Waterwise Office Program

Water Management Plan

Business Name:

Address:

Telephone:

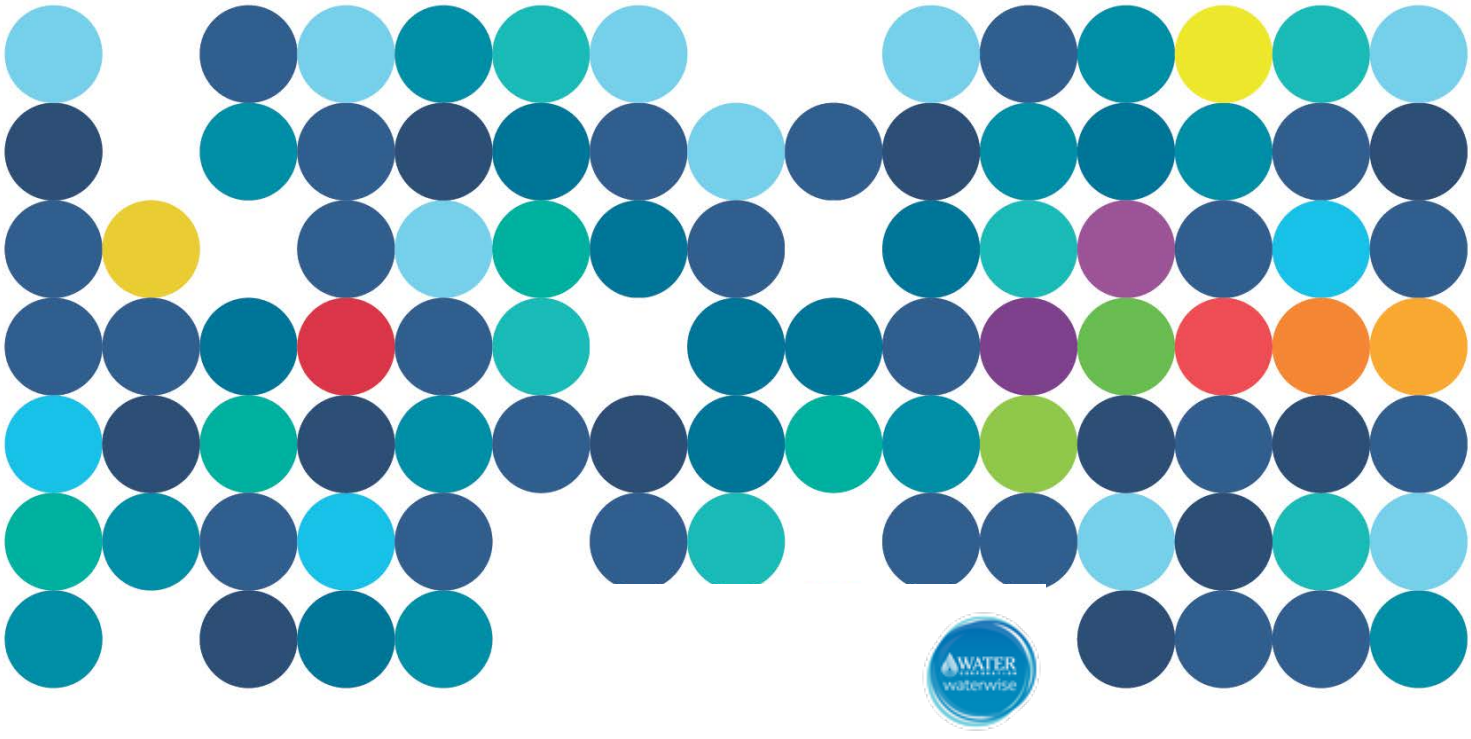
Email:

Date:

Completion of this plan is a requirement to be endorsed as a Waterwise Office and be eligible for the Waterwise Office Recognition Scheme. Please email your completed report to:
water.efficiency@watercorporation.com.au

Or post to:

Water Efficiency Partnerships
Water Corporation
PO Box 100
Leederville WA 6007



1. Introduction

The Water Corporation, Property Council of Australia and the City of Perth have developed the Waterwise Office Program to support the Perth commercial office sector to shift towards best practice water use.

Criteria to become a Waterwise Office

Buildings with a net lettable area (NLA) greater than 5,000m2 are eligible to join the program.

To participate the building owner or owner's representative must commit to complete a Water Management Plan within three months of signing up to the program and report annually on progress.

To be endorsed as a Waterwise Office the building owner must demonstrate water use performance is equal to or above the industry baseline:

- 0.86kL/m2/annum for a water-cooled building
- 0.71kL/m2/annum for an air-cooled building

This template has been created by Water Corporation to assist participants to complete a Water Management Plan to be endorsed as a Waterwise Office.

Objectives

The objectives of the Water Management Plan are to:

- Assess current water use on site
- Identify inefficiencies and potential water savings
- Set a target to improve water use
- Prepare an action plan and implement water efficiency actions to progress towards your target
- Provide a process for annual reporting on implementation of water efficiency actions

Benefits

The benefits of having a Water Management Plan include:

- Thorough understanding of your water use
- Reduce your operating costs
- Reduce your carbon footprint
- Improve sustainability ratings and improve public perception

Need help completing your plan?

Water Corporation endorsed Waterwise Water Auditors can assist with completing your water management plan. Visit watercorporation.com.au/waterwise to find a Waterwise Water Auditor near you.

2. Site Information

Business Details

Business Name *Please show the business name as you would like it represented in marketing and communications materials*	
Property address	
Building Owner	
Building Manager	
Website	
Water Corporation Billing Account number	
Building Description *Provide a description of the building e.g. mixed use, other facilities or purpose, number of staff and/or tenants.*	
Net Lettable Area (m^2) *Office Building Only*	
Gross Lettable Area Retail (m^2) *Retail Only (if applicable)*	
Building Cooling Type *(Air or Water Cooled)*	
Sewerage Discharge Factor (%)	
Current NABERS Water Rating *(if applicable)*	
Details of existing water saving initiatives/projects	E.g. - Install low-flow hand basin taps (less than 4.5L/min) - Daily meter readings and leak tests - Educate staff about water efficient cleaning practices. - Install sub-meters i.e. on cooling towers or retail space. Recommended on areas consuming over 15% of total water use.

Table 2.1: Business Details

2.2 Contact Information

BUILDING OWNER		
Name		
Position		
Telephone		
Mobile		
Email		
BUILDING MANAGER		
Name		
Position		
Telephone		
Mobile		
Email		
WATER MANAGEMENT TEAM *This team will be dedicated to reducing water use on site. The first contact should be the property Water Manager responsible for the Water Management Plan, as well as other staff who may influence or have an understanding of how water is used at your site.*	**Name**	**Position**
PARTICIPANT QUOTE – maximum 75 words *Please provide a quote from a senior business representative expressing support of the program. This quote will be used for marketing purposes in support of your participation.*		

Table 2.2: Contact Information

3. Water Use Information

Historical Water Use – Scheme Water

Your annual water use is the amount of water currently used on site and can be found on your latest water use bill. *To determine your historical scheme water use, you will need your property's water bills for the previous 12 to 36 months. If you do not have access to your bills email water.efficiency@watercorporation.com.au*

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Annual water use (kL)					
Daily Water use (kL/day)					

Table 3.1: Historical Water Use

To make it easier to compare water use you may also wish to include annual water use data as a graph.

[Insert graph here]

Please outline the source of the above water use information e.g. sub-meter readings, Water Corporation accounts, meter readings. *If water use is different from the Water Corporation account information (e.g. calculated from sub-meter readings) please attach a copy of your current year's sub-meter readings.*

When reviewing your property's water use history, ensure the data represents normal operating conditions, i.e. there were no site renovations, or changes in occupancy during the period. *If there has been a variation from normal conditions during the period, please include a description or reason for this and the estimated impact on water use in the table below.*

Water Balance

A water balance is a measure of how much water is entering and leaving your property. Working out a water balance will help you to understand where water is being used. This makes it easier to identify and prioritise your water saving opportunities.

This information can be estimated from a water audit or if you have sub-metering in place you can develop a more accurate water balance from sub meter readings.

Need help? A Water Corporation endorsed Waterwise Water Auditor can investigate where your water is going, and give you advice on making your water use more efficient. Search for a Waterwise Water Auditor on Water Corporation's website

Major Water Using Area	Water Used (kL)	Water Source (scheme, recycled, bore, other)	Percentage of Total Water Use (%)
Toilets			
Showers			
Hand basins			
Irrigation			
Kitchens/Kiosks			
Cleaning			
Retail			
Cooling Towers			
Other			
TOTAL			**100%**

Table 3.2: Water Balance

Water use shown above was determined by:

Give a brief explanation of how the water balance was determined (e.g. sub-metering, site water audit, estimation)

4. Benchmarks and Targets

Performance Benchmarks

A performance indicator will allow you to assess your water use performance against the industry standard and allows for realistic and measurable targets to be set. The following performance indicator is recommended for office buildings:

- Kilolitres per m^2 net lettable area (kL/m^2/annum)

The industry baseline for water use in a commercial office building is:

- 0.86kL/m^2/year for a water-cooled building
- 0.75kL/m^2/year for an air-cooled building

If the building is mixed use e.g. retail and office, please provide evidence of how the office building water consumption was calculated e.g. attach sub meter readings.

WATER USE DETAILS ***In order to be eligible for the Waterwise Office Recognition Scheme you must provide a performance benchmark.***				**NABERS** (used for waterwise recognition if available)
Period (Reporting year)	**Water used** (kL) Office Building Only	**Occupancy** (%) Office Building Only	**Benchmark** (kL/m2/annum)	[insert star rating]
				[insert normalised consumption]
				[recognition category]*

*The NABERS normalised consumption will be used as the benchmark to determine recognition level if a water rating exists.

Table 4.1: Performance benchmarks

The following recognition categories have been established for the Waterwise Office Program
* This information is provided as a guide only.

	Water cooled (kL/m2/annum)	**NABERS water rating (stars)**		**Air cooled (kL/m2/annum)**	**NABERS water rating (stars)**
Endorsed (industry baseline)	0.75 – 0.86	3.0 – 3.5	Bronze (industry baseline)	0.61 – 0.75	3.5 – 4.0
Silver	0.61 – 0.75	3.5 – 4.0	Silver	0.48 – 0.61	4.0 – 4.5
Gold**	0.48 – 0.61	4.0 – 4.5	Gold**	0.35 – 0.48	4.5 – 5.0
Platinum**	0.35 – 0.48	4.5 – 5.0	Platinum**	<0.35	>5.0

* The NABERS normalised consumption will be used to determine recognition level if a water rating exists.

** To be eligible to receive Gold or Platinum levels of recognition a current NABERS Water Rating is required. This allows us to independently validate the results of high performing buildings before they are recognised as such. Check your NABERS Water Rating at https://nabers.gov.au/public/webpages/home.aspx.

Table 4.2: Waterwise Office Program Recognition Categories

Water Efficiency Targets

Setting water reduction targets will help drive the implementation of water efficiency actions in your property. Targets need to include a realistic timeframe and the base year from which improvements will be measured.

Referring to your benchmark from the current year (Table 4.1 Performance benchmarks) insert a reduction target as a figure percentage of your benchmark for the coming year.

E.g. if your benchmark in 2016/17 was 0.50kL/m2/annum, a suitable water efficiency target might be: to achieve a further 5% reduction in water use and a benchmark of 0.47kL/m2/annum.

The water efficiency target(s) for *[Property Address]* is:

5. Water Saving Checklist

Water saving action	Status	Recommended action	Comments
Managing your water			
Read and monitor meter(s) on daily basis	☐Yes ☐No	Begin reading and recording daily meter reads including leak test. Or, install a continuous monitoring system (data logger) to enable visibility over changes in water use.	
Do you calculate a benchmark for water use at least annually?	☐Yes ☐No	Divide total annual water use (per reading year) by the NLA. Use this benchmark to measure against best practice standards and set goals to decrease water use.	
Are there measures in place to identify where water is used on site? I.e. use of sub meters or hiring a Waterwise Water Auditor	☐Yes ☐No	Sub meters are recommended for areas using over 15% of total water use. Water auditors can perform an in depth site water review.	
Are plumbing fixtures inspected routinely to check for leaks?	☐Yes ☐No	Complete daily walk-arounds and report leaks to maintenance facilitator.	
Are identified leaks repaired in a timely manner?	☐Yes ☐No	Consider using services of a Waterwise Plumber.	
Has a water efficient purchasing policy been implemented?	☐Yes ☐No	Consideration in annual budget of relevant water efficiency plumbing upgrades to meet best practice standards.	
Watering roster days/times are adhered to?	☐Yes ☐No	Check watering roster at https://www.watercorporation.com.au/save-water/watering-	

		days	
Are waterwise materials (posters, stickers etc.) displayed to encourage saving water?	☐Yes ☐No	Order items from; https://www.watercorporation.com.au/materials	
Online Water Efficiency Training: Water Management Team to complete the following modules; - Water Efficient Landscape & Irrigation - Water Auditing for Non-Residential Facilities - Cooling Tower Water Efficiency (only applicable for water-cooled buildings)	☐Yes ☐No	Access training at https://www.watercorporation.com.au/home/business/saving-water/training-and-events	

Water saving action	What type of action is this? Short term = low cost, payback less than 12 months Long term = high cost, payback greater than 12 months	Recommended action	Comments
Amenities			
Shower: Install WELS 3 star rated [or better] showerheads or, install flow regulators to reduce to 9L/minute [or better].	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit http://www.waterrating.gov.au/ for more info	
Hand basin: Install WELS 6 star rated [or better] taps or, install flow regulators to reduce to 4.5L/minute [or better].	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date:	Visit http://www.waterrating.gov.au/ for more info	

	☐Completed		
Toilets: Install WELS 4 star rated dual-flush toilets [or better].	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit http://www.waterrating.gov.au/ for more info	
Urinals: Install manual flush, automatic sensor, ultra-low-flow or waterless urinals.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Complete	Visit http://www.waterrating.gov.au/ for more info. Cyclic flushing urinals are considered non-water efficient and should be upgraded.	
If applicable – Automatic sensor urinals – are the solenoids inspected regularly to detect faults and repaired if required?	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Introduce routine checks into maintenance schedule.	
Hot water system: Installed local to kitchen area with an insulated supply line or, install a ring main or loop system to prevent water wastage and reduce energy costs too.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	If hot water system is located away from kitchen, consider installing secondary system closer to kitchen.	
Sinks: Install WELS 3 star rated tapware or, install flow regulators to reduce to 9L/minute [or better].	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit http://www.waterrating.gov.au/ for more info. Consider installation of sensor taps or foot-operated taps.	

Dishwashers: Install energy and water efficient commercial dishwasher that uses less than 5L/cycle.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit http://www.waterrating.gov.au/ for more info	
Pre-rinse spray valves: Install WELS 6L/minute valves	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit http://www.waterrating.gov.au/ for more info	
If applicable – Pre-rinse spray valves – are the valves inspected regularly to detect faults and repaired if required?	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Introduce fortnightly routine checks into maintenance schedule.	
Cleaning: Use mops/squeegees to clean floors rather than a hose.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	If hose must be used, fit with trigger nozzle.	
Food preparation: Washing/defrosting to be done in the sink with plug to retain water rather than under a running tap.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Food can also be defrosted in fridge or microwave depending on	
Shower: Install WELS 3 star rated [or better]	☐Ongoing	Visit	

showerheads or, install flow regulators to reduce to 9L/minute [or better].	☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	http://www.waterrating.gov.au/ for more info	
Hand basin: Install WELS 6 star rated [or better] taps or, install flow regulators to reduce to 4.5L/minute [or better].	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit http://www.waterrating.gov.au/ for more info	
Soil improver/mulches/wetting agents are used where necessary to improve water retention and soil quality.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit https://www.watercorporation.com.au/save-water/in-the-garden for information.	
Landscape design incorporates waterwise plants and methods.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Visit https://www.watercorporation.com.au/save-water/in-the-garden for information.	
If applicable, underutilised areas of lawn are replaced with waterwise alternatives.	☐Ongoing ☐Short term – Proposed completion date: ☐Long term – Proposed completion date: ☐Completed	Consider replacing lawn in these areas with waterwise gardens or alternatives such as mulch to reduce water use.	

6. Management Commitment and Water Corporation acceptance

This section confirms a commitment from the business to implement water saving actions identified in the WMP and signed by the business owner/business manager and Water Corporation in order to be accepted.

Commitment to Water Management Plan			
[Business Name] at *[Property Address]:*			
a)	Will implement the water saving measures stated in Section 5 of the Water Management Plan and ensure employees and contractors assist in implementing actions.		
b)	Acknowledges that the Water Corporation may comment on the WMP and/or request additional information relating to the WMP.		
c)	Acknowledges that the Water Corporation will monitor the WMP.		
d)	Will submit an annual report, in accordance with Section 5 (Action Plan), detailing progress made on the WMP in order to maintain endorsement as a Waterwise Office and be eligible for the Waterwise Office Recognition Scheme.		
Building Owner			
Name			
Position			
Signature		Date	
Building Manager			
Name			
Position			
Signature		Date	
Water Corporation Acceptance of WMP			
Name			
Position			
Signature		Date	