



# Waterwise Council Action Plan

Shire of Bridgetown-Greenbushes

27 November 2020





The Waterwise Council Program supports the State Government's vision to create a Waterwise Perth and waterwise communities, recognising that:

*A waterwise Perth is cool, liveable, green and sustainable, a place where people want to live, work and spend their time. It is a city where communities care about and value water, while making best use of its various sources (groundwater, surface water, stormwater, seawater and wastewater).*

*The city serves as a catchment and provides healthy natural environments, supporting a range of social, ecological and economic benefits.*

The Shire of Bridgetown-Greenbushes vision;

*'A beautiful place to live' Working together with the community to achieve our shared objectives.*

Aligns with the Waterwise communities goals to create a Waterwise Bridgetown-Greenbushes.



## Introduction

It has been over 10 years since the Waterwise Council Program was launched by Water Corporation and the Department of Water and Environmental Regulation. The Program was developed to build a cooperative working relationship with local governments to improve water use efficiency in local governments and their communities.

Since the development of the first Water Efficiency Action Plan in 2016, Waterwise Councils have achieved a number of amazing and innovative initiatives to reduce water usage and strive towards developing waterwise communities.

## Criteria to become a Waterwise Council

The Waterwise Council (WWC) Program is free to all local government authorities (LGAs) in Western Australia to join. To be endorsed as a Waterwise Council, a local government must fulfil the following steps:

**Criteria 1:** Sign a Memorandum of Understanding to participate in the Waterwise Council Program.

**Criteria 2:** Review water consumption and create a Waterwise Council Action Plan for potable and non-potable water sources for all local government operations and the community.

**Criteria 3:** Ensure appropriate staff complete online waterwise training at <https://www.watercorporation.com.au/Help-and-advice/Business-customers>

**Criteria 4:** Progress towards full compliance with groundwater licence conditions including metering regulations and no infringements of water usage issued in the past 12 months.

**Criteria 5:** Report annually to retain endorsement (optional recognition scheme)

### Objectives

The objectives of the Waterwise Council Action Plan are to:

- Assess current water management activities across council operations and the community;
- Identify opportunities to save water;
- Set goals to improve water management outcomes;
- Prepare an action plan and implement water actions to progress towards your targets;
- Provide a process for annual reporting on implementation of water actions; and
- Work towards creating waterwise communities beyond water efficiency (recognition scheme).

This plan will be valid for a period of **5 years** and forms the basis of annual reporting requirements.

### Methodology

- Waterwise journey
- Water use inventory
- Develop water goals and targets
- Table of endorsement actions
- Recognition Scheme



## Contact Details

LGA details	
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## Water Management Team

Name	Position/Department	Email	Completed online training? Yes/No
Seonaid Leslie	Waste and Environmental Officer	SLeslie@bridgetown.wa.gov.au	
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# Bridgetown Waterwise Journey

## Main Strategic Documents

Below are the Shire’s main strategic documents. The main documents are the Shire’s Strategic Community Plan 2019 and Natural Environment Strategy 2008, which are both under review.

**Table 1: Summary of related strategic documents**

Main Strategic Document	Link	Notes
Strategic Community Plan 2019	<a href="https://www.bridgetown.wa.gov.au/documents/161/strategic-community-plan-2019">https://www.bridgetown.wa.gov.au/documents/161/strategic-community-plan-2019</a>	This strategy is the main document for waterwise objectives for the City/Town/Shire. Community consultation has just been done and this document is being reviewed.
Natural Environment Strategy	<a href="https://www.bridgetown.wa.gov.au/documents/154/bridgetown-natural-environment-strategy">https://www.bridgetown.wa.gov.au/documents/154/bridgetown-natural-environment-strategy</a>	This document needs to be reviewed.
Corporate Business Plan 2020-2024	<a href="https://www.bridgetown.wa.gov.au/documents/197/corporate-business-plan-2020-2024">https://www.bridgetown.wa.gov.au/documents/197/corporate-business-plan-2020-2024</a>	
Consolidated Asset Management Plan Summary 2019/20 to 2033/34	<a href="https://www.bridgetown.wa.gov.au/documents/193/consolidated-asset-management-plan-summary-201920-to-203334">https://www.bridgetown.wa.gov.au/documents/193/consolidated-asset-management-plan-summary-201920-to-203334</a>	The impact of Climate Change on Assets is highlighted as increases in costs, due to implementation of power and water consumption minimisation strategies.
Related Strategic Document	Link	Notes
Guidelines for the Construction of Dams	<a href="https://www.bridgetown.wa.gov.au/documents/191/guidelines-for-construction-of-dams">https://www.bridgetown.wa.gov.au/documents/191/guidelines-for-construction-of-dams</a>	
Stormwater Management Guidelines	<a href="http://www.bridgetown.wa.gov.au/documents/192/stormwater-management-guidelines">www.bridgetown.wa.gov.au/documents/192/stormwater-management-guidelines</a>	
Policy Manual – Other Policy No. O.10 Managing the Natural Environment, pp 24	<a href="http://www.bridgetown.wa.gov.au/documents/134/09-policy-manual-other">www.bridgetown.wa.gov.au/documents/134/09-policy-manual-other</a>	
Policy Manual – Town Planning Policy No. TP.25 Aquaculture Policy	<a href="https://www.bridgetown.wa.gov.au/documents/133/08-policy-manual-town-planning">https://www.bridgetown.wa.gov.au/documents/133/08-policy-manual-town-planning</a>	
Policy Manual – Town Planning Policy No. TP. 21 Siting of Water Tanks Policy	<a href="https://www.bridgetown.wa.gov.au/documents/133/08-policy-manual-town-planning">https://www.bridgetown.wa.gov.au/documents/133/08-policy-manual-town-planning</a>	
Policy Manual – Works and Services Policy No. I. 1 Street Trees	<a href="https://www.bridgetown.wa.gov.au/documents/129/04-policy-manual-infrastructure">https://www.bridgetown.wa.gov.au/documents/129/04-policy-manual-infrastructure</a>	
Policy Manual – Works and Services Policy No. I. 1.4 – Road Verge Development Criteria	<a href="https://www.bridgetown.wa.gov.au/documents/129/04-policy-manual-infrastructure">https://www.bridgetown.wa.gov.au/documents/129/04-policy-manual-infrastructure</a>	



Policy Manual – Works and Services Policy No. I.17 Pesticides Spraying	<a href="https://www.bridgetown.wa.gov.au/documents/129/04-policy-manual-infrastructure">https://www.bridgetown.wa.gov.au/documents/129/04-policy-manual-infrastructure</a>	Impacts waterways, landscaping and garden maintenance.
Local Law – Activities on thoroughfares and trading on thoroughfares & public places	<a href="https://www.bridgetown.wa.gov.au/documents/142/local-laws-activities-on-thoroughfares">https://www.bridgetown.wa.gov.au/documents/142/local-laws-activities-on-thoroughfares</a>	





## Water Use Inventory

The purpose of the Corporate and Community water use inventories is to identify priority areas for action and assist the Shire to track water consumption over time.

### Corporate water consumption

The Shire's potable water consumption has increased in the last financial year by ~10%. This is to be expected as facilities expand; however the Shire recognises the importance of closely monitoring this consumption, to pick up leaks and identify opportunities for increased water use efficiency.

At the time of writing this Action Plan there are no metered Shire owned non-potable licenced groundwater or alternative water sources being used. One of the Shire's actions is to review this. The Shire uses dam water pumped from behind The Cidery and Blackwood Valley Brewing Company, located on Gifford Road, to reticulate the Bridgetown Football/Sports Oval on Les Woodhead Ave off the Bridgetown-Boyup Brook Road. There is also a bore used by the Bridgetown Tennis Club for reticulation which will be investigated.

The Greenbushes Sports Grounds, which includes an active soccer field, cricket pitch, change rooms, canteen and two toilet blocks is part managed by Talison Staff. Reticulation of the soccer field is organised by Talison by pumping from the nearby Watercorp owned dam and New Zealand Gully Dam.

**Table 2: Summary of corporate total water consumption over time from potable and non-potable water sources**

Water source	2015/2016 (kL)	2016/2017 (kL)	2017/2018 (kL)	2018/2019 (kL)	2019/2020 (kL)
Potable water	23591	21198	23923	21950	26799
Non-potable, licensed groundwater	N/A	N/A	N/A	N/A	N/A
Non-potable alternate water source (Recycled water/stormwater etc.)	N/A	N/A	N/A	N/A	N/A
<b>Total water consumption</b>	<b>23591</b>	<b>21198</b>	<b>23923</b>	<b>21950</b>	<b>26799</b>

The Shire's top potable site is its commercial standpipe on Rose Street. This was heavily used by local farmers in the last financial year, which explains the spike from previous years. The next four top water consuming assets are the Swimming Pool, Tennis Courts, Library and Greenbushes Hall/Thompson Park on Blackwood Road. These will be investigated further to identify any water saving actions that can be taken.

At the time of writing this Action Plan the Shire does not hold any groundwater or surface water licences to self-supply water.

**Table 3: Top potable and non-potable water consuming assets**

Account #	Common name	Water use source	2018/2019 (kL)	2019/2020 (kL)	Notes*
<b>Top 5 potable sites</b>					
9006881727	Rose Street Standpipe	Scheme	3959	5287	Registered as a commercial standpipe in 2019. Increasing use by farmers for drought assistance and by local volunteer fire brigades for bushfire control.
9006870817	Swimming Pool	Scheme	4742	4842	



9006878317	Tennis Courts	Scheme	1925	2222	Site isn't managed by the Shire. Bore is used for part of the year. Investigations to be done into upgrading bore.
9006870825	Library	Scheme	364	2114	Previous undetected leaks in both roof and ground gardens. Gardens have required high volumes of water to establish.
9006884450	Thompson Park/Town Hall/Skate Park (Blackwood Road, Greenbushes)	Scheme	1303	1742	Park upgrade and retic system in 2012/13. Known issues with turf and subsoil.
9006885859	Greenbushes Sports Ground Blackwood Rd	Scheme	510	657	Used for free camping and soccer events.
9006870809	95 Steere St Recreation Centre	Scheme	245	490	Three water meters.
9006883714	Toilets Spring Gully Rd Greenbushes	Scheme	117	131	
9006884549	Toilets Blackwood Rd Greenbushes	Scheme	107	131	
<b>Top non-potable sites</b>					
N/A	N/A	N/A	N/A	N/A	N/A

At the time of writing this Action Plan there are no corporate licences to take groundwater.

**Table 4: Summary of corporate licences to take groundwater**

Licence #	Current Licensed allocation (kL)	Actual metered abstraction	Actual metered abstraction	Actual metered abstraction	Notes*
		2017/2018 (kL)	2018/2019 (kL)	2019/2020 (kL)	
N/A	N/A	N/A	N/A	N/A	N/A





## Community water consumption

The Shire's annual community water use is the amount of water currently consumed by the community. This information helps to recognise the total water cycle to progress towards a Waterwise Shire and can assist to identify trends and set targets to reduce water consumption.

The top potable water use sector in the Shire is Residential, which has remained just over 300,000kL a year since 2015/2016.

**Table 5: Community potable water use sectors and water consumption over time**

Water use source	2015/2016 (kL)	2016/2017 (kL)	2017/2018 (kL)	2018/2019 (kL)	2019/2020 (kL)
Residential	314,284	305,048	311,549	317,591	306,868
Commercial	69,960	72,070	78,455	81,254	70,892
Education	10,854	10,994	11,360	13,075	11,737
<b>Total water use</b>	<b>395,098</b>	<b>388,112</b>	<b>401,364</b>	<b>411,920</b>	<b>389,497</b>

The main source of non-potable water used by community across the Shire of Bridgetown-Greenbushes is surface water. There are two licences to abstract surface water from farm dams for horticulture on the very upper tributaries of the Donnelly River. Groundwater yields are poor and there are no licences to abstract groundwater.

Water for cattle or other stock not raised under intensive conditions does not need to be licensed, as defined in the exemptions of the Rights in Water and Irrigation Act 1914. In 2013 the Australian Bureau of Statistics estimated that around 270,769 kL/yr of water was used for cattle and other livestock (sheep and pigs) across Bridgetown-Greenbushes. This water is sourced from surface water - rivers and their tributaries or farm dams.

Further investigation will be undertaken into community non-potable unlicensed groundwater as a bore is partially used by the Bridgetown Tennis Club. Additionally the use of recycled water by sporting clubs will be investigated, as it's known that the Bridgetown Golf Club use recycled water for a period of the year for their reticulation.

**Table 6: Community non-potable water allocation over time**

Water use source	2015/2016 (kL)	2016/2017 (kL)	2017/2018 (kL)	2018/2019 (kL)	2019/2020 (kL)
Unlicensed stock water	-	270,769	270,769	270,769	270,769
Licensed, self-supply groundwater users for example schools, sports clubs, industry, construction and horticulture	N/A	N/A	N/A	N/A	N/A
Licensed, self-supply surfacewater users	-	50,000	170,000	170,000	170,000
Non-potable alternate water source (Recycled water/stormwater etc.)	N/A	N/A	N/A	N/A	N/A



## Waterwise Goals

### Waterwise Vision

From the Shire of Bridgetown-Greenbushes Strategic Community Plan (2019), our Waterwise priorities are:

- Value protect and enhance our natural environment;
- Enhance parklands, reserves and gardens;
- Effectively utilise natural resources;
- Inform community on land management and sustainable living; and
- Ensure development is sympathetic to the landscape.

### Corporate Water Management

The Shire of Bridgetown-Greenbushes' corporate water management goals are:

- Monitor water use, establish baselines and make improvements to increase efficiency;
- Increase collaboration between Council departments to promote Waterwise practices;
- Protect waterways by reducing pollution and litter; and
- Work with the Planning Department to incorporate Water Sensitive Urban Design in the review of the Local Planning Policy.

### Community Water Management

The Shire of Bridgetown-Greenbushes' community water management goals:

- Educate the community on water efficiency and Waterwise gardens;
- Engage with local schools on water efficiency and sustainability; and
- Promote the installation and use of non-potable water supplies (e.g. grey water systems and rainwater tanks).



# Waterwise Endorsement Action Table

## Waterwise Endorsement Action Table

Table 8: Waterwise Endorsement Action Table

Water Area	Corporate Water Actions	Status (Complete/In Progress/Ongoing/ To be Completed)	Department Responsible	Notes/Evidence
<b>All water sources</b>				
Facilities	Establish a Water Audit Program or similar to closely monitor water use, continually improve water efficiency and identify how to reduce water demand of your top water consuming assets. Demonstrate your plans to implement viable recommendations from your water audits over time.	To be Completed	Corporate Services Manager Building Assets and Projects Asset Management	Assistance and support to be provided by the <i>Development &amp; Infrastructure</i> Waste and Environmental Officer
	Implement maintenance processes to detect, report and repair leaks within all council assets.	To be Completed	Corporate Services Manager Building Assets and Projects Asset Management	Development of a facilities inspection, maintenance and monitoring program
Monitoring	Implement tracking and monitoring of assets' water use over time using industry standards for benchmarking top water consuming sites.	To be Completed	Corporate Services Manager Building Assets and Projects Asset Management	Development of a facilities inspection, maintenance and monitoring program Assistance and support to be provided by the <i>Development &amp; Infrastructure</i> Waste and Environmental Officer
Education	Establish a Water Management Team to foster a culture of Waterwise Champions within the council including providing behaviour change programs,	To be Completed	CEO <i>Development and Infrastructure</i> Waste and Environmental Officer	





# Waterwise Endorsement Action Table

	workshops or initiatives that will encourage waterwise practices at the office and at home.			
	Proactively reduce pollution and litter near local waterways through community groups, council programs or similar.	To be Completed	<i>Development and Infrastructure</i> Waste and Environmental Officer and Community Landcare Officer	Collaborate with Keep Australia Beautiful and Transition Towns. Conduct surveys.
Irrigation	Establish and/or maintain a baseline water budget for every irrigated public open space asset. Demonstrate how you monitor and adjust the baseline water budget in response to weather conditions and or landscape planting changes.	To be Completed	<i>Development and Infrastructure</i> Team Leader Parks and Gardens	Assistance and support to be provided by the <i>Development &amp; Infrastructure</i> Waste and Environmental Officer
	Provide evidence that demonstrates irrigation systems are performing at best practice and are audited to identify poorly performing fixtures or schedules.	To be Completed	<i>Development and Infrastructure</i> Team Leader Parks and Gardens	Development of inspection, maintenance and monitoring program
Landscaping	Landscaping policies and/or plans to include low water use plants, waterwise mulch, hydrozoning and soil amendments.	To be Completed	<i>Development and Infrastructure</i> Waste and Environmental Officer and Team Leader Parks and Gardens	
WSUD	Develop Local Planning Policy to implement water sensitive urban design in new land developments and infill developments.	To be Completed	<i>Development and Infrastructure</i> Manager of Development Services Senior Planning Officer	
Compliance	Review all Shire water use and ensure all licencing and reporting conditions are being met.	To be Completed	<i>Development &amp; Infrastructure</i> Waste and Environmental Officer Corporate Services Manager Building Assets and Projects Asset Management	
<b>Potable water sources</b>				
Facilities	Procurement policies incorporate internal requirements to install better than the minimum Building Code of Australia WELS ratings for water efficiency for water fixtures, fittings and appliances for all new buildings AND external requirements to	To be Completed	<i>Development and Infrastructure</i> Team Leader Parks and Gardens <i>Corporate Services</i>	Procurement policies to be developed and implemented.





# Waterwise Endorsement Action Table

	use Smart Approved WaterMarked and Waterwise Approved products and services where possible.		Manager Building Assets and Projects Asset Management	
Monitoring	Scheme water meters (and any sub meters) are read on a regular basis and recorded. Usage anomalies are investigated and leaks repaired in a timely manner.	To be Completed	<i>Development and Infrastructure</i> Team Leader Parks and Gardens <i>Corporate Services</i> Manager Building Assets and Projects Asset Management	
<b>Non-potable water sources</b>				
Landscaping/ Facilities	Investigate alternative (non-scheme) water supply options for public open space in areas with limited groundwater allocation.	To be Completed	<i>Development and Infrastructure</i> Team Leader Parks and Gardens <i>Corporate Services</i> Manager Building Assets and Projects Asset Management	Assistance and support to be provided by the <i>Development &amp; Infrastructure</i> Waste and Environmental Officer

Water Area	Community Water Actions	Status (Complete/In Progress/Ongoing/ To be Completed)	Department Responsible	Notes/Evidence
Education	Engage with household and business ratepayers to promote water efficiency, Waterwise gardens and how to be a responsible bore owner.	To be Completed	<i>Development and Infrastructure</i> Waste and Environmental Officer and Community Landcare Officer	Information newsletters, factsheets, Waterwise demonstrations, public meetings
	Provide information on the installation and local regulation of non-potable water supply (e.g. grey water systems and rainwater tanks)	To be Completed	<i>Corporate Services</i> <i>Manager Building Assets and Projects Asset Management</i> and Community Landcare Officer	Information Bulletins and Guidelines on Shire web site; review of Shire of Bridgetown-Greenbushes Stormwater Management Guidelines 2011.
	Engage with local schools on water efficiency and sustainability programs, including encouraging schools to participate in the <a href="#">Waterwise Schools Program</a> .	To be Completed	<i>Development and Infrastructure</i> Waste and Environmental Officer and Community Landcare Officer	Meetings and information exchange with school staff and students. Implementation of School water efficiency and





# Waterwise Endorsement Action Table

				sustainability demonstration projects.
	Promote community connectivity to water through Waterwise events at local lakes, rivers or coastal areas.	To be Completed	<i>Development and Infrastructure</i> Waste and Environmental Officer and Community Landcare Officer	Community forums and open days
	Support local environmental community groups to adapt to low water use practices	To be Completed	<i>Development and Infrastructure</i> Waste and Environmental Officer and Community Landcare Officer	Meetings and information exchange with local environmental community groups through newsletters, factsheets and social media





## Endorsement of Waterwise Council Action Plan

<b>Shire of Bridgetown-Greenbushes:</b>		
a)	Will implement the water management measures stated in the Waterwise Council Action Plan and ensure employees and contractors assist in implementing actions.	
c)	Acknowledges that the Water Corporation and / or Department of Water and Environmental Regulation may comment on the Action Plan and/or request additional information relating to the Action Plan.	
d)	Acknowledges that the Water Corporation and Department of Water and Environmental Regulation will monitor the Action Plan and failure to meet requirements of the program may result in the withdrawal of Waterwise endorsement.	
e)	Will submit an annual report, in accordance with the Waterwise Endorsement Action Table, detailing progress made on the Action Plan in order to maintain endorsement as a Waterwise Council.	
Name	<b>Tim Clynch</b>	
Position	<b>Chief Executive Officer</b>	
Signature		Date

## Water Corporation and Department of Water and Environmental Regulation Acceptance of the Waterwise Council Action Plan

Water Corporation and Department of Water and Environmental Regulation has reviewed and accepted the Action Plan. With acceptance of this Action Plan the Shire of Bridgetown-Greenbushes: will be eligible for endorsement/re-endorsement as a Waterwise Council.

## Water Corporation

Name		
Position		
Signature		Date

## Department of Water and Environmental Regulation

Name		
Position		
Signature		Date

