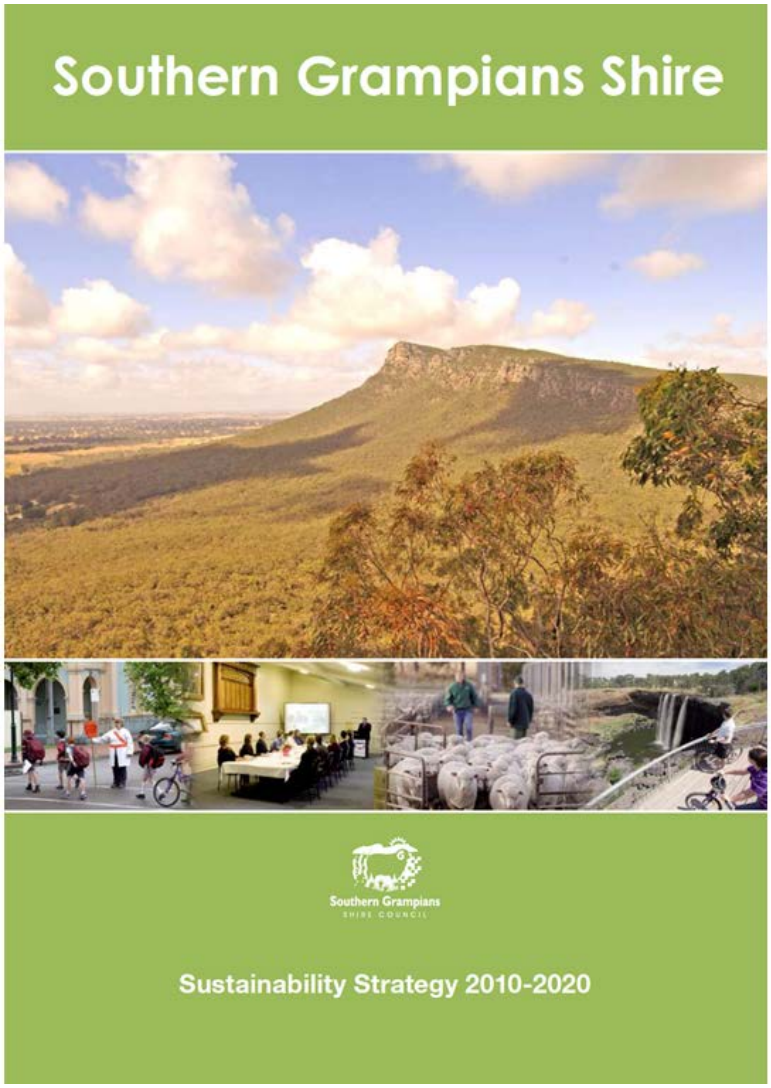


# Sustainability Strategy

# 10 Year Review

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Sustainability Coordinator

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## Executive Summary

The Southern Grampians Shire Council Sustainability Strategy 2010-2020 was developed in 2008/9. The Strategy was adopted by Council in April 2010. It incorporated ideas and visions from agencies, the community and Council and provided a ten year action plan for Council's environmental sustainability actions. The Sustainability Strategy dealt with five areas of activity:

1. Land – invasive species, biodiversity, soil health, land use planning, roadside management, remnant vegetation
2. Water – water conservation, sustainable water use, water sensitive urban design, water quality, domestic waste water, wetlands and waterways
3. Waste – waste reduction, litter, recycling, organic waste diversion, tip-shop, waste to energy
4. Liveability - youth, community capacity and engagement, environmental groups, vulnerable populations, health & wellbeing, Council processes to improve sustainability
5. Climate change – emissions reduction, fleet, climate adaptation, renewable energy, bioenergy, offsetting, carbon management.

Across the five areas of activity the Strategy contained 102 actions. Of the total, 78 have been either started, are ongoing or have been completed. Many are ongoing actions that have been embedded into day-to-day operations. Twenty-four actions have not been started. The reasons for this are detailed in the report but in most cases it is because resources available for community and educational activities have significantly reduced since the strategy was developed or because some of the actions are not local government responsibility.

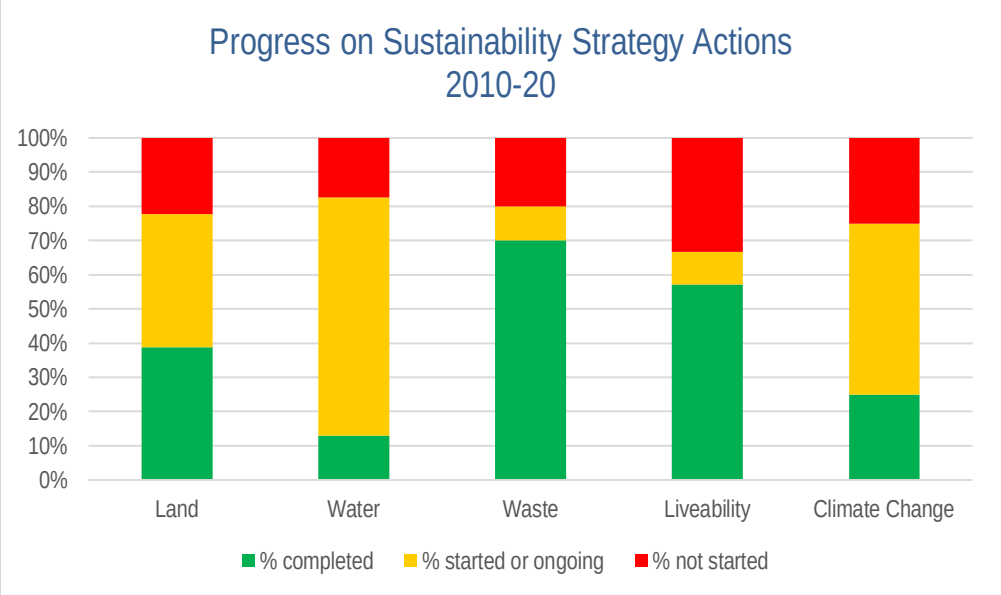


*Figure 1: Progress on Sustainability Strategy Actions*

Significant achievements resulting from the strategy include:

- Road side weeds and vegetation condition have been mapped for all Shire roads
- Links and cooperation with other agencies improved, in particular:
    - Wannon Water
    - Glenelg Hopkins Catchment Management Authority
    - Department of Environment, Land, Water and Planning
    - Other Councils in the region
    - Barwon South West Waste and Resource Recovery Group
    - Sustainability Victoria
    - Southern Rural Water
    - Southern Grampians and Glenelg Primary Care Partnership
- Sustainability principles embedded into a number of administrative processes
- Community grants program developed for Council to support community environmental activities
- A kerbside organic (food and garden) waste collection service introduced
- Installation of public place recycling facilities in many locations across the Shire
- Introduction of E-waste recycling
- Re-use Shop established
- Bin audits conducted regularly
- All towns now have a kerbside waste and recycling service
- Energy audits and carbon inventories completed
- Replacement of 1000 street lights with LEDs and plans to replace a further 500 cost-shared lights
- Energy efficiency in buildings significantly improved and emissions from electricity significantly reduced
- 216 kW of renewable electricity generation installed on Council buildings
- Development of a carbon management plan and implementation of many actions
- Development of a climate change adaptation plan and implementation of some actions

- Inclusion of environmental criteria in the purchase of fleet vehicles, the procurement policy, business cases and tenders
- Establishment of an effective network across the region of Councils' Sustainability officers who work together on projects that have a regional focus
- Improved metering and monitoring of water use and removal of redundant mains water supplies
- Improved monitoring of gas and electricity use
- Contract established to purchase 100% renewable electricity.

The report provides details on activities undertaken in the past decade with further explanations of how the work was carried out, and identifies some future areas to be considered in development of a future Sustainability Strategy to guide Council's activities over the next decade.

# Introduction

The Southern Grampians Shire Council Sustainability Strategy 2010-2020 was developed in 2008/9 by a Steering Committee which included elected Councillors, community and agency leaders from the sustainability, natural resources and environmental management sectors. The Strategy was adopted by Council on 14 April 2010. It incorporated ideas and visions from agencies, the community and Council and provided a ten year action plan for Council's sustainability actions in the Shire.

Council employed a Sustainability Coordinator in 2008 to coordinate the Strategy's implementation. In 2010 a full time NRM Officer (later renamed Biodiversity Officer) was employed to take responsibility for the land management aspects (weeds, pests, native vegetation, revegetation and reserve management) of the Strategy. The Sustainability Coordinator continued to work on the energy, waste, water and liveability elements of the Strategy.

The broader sustainability landscape has changed considerably since 2010 when the Strategy was adopted. The prolonged "millennium drought" from 1995 to late 2009 had focussed attention on water efficiency and water savings so these were emphasised in the Strategy. Awareness of climate change induced by human activity was recognised by all levels of government and an Emissions Trading Scheme was anticipated in the near future. Council had not embarked on any energy efficiency works but recognised the need to understand the carbon footprint of its operations. Climate Change Adaptation was recognised as a concept but Council had not yet focussed on what the implications of climate change would be for the Shire.

Now in 2020 the lifespan of the Strategy is complete. Council has completed a large number of actions from the Strategy and the external conditions have changed significantly so this review will assess what was achieved by the Strategy with comments of how the external operating environment has changed or influenced Council activity.

The Sustainability Strategy included 26 strategic objectives and 104 priority strategic actions across five key themes:

1. Land (including biodiversity, pest plants and animals, soil health, salinity, sustainable agriculture and land use change)

2. Water (including water availability/ security, stormwater, water quality, waterway health, water conservation)

3. Waste (including resource use, 'reduce, reuse, recycle', landfill, composting)

4. Liveability (including economic prosperity and employment; social wellbeing, access to health, education and aged care facilities, telecommunication and transport services, governance, aesthetically pleasing and being a safe and good place to live or visit) and

5. Climate (including energy efficiency, alternative energy sources, emissions management, use of fossil fuels and adaptation to climate change).

The Sustainability Strategy was directly linked to a series of existing plans and strategies including the Roadside Vegetation Management Plan, the Public Health and Wellbeing Plan, Leisure plans,

Sustainable Water Use Plan, the Domestic Wastewater Management Plan and the Lake Hamilton Management Plan.

Implementation of the Sustainability Strategy was coordinated by the Sustainability Coordinator and the Biodiversity Officer but involved all Council departments as well as a number of other agencies particularly the Glenelg Hopkins Catchment Management Authority (GHCMA), the Department of Environment, Land, Water and Planning (DELWP), the regional water authority Wannon Water, the Barwon South West Waste and Resource Recovery Group (BSWWRRG) and the Southern Grampians and Glenelg Primary Care Partnership (SGGPCP).

## Progress on Measures and Targets

The following review summarises the progress made in relation to the measures and targets listed in the Sustainability Strategy under each key theme, then describes in more detail what actions have been taken against the priority strategic actions 1.1 through 26.7.Measures and Targets - a snapshot
In this part of the review the measures and targets set for each area (land, water etc) for the 2010-20 period are reviewed using the following indicators:

☺ = good progress or completed ☹ = started/part progress ☹ = not started

### 1. Land

| Measure/Target | Progress | Comments |
|---|---|---|
| Implementation of weed control programs on roadsides | ☺ | Eradication of Regionally Prohibited & Controlled weeds on Council roadsides is continuing. Funding received annually from DEWLP. |
| Training for relevant Council staff in weed identification and management completed | ☹ | Training was completed in May 2011. Need for training is ongoing – staff turnover, new managers. |
| Training for relevant Council staff in weed hygiene completed | ☹ | Training was completed in May 2011. Need for targeted training is ongoing – staff turnover, new managers. Hamilton and Dunkeld depots primarily (Chilean Needle grass and Serrated tussock weed hygiene zones mapped) |
| Protocol for works on roadside developed and adopted | ☺ | The process is in place (Construction Environment Management Plans). Roadside Management Plan was updated and adopted in 2019 – provides detail on what activities are permitted on roadsides. |
| Invasive species mapping for high priority vegetation roadsides | ☺ | Weed mapping was done in 2011 and forms the basis for the weed control program. Weed infestation zones are marked in Council GIS mapping system. Remote mapping system is being developed in 2020 which will continually update the data set. |
| Weed enforcement protocols developed, resource allocation for a weed gazetted officer or environmental control officer | ☹ | Council employed a Natural Resource Management (now called Biodiversity) Officer in October 2010. The position has been held by five different people since 2010. Councils have no legal capacity to undertake weed enforcement so this target is not appropriate. |
| Formal agreements/MOU developed for information sharing between Council and other agencies. | ☺ | Ongoing working relationships between Parks Victoria, GHCMA and DELWP have been established. Weed and native vegetation mapping information is shared with other agencies. A Heads of Agreement between Council, GHCMA and Wannon Water has been developed. |

## 2. Water

☺ = good progress or completed  😐 = started/part progress  ☹ = not started

| Measure/Target | Progress | Comments |
|---|---|---|
| Number of prioritised actions identified under the Sustainable Water Use Action Plan (SWUP) prioritised and completed | ☺ | A number of the actions specified in the SWUP have been completed or are ongoing. Target was achieved. |
| Sustainable Water Use Plan and Domestic Waste Water Management plan reviewed and updated | ☺ | The Sustainable Water Use Plan (2006) was an initiative provided through the Victorian Government as part of its 2004 White Paper "Securing our Water Future Together". No resources have been provided since then to review the plan. The Hamilton Integrated Water Management Plan will address issues for the Hamilton urban area. In the coming years IWM planning should be extended to other towns in the Shire.<br><br>Councils are required under the State Environment Protection Policy (Waters of Victoria) to develop a Domestic Wastewater Management Plan. This has been completed by Council's Environmental Health Department in 2019. Audits of domestic waste water systems in Penshurst, Glenthompson, Branxholme, Balmoral, Cavendish and Hamilton (14 unsewered lots) have been completed. Council has added Domestic Waste Water management to its list of advocacy priorities and is lobbying state government agencies for support to improve the situation in unsewered towns. Target was achieved. |
| Progress towards Council's goal of reducing water consumption in all Council's operations by 10% by 2012 compared to 2004-2009 | ☹ | See Table 1. Water use has in general continued to increase every year since the baseline year (2006). Water restrictions were in place from 2005 to 2010. 2010-11 was an abnormally wet year with annual rainfall of 902 mm so total water was lower in that year. Water use in 2017/18 was 136,399 kL (more than double the baseline volume of 66,493 kL).<br><br>Demand for water is directly related to weather conditions and with climate change already bringing hotter and drier conditions so we can expect demand for water in Council operations to continue increasing so the focus needs to be on replacing potable water with alternative supplies for open space irrigation, on improving water use efficiency and on climate change adaptation. |
| Progress towards rainwater capture for Council's four main facilities: number of | ☺ | Rainwater tanks have been installed across the Shire on a number of Council buildings. A total of 745,800 litres of rain water storage was installed between June 2009 and May 2015 (See Table 2). |

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| rainwater tanks and volume of water collected compared to 2008-09 levels | | |
| Progress towards promoting use of rainwater tanks in new developments (target: 10% increase compared to 2008-09 levels) | ☹ | Rainwater tanks are included in the Victorian Building Authority requirements for the mandated 6-star rating for new homes and large extensions. Homeowners can choose to install rainwater tanks or solar hot water to meet the 6-star rating; however the payback period on solar hot water is far shorter than on rain water tanks so that is a more attractive option. Drivers for rain water tank installation are more likely to be water restrictions and the cost of purchasing mains water which are out of Council's control. |
| Number of actions identified under Water Audits for main four facilities of Council prioritised and completed | ☺ | All non-water efficient shower heads at Council's swimming pools have been replaced. All public toilet cisterns have been replaced with dual-flush cisterns. Water efficient taps and shower heads have been installed at the saleyards. As part of the airport refurbishment in 2012 the toilets and all taps were replaced with water-efficient types. At HILAC pool covers were installed which reduced evaporation, saving water, and also saved energy for heating.<br>Recommendations from the audit regarding reusing backwash water for toilet flushing were implemented. Target was achieved. |

## 3. Waste

☺ = good progress or completed  😐 = started/part progress  ☹ = not started

| Measure/Target | Progress | Comments |
|---|---|---|
| 15% increase in the volume of waste diverted from landfill compared to 2008-09 levels | 😐 | The waste diversion rate has fluctuated between 41% and 48%, noting that data collection and accuracy has improved since 2008. The waste diversion rate in 2017-18 and 2018-19 was 44%, slightly higher than the state average of 41% and lower than the Barwon South West regional average of 47%. |
| 10% increase in the volume of recycled material recovered compared to 2008-09 levels | 😐 | Similar to above, the tonnage of recyclables recovered has varied from year to year but reached a maximum of 1758 tonnes in 2018-19 (including drop-off recycling). Future focus should be on reduction of recyclable/recoverable items in waste stream and reducing contamination of recycling. |
| Achieve Sustainability Victoria Best Practice levels of waste management | 😐 | Waste management practices have improved considerably since 2008-09. Council now provides a kerbside waste and comingled recycling collection service to all towns in the Shire including Cavendish and Branxholme.<br><br>An optional organics (FOGO) collection has been offered in Hamilton and Tarrington since 2014 and in July 2020 it will be made compulsory in all towns. |
| Household garbage decreased from 356 kg/year to 324 kg/year (regional average) by 2015 | ☹ | In the baseline period 2006-07, the average weight of garbage generated per household through the Council kerbside service was 356 kg. It peaked at 407 kg in 2012-13 and again in 2016-17 and most recently was 369 kg in 2018-19. Household garbage generation has not significantly declined although the accuracy of the original baseline data used in developing the targets is questionable. |
| Household recycling increased from 229 kg/year to 279 kg/year (regional average) by 2015 | ☹ | Household recycling in the Southern Grampians increased from the baseline of 229 kg/hh/year in 2006-07 to a maximum of 295 in 2011-12 but since then has dropped to 213 kg in 2018-19. |
| Organics collected increased from 0 kg/year to at least 50% of 279 kg/year (regional average) by 2015 | ☺ | A feasibility study to examine options for green/organic waste collection and management was carried out in 2011, followed by a trial on 200 households in 2012. In January |

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| | | 2014 an optional fortnightly service for food and garden organics was introduced. The take up rate was lower than expected but survey results show that the users were highly satisfied with the service and the number of households on the service continued to increase (1136 households in November 2019). The total recovery of organic materials in 2018-19 was 505 tonnes, equating to 444 kg/hh/year which vastly exceeds the target, but from a small number of households. The service will be made compulsory in July 2020. |

## 4. Liveability

☺ = good progress or completed  😐 = started/part progress  ☹ = not started

| Measure/Target | Progress | Comments |
|---|---|---|
| Community Engagement Policy developed | ☺ | Completed in 2010. The Community Planning Focus Group was established in 2014 and is comprised of staff from Sustainability, Tourism, Communications, Infrastructure, Planning, Community Services, Environmental Health, Arts and Culture, Emergency Management and Recreation. |
| Structure Plan for CBD developed | ☺ | The Hamilton CBD Structure Plan was released to the community in June 2011 and was finalised in November 2011. Target achieved. |
| Subjective well-being score (aggregate score for Southern Grampians maintained or increased in the medium to long term) | ☺ | Victorian Community Indicators project – Southern Grampians Shire scored above average on most wellbeing indicators in a 2006 study. In its 2015 report (most recent data available) the Subjective wellbeing score for people living in the Southern Grampians Shire was 80.2 compared to the Australian average of 77. Target achieved. |
| Community satisfaction survey delivered on a regular basis | ☺ | The community is surveyed regularly as to their level of satisfaction with Council's performance. Overall performance increased from 52 in 2012 to 58 in 2013, 57 in 2014 then declined to 53 in 2015.The 2019 survey showed an overall performance score of 53, compared to 56 for other large rural shires and 60 statewide. Target achieved. |

## 5. Climate Change

☺ = good progress or completed  😐 = started/part progress  ☹ = not started

| Measure/Target | Progress | Comments |
|---|---|---|
| Number of recommended building retrofitting actions completed under energy audits. Target: three priority actions per year. | ☺ | Target achieved<br><br>2008-10 – Heat pump Market Place and Lake toilet block, HILAC plasma down lights in foyer, ceiling fans Market Place, delamping Market Place, new hand dryer Market Place.<br><br>2010-11 – Heat pump Saleyards toilet block (later moved to Dunkeld VIC), motion sensors Saleyards toilets, HILAC pool blanket, Develop Carbon Management Plan.<br><br>2011-12 – Solar hot water system Penshurst caravan Park, Solar PV 3 kw Hamilton VIC, LED downlights Library.<br><br>2012-13 – Replacement of T8 with T5 fluorescent tubes in library, solar film library front window, replacement of 50 w with 35 w halogen downlights in Hamilton VIC, window tinting north side of Brown St offices, major retrofit works at aerodrome terminal as part of refurbishment (insulation of walls and ceiling, film on windows, LED lights), motion sensors Hamilton depot tea room and toilets, driver training to reduce fuel use<br><br>2013-14 – Replacement of 140 x 36w fluorescent tubes with 18w LED tubes Brown St, solar film Market Place north facing windows.<br><br>2014-15 – HILAC solar PV 30 kw, 998 x 80w street lights replaced with 18w LEDs.<br><br>2015-16 - Insulation installed at Hamilton Depot office building, LED high bay lights installed in HILAC gym, pool and foyer.<br><br>2016-17 – 30 kW solar PV installed on Hamilton Art Gallery, Variable speed drives installed on HILAC pool pumps, LED flood lights at Hamilton Depot additional LED flood lighting at HILAC pool. |

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| | | 2017-18 – LED lighting panels installed at Market Place office. Windows replaced at Senior Citizens building and kindergartens to improve energy efficiency.<br><br>2018-19 – 53 kW solar PV installed on Hamilton Depot, eight storage hot water systems replaced with energy efficient type.<br><br>2019-20 – 100 kW solar PV installed (30 each on PAC, HILAC and Market Place, 6 kW on Animal Pound and 4 kW on Coleraine Depot), LED lighting installed at Hamilton depot, HILAC and Brown St. A further 50 kW to be installed on Livestock Exchange in 2020. |
| Reduction in volume of waste going to landfill by 20%, compared to 2008-09 levels |  | This measure relates to the total municipal, commercial & industrial, building and demolition waste sent to landfill. The total tonnage of waste landfilled in the Shire in 2018-19 was only 4,221 tonnes, a decrease of 58% from the 2008-09 figure of 10,084 tonnes caused largely by a change in commercial waste activity. The Hamilton landfill is currently not in use and all waste types are being transported to an alternative landfill. |
| Number of public educational initiatives run by Council and/or community groups and Waste Reduction Group – at least three per year |  | The Waste Reduction Group (WRG) in conjunction with Council conducted a number of community waste education events in the early part of the decade. However in 2014 the WRG ceased to operate and the functions were taken over by the Barwon South West Waste and Resource Recovery Group. The BSWWRRG has developed a waste education strategy and Council works closely with the group at community education events. |
| Green power purchased by Council 20% first year (2011), reviewed annually |  | Purchase of 20% Greenpower was intended to commence July 2011, however Council at the time declined to go ahead with the Greenpower purchase in 2011 due to the additional cost. Council's electricity purchasing contract will provide renewable electricity for all sites from 1 July 2020.<br>Focus for emissions reduction should in future include reducing gas usage, electrifying passenger fleet, investigating hydrogen for heavy fleet. |

# Review of actions

## Land

Land management is of critical importance in the Southern Grampians Shire as the economic base of the region is dependent on healthy and productive land and many of the Shire's tourist attractions are also land- or natural resource-based. One of Council's important responsibilities as land manager of roadsides and reserves is to control declared weeds. The listing of Victorian Volcanic Plains grasslands as endangered under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 raised the profile of the Shire's native grassland remnants.

When the Strategy was developed the key challenges were identified as:

- Soil decline and increasing dry land salinity
- Addressing the urban/rural pressures on the natural environment within the current local planning scheme
- Further developing community understanding of biodiversity values (including endangered ecological communities) in the context of a predominantly cleared landscape
- Appropriately managing the built environment

Council appointed a Natural Resource Management Officer in October 2010 as the importance of these issues was recognised. Actions in the Strategy were allocated across four areas and significant progress has been made.

### Community capacity and engagement to help community better understand land related issues

| *What we said we would do:* | *What we did* | *Comments* |
|---|---|---|
| 1.1 Collaborate with all relevant agencies for capacity building initiatives within Council (e.g. land/biodiversity/invasive species best practice management) | Roadside vegetation on Council roads within the Shire was mapped for weeds and native vegetation in 2011. Mapping information is shared with other agencies such as the Department of Environment, Land, Water and Planning (DELWP) and the Department of Economic Development, Jobs, Transport and Resources (DEDJTR). Heads of | Collaboration with the other agencies should continue in accordance with existing agreements. |

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| | Agreement has been developed between Council, GHCMA and Wannon Water.<br><br>Council has been collaborating with the Glenelg Hopkins Catchment Management Authority in the revegetation of the Grange Burn.<br><br>Council supported the GHCMA to promote better management and protection of linear grasslands across the Victorian Volcanic Plains and to fence off stretches of the Grange Burn upstream of Lake Hamilton in order to exclude livestock from the stream and reduce the nutrient load which contributes to the blue-green algae problem in the lake. | |
| 1.2 Support partnership projects which enhance local biodiversity, conservation of land/soil/water resources and promote recreation activities in local communities | Council was active in the creation of the Wannon Nigretta Community Group which was formed in 2011 with the intent of undertaking environmental improvement projects.<br><br>The Natural Resource Management/Biodiversity Officer has been actively involved with programs in Environmental Sustainability with local schools and community groups. Council organised a National Tree Day event in Hamilton in | The Wannon Nigretta Group's objectives were to protect and preserve the natural environment in the Wannon Region, educating and informing the community and fostering community involvement in the Wannon Scenic Reserves.<br><br>The school programs started in 2012 and involve students in understanding urban and recreational planning and practical contributions to tree planting, weeding and beautification of natural areas. |

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| | 2019 and will do so again in 2020, and works actively with local schools.<br><br>Council provides the "Greater Grants – Community Sustainability Grants" through which community groups can access funds to carry out biodiversity and conservation works. | Community groups which have received funding for conservation or biodiversity works include the Peter Francis Points Arboretum, HIRL, Friends of Yatmerone Reserve, Panyyabyr and Mirranatwa Landcare groups, Hamilton Field Naturalists Club and the Dunkeld Public Lands Committee. |
| 1.3 Support partnership projects looking to educate the community about soil health and best practice soil management | Through the Greater Grants program Council has supported the Soil Health Group to conduct educational seminars for district farmers. | Not a responsibility of Local Government. GHCMA and DEPI (now DEDJTR) carry out this role. |
| 1.4 Support partnership projects looking to educate the community about biodiversity and threatened species on reserves and private land | As above, Council has supported a number of community groups to carry out conservation and biodiversity projects which include education elements:<br>• Peter Francis Points Arboretum, Coleraine<br>• Salt Creek revegetation<br>• Friends of Yatmerone<br>• Glider boxes – Wannon River<br>• Kanawalla Rail reserve | Financial support through Greater Grants is not available for projects on private land so Council has confined its community grants to biodiversity projects on public land. |
| 1.5 Promote community educational programs on appreciation of natural | Council provides occasional education to the community on biodiversity such as the "Fireside Chat" and bandicoot walk | |

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| environment and the role of its different elements (e.g. soil health, biodiversity, etc) | at the 2016 Sustainable Living Expo. Where relevant Council assists partner organisations to promote events. | |

## Land use planning reflecting appropriate level of stewardship for the environment

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 2.1 Council to review the Southern Grampians Planning Scheme to ensure it guides the appropriate location of urban development (including land use and land capability analysis) | The Southern Grampians Planning Scheme was reviewed in 2010 and the following changes (Amendment C25) were made:<br><br>Rezoning land where another zone is more appropriate to achieve the aims of the Municipal Strategic Statement, including:<br><br>▪Some Farming zoned land close to existing urban areas to Rural Activity Zone;<br><br>▪ Larger lots in Low Density Residential Zone (east of the Hamilton Highway alignment) to Rural Living Zone;<br><br>▪ Low Density Residential land north of North Boundary Road to Rural Living Zone; and | Rural Land Use Strategy is in development. |

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| | Changes to Overlay controls (which guide built form):<br><br>▪ Some modification to existing Development Plan Overlays which apply to land around the outskirts of Hamilton to reflect the masterplans prepared as part of the structure planning process.<br><br>▪ Introduction of Environment Audit Overlays where previously industrial land may now be used for any 'sensitive' land uses such as residential use.<br><br>In 2017 the Planning Scheme was reviewed again, with the following significant amendments undertaken:<br><br>▪ Amendment C14 – Amended the Schedule to the Heritage Overlay to identify those properties included in the Victorian Heritage Register<br>▪ Amendment C25 - Made zone, overlay and local policy changes to implement the Southern Grampians Shire Council Planning Scheme Review 2010 and Indicative Strategic Planning Program, Hamilton Structure Plan 2011 and associated documents, Hamilton Airport Master Plan 2010 and Southern Grampians Shire Economic Development Strategy 2011- 2021 and Southern Grampians Retail Strategy 2011<br>▪ Amendment C29 - Implemented the recommendations of the Dunkeld Structure Plan, January 2014 and Dunkeld Urban Design Guidelines, 2012 through various policy, zone and | |

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| | overlay changes including the introduction of Design and Development Overlays, Development Plan Overlay, Environmental Significance Overlay and Vegetation Protection Overlay<br>▪ Amendment C32 - Implemented the new residential zones, Residential Growth Zone and associated Schedule 1 (Residential surrounding Hamilton central business district) and 14 Neighbourhood Residential Zone and associated Schedule 1 (Church Hill area). Zone maps were also amended to remove references to redundant business zones and include reference to the Commercial 1 Zone<br>▪ Amendment C33 - Implemented the Tarrington Structure Plan (2014) by changing policy, rezoning land from Farming Zone to Rural Living Zone and Township Zone, introducing a new minimum lot size on land in the Rural Living Zone, and inserting Design and Development Overlay Schedule 10, Design and Development Overlay Schedule 11 and Development Plan Overlay Schedule 13 to guide the development of Tarrington<br>▪ Amendment C36 – Applied a permanent Significant Landscape Overlay (SLO) Schedule 6 to Harman's Valley to replace an interim SLO introduced by the Minister for Planning by Amendment C50 in October 2016, to recognise the landscape significance of the feature, as identified by the South West Landscape Assessment Study 2013. | |
| 2.2 Council's Planning Scheme to incorporate relevant environmental layers (e.g. salinity, vegetation, etc.) | A Vegetation Protection Overlay was introduced for Dunkeld in 2014 to protect the red gums that give Dunkeld its scenic character. | Vegetation Protection and Environmental Significance Overlays for the Shire will be a |

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| | | subject within the proposed Natural Assets Strategy |
| 2.3 Council to train key and relevant staff in invasive species identification and management | Training was conducted in May 2011 for weed recognition and identification, job planning to minimise weed and disease spread and weed hygiene for equipment. The training involved 45 outdoor staff and was a key development in the improved management of roadside vegetation. Follow up in-house training conducted by the NRM Officer and the Sustainability Coordinator was done in late 2013 with the 36 outdoor staff involved in the Certificate in Rural Operations Training. | Targeted ongoing training is necessary |
| 2.4 Council to evaluate resources/staff allocation to ensure the effective provision of environmental control / planning and environmental educational services to the community | Council employed a NRM/ Biodiversity Officer in 2010 to provide the required services. | |
| 2.5 Council to support expert agency efforts to better understand agricultural capability and its relationship with other values (e.g. biodiversity, economic markets, etc) | A land-use capability study of the Shire's farming land was conducted in 2014, funded by the Victorian Government which looked at future land use under forecast climate change scenarios. This had a climate change and agriculture focus but did not explore the relationship with "other values". | |

## Protection and enhancement of remnant systems and habitat

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 3.1 Roadside management vegetation: Council to train relevant staff involved in Roadside Management in vegetation management | As part of the mapping process for roadside vegetation the significant native vegetation was identified and ranked according to its quality and these are identified on the Council GIS system. Some areas of particular interest have been signposted to educate the community and Council staff.<br><br>The weed training conducted in 2011 included an element of native vegetation management. Road construction staff were further educated about native vegetation in 2011 by staff from Colac Otway Shire following a serious breach of the law on a roadside. In-house training for road construction staff was done in late 2013 to raise their awareness of the high value vegetation on our roadsides. | Signposts need to be reviewed as vegetation at some of the sites has changed condition.<br><br>Ongoing training for Council staff should be provided to ensure current staff are appropriately educated about native vegetation and weeds. |
| 3.2 Council to adopt appropriate protocols for works on roadside and/or sensitive areas within reserves | Roadside Management Plan was updated in 2019 – this provides guidance on activities, and depends on the vegetation significance rating of the location. | Construction Environment Management Plans are used for internal staff when carrying out roadworks. |

## Invasive species management

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 4.1 Council to map weed distribution on high priority vegetation areas (roadside and reserves) | Weed mapping was completed in 2011 and is continuously being refined as treatment is carried out. | |
| 4.2 Council to lead by example implementing community education programs about weed management roles and responsibilities | Council has acquired funding from the Victorian Government every year since 2011 through its Building Capacity to Respond to Pests funding program. This grant provided for on-ground works, specifically spraying and mulching of regionally prohibited and regionally controlled weeds on municipal roadsides, and for capacity-building. Capacity building included weed mapping and training for roadworks staff in weed identification and weed hygiene. | DEDJTR is the responsible authority for community weed education in general, not Local Government. |
| 4.3 Council to promote existing invasive species management and best practice management programs among community | See 4.5 below | DEDJTR is the responsible authority for community weed education rather than Council. |
| 4.4 Council to work cooperatively with neighbouring councils in the management of new incursions on roadsides | Through the regional Environment Officer Network, Council liaises with neighbouring shires regarding emerging weed issues. | |
| 4.5 Council to support the development of weed control programs in conjunction with other agencies and community groups | Financial support was provided through the Greater Grants program to two Landcare groups in 2013 to control Cape Tulip, St John's Wort and South African Weed Orchid. Biodiversity Officer liaises with Landcare groups to coordinate targeted weed control. | |

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| 4.6 Council to look at increasing the enforcement role to support weed management in private land | There have been no developments related to weeds on private land. | Council has no legal basis for weed enforcement on private land which is the responsibility of the Department of Economic Development, Jobs, Transport and Resources (DEDJTR). |

## Water

The Sustainability Strategy recognises that the region's ongoing prosperity depends on its water supply which is under stress from reduced rainfall and runoff caused by climate change, salinity and algal blooms. It provides direction for water conservation, water quality improvements, behavioural change and capacity building, increased re-use of stormwater, improved sewerage and grey water treatment and for enhancement of significant waterways and wetlands.

A Sustainable Water Use Plan was developed in 2006 in conjunction with four neighbouring Shires and Wannon Water, funded by the Victorian Government. The plan tried to establish how much water Council was using per year and provided a target of 10% water use reduction by 2012 and the actions to do so. The plan was developed in the height of the Millennium Drought and reflects the severe water shortages that the region was experiencing and the pressing need to reduce water consumption. Water restrictions were in place from 2005 to 2010 so the baseline usage of 62,000 kilolitres (kL) was established during a time of abnormally low usage. Also it must be noted that the baseline figure was developed using the known volume of water used through metered connections at the time. Since then, the number of meters has been increased substantially so the volume of water known to be used has increased. In 2010 Wannon Water constructed a pipeline from Rocklands Reservoir to supply Hamilton and since then mains water use has not been restricted. This is reflected in the recent higher water use figures shown in Table 1, notably the 2017/18 usage of 149,999 kL.

Council operations use both potable and non-potable water from Wannon Water, water from the Council-run "Old Reservoir" on North Boundary Road, Hamilton, water from Southern Rural Water using metered bores and a small amount from rain water tanks connected to Council premises. The volumes of water consumed from these sources (excluding tanks) is shown in Table 1.

Meters were installed on the Southern Rural Water bores in 2010; prior to this there were no records of water use from these sources. The Brown Street site which includes the PAC, Art Gallery, offices and Library was not metered prior to 2009.

In 2009 several Council buildings and operations were audited for their water use which provided a detailed breakdown of water use at those sites. The largest water user of these was the saleyards which consumed 1700 kL of potable water in 2009-10 for livestock drinking water and a further estimated 10,500 kL per year of bore water for washing down of yards and trucks.

Table 1 provides details of total water use by source for the period 2007 to 2019. Figure 2 presents water use from all sources and Figure 3 illustrates the effect of annual rainfall on water use.

Table 1. Water use by source, 2007 to 2019

| Water Source | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wannon Water kL - Potable | 25145 | 26467 | 30806 | 30392 | 41351 | 40141 | 53148 | 60186 | 55006 | 49568 | 50110 | 66179 |
| Wannon Water kL - Recycled | 2118 | 2945 | 2724 | 19 | 1886 | 474 | 12699 | 23858 | 1468 | 7550 | 6275 | 6473 |
| Wannon Water kL - Untreated | | | | 1747 | 1425 | 1771 | 4773 | 4458 | 9563 | 6789 | 8000 | 1885 |
| Old reservoir kL | 24230 | 24688 | 26714 | 13587 | 39431 | 28809 | 25457 | 34485 | 52779 | 52779 | 72014 | 41764 |
| SRW bores kL | 15000 | 15000 | 15000 | 9700 | 11900 | 10300 | 10800 | 15100 | 13300 | 11600 | 13600 | 16700 |
| Total | 66493 | 69100 | 75244 | 55445 | 95993 | 81495 | 106877 | 138087 | 132116 | 128286 | 149999 | 133001 |
| Rainfall mm (Hamilton Airport) Long term average is 692 mm | 535 | 537 | 638 | 902 | 534 | 487 | 681 | 468 | 512 | 811 | 608 | 582 |
| Water restrictions in place | Yes | Yes | Yes | No | No | No | No | No | No | No | No | No |

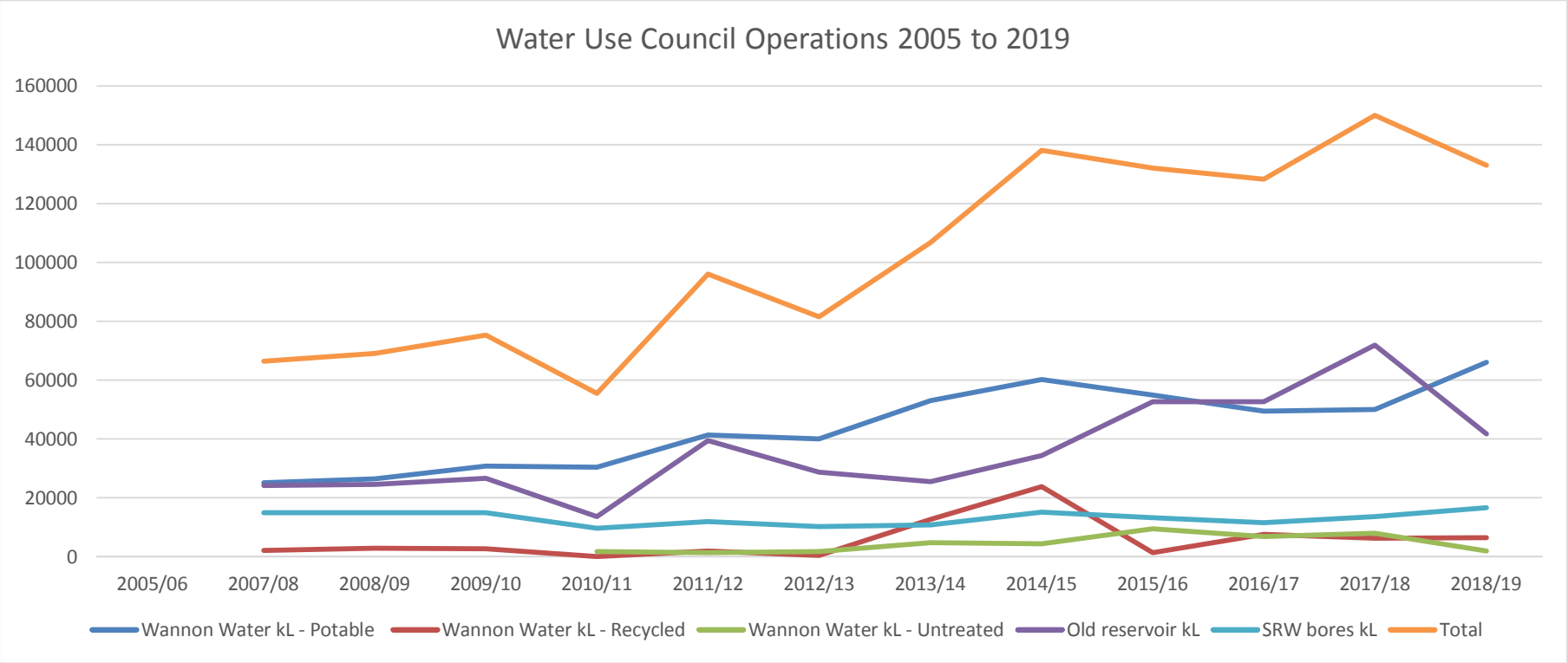


*Figure 2– Water used by source 2007 - 2019*

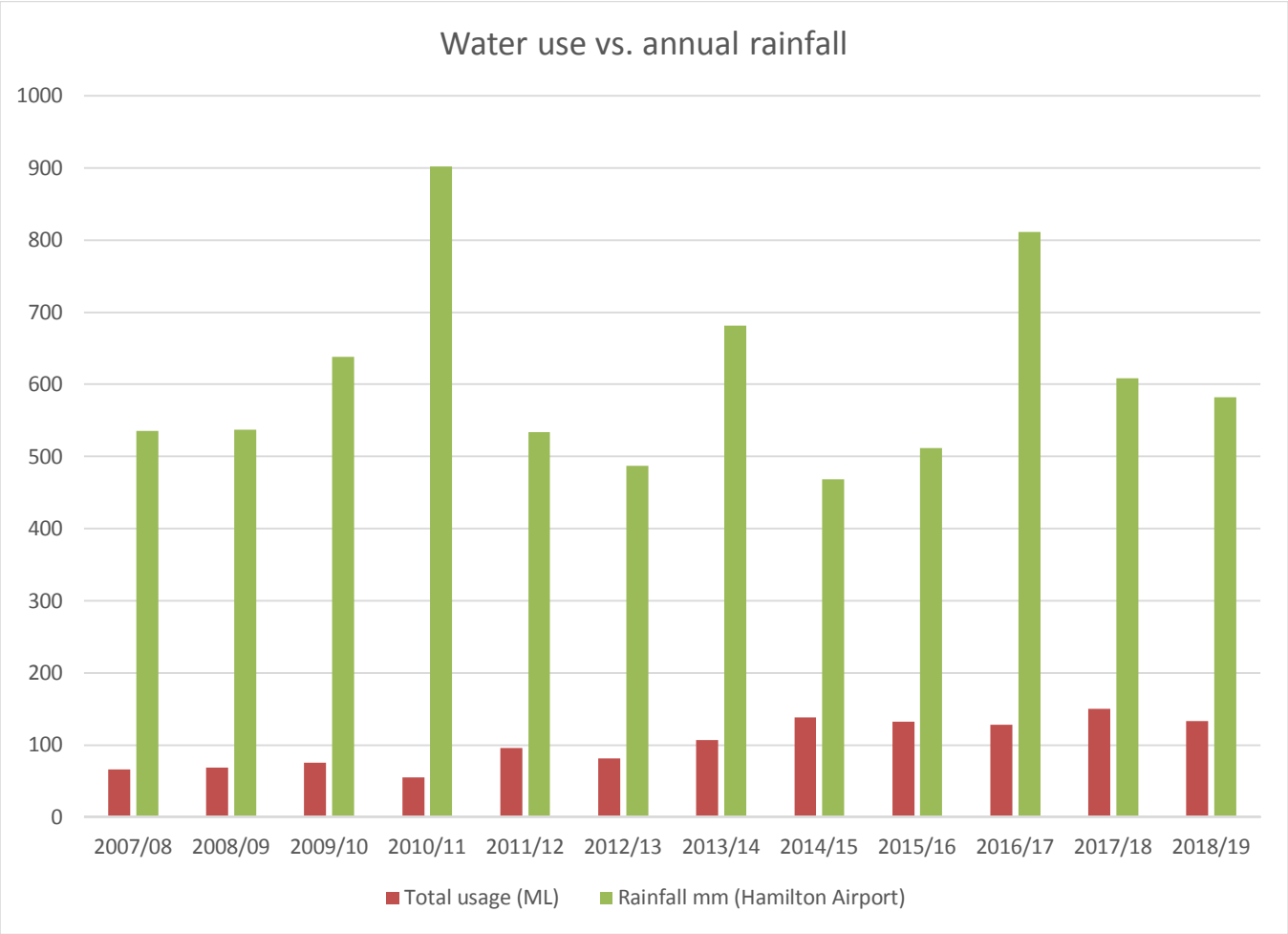


*Figure 3. Water use vs. Annual rainfall*

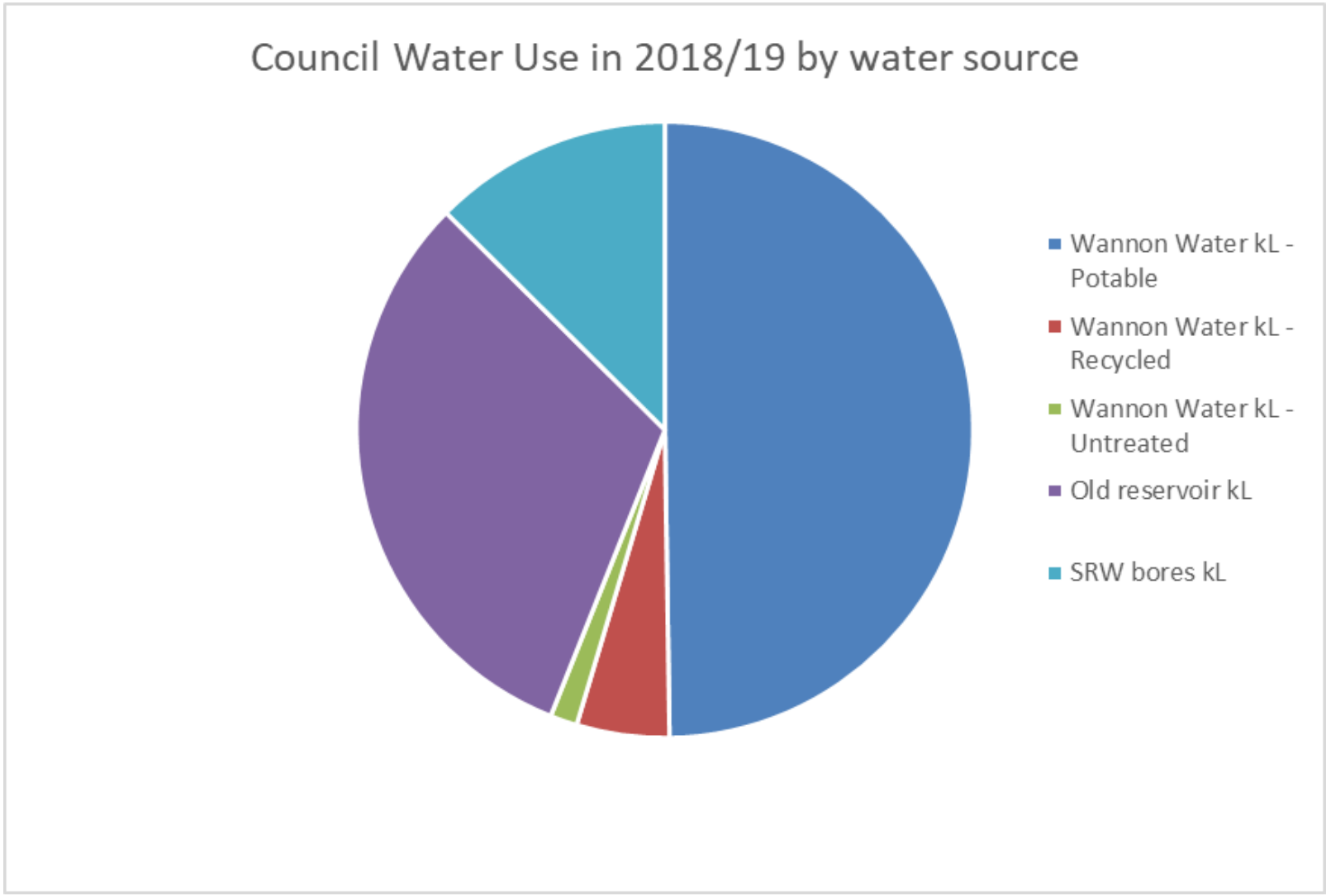


*Figure 4. Council water use in 2018/19 by water source*

## Water conservation

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 5.1 Council to effectively implement all actions under Sustainable Water Use Plan and Water Audits (four major facilities) | Action 2 – "Investigate the use of a data collection system" - Water data collection has been successfully streamlined to allow collation.<br><br>Action 4 – "Review capacity of the Old Reservoir" - completed. The volume when full is 125 ML.<br><br>Action 8 – "Replace high water using plants with drought tolerant types" – Parks and Gardens have stated that they use native species where possible, which are in general reasonably drought tolerant.<br><br>Action 10 and 13 – "Review machinery washdown procedures at depots and saleyards" – Coleraine and Hamilton Depots were previously using mains water for machinery washdown and are both now converted to rainwater. The Saleyards redevelopment has provided for rain water capture and re-use in stock troughs and for truck washing.<br><br>Action 14 – "Retrofit toilets and showerheads" – there is an ongoing replacement program with water efficient toilets, shower heads and taps. | For some time (2011 to 2017) Council's Accounts Department recorded water use data from Wannon Water bills into a centralised spreadsheet so information was readily accessible. Data can also be directly accessed from Wannon Water if needed. Southern Rural Water has implemented an online system for viewing usage records. Council's Engineering department records meter readings at the Old Reservoir (no readings were taken in 2014).<br><br>It is unlikely that following all the audit recommendations will save enough water to justify the cost - for instance, the estimated cost of saving 1,075 kL at the Brown Street buildings is over $47,000. At 2016 prices, this would save around $2600 worth of water per year. |
| 5.2 Diversion/use decrease for all council operations. 10 % reduction water use by 2012 and 20 % by 2017 | Metered water use was higher every year since the baseline year (2006) except in 2010-11 which was an abnormally wet year with annual rainfall of 902 mm. The highest water use | The baseline figure of 62,000 kL (62 ML) per annum used in developing the Sustainable Water Use Plan included known volumes |

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| (as per Sustainable Water Use Plan equivalent to 6.2 ML/a and 12.4 ML/a respectively) | period was 2014/15 when Council operations used over 138,000 kL (138 ML).<br><br>Council is in the fortunate position of having a variety of non-potable water sources for open space irrigation (Class C recycled water, SRW bore water, the Hamilton "Old Res" and Cruckoor Reservoir (Wannon Water untreated supply) – See Figure 4. | from the Old Reservoir, metered Wannon Water connections and an estimate of bore water use from Southern Rural Water connections.<br><br>At the time when the plan was developed, 63% of Wannon Water connections were unmetered (126 out of 201) so an estimate of 22,000 kL per year for the Wannon Water connections was made. Since then more connections have been metered (in 2015 only 35% of connections were unmetered) so that the actual volume used now is better understood. |
| 5.3 Develop guidelines for reducing water consumption in new and existing Council buildings or facilities | Council buildings are being retrofitted with lower water using fittings as funds permit and as repairs are needed to old fittings. New buildings will be subject to the usual water efficiency standards that apply to all new buildings. | Guidelines or a policy are needed to move practices towards more water efficiency (re. gardens, plant species, turf management) |
| 5.4 Council to increase use of reclaimed water from 40ML to 50ML by 2012 | Estimates provided by Wannon Water for use in the Sustainability Strategy were that Council used 5.7 ML for irrigation and roadworks, 3.1 ML for Mitchell Park, 1.8 ML for Kennedy Oval and 30 ML for the livestock exchange- a total of 40.6 ML.<br><br>Meters have been installed and the actual usage figures in 2014/15 were 3.2 ML at Mitchell Park and 20.6 ML at the | Safety concerns related to transmissible diseases prevents use of recycled water for roadworks.<br><br>Kennedy Oval is managed by a Committee of Management so Council has no involvement in its water supply. |

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| | Livestock Exchange (Beath St agistment paddocks), a total of 23.8 ML.<br><br>In 2018/19 the total volume of recycled water was only 6.4 ML. | Increasing the use of recycled water for productive uses is a key element of the Hamilton IWM plan. |
| 5.5 Promotion of water saving initiatives and re -use among community | Council participated in promoting the State Government's water savings initiatives while they existed. | Since the Rocklands pipeline was constructed in 2010 there have been no water restrictions in the Shire so the pressing need for water saving has diminished; however in future as climate change impacts affect runoff and evaporation it is expected that water saving initiatives will once again become essential. |
| 5.6 Support Glenelg Hopkins CMA initiatives to raise awareness and education about importance of environmental flows | Council supports CMA activities but to date has not become involved in CMA educational programs relating to environmental flows. | |
| 5.7 Water Sensitive Urban Design (WSUD) principles strengthened in Planning Scheme | Council adopted the Infrastructure Design Manual (IDM) in early 2018 to guide infrastructure development. The IDM aims to:<br><br>• ensure that all stormwater discharged to natural watercourses and other drainage authorities' drains meet the requirements of the Environment Protection Act 1970 and the water quality performance objectives for individual drainage catchments as | The IDM will become a Reference Document in the Southern Grampians Planning Scheme. |

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| | provided in the State Environment Protection Policies (SEPPs).<br>• implement the design requirements of the Council's Stormwater Management Plan.<br>• ensure all designs incorporate consistent best practice WSUD measures and principles.<br>• ensure treatment methods and associated structures are cost effective from a maintenance and operational perspective and that the risk to the public is minimised as far as practicable.<br>• protect and enhance natural water systems within urban environments.<br>• integrate stormwater treatment into the landscape, maximizing the visual and recreational amenity of developments.<br>• improve the quality of water draining from urban developments into receiving environments. | |
| 5.8 Consider more water storage by developing a Sustainable Water Management Plan for each town including stormwater and grey water. | No progress | Through the process of developing the Council Climate Change Adaptation Plan, the need for an Integrated Water Management Plan was identified and made a priority. |

## Water quality

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 6.1 Nutrients and turbidity levels managed according to ANZ standards in Council managed waterways ( e.g. Lake Hamilton, Grange Burn) | There has been significant progress in relation to understanding water quality in Lake Hamilton since 2010.<br><br>Regular water sampling at Lake Hamilton was extended in 2010-11.<br><br>A Water Quality Action Plan was developed in 2012 which was followed with a detailed study of the inflows into the lake.<br><br>The GHCMA provided financial support for a number of farmers upstream to fence off their stream access to improve water quality.<br><br>A small treatment wetland was constructed at the lake, near Cross St in 2013 to intercept and treat stormwater from that urban catchment.<br><br>Further research and study of inflows into the lake were carried out in 2012 which showed that the vast majority of nutrients entering the lake are from farm land upstream of the footbridge.<br><br>Investigations were done into constructing a 1.4 hectare retention wetland upstream of the lake on Monivae College's land, to remove nutrients from the water before it enters the lake. The cost was estimated to be $1.8 million and it would have only removed around 13% of the phosphorus and 3% of the nitrogen, so no further action was taken. | Improving the water quality of inflows from urban catchments will be included in IWM plan actions.<br><br>As funding permits, the GHCMA will continue its program upstream of the lake of fencing off and revegetating the riparian zone to reduce the amount of nutrients flowing into the lake. |
| 6.2 Identify sources of waste water pollution into significant waterways, | Stormwater flow into the lake has also been sampled at a number of locations and has at times shown high levels of E. coli and phosphorus. DNA tests have also been done to determine whether | Most samples were of animal origin except for some human E. coli which was detected near the Rippon Road |

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| develop plan to address the environmental impacts | the E. coli was of animal or human origin, in order to find out whether there are septic tank or sewerage system failures contributing to the lake water problems. | inflow. Council held discussions with Wannon Water but the origin was unknown and no progress was made with investigations.<br><br>The Hamilton IWM plan will include actions on addressing stormwater quality inflows to the Grange Burn. |
| 6.3 Algal blooms monitored, controlled, Response Management Plans implemented (including Lake Hamilton Management Plan and Grange Burn Catchment) | Algal blooms are carefully monitored and the communication plan is routinely enacted to prevent health impacts from contact with unsafe water. | It is impossible to control algal blooms in the lake because of the retention time, temperature and nutrient inflows, all of which are out of Council's control.<br><br>However, improving community understanding of the science behind blue-green algal outbreaks would be beneficial. |

## Behavioural change and capacity building

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 7.1 Council to demonstrate leadership by effectively implementing water saving initiatives in its own buildings ( e.g. rainwater capture), in accordance with energy and water audits and management plans | Council has had a continuous program of water saving measures in buildings and installing rain water tanks. Since 2009 a total of 745,800 litres of rain water storage has been installed. See Table 2. | Water collection from the Showgrounds roof for use at HILAC is an action in the Hamilton IWM plan. |
| 7.2 Influence and promote the community's use of alternative supplies including recycling, grey water, re use and water tanks to reduce potable water consumption | Council has promoted the use of alternative water supplies through the Sustainable Living Expo in 2012, 2014 and 2016. | |
| 7.3 Promotion of existing and upcoming information on rebates for rainwater tank and water recycling systems | While these programs were in existence Council promoted them through Customer Service offices and community events. | Rebates are no longer available for tanks and water efficiency products. Water saving programs tend to arise in periods of water shortage. |
| 7.4 Develop water saving educational programs (such as 'Adopt wetlands' or Water wise gardens) for schools and community groups. | Council and Wannon Water developed a small water wise garden near Lake Hamilton in 2011. | The water wise garden does not receive the necessary maintenance and is not achieving its aim. |

Wet conditions in 2010-11 and average rainfall in most years since then have reduced public interest in, and concern for, water conservation. However Council has continued to install rainwater tanks for its own operations with a total of 530,400 litres of storage installed between June 2009 and August 2010 and a further 215,400 litres between 2011 and 2015.

Table 2. Rain water tanks installed on Council properties 2009 to 2015

| Location | Size (litres) |
|---|---|
| Carapook | 5,400 |
| Woodhouse hall | 18,000 |
| Dunkeld Swimming Pool | 12,000 |
| Coleraine Visitor info centre | 22,000 |
| Pigeon ponds hall | 22,000 |
| Cavendish | 22,000 |
| Dunkeld Hall | 44,000 |
| Mirranatwa hall | 22,000 |
| Grangeburn Bowling Club | 22,000 |
| Hamilton Croquet Club | 22,000 |
| Mooralla Community centre | 27,000 |
| Balmoral Swimming pool | 36,000 |
| Dunkeld Visitor info centre | 47,000 |
| Balmoral Bowling Club | 187,000 |
| Hamilton depot | 45,400 |
| Coleraine depot | 104,000 |
| Aerodrome house | 22,000 |
| Terminal | 44,000 |
| Livestock Exchange | 176,000 |
| Total | 899,800 |

## Increased re-use of stormwater

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 8.1 Council to evaluate options to reuse stormwater in its own operations | The Hamilton Stormwater Management Plan was developed in 2001 and has not been reviewed since. | The Stormwater Plan is primarily concerned with the quality of water entering streams from stormwater and does not refer to capture and use of stormwater. The Hamilton IWM plan will consider capture and re-use of stormwater for the Hamilton urban area. |
| 8.2 All new developments to comply with best practice for re-use of stormwater | The Infrastructure Design Manual (IDM) was adopted in 2018 and ensures best practice for stormwater reuse. | The stormwater treatment elements in the IDM were applied to the design of the Cox St redevelopment. |

## Sewerage and Grey Water Management

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 9.1 Council to develop a sewerage strategy for new developments | Council works closely with the regional water authority on matters relating to sewerage. | |
| 9.2 Council to continue to provide information about grey water best practice management to Council residents | The Environmental Health Unit continues to provide information relating to domestic waste water and grey water use to residents. | Wetter conditions since 2010 have reduced public interest in re-using grey water so this has not been a priority area of work in recent years. |
| 9.3 Conduct feasibility studies for towns with no reticulated water supply or no sewerage (including Branxholme, Balmoral and Glenthompson) | A feasibility study was done in 2011 for Branxholme, as the first township to consider alternative systems for dealing with domestic waste water in townships where there is inadequate land area for septic systems. Funding was sought but not received for a pilot "cluster" system for Branxholme which would have addressed the problems.<br><br>Council has conducted septic tank system audits in Penshurst, Glenthompson, Cavendish and Balmoral. | Council actively advocates to State Government for support in dealing with the problem of township waste water.<br><br>A study funded by the regional IWM program is underway to examine alternative solutions for Penshurst. |
| 9.4 Review and update the Domestic Wastewater Management Plan (DWMP) | The DWMP was reviewed and updated in 2019. It is required under the State Environment Protection Policy (Waters of Victoria) and is concerned with discharge of waste water off-site. It found that Glenthompson and Penshurst are high-risk townships and are in need of an alternative disposal solution for domestic waste water. | See above. |

## Enhancement of Significant Waterways and Wetlands

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 10.1 Council to support Glenelg Hopkins CMA efforts to improve waterways and wetlands condition | Council continues to work with the GHCMA to improve the Grange Burn in Hamilton, with removal of woody weeds and revegetation using appropriate indigenous plant species. A platypus ladder was installed at Apex Park to enable movement of platypus up and down the Grangeburn. Council and the GHCMA worked together to facilitate fencing on private land upstream of Lake Hamilton, to exclude livestock from the Grange Burn. | This is an ongoing program. Grant funding was received in 2019 from Commonwealth Government for tree planting on Grange Burn and continuing joint activities and this cooperation is intended to continue. |
| 10.2 Council to prioritise maintenance of existing wetlands | Work has continued at the Hamilton Wetlands to improve the amenity and conservation value of these areas. Full management of Lake Linlithgow is being handed back to Parks Victoria in 2020. | The Hamilton IWM Plan will include an action to monitor and improve the performance of the Hamilton Wetlands. |

## Waste

Council previously worked closely with the South West Regional Waste Management Group (SWRWMG) towards the Victorian "Towards Zero Waste" targets which related to the amount of waste generated, the percentage of resources recovered through recycling and the level of littering. In 2014 the SWRWMG was merged into the Barwon South West Waste and Resource Recovery Group (BSWWRRG) and Council continues to participate in regional activities. The Victorian "Towards Zero Waste" strategy did not achieve its objectives, with the total volume of waste in Victoria increasing from 8 million tonnes in 2000 to 11.9 million tonnes in 2011. It was replaced with the state wide policy "Getting Full Value" which focuses on resource recovery rather than waste reduction.

### Establish a Waste Management Plan for Council

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 11.1 Minimise waste from Council buildings and facilities including parks, gardens and public utilities and recreation reserves | Recycling bins have been introduced in Market Place and Brown St offices, at the Melville Oval, Pedrina Park and Mitchell Park sports grounds, at the Livestock Exchange and in some townships. | Public place recycling facilities are being introduced in other public places (business centres, sports grounds and parks) in all townships. New public recycle bins were installed in Coleraine in 2019. |
| 11.2 Develop litter reduction strategies for the whole of Southern Grampians Shire | Every year Council supports Clean Up Australia Day by providing free collection and disposal of materials to community groups that undertake clean-ups. | Illegal dumping is an intermittent problem and this imposes additional pressure on Council through the Local Laws staff who investigate, and Parks and Gardens staff who clean it up. |
| 11.3 Actively implement ECOBuy, the Local Government preferred green purchasing program for increased purchasing of environmentally preferable products | Council subscribed to ECOBuy from 2002 until September 2014. In 2011 and 2012 key purchasing staff participated in ECObuy training.<br><br>Council was a member of ECObuy for a number of years and sustainability considerations were embedded into the Procurement Policy and tender documents, but staff | It is now very easy to report on environmental purchases. Some staff training is needed to ensure that accurate information is captured. |

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| | acceptance of the program was always lacking. The principal limitation to the use of ECObuy was the Council purchasing software which lacked the ability to record the selection of a “green” (second hand, recycled, low energy, low water use) item.<br><br>In 2016 Civica was modified to allow this to happen and from 1 November 2016 it has been a mandatory step when creating a purchase order.<br><br>In the 2019 calendar year $12,473,439 worth of purchases were claimed by staff to have an environmental benefit.<br><br>The role of ECOBuy has in the meantime changed whereby it is now a consultancy organisation that provides advice on sustainable procurement. | |

Currently the Southern Grampians Shire Council does not have its own Waste Management Plan. Prior to the establishment of the BSWWRRG, the SWRWMG plan incorporated targets and actions for its member councils. The BSWWRRG focuses on integrating regional waste management activities into the State plan (the Statewide Waste and Resource Recovery Infrastructure Plan or SWWRRIP) and improving waste management and resource recovery across the new, larger region.

One of the BSWWRRG projects underway is the development of a Waste Strategy template that member Councils can use to construct their own waste strategy in line with regional and state objectives. Southern Grampians Shire Council has recognised the need for a waste strategy to guide decisions so will utilise the template.

### Community Awareness Raising and Education

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 12.1 Council to liaise with community, locals schools and sports organisations to implement an educational behavioural change program focussed on appropriate waste management and recycling | Council has provided a number of schools and kindergartens with funding through the Greater Grants program, and with advice and materials to help improve their recycling and resource recovery. | The regional waste management group (BSWWRRG) is approaching waste education with a regional focus and Council is involved in regional programs. |
| 12.2 Improve kerbside collection service by implementing community education to minimise waste | Council participated in the region-wide campaign "Get it Right on Bin Night" in 2014 which aimed to recover more recyclable materials from homes. In 2015 the Waste Services Guide was developed to provide comprehensive waste information for all residents. This was distributed with rates notices and provided to real estate agents for residents who rent their homes. | It is important to build on these education activities to reduce the amount of waste going to landfill and optimise resource recovery. |
| 12.3 Council to liaise with local businesses to achieve plastic bag free status (as per South Australian model) | Discussions were held with the Coleraine community but no progress was made. Very difficult to implement without community and business support. | Since the strategy was developed the statewide ban on lightweight plastic bags has been introduced. |
| 12.4 Encourage and support business to join sustainable business initiatives to reduce the impact of waste and chemicals in their day to day operations | Economic Development in conjunction with Sustainability have coordinated a number of seminars for local businesses, particularly in relation to energy efficiency. These were provided by VECCHI and the Victorian Government. | Council continues to promote opportunities as they arise. |

## Upgrade of the Shire's recycling facilities and specialised waste services

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 13.1 Enhance recycling opportunities at all waste transfer stations and undertake recycling collection programs such as E-waste, fluorescent and HID lamps | Recycling facilities/services have been introduced for fluorescent tubes, E-waste and household goods. There are now industry based schemes for mobile phones, plastic bags, printer cartridges and small batteries available in the Shire. | Southern Grampians Shire is still lacking access to the "Detox your Home" services that most other regions in Victoria have including Portland, Horsham, Warrnambool and Ararat. Council put in an unsuccessful expression of interest to host a "Paint Back" scheme collection point in Hamilton. |
| 13.2 Investigate the viability of introducing a material recovery facility for either the Southern Grampians Shire or a facility for the whole SW region. | Not progressed | These facilities are normally constructed in large centres to benefit from the large quantities of materials available in cities. |
| 13.3 Council to evaluate a "tip-shop facility" (re-use shop) at Southern Grampians Transfer stations | The Hamilton Recycle Centre located at the Hamilton Landfill was constructed and opened in March 2013. The shop was first operated by Future Employment Opportunities and has since been taken over by WDEA and rebranded "The Big Green Shed".. | The recycle shop is operating well and the model involving WDEA is proving successful. |
| 13.4 Introduce more public place recycling facilities at key locations | Public place recycling facilities have been introduced at the Melville Oval, Pedrina Park and Mitchell Park sports grounds, at the Livestock Exchange and in Dunkeld and Coleraine. | Public place recycling facilities are needed in all public places where collection truck access is available (business centres, sports grounds and parks) in all townships. |

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| 13.5 Continue to identify litter hot spots and install cigarette butt bins in CBD areas | Cigarette butt bins were installed in the Hamilton CBD in 2011. Cigarette butt receptacles are built into the lids of the waste bins in the steel enclosures. | |
| 13.6 Investigate alternatives for conversion of waste into energy (eg methane capture, biochar etc) | Council participated in the South West Biochar Action Group in 2011 and 2012, until the Group's demise.<br><br>Council also undertook a feasibility study in 2018 to utilise waste woody materials to replace natural gas at the Industrial Estate in Port Fairy Road. | The Biochar Action Group had proposed a trial involving Wannon Water that would have utilised Council woody waste but the project ran into contractual difficulties in 2012 and never proceeded. |

### Reduce level of household, commercial and industrial waste going to landfill

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 14.1 Commercial and demolition waste recycled in line with Victoria's "Towards Zero Waste" strategy | Waste concrete is crushed and re-used for road base. Waste wood is chipped and partly composted. | Council only receives around 200 tonnes of demolition waste per year and it is transported to an off-site landfill. |
| 14.2 Recycling and kerbside collection audits | Bin audits have been conducted in Hamilton and Coleraine in 2010 and 2018, and in Hamilton only in 2014. These were managed by the regional Waste Management Group. Council has also conducted smaller scale audits for specific reasons – to assess the organic bin trial in 2012 and to assess new bin lids in 2016. | Bin audits are an important tool to help us understand opportunities for improved waste management. They show that still around 70% of waste in kerbside bins could be diverted from landfill, into recycling or green/organic waste streams. |

### Increase level of green and organic waste diverted from landfill

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 15.1 Implement an educational program regarding re-use of organic waste | Council and the South West Regional Waste Management Group conducted a Composting and Worm Farm workshop in 2010. Attendees were provided with a compost bin or a worm farm and were trained in their correct set-up and use. There were 100 worm farms and 50 compost bins distributed at the workshop which equates to 2.7 % of Southern Grampians Shire households. Surveys after the workshop indicated that on average households were diverting 2.4 kg of organic waste out of landfill per week.<br><br>Further worm farming and composting workshops were provided to the community at the Sustainable Living Expos held very second year since 2012. | Education exercises such as these tend to attract residents who are already interested in such topics and do not reach the majority – "preaching to the converted".<br><br>A compulsory kerbside organics service will be introduce in July 2020. |
| 15.2 Investigate the viability of introducing a green/organic waste collection service in addition to the 2-bin waste and recycling service | A feasibility study was done in 2011 to investigate a kerbside green and organic waste collection and management service. This considered the size and frequency options for a third bin, and composting and other forms of treatment.<br><br>The study was followed by a 200-house trial in 2012 and the optional organic waste serviced was introduced in Hamilton and Tarrington in 2014. The optional service | In 2016 Council in conjunction with Glenelg Shire Council investigated options for a joint organic waste processing facility to serve both Councils.<br><br>There were numerous processing options analysed but to date the cheapest option is |

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| | was taken up by around 1200 households and collects around 500 tonnes per year of mainly garden waste.<br><br>The service will be made compulsory across the Shire in 2020. | still to deliver material to a third party composter. |
| 15.3 Evaluate the adoption of a rebate to provide community members with a compost bin to reduce organic waste going to landfill | Council has been providing compost bins and worm farms at cost price to residents since 2011. | Some of the issues with using this approach to managing organic waste are i) motivating residents, ii) dealing with seasonal variations in waste volume iii) difficult items such as meat scraps which create odour and attract vermin. |
| 15.4 Council to liaise with schools and community and provide support for establishment of worm farms as a measure to encourage residents to reduce the amount of green waste going to landfill. | As above | As above, this approach is effective for only a very small proportion of the community. |
| 15.5 Evaluate possible business opportunities from re-utilising green waste | Investigations are ongoing into on-farm composting of organic waste. | EPA regulations that prevent odour and amenity issues can deter businesses from receiving Council organic waste. However this should be pursued to encourage beneficial re-use of the materials in the Shire. |

Table 3. Waste data 2008-2019

| Year | 2008-09 | 09-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | % change from 2008-09 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kerbside waste (t) | 2038 | 1672 | 1767 | 1168 | 2418 | 2170 | 2110 | 2127 | 2484 | 2510 | 2374 | +16.5 |
| Municipal waste (t) | 5326 | 4676 | 4481 | 3798 | 3676 | 3702 | 3940 | 3681 | 1494 | 1427 | 1362 | -74.4 |
| Commercial & Industrial waste (t) | 4409 | 3139 | 2676 | 5175 | 5303 | 3965 | 3143 | 1833 | 370 | 324 | 269 | -93.9 |
| Construction & demolition waste (t) | 349 | 321 | 280 | 408 | 305 | 452 | 267 | 252 | 225 | 218 | 216 | -38.1 |
| Total (all waste landfilled) | 10084 | 8136 | 7437 | 9381 | 9284 | 8119 | 7350 | 5766 | 4573 | 4479 | 4221 | -58.1 |
| Recycling - kerbside (t) | 1392 | 1544 | 1543 | 1649 | 1230 | 1371 | 1553 | 1388 | 1291 | 1441 | 1372 | -1.4 |
| Recycling - drop off (t) | | | | | | | | 217 | 270 | 297 | 386 | |
| No. households | 5469 | 5455 | 5446 | 5565 | 5937 | 5940 | 5744 | 6012 | 6098 | 6352 | 6429 | +17.6 |
| Kerbside garbage/household (kg/hh) | 373 | 307 | 324 | 210 | 407 | 365 | 367 | 354 | 407 | 395 | 369 | -0.9 |
| Kerbside recycling/household (kg/hh) | 254 | 283 | 283 | 295 | 227 | 275 | 270 | 231 | 212 | 227 | 213 | -16.1 |
| Kerbside organics collected (t) | 0 | 0 | 0 | 0 | 0 | 0 | 288 | 308 | 463 | 550 | 505 | |
| Kerbside Diversion Rate % | 41% | 48% | 47% | 58% | 36% | 43% | 47% | 44% | 41% | 44% | 44% | +2.0 |

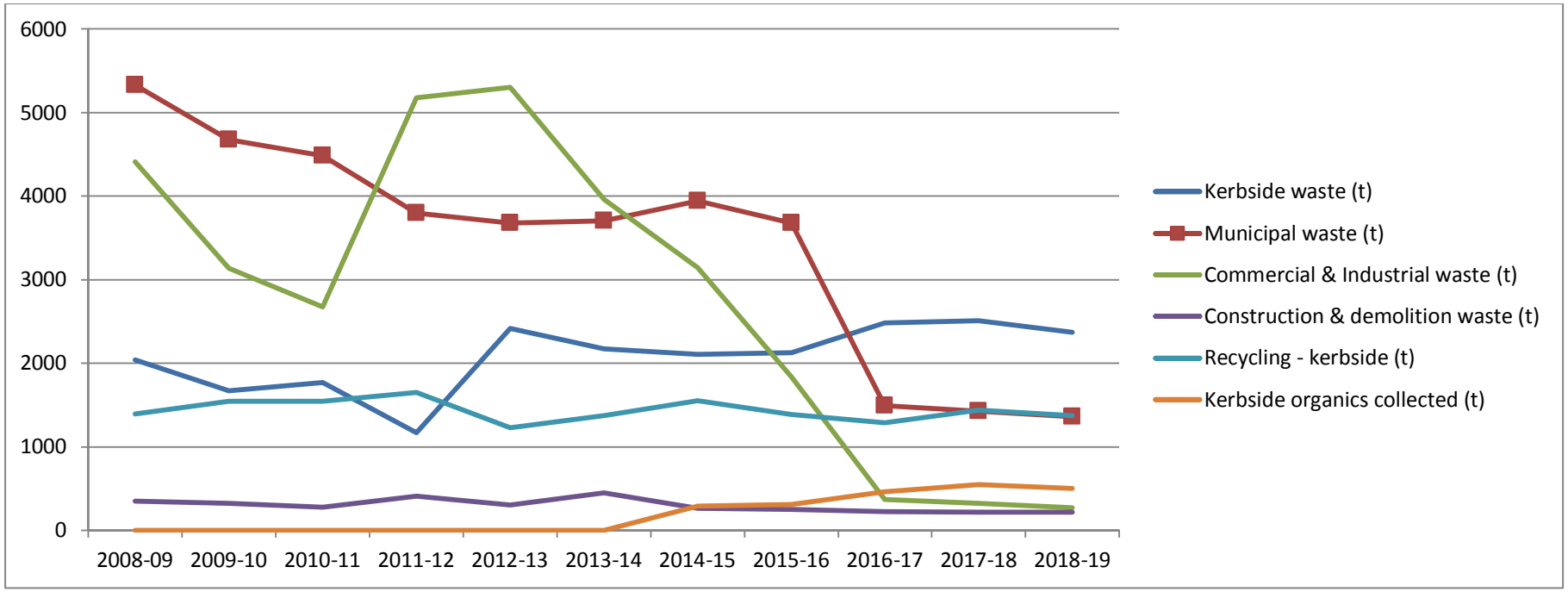


*Figure 5. Waste and recycling data 2009 to 2019*

## Liveability

### Diversity of employment and opportunities for young people

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 16.1 Development of partnerships with educational providers to ensure more opportunities are offered to youth | Monivae Year 7 students were involved in stream-side revegetation and weed control along the Grangeburn in 2012-14. | Council is an active member of the LLEN (Local Learning and Employment Network) whose role is "to broker sustainable strategic partnerships between and among key stakeholders to improve education and transition outcomes and support young people to remain engaged or re-engage in education and training". |
| 16.2 Active involvement on State and Federal government programs to diversify work force, specifically green jobs. | Conservation Volunteers Australia were engaged to do on-ground restoration works for several years. | |
| 16.3 Increase the level of engagement with young people and develop a Youth Pathways Program | Council conducts the successful L2P learner driver program. | Council has continued to develop its relationships with educational providers within the Shire in the form of an educational cluster, to share infrastructure and programs to improve opportunities for young people. Other organisations involved include RMIT University, Southern Grampians Adult Education, South West TAFE and a number of schools |

## Community capacity and engagement

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 17.1 Development of a Community Engagement Policy for Southern Grampians Shire | A Community Engagement Policy has been developed which describes the organisation's approach to community engagement and its application and timing.<br><br>The Community Engagement Framework was developed in 2013 then the Community Planning Focus Group was formed which includes staff from all Council departments with involvement in community planning and development. | Council now had a dedicated department for Community Engagement and a comprehensive program of community visits and engagements. |
| 17.2 Support activities of "environment" and related groups | Community environmental groups are supported by Council by providing advice, letters of support for funding applications, technical assistance and through the Greater Grants program which started in 2011, whereby community groups active in the fields of sustainability or natural resource management may apply for a grant of up to $2500, if their objectives are consistent with the Sustainability Strategy. | Approximately 4 community environmental projects per year are funded through the Community Sustainability Greater Grants program. |
| 17.3 Encourage a range of community events and activities to engage youth and bridge the generational gap (eg. Kids sheds, mentoring activities, entertainment events) | The Hamilton Library runs a comprehensive program for children, toddlers and babies. | |

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| 17.4 Assist community to explore and implement replicable elements of Transition Towns (eg. self-sufficient living, community gardens) | Two community gardens have been developed in Hamilton with support from Council. The Hamilton Community Orchard was developed in 2011 on Council land in Strachan St. In 2012 vacant land in Corriedale Lane was taken up by the same community group and used for a garden. This was further developed with Council's support and financial assistance in 2015, and formed into a more formal and structured garden which is used regularly by the general community. | |

## Good governance processes supporting sustainability adoption within Council

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 18.1 Development of an overarching Sustainability Policy for Council | Council does not have an overarching policy on sustainability. It has been been embedded across a range of Council activities but an all-encompassing policy does not exist. | |
| 18.2 Sustainability assessment criteria to be embedded into all Council decisions through Capital Works Program, Annual Works Program, Procurement Policy, Adoption of ECOBuy as the preferred Green Procurement Policy, Motor Vehicle Policy review and update) | Sustainability assessment criteria have been incorporated into a number of key processes. Changes have been made to the Motor Vehicle Procurement Policy, whereby the operating costs and greenhouse gas emissions are considered when vehicles are purchased and the weighting of these criteria are used in decision making. Sustainability is considered when developing business cases and has also been embedded in the Procurement Policy and tender forms. Environmentally preferable purchases are now captured with recent modifications to Civica, Council's finance software. | Council was unable to fully adopt EcoBUY because of difficulties capturing purchasing data with previous versions of the accounting software. EcoBUY no longer exists in its original form but is now a for-profit consultancy so this is no longer relevant; however reporting of environmentally beneficial products is possible with the updated purchasing software. |
| 18.3 Evaluation of implementing Environmental Management Systems and indicators model (eg. Global Reporting Initiative or Deakin University model) as the preferred sustainability reporting mechanism | A significant amount of work was done on the South West Sustainability indicators project, a Local Government Sustainability Accord project for which the Southern Grampians Shire Council is the lead agency. The research project was started at Deakin University then transferred to Federation University, and it developed a set of sustainability indicators to be used to assess the sustainability of a local government area. The | The GRI methodology has very good potential for organisation-wide reporting because it covers triple bottom line sustainability and it is based on what is "material" or important to the organisation. |

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| | Environmental Indicators project was successfully completed in 2012.<br><br>Basic training in the Global Reporting Initiative (GRI) was undertaken in 2016 by the Sustainability Coordinator. | |
| 18.4 Council to assess required budget allocations to support implementation of sustainable programs | An operating budget has been provided each year to implement actions from the Sustainability strategy. This has been supplemented by grants, many through the DELWP Local Sustainability Accord/VASP and Sustainability Victoria programs. | |
| 18.5 Staff Duty Statement and Performance Evaluation to incorporate sustainability criteria into all Position Descriptions within Council | A sustainability clause has been added to staff duty statements for all positions within Council operations.<br><br>All new staff are provided with Sustainability induction training within their first few weeks of employment. | |
| 18.6 Long term financial planning applying triple bottom line thinking and actions to specific planning tasks, projects and capital works decisions making processes | As per 18.2, environmental impacts should be considered if key Council processes are followed correctly. | |

## Support to vulnerable populations

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 19.1 Investigate alternatives to support most vulnerable communities across Southern Grampians to adapt to the new carbon economies | The Sustainability Victoria program "Energy and Water Task Force" program was adopted by Council in 2011. It was a free service for pension card and health care card holders, funded by the Victorian government, which provided an energy and water use assessment of homes, whether they were owned or rented. The aim was to improve the comfort of homes for low-income residents, to reduce heating and cooling costs and also to promote water conservation. The program was conducted by Western District Employment Access (WDEA) staff and was taken up well by residents of the shire. The program was discontinued later in 2011. | |
| 19.2 Ensure that Council policies and strategies address specific issues related to vulnerable populations | Council provides a range of services to aged and disabled residents such as Senior Citizens centres, the Home and Community Care program, Meals on Wheels and community transport. | |
| 19.3 Ensure the provision of services for disadvantaged and vulnerable populations | As above | |

## Wellbeing and liveability

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 20.1 Develop a Transport Strategy including investigations into share use of existing services, promoting walking and cycling | Not done | |
| 20.2 Ensure CBD Structure Plan provides for increased use of alternative transport like bike and walking | The Hamilton structure plan was adopted in late 2011 and makes many provisions for walking and cycling. | |
| 20.3 Council to ensure protection and enhancement of key natural environment areas (eg. reserves) for recreational and cultural use | There has been extensive work carried out at the Wannon and Nigretta Falls and Mt Rouse reserves to protect and enhance these sites for recreational and cultural use. | |
| 20.4 Council to support and advocate for multiple cultural and artistic events for the Shire | A full events program has been developed, underpinned by an Events strategy. The ongoing program continues to attract visitors to the shire and to enhance the experiences and quality of life for the residents. | |

## Prosperous tourism and business activities

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 21.1 Support innovative and emerging business initiatives | Council continues to encourage and support new businesses. A planning permit was been granted for an abattoir in Hamilton. Council conducts regular Small Business workshops to improve performance and competiveness of local businesses. Council is developing an Industrial Estate in Port Fairy Road. | |
| 21.2 Develop the concept of improving allied facilities (eg. aged care, community transport) and encourage education and employment in this growing area | See 19.2 | |

## Sustained agricultural production

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 22.1 Council to advocate and support the value of agricultural activities in the Shire, increased production capacity and to help transition to low carbon economies | Agricultural production continues in the shire with excellent returns to farmers from lambs, wool and beef cattle. | |

## Climate Change

Council has recognised the importance of taking responsibility for its greenhouse gas emissions and the need to display a good example to the community in terms of energy savings and greenhouse gas emission (GHG) management. The 2010 Carbon footprint identified that the largest source of GHG was the Hamilton landfill which produced around 2/3 of the total emissions, due to the breakdown of organic materials under anaerobic conditions and production of methane. Other large emission sources are electricity use in buildings and operations, since all electricity used is derived from brown coal, and transport and stationary use of petroleum-based fuels by the Council fleet and machinery.

The Carbon Emissions Trading Scheme that was anticipated when the Sustainability Strategy was developed has not eventuated and the carbon tax was introduced in 2012 and abolished in 2014, so there has been no Council activity in this area.

### Reduction and offset of Council carbon emissions

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 23.1 Energy audits conducted for four main Council facilities in Hamilton | Energy and water audits were conducted at HILAC, the aerodrome, the Brown St business Centre, the Livestock Exchange, Market Place, the Hamilton outdoor pool and the Hamilton Depot. The audits identified many opportunities to reduce energy and water use, with estimates of the cost of implementation and the pay-back period Recommendations from the audits have been implemented every year, using the Sustainability operating budget and grant funds. Implementation actions have included delamping and solar window film at Market Place and installation of an energy-saving heat pump hot water system. Energy savings at Market Place were very good with electricity use down by 17% in 2010 compared to 2009. | Technological advancements particularly in LED lighting and solar PV have meant that many of the recommended actions are redundant now. Some of the recommendations were not implemented because of operational reasons, for example the need to keep art works at a constant temperature. |

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| | HILAC is the Council's largest energy user with an electricity bill of around $12,000 per month. A number of key actions have been completed including purchase of a thermal pool blanket, replacement of high bay, fluorescent and halogen lights with LED, installation of variable speed drives on pumps and installation of 60 kW of solar PV generation.<br><br>At the Saleyards a heat pump hot water system and motion sensors in the toilet block were installed and the recommended improvements to energy efficiency in the kitchen were carried out.<br><br>At the Hamilton depot various lighting has been replaced with LED, the office/storeroom was insulated and 53 kW of solar PV generation was installed.<br><br>LED lights have been introduced throughout the Art Gallery, library, offices and PAC and 60 kW of solar PV generation was installed. | |
| 23.2 Energy audits conducted for extra four Council facilities across the Shire | Smaller Council facilities outside Hamilton with disproportionate energy use were investigated, without a formal energy audit. This led to some energy efficiency improvements such as replacing the electric hot water system at the Dunkeld Visitor Information Centre with a heat pump, and at the Penshurst Caravan Park the | Council's facilities in other locations outside Hamilton are relatively low users of energy so the efforts were mainly confined to the largest using facilities. |

| | | |
|---|---|---|
| | electric HWS was replaced with an evacuated tube solar water heater. | |
| 23.3 Carbon footprint for all of Council facilities (including waste, vehicle fleet, energy usage) | A carbon "footprint" or inventory was calculated for Council operations in 2008-09, 2009-10, 2001-11, 2011-12, 2015-16 and 2016-17. See Figure 6. | The cost of using a consultant to calculate the carbon footprint was becoming quite significant and there was very little difference between years, so the process was not undertaken again until 2015-16. The 2015-16 inventory was done in-house, with some assistance from the consultant and the 2016-17 inventory was fully funded by the state government.<br><br>Council has made very good reductions in greenhouse gas emissions through energy efficiency, with the emissions from electricity declining from 3412 to 2321 tonnes CO2-e between 2008 and 2016/17, with further reductions since then. A carbon inventory has not been completed since 2016/17. |
| 23.4 Council to play a leadership role in considering fuel efficient Council vehicles (solar, LPG, hybrid diesel) and education on efficient driving | Council's Sustainable Vehicle Purchasing policy has resulted in an improvement in the overall passenger fleet fuel efficiency. The maximum fuel consumption for passenger vehicles in the Council fleet is now 8.0 l/100 km. | |

| | | |
|---|---|---|
| 23.5 Council to continue to support activities of the Council Sustainability Working Group | The Sustainability Working Group was an internal committee with representatives from across Council departments. It existed from 2009 until 2014. | |
| 23.6 Climate related risk assessment for Council infrastructure | A comprehensive risk assessment for all Council operations was done in 2016 as part of the Barwon South West Climate Resilient Communities project. This work was used to develop the Climate Change Adaptation Plan which was endorsed by Council in 2017. | Climate change adaptation has become more of a priority across local and state government sectors since the Sustainability Strategy was developed. The focus is now on embedding climate change considerations into Council processes. |
| 23.7 Council to encourage use of bikes among employees | Council actively encouraged bike use for several years by engaging with the “Ride to Work” program. A staff bike was purchased for use on short trips and is kept at Brown St. | |

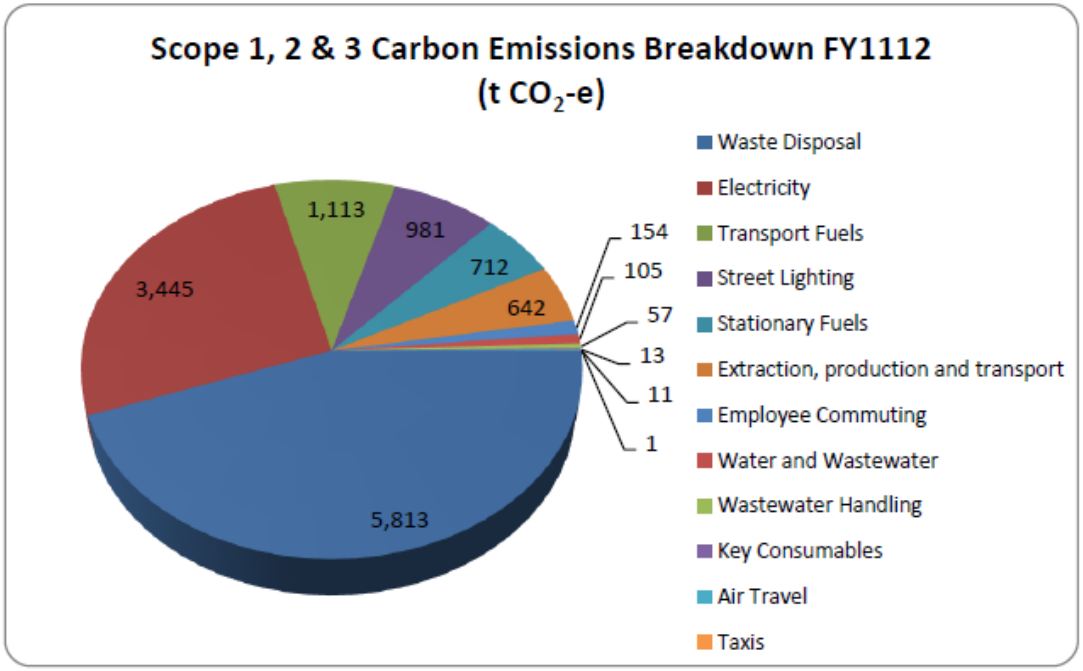


*Figure 6. Carbon footprint 2011-12*

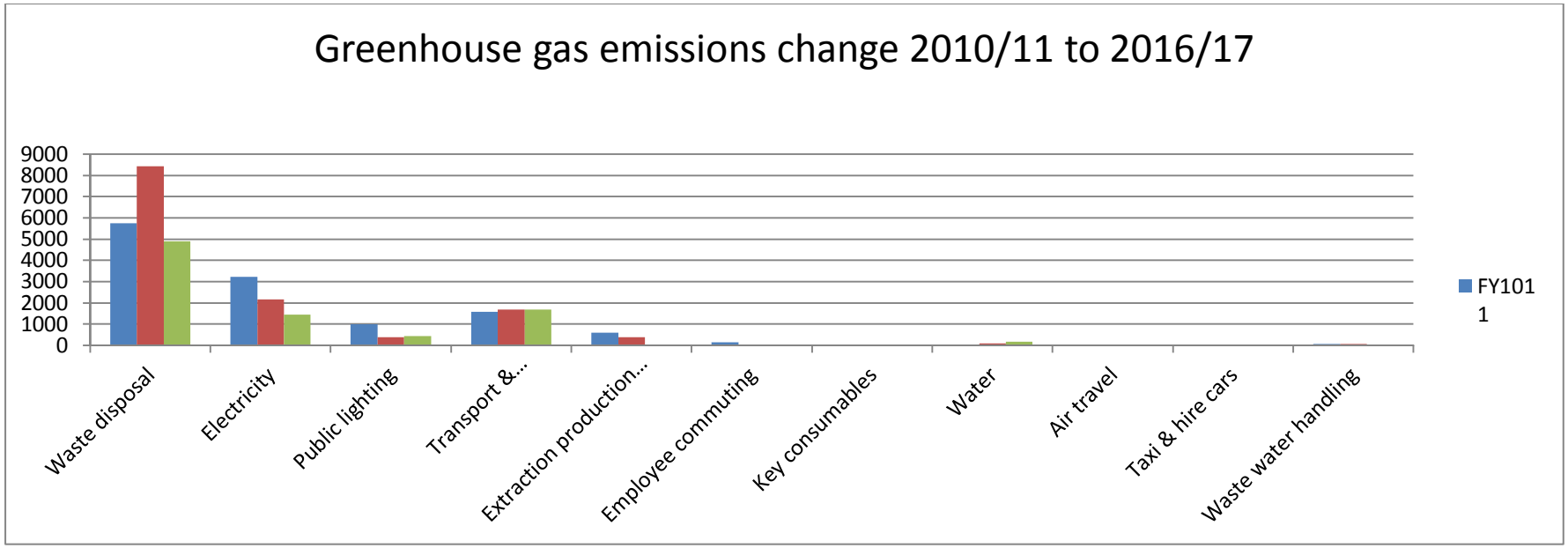


*Figure 7A. Changes in greenhouse gas emissions 2010/11 to 2016/17*

## Carbon footprint and emissions management plan

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 24.1 Council to show leadership developing and implementing a Carbon Emission Management Plan for Council operation utilising a carbon footprint as baseline | Council developed a carbon management plan in 2011 which formed the basis for an emissions reduction program for Council operations. | Emissions have been reduced significantly through energy efficiency works; however the major source of emissions is waste, namely the Hamilton landfill which produces almost half of Council's total emissions (5813 tonnes CO2-e per year in 2011-12, from a total of 13046 )<br><br>This is being addressed by the introduction of a kerbside organic waste service which diverts garden and food waste from the waste stream. Because of the legacy waste already in the landfill it will take many years for landfill emissions to be reduced. |
| 24.2 Greater provision of infrastructure supporting alternative means of transport (cycle paths, shared pedestrian/bike path) for the whole of Southern Grampians | Bike lanes were painted on some streets within Hamilton and a map was created. A rail trail between Hamilton and Wannon was created on the rail reserve. | |

### Increased use of renewable or less polluting energy sources

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 25.1 Increased amount of electricity and fuel sourced from renewable sources for Council operations (green power) and in accordance with a Carbon Emissions Management Plan | Council has installed 216 kW of solar generation capacity since 2012 which generates around 300 MWh of electricity per year, offsetting around $52,000 worth of electricity from the grid at 2019 prices. The Sustainability Strategy states that Council was to purchase 20% Greenpower (electricity produced by renewable means) in 2011 which was rejected by Council in 2011 due to the added cost, because there was a surcharge on Greenpower of between 5 and 10c/kWh.<br><br>As of 1 July 2020 all Council's electricity will be purchased from renewable sources through its contact with Procurement Australia. | The cost of electricity from renewable sources has come down significantly since the strategy was written due to the lower running costs of wind and solar farms compared to coal and gas generation. |
| 25.2 Awareness among industry/business groups regarding use of renewable sources of electricity/fuel | Not done | |
| 25.3 Council to support and encourage biofuel production | Investigations into biofuel energy are ongoing, in particular the use of biomass to replace gas for heating. | |
| 25.4 Council to participate in regional efforts to investigate alternative energy sources | Council participates in relevant initiatives | |

### Community education and engagement

| *What we said we would do:* | *What we did:* | *Comments* |
|---|---|---|
| 26.1 Support partnership projects which improve opportunities for Council, farms and local businesses to better understand carbon emissions management and offsetting | | The unstable energy and carbon policy environment across Australia in the past few years has made it difficult to progress in this area. Carbon management has been politicised to the point where it has become impossible for Council to engage with the community about emissions reduction. Instead Council has focussed on reducing its own emissions, accounted for with the NGERS protocol. |

| | | |
|---|---|---|
| 26.2 Council to take a stronger role promoting the use of alternative energy and informing community about existing initiatives and funding opportunities | A significant proposal for a "Solar Hub" under a Victorian Government scheme was developed in 2010-11, covering the Southern Grampians shire and the surrounding region. The project would have incorporated a training element to improve the skills of regional electricians in relation to solar technology, monitoring and promotion and encourage the uptake of solar panels to generate at least 2 megawatts of electricity on homes, businesses and farm buildings through a bulk-purchasing scheme. The scheme was discontinued in 2011.<br><br>Since then Council has demonstrated its commitment to renewable energy by installing solar photovoltaic systems on a number of Council buildings. | An opportunity exists to facilitate a bulk roll out of rooftop solar PV in the community and businesses. |
| 26.3 Council to show leadership educating the community about the relevance of appropriate waste management in relation to emissions | Council introduced a voluntary organic waste service to reduce emissions from landfill and continues to educate residents about diverting food and garden waste. The voluntary service will become compulsory in 2020. | . |
| 26.4 Develop an education program about food security and self-sufficiency | Council staff have formed and maintained links with the Primary Care Partnership and their work on food security. | |
| 26.5 Council to help communities better understand the implication of a carbon Pollution Reduction Scheme (CPRS) and an Emissions Trading Scheme (ETS) | Not done | See comments above, in 26.1. |

| | | |
|---|---|---|
| 26.6 Council to support community driven and emerging initiatives related to adaptation to climate change (eg Transition Towns) | In 2015-16 Council began work on a climate change adaptation plan, as part of the regional Barwon South West Climate Resilient Communities project. | |
| 26.7 Council to ensure the Planning Scheme and building guidelines help to better address climate change issues | The Building Code of Australia and Victoria's state regulations require a minimum of 6 star energy efficiency rating on new buildings and large renovations, which help to address temperature-related climate change impacts. | There is potential for Council to become more influential in this area as some other Victorian Councils have done, and require a sustainable design assessment with planning permit applications for buildings which will save occupants money in the longer term. These cover issues such as energy efficiency, water use efficiency, stormwater management, building materials and waste management. |

## Implementation and Monitoring

The Sustainability Strategy recommended a series of steps for implementation and monitoring of progress and a Plan, Do, Study, Act cycle.

### Technical Reference Group

The Sustainability Strategy recommended that a Technical Reference Group be formed, which would include the agencies necessary for the actions within the Strategy to be implemented (includes Wannon Water, Glenelg Hopkins CMA, DPI/DELWP, Waste Reduction Group). Terms of Reference for the Sustainability Strategy Technical Reference Group were developed (see Appendix 1) but were never taken to Council for endorsement so the Group has not been appointed.

### Community Groups

The Strategy recommended that community groups be formed to implement community initiatives detailed in the strategy.

Council works with existing community groups and only if necessary forms new groups to help meet objectives within the Sustainability Strategy, an example being the Wannon-Nigretta Community Group which was formed to complement Council operations at the Wannon and Nigretta reserves. Community Resilience Groups may be formed to help communities adapt to climate change.

Council's Sustainability and Environment staff have become involved with existing groups and organisations to promote sustainability objectives; for example the Primary Care Partnership's projects relating to Food Security and Active Transport and the Hamilton Community Garden Association.

### Sustainability and NRM staffing

Staffing arrangements have changed since the launch of the Sustainability Strategy so that now Council employs a full time Sustainability Coordinator and a full time Biodiversity Officer to deliver outcomes relating to the various components of the Sustainability Strategy.

### Yearly work plan

The yearly work plan as proposed in the Strategy is completed every year by the Sustainability Coordinator and the Biodiversity Officer.

## Future direction

There have been many significant changes within Council as a result of adopting the Sustainability Strategy.

These include:

- Mapping of weeds and native vegetation on all Shire roads
- Introduction of an organic waste kerbside service
- Replacement of 1000 street lights with LEDs and plans to replace a further 500 cost-shared lights
- Extensive energy efficiency retrofits in Council buildings and facilities
- Installation of 216 kW of solar PV generation on Council facilities
- Development of a carbon management plan
- Development of a climate change adaptation plan
- Establishment of a recycle shop at the Hamilton landfill site
- Inclusion of environmental criteria in the purchase of fleet vehicles, the procurement policy, business cases and tenders
- Installation of public place recycling facilities in many locations across the Shire
- Establishment of an effective network across the region of Councils' Sustainability officers who work together on projects that have a regional focus
- Improved metering and monitoring of water use and removal of redundant mains water supplies
- Improved monitoring of gas and electricity use
- Contract established to purchase 100% renewable electricity.

The national and global landscape has also changed considerably since the strategy was developed in 2009 so looking to the future, there are new issues for consideration including:

- Energy
    - Phase out use of natural gas to further reduce GHG emissions and reduce demand for unsafe gas extraction
    - Assess feasibility of bioenergy as a replacement for natural gas
    - Continue with replacement of inefficient street lights
    - Investigate and implement electric vehicle use and provision of charging infrastructure where appropriate
    - Investigate use of hydrogen as an energy source

    - Continue with energy efficiency works
- Water
    - Implement actions from Hamilton IWM plan
    - Extend IWM plan development to other towns
    - Continue to look for opportunities to improve water use efficiency and alternative water storage
    - Implement a pilot cluster septic system in an unsewered township
- Waste
    - Develop holistic waste strategy to guide best practice waste management and diversion
    - Continue to work with BSWWRRG to improve waste management in the Shire and region
- Biodiversity
    - Continue to improve knowledge of roadside conditions, map and treat weeds
    - Collaborate with other organisations and community for restoration activities eg. Grange Burn
    - Develop a Natural Asset Strategy to guide further works and area of significance for conservation
    - Review Vegetation Protection Overlays and Environmental Significance Overlays to ensure adequate protection to the Shire's important assets

# Appendix 1 – Terms of Reference for Technical Reference Group

SOUTHERN GRAMPIANS SHIRE COUNCIL

SUSTAINABILITY STRATEGY - TECHNICAL REFERENCE GROUP

TERMS OF REFERENCE

## Purpose and Status

### 1.1 Purpose

The Technical Reference Group shall:

- Provide technical advice to Council on matters relating to implementation of the Council's Sustainability Strategy

In the role, the Technical Reference Group shall:

- Review and monitor the implementation and monitoring of the Sustainability Strategy
- Source and seek funds for projects listed in the Sustainability Strategy
- Engage interested groups and individuals to assist in implementation of the Sustainability Strategy
- Provide technical advice and input to Council on issues relevant to sustainability, native vegetation, climate change, waste management and carbon management
- Assist council to develop beneficial partnerships with relevant agencies

### 1.2 Technical Reference Group Status

The Technical Reference Group is a Reference Committee of Council and is not legally constituted.

## Meetings

2.1 Membership

The composition of the Technical Reference Group shall reflect the relationship between the Southern Grampians Shire and the relevant agencies operating within, but not confined to the Shire.

Membership shall be comprised of:

- Director Shire Futures, Southern Grampians Shire
- Sustainability Coordinator, Southern Grampians Shire
- Biodiversity Officer, Southern Grampians Shire
- Department of Sustainability and Environment (1)
- Department of Primary Industries (1)
- Wannon Water (1)
- Glenelg Hopkins Catchment Management Authority (1)
- Barwon South West Waste and Resource Recovery Group (1)

Other organisation representatives or individuals may be invited to attend on the basis of need and relevance, as determined by the Director of Shire Futures.

2.2 Term of Appointment

The term of appointment shall be two years.

2.3 Conflict of interest

Members have a responsibility to declare any conflict or potential conflict between their business or professional interests, and their roles as members of the Technical Reference Group. The meeting shall then determine if and how the member may participate in deliberations.

2.4 Inability to attend

All members may send a deputy who shall replace the official member when unable to attend.

2.5 Resignation

Resignations shall be submitted in writing to the Chair of the Technical Reference Group.

2.6 Non attendance

If a member misses three consecutive meetings without an apology or sending a deputy they will be deemed to be no longer a member of the Reference Group and a replacement member will be sought from the relevant agency.

## Meetings

3.1 Meetings

The frequency location and dates for the Technical Reference Group meetings shall be determined by the Group.

3.2 Decision Making

The committee shall operate on a consensus model of decision making.

3.3 Quorum

A quorum shall consist of four current members.

## Chair

4.1 Chair

The Director of Shire Futures shall chair all meetings of the Technical Reference Group. The chairperson's delegate shall chair meetings when the Chair is unable to do so.

4.2 Operation of Meetings

The Chair is responsible for ensuring the Technical Reference Group operates in an effective manner within the Terms of Reference. The Chair shall endeavour to ensure that all members have a fair and reasonable opportunity to present their views.

The Group shall ensure that "ground rules" are established and implemented within three months of its first meeting to ensure proper conduct at meetings.

## Council

### 5.1 Relationship with Council

Council shall ensure an appropriate level of administrative support is provided to the group.

### 5.2 Reporting to Council

Recommendations of the group shall be reported by the Director Shire Futures to the Executive Management Team and to Council.