement 75% of the Cycling Strategy's actions within specified timeframes.	OG	Operational expenditure/ seek funding avenues	Strategic Planning			
	personal, fossil fuel powered transportation.	community non-motorised and public transport needs.	Complete the redevelopment of the Maude Street bus interchange to encourage a higher level of public transport use by 2016. *Subject to funding availability			Planning			
			Provide funding for bicycle infrastructure projects at levels above the Victorian rural Council average spend			Projects			

5. Susta	5. Sustainable development, planning and transport								
Key direction	Objective	Action	Key indicators /targets	Timeline	Resource implications	Responsibility *Lead branch			
			annually. *According to the BiXE Victorian Regional Zone Benchmark						
		5.3.2 Develop the Goulburn Valley Freight and Logistics Centre (GV Link).	Continue to market the investment opportunities of GV Link.	OG	Operational expenditure/ seek funding avenues	Investment Attraction			
Planning and regulation powers	5.4 Embed Environmentally Sensitive Design (ESD) principles into all development, planning, and transport activities within the City of Greater Shepparton.	5.4.1 Amend the Greater Shepparton Planning Scheme to include Environmentally Sensitive Design (ESD) principles in the design phase of the planning permit process. *Dependent on outcomes from the Ministerial Advisory Committee (TRIM: 2013/43166)	Amend the Greater Shepparton Planning Scheme to include Environmentally Sensitive Design (ESD) principles.	MT	Operational expenditure (\$2.5K)	Strategic Planning			
ommunity	5.5 Partner with,	5.5.1 Encourage and support businesses, industry and the general community to increase awareness and commitment to Environmentally Sensitive Design (ESD) principles.	Community, business and industry are all represented at annual community information sessions regarding ESD principles and the long term benefits these principles will provide to the community.	OG	Operational expenditure/ seek funding avenues	Sustainability & Environment			
Enable and empower our community	support and empower our community to reduce vehicle use and achieve sustainable	5.5.2 Increase the community's use of public transport, cycling, walking or car-pooling as alternate commuting options.	Produce four media releases and social media posts a year to promote public transport, cycling, walking or carpooling as alternate commuting options.	OG	Internal staff time	Sustainability & Environment			
ble and em	development and lifestyles across the municipality.		Support a minimum of one community group (Transition Tatura etc.) annually to raise community awareness of peak oil issues and opportunities.		Operational expenditure/ seek funding avenues				
Enal		5.5.3 Encourage the community to grow fruit and vegetables at home or at community gardens, and purchase locally grown produce.	Increase the number of residents utilising community hub or Kidstown facilities to grow their own fruit and vegetables.	OG	Operational expenditure/ seek funding avenues	Active Living			

5. Sustainable development, planning and transport								
Key direction	Objective	Action	Key indicators /targets	Timeline	Resource implications	Responsibility *Lead branch		
			Sustainability and Environment Team representative to attend 90% of community garden development events.		Internal staff time	Sustainability & Environment		
			Promote and encourage the consumption of home-grown fruit and vegetables.	OG	Internal staff time	Sustainability & Environment		
y stakeholders	5.6 Lobby Governments and collaborate with key stakeholders to increase sustainable development outcomes and minimise vehicle use.	5.6.1 Collaborate with agencies, Local Governments and other key stakeholders to achieve sustainable development and reduce vehicle use across the municipality.	Council continues to provide support to relevant sustainable development, planning and transport partnerships (IDM Working Group, cycling stakeholders etc.).	OG	Operational expenditure/ seek funding avenues	Strategic Planning Arts, Tourism, Events Projects		
and collaborate with key stakeholders			Council applies for funding annually for the implementation of sustainable development, planning and transport actions and activities.			Strategic Planning Community Strengthening Investment Attraction		
Advocate and cc		5.6.2 Advocate and lobby the Federal and State to ensure sustainable development and reduce vehicle use across the municipality.	Continue to lobby the Federal and State Governments to improve passenger and freight rail infrastructure and services for the City of Greater Shepparton (including high speed rail).	OG	Internal staff time	Strategic Planning Investment Attraction		

6. Council governance and operations								
Key direction	Objective	Action	Performance indicators/targets	Timeline	Resource implications	Responsibility *Lead branch		
			Commence quarterly environmental sustainability reporting to Executive.	ST	Internal staff time			
		6.1.1 Commence annual	Produce annual environmental sustainability reports.	OG	Operational expenditure (\$3K)			
		reporting on Council's environmental sustainability activities and achievements.	Implement 80% of Environmental Sustainability Strategy actions within specified timeframes.	OG	Operational expenditure/ seek funding avenues	Sustainability & Environment		
	6.1 Provide open and transparent reporting on		Identify and establish benchmarks to report against. Complete State of the Environment reports as appropriate	LT	Internal staff time			
Leading by example	Council's environmental sustainability	6.1.2 Improve internal communication about Council's environmental sustainability activities and achievements.	 (during 4 year review). Environmental sustainability annual reports circulated internally. Sustainability and Environment staff members attend a minimum of four internal team meetings to discuss environmental sustainability activities and achievements across the organisation. Environmental Sustainability tips/articles/achievements are included in 75% of "From the CEO's Desk", 75% of "Exec Speak" internal communications and twelve "Insite" articles a 	OG OG	Internal staff time Internal staff time	Sustainability & Environment Sustainability & Environment		
		 6.2.1 Ensure that Council's Environment Branch (Sustainability and Environment, Waste Services) is adequately resourced (staff and annual budget). 	year. Complete the review of the Sustainability and Environment Department by the end of 2014	ST	Internal staff time	Manager, Sustainability & Environment		
	6.2 Ensure that Council has the culture, resources, and staff to deliver our environmental sustainability objectives.		Appoint an administration position for the Waste Services and Sustainability and Environment Teams.	ST	Operational expenditure (\$67K)	Director,		
			Increase the Sustainability and Environment Team by two FTE officers (1x Sustainability Officer, 1x Environment Officer) to bring staff numbers closer to the average for Victorian City Councils.	MT	Operational expenditure (\$150K)	Sustainable Development		

6. Council governance and operations								
Key direction	Objective	Action	Performance indicators/targets	Timeline	Resource implications	Responsibility *Lead branch		
			Employ a Waste and Resource Recovery Education and Sustainability Officer (refer to Waste and Resource Recovery Management Strategy 2013-2023).	ST	Operational expenditure (\$75K)			
			50% of budgeted Sustainability and Environment Team projects are committed before November 30 each year. 80% of budgeted Sustainability and Environment Team projects commence before November 30 each year. Implement 80% of Environmental Sustainability Strategy actions within specified timeframes.	OG	Operational expenditure/ seek funding avenues	Manager, Sustainability & Environment		
e		6.2.2 Support the Sustainable Working Group (SDWG) to implement environmental sustainability behaviour and cultural	The Sustainable Working Group develop and implement an annual action plan for environmental sustainability behaviour and cultural change activities. The SDWG implements 80% of actions in the SDWG action plan annually.	OG	Operational expenditure (\$5K)/ seek funding avenues	Manager, Sustainability & Environment		
examp		change across the The The	The SDWG meeting attendance rate is 80% per year.		Internal staff time			
Leading by example	6.3 Council staff have the	6.3.1 Conduct staff training for key environmental sustainability programs or	Undertake annual environmental sustainability training (including induction, procurement, ECO-buy, weed identification and vehicle hygiene etc) for appropriate staff.	OG	Internal staff time	Learning & Development		
Ĕ	skills, knowledge and capacity to achieve	knowledge and processes (procurement etc)	Conduct environmental sustainability training annually for appropriate Council staff (with an 80% attendance rate).			Sustainability & Environment		
	Council's environmental sustainability objectives.	6.3.2 Provide training and learning opportunities for the Sustainability & Environment Team.	Training and PD opportunities identified during annual staff PES (Performance Evaluation System) are budgeted and approved.	OG	Operational expenditure/ seek funding avenues	Manager, Sustainability & Environment		
	6.4 Ensure environmental sustainability implications	6.4.1 Integrate	Integrate the Environmental Sustainability Checklist into the IPM project-planning program.	ST		Sustainability & Environment		
	are considered in project planning and decision- making activities.	6.4.1 Integrate environmental sustainability considerations and impacts into all Council projects and programs.	Integrate environmental sustainability considerations into all infoCouncil reports.	ST	Internal staff			
			Increase Council's "green spend" from 2014 to 2017.	OG	time	Procurement		

6. Cour	6. Council governance and operations							
Key direction	Objective	Action	Performance indicators/targets	Timeline	Resource implications	Responsibility *Lead branch		
Planning and regulation powers	6.5 Ensure that Council utilise the most appropriate and effective planning and regulation powers available.	6.5.1 Establish a committee or internal working group to develop clear guidelines on which regulatory services area of Council is in the best position to achieve the best outcomes under the relevant legislation.	Establish a Regulatory Services Working Group. Planning, Building Services, Local Laws, Environmental Health, Sustainability, and Environment would all be involved. Regulatory Services Guidelines are developed.	ST	Internal staff time	Citizens Service		
		6.6.1 Promote Council's environmental sustainability activities and achievements	Circulate and promote environmental sustainability annual reports are to the community via traditional and social media avenues.	OG	Operational expenditure (Action 6.1.1)	Sustainability & Environment		
ý	6.6 Our community is well informed and knowledgeable about Councils environmental sustainability activities and achievements.	out 6.6.2 Improve ental communication with the vities community about Council's	Install energy and water consumption monitors at Aquamoves and the Welsford Street office.	MT	Operational expenditure/ seek funding avenues	Sustainability & Environment		
Enable and empower our community			Promote environmental sustainability activities and achievements via social media at least twelve times a year. Circulate monthly media releases via traditional media.	OG	Internal staff time			
er our (Monitor and report on the use of QR (Quick Reference) signage at Council managed sites annually.					
empowe			Increase the bi-annual Auspoll Community Survey performance rating score for Council's environmental sustainability responsibilities in 2014 and 2016.					
le and			Complete an overhaul of the Sustainability and Environment section of the Council website.	ST	Internal staff time	Sustainability & Environment		
Enab	6.7 Our community is	6.7.1 Develop and	Promote environmental sustainability issues and opportunities via social media at least six times a year.					
	well informed and knowledgeable about environmental sustainability issues in our	formed and edgeable about nmental inform the community about	Circulate monthly media releases to media outlets. Increase the bi-annual Auspoll Community Survey importance rating score for Council's environmental sustainability responsibilities in 2014 and 2016.	OG	Internal staff time	Sustainability & Environment		
	municipality.	is valued.	Organise a minimum of two, community environmental sustainability related events annually.		Operational expenditure/			

6. Council governance and operations								
Key direction	Objective	Action	Performance indicators/targets	Timeline	Resource implications	Responsibility *Lead branch		
					seek funding avenues			
Enable and empower our community			Monitor and report on the use of QR (Quick Reference) signage at Council managed sites annually.		Internal staff time	Sustainability & Environment		
	6.8 Promote and/or support the environmental protection and enhancement activities currently occurring in the municipality.	6.8.1 Provide support and publicity for community groups and others in the community undertaking positive environmental activities.	Support a minimum of twelve community (Landcare, community plan etc.) groups annually to undertake positive	OG	Operational expenditure/ seek funding avenues	Sustainability & Environment		
			environmental activities.			Waste Services		
			Support a minimum of two, community environmental sustainability related events annually.			Sustainability & Environment		
ы. Ш						Waste Services		
Advocate and collaborate with key stakeholders	6.9 Stakeholders are informed and engaged in the implementation of the Environmental Sustainability Strategy.	6.9.1 Council endorse the formation of the Greater Shepparton Environmental Sustainability Stakeholder Advisory Committee.	Council endorse the Greater Shepparton Environmental Sustainability Stakeholder Advisory Committee Terms of Reference in 2014.	OG	Operational expenditure (\$1K)/ seek funding avenues	& Environment		
			Greater Shepparton Environmental Sustainability Stakeholder Advisory Committee meetings are held quarterly.		Internal staff time			
			Implement 80% of Environmental Sustainability Strategy stakeholder involvement actions within specified timeframes.					
		6.9.2 Work with stakeholders to improve the quality of environmental data for the City of Greater Shepparton.	Improve State of the Environment data in terms of reliability and specifically to our municipality in the review of the Strategy in 2017	LT	Internal staff time	Sustainability & Environment		
	6.10 Advocate and collaborate with government agencies to improve environmental management outcomes across the municipality.	6.10.1 Continue to enter into partnerships with agencies and stakeholders to develop and implement joint projects.	Council continues support for partnership programs (such as GBGA, Municipal Catchment Coordinator, RiverConnect etc).	OG	Operational expenditure (RiverConnect \$90K, GBGA - Action 3.6.1)	Sustainability & Environment		
			Investigate entering into GIS data share agreements with the relevant agencies and departments (DEPI, GVW etc).		Internal staff time			

6. Council governance and operations								
Key direction	Objective	Action	Performance indicators/targets	Timeline	Resource implications	Responsibility *Lead branch		
Advocate and collaborate with key stakeholders			Establish a minimum of two new environmental sustainability partnerships before the Strategy is reviewed in 2017		Internal staff time			
		6.10.2 Actively seek funding opportunities for the implementation of the Environmental Sustainability Strategy.	Council apply for funding annually for the implementation of Environmental Sustainability Strategy actions.	OG	Internal staff time	Sustainability & Environment		

Acronyms

CES – Office of the Commissioner for Environmental Sustainability (State)	G-MW - Goulburn-Murray Water (Regional)			
DEPI – Department of Environment and primary Industries (State)	GVW - Goulburn Valley Water (Regional)			
DHS – Department of Human Services (State)	GB WQWG - Goulburn Broken Water Quality Working Group (Regional)			
DIICCSRTE – Department of Industry, Innovation, Climate Change, Science Research and	IDM Group (Infrastructure Design Manual) (State)			
Tertiary Education (Federal)	LaBIF - Land and Biodiversity Implementation Forum (Regional)			
DPCD - Department of Planning and Community Development (State)	MAV - Municipal Association of Victoria (State)			
DSEWPaC -De Department of Sustainability, Environment, Water, Population and	MDBA - Murray-Darling Basin Authority (Federal)			
Communities (Federal)	NRWMPP - Northern Region Water Monitoring Partnership Program (Regional)			
DTPLI - Department of Transport, Planning and Local Infrastructure (State)	PV – Parks Victoria (State)			
EPA - Environment Protection Authority (State)	Resource GV – Resource Goulburn Valley (Regional)			
GB CMA - Goulburn Broken Catchment Management Authority (Regional)	SV - Sustainability Victoria (State)			
GBGA - Goulburn Broken Greenhouse Alliance (Regional)	TfN – Trust for Nature (State)			
GB LGBRG - Goulburn Broken Local Government Biodiversity Reference Group (Regional)	YYNAC – Yorta Yorta Nation Aboriginal Corporation (Regional)			
GMLN - Goulburn Murray Landcare Network (Regional)				
	VECCI - Victorian Employers' Chamber of Commerce and Industry (State)			

References

- ABS (Australian Bureau of Statistics) 2012, "2011 Census of Population and Housing Greater Shepparton" Atlas.id, accessed April – September 2013, <u>http://profile.id.com.au/shepparton/population?WebID=110</u>
- Anderegg W et al. 2010, "Expert credibility in climate change", *Proceedings of the National Academy of Sciences* of the United States of America, Volume 107 Number 27
- Benalla Rural City Council 2011, Environment Strategy Discussion Paper, Benalla Rural City Council, Benalla
- Benalla Rural City Council 2011, Environment Strategy 2011-2015, Benalla Rural City Council, Benalla
- BOM (Bureau of Meteorology) 2013, Commonwealth Government of Australia, accessed April September 2013, http://www.bom.gov.au/climate/averages/tables/cw_081125.shtml
- Cook J et al. 2013, "Quantifying the consensus on anthropogenic global warming in the scientific literature" *Environmental Research*, Volume 8 <u>http://www.skepticalscience.com/docs/Cook_2013_consensus.pdf</u>
- Cook C et al. 2009, "Examining the Scientific Consensus on Climate Change" EOS Transactions American Geophysical Union, Volume 90, Number 3, pg 21-22
- Connor P 2008, Roadside Management Strategy, Greater Shepparton City Council, Shepparton
- Connor P, Ralph M 2009, *Strategic Framework for Managing Native Vegetation on Road Reserves*, Greater Shepparton City Council, Shepparton
- Coomes Consulting 2006, Greater Shepparton 2030 Strategic Plan, Greater Shepparton City Council, Shepparton
- CSIRO (Commonwealth Scientific and Industrial Research organisation) 2003, Natural Values: Exploring options for enhancing ecosystem services in the Goulburn Broken Catchment, CSIRO Sustainable Ecosystems, Canberra
- Daily G 1997, Natures Services societal dependence on natural ecosystems, Island Press, Washington
- DEPI (Department of Environment and Primary Industries) 2012, Draft Victorian Waste and Resource Recovery Policy, State Government of Victoria, Melbourne
- DNRE (Department of Natural Resources and Environment) 2002a, *Biodiversity Action Planning Strategic overview for the Victorian Riverina bioregion*, State Government of Victoria, Melbourne
- DNRE (Department of Natural Resources and Environment) 2002b, *Healthy Rivers, Healthy Communities & Regional Growth Victorian River Health Strategy*, State Government of Victoria, Melbourne
- DPCD (Department of Planning and Community Development) 2010, *The Hume Strategy for sustainable communities 2010-2020*, State Government of Victoria, Melbourne
- DSE (Department of Sustainability & Environment) 2008, *Climate Change in Goulburn Broken*, A Victorian Climate Change Adaptation Program document produced for the State Government of Victoria, accessed April – September 2013,

http://www.gbcma.vic.gov.au/downloads/ClimateChange/Climate_Change_in_Goulburn_Broken.pdf

- DSE (Department of Sustainability & Environment) 2009, *Securing Our Natural Future A white paper for land and biodiversity at a time of climate change*, State Government of Victoria, Melbourne
- EPA Victoria, "Australia's and Victoria's Ecological Footprint", State Government of Victoria, Melbourne, accessed April – September 2013, <u>http://www.epa.vic.gov.au/ecologicalfootprint/ausFootprint/default.asp</u> <u>http://www.epa.vic.gov.au/ecologicalfootprint/about/whatdoesitmean.asp</u>
- GB CMA (Goulburn Broken Catchment Management Authority) 2013a, *Goulburn Broken Catchment Management Authority Annual Report 2012-13 (Draft),* State Government of Victoria, Melbourne
- GB CMA (Goulburn Broken Catchment Management Authority) 2013b, *Goulburn Broken Regional Catchment Strategy 2013-2019,* State Government of Victoria, Melbourne

- GB CMA (Goulburn Broken Catchment Management Authority) & DPI (Department of Primary Industries) 2008, Weeds of the Goulburn Broken – A field guide to terrestrial and aquatic weeds, 3rd Edition, Shepparton
- Greater Shepparton City Council 2005, *Waste and Resource Recovery Management Strategy 2005-2015*, Greater Shepparton City Council, Shepparton
- Greater Shepparton City Council 2007, Greenhouse Local Action Plan Cities for Climate Protection (CCP) Program Milestone Five Report, Greater Shepparton City Council, Shepparton
- Greater Shepparton City Council 2009, *Sustainable Purchasing Policy*, Greater Shepparton City Council, Shepparton
- Greater Shepparton City Council 2009c, Procurement Policy, Greater Shepparton City Council, Shepparton
- Greater Shepparton City Council 2010, *Waste and Resource Recovery Management Strategy Review 2010*, Greater Shepparton City Council, Shepparton
- Greater Shepparton City Council 2013, *Sustainable Decision-Making Policy,* Greater Shepparton City Council, Shepparton
- Greater Shepparton City Council 2013, "Greater Shepparton Planning Scheme", accessed January April 2013, <u>http://planningschemes.dpcd.vic.gov.au/greatershepparton/home.html</u>
- Greater Shepparton City Council 2013, *Council Plan 2013-2017 and Strategic Resource Plan*, Greater Shepparton City Council, Shepparton
- Indigo Shire Council 2009, Indigo Shire Council Environmental Strategy, Indigo Shire Council, Beechworth
- Municipal Association of Victoria (MAV) 2011, MAV Local Government Environmental Sustainability Survey Report 2010, Municipal Association of Victoria, Melbourne
- Miles C, McLennan R, Keogh V, and Stothers K 2010, *Biodiversity Strategy for the Goulburn Broken Catchment, Victoria 2010-2015*, Goulburn Broken Catchment Management Authority, Shepparton
- Mount Alexander Shire Council 2011, *Environment Strategy 2011-2014*, Mount Alexander Shire Council, Castlemaine
- Murray-Darling Basin Authority (MDBA) 2010, Guide to the proposed Basin Plan: overview, Murray-Darling Basin Authority, Canberra.
- Murray-Darling Basin Authority (MDBA) 2011, Proposed Basin Plan: a draft for consultation, Murray-Darling Basin Authority, Canberra.
- RMCG (Consultants) 2011a, *Goulburn Broken Local Government Regional Climate Change Adaptation Plan*, Goulburn Broken Greenhouse Alliance, Shepparton
- RMCG (Consultants) 2011b, Sustainable Community Strategy Final Report, Greater Shepparton City Council, Shepparton
- VEAC (Victorian Environmental Assessment Council) 2010, *Remnant Native Vegetation Investigation Discussion Paper*, State Government of Victoria, Melbourne
- VEAC (Victorian Environmental Assessment Council) 2011, *Remnant Native Vegetation Investigation Final Report*, State Government of Victoria, Melbourne
- Zittel 2013, "Fossil and Nuclear Fuels the Supply Outlook", Energy Watch Group, April September 2013, http://energywatchgroup.org/fileadmin/global/pdf/EWG-update2013_long_18_03_2013.pdf

APPENDIX I - ENVIRONMENTAL SUSTAINABILITY STRATEGY STAKEHOLDER REFERENCE COMMITTEE -TERMS OF REFERENCE

1. Background

Greater Shepparton City Council has received funding from the Victorian Sustainability Accord for the preparation of an Environmental Sustainability Strategy. The development of the Strategy will enable Council to identify and prioritise sustainability and climate change activities with improved integration across Council strategies and plans.

The project supports local capacity building through a strong engagement program both across Council business units and within the local community.

The Environmental Sustainability Strategy will address issues that have arisen through the development of Council's Local Environmental Sustainability Priority Statement (LESPS), and strategic implementation actions identified in the Municipal Strategic Statement (MSS) namely:

- Prepare an Environmental Strategy incorporating Local Biodiversity Action Plans.
- Prepare an integrated strategy to address all aspects of our environment and to cooperate in the development of regional environmental plans.
- Proactively incorporate sustainability and environmental issues into Council projects and programs.
- Communicate and promote Council's environmental and sustainability commitment and achievements, internally as well as to ratepayers and the wider community.

The Environmental Sustainability Strategy will also:

- Identify an overall vision, broad directions and targets
- Provide a framework for coordinating and regularly reviewing existing environmental sustainability policies, plans and projects
- Assist Council to involve community and cross-Council business units in local sustainability goals and activities
- Identify priority projects and commence action planning.

2. Purpose of Committee

The Greater Shepparton City Council (Council) has resolved to appoint a Stakeholder Reference Committee to inform the development of Council's Sustainability and Environmental Strategy (Strategy).

The Stakeholder Reference Committee (SRC) will have input into the development of the Strategy. The Committee's role is one of providing advice. It is not delegated to make decisions on behalf of the Council.

3. Functions of the Committee

The Stakeholder Reference Committee will have the following functions:

- To advise and assist in the development and review of Council's Environmental Sustainability Strategy.
- To advise and assist in determining the Environmental Sustainability Strategy scope.
- Engage and communicate with the wider community according to the guidelines and requirements of the Strategic Community Engagement Plan and Communications Plan developed from the Greater Shepparton Community Engagement Strategy and Community Engagement Toolkit.

Stakeholder Reference Committee members may be called upon to vote on decisions concerning the development of the Strategy. Each committee member will have one (1) vote to give towards the specified options, if and when this occasion occurs. The quorum for the Stakeholder Reference Committee is ten (10) people.

There is no term of office for Stakeholder Reference Committee members. Members have been appointed to the Sustainability and Environment Stakeholder Reference Committee on an ongoing basis commencing 19 April 2012 and continuing until the completion of the development of the Sustainability and Environment Strategy.

The Stakeholder Reference Committee Terms of Reference will be reviewed once the Strategy has been completed. It is possible that the Stakeholder Reference Committee may continue to function as an implementation committee after the Strategy has been adopted by Council. Decisions on this matter will be finalised once the Strategy has been completed.

4. Stakeholder Reference Committee Membership

The Environmental Sustainability Strategy Stakeholder Reference Committee shall comprise of eighteen (18) members appointed by resolution of Council as follows:

- Councillor (Chair), Greater Shepparton City Council Councillor Cr Kevin Ryan
- Manager, Sustainability and Environment, Greater Shepparton City Council Greg McKenzie
- Sustainability and Environment Officer, Greater Shepparton City Council Travis Turner
- Goulburn Broken Catchment Management Authority nominee (GB CMA) Rachael Spokes
- Department of Environment and Primary Industries (DEPI) nominees (3) (1 x Accord Project Officer, (Chelsea Cherry) + 1 x Biodiversity Officer (Kate Stothers), 1 x Sustainability Services Officer, (Jen Pagon))
- Parks Victoria (PV) nominee Neville Wells
- Resource GV nominee Nick Nagle
- Goulburn Broken Greenhouse Alliance nominee (GBGA) Tracy Taylor
- Goulburn Murray Landcare Network nominee (GMLN) John Laing
- Goulburn Valley Environment Group nominee (GVEG) Barb Gray
- Yorta Yorta Nation Aboriginal Corporation nominee (YYNAC) Neville Atkinson
- Goulburn-Murray Water nominee (G-MW) Gabe O'Brien
- Goulburn Valley Water nominee (GVW) Alan Tyson
- Community representatives (3) Royce Dickson, Dani Beischer and Sue Hunt

5. Expression of interest and selection process

The Council will call for written expressions of interest from members of the community to fill the three community representative positions. Expressions of Interest will be assessed against the following selection criteria:

- Demonstrated experience in environment management, within a community setting.
- Knowledge of environmental issues affecting the City of Greater Shepparton.
- The ability to access networks and stakeholder groups within the community.
- Experience facilitating/ leading community-based committees.

Formal qualifications in environmental management, or a related discipline would be well regarded, but not essential.

A selection panel consisting of members of Council's Sustainability and Development Working Group, the Councillor Chair and Deputy Chair will undertake the assessment of submissions, interview applicants (at its discretion) and make recommendations to Council on Committee appointments.

Council will invite the nominated agencies (DSE, DPI, GB CMA, G-MW, GVW, GMLN, YYNAC, GVEG, Resource GV, GBGA and PV) to nominate representatives to the Committee.

6. Financial arrangements

Contributions from each participant to the committee are in-kind.

7. Meeting arrangements

The Greater Shepparton City Council Sustainability and Environment Branch representative will convene the meetings of the committee. The committee will meet approximately monthly. Meetings will be structured, with agenda's prepared and minutes recorded. A copy of the meeting minutes will be forwarded to the Councils Sustainability and Development Working Group.

All members of the committee will:

- Respect and value the views of every member of the committee
- Encourage every member of the committee to contribute to the committee's deliberations;
- Honestly express opinions
- Remain objective and focused on the role of the committee
- Personally accept responsibility for individual actions and as a committee, accept responsibility for committee's decisions.

