



# RECYCLED WATER INSTALLATION GUIDE

Guidelines for use and installation





## Contents

Services	3
Information	4
Charles Sturt Recycled Water Mains	5
Water Pressure	5
Water Meter Assemblies	6
Approved Products*	6
On the Property*	7
Commissioning the System*	8
What can Charles Sturt recycled water be used for?	13

\*Specific information for  
installing plumber.

# Services

This recycled water guide has been made available for plumbers conducting recycled water plumbing installations within the City of Charles Sturt and property owners connecting to the recycled water network.

The guide aims to ensure proper installation of the recycled water service and

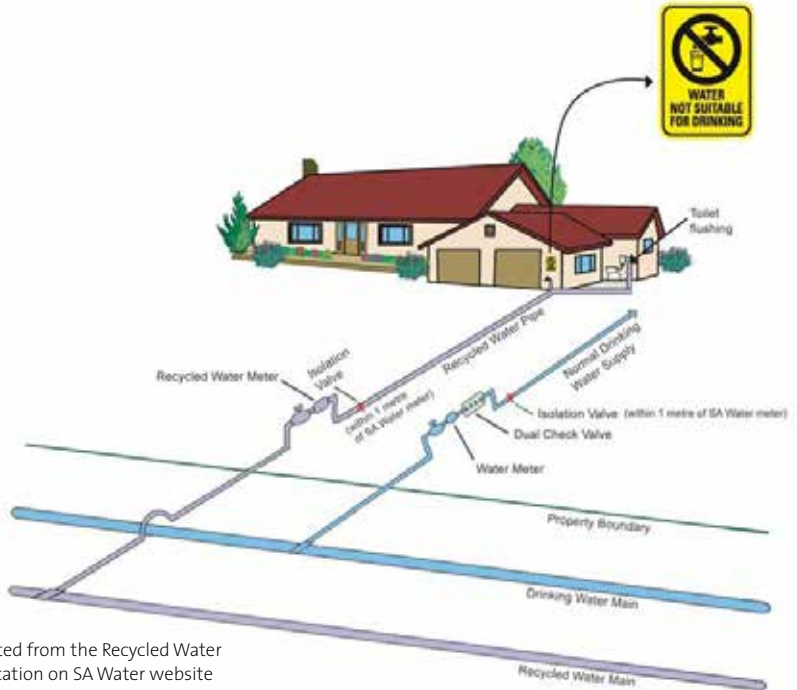
a clear guide for the uses of Charles Sturt recycled water.

This guide will also assist householders and residents to understand the identified uses for Charles Sturt recycled water within their homes.

All recycled water plumbing installations must comply with AS/NZS 3500 and be performed by licensed

registered plumbing contractors.

Charles Sturt would like to acknowledge the assistance of SA Water, City of Salisbury, the Department of Health, the Plumbing Industry Commission of Victoria and the Plumbing Industry of SA in the preparation of this guide.



This image was reprinted from the Recycled Water Plumbing Guide Publication on SA Water website [www.sawater.com.au](http://www.sawater.com.au), published in April 2006 and located on Page 4, with permission of SA Water.



## Information



The collection, treatment, storage and distribution of recycled stormwater is a new initiative for Charles Sturt. Recycled water will assist the city in becoming more water efficient, reducing the cities reliance on the Murray Darling basin, stopping the pollution of local marine estuaries and ensuring green open spaces for residents.

Recycled water is defined as any non-potable reclaimed, recycled or reused water. This may include recycled stormwater, native groundwater or any combination of these waters.

Charles Sturt recycled water has been treated to a standard satisfactory to the identified uses in this information guide (page 13).

Recycled water must be managed differently to drinking water.

The objective of this guideline is to ensure

correct identification, installation and auditing of the recycled water system to ensure no accidental interconnection of drinking water services to recycled water services.

Recycled Water services can only be connected to supply recycled water to toilets, outdoor garden taps and irrigation systems.

Plumbers will be required to notify the Office of Technical Regulator at the completion of Stages 1 & 2 of system installation. Plumbers will also be required to provide a Certificate of Compliance to property owners, Council and the Office of Technical Regulator within 7 days of installation being completed.

# Charles Sturt Recycled Water Mains

Recycled water is delivered to the City through a system of dedicated mains systems. The system is clearly identified by its purple or lilac colour.

A recycled water connection can be provided to a property by the property owner/plumber/ builder lodging an application for recycled water connection with Council. This application can be found on our website at [www.charlessturt.sa.gov.au](http://www.charlessturt.sa.gov.au)

or can be collected from Councils office.

A separate application must be made to SA Water for a drinking water supply connection.

## Water Pressure

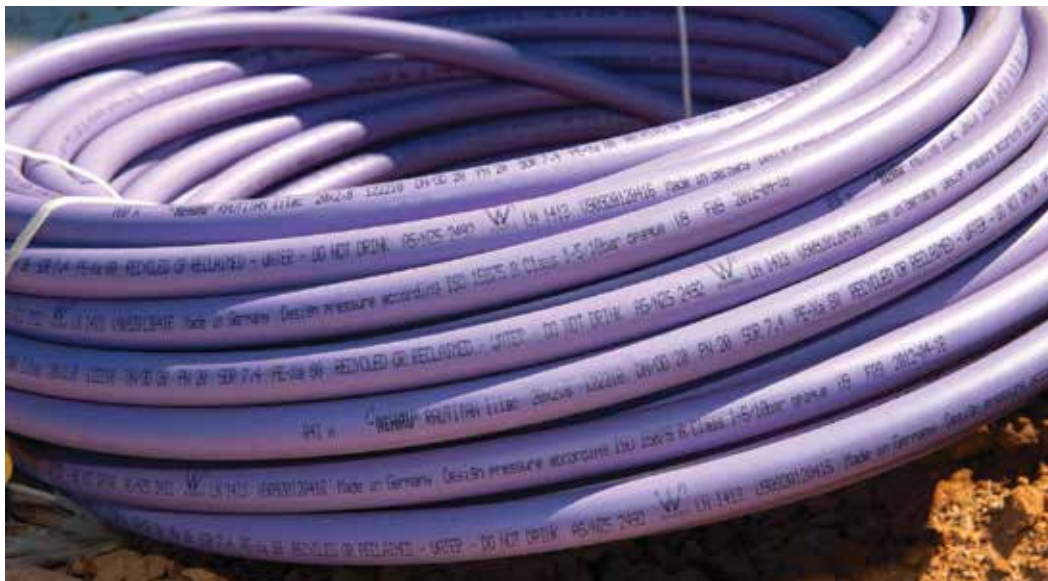
The water pressure available through the dedicated recycled water mains is slightly less than that provided by the drinking water mains. This may affect irrigation systems and should be

considered when designing any irrigation systems for a property.

## From main to meter

Two water services pipes will enter the property.

The service for recycled water will be easily identifiable by the purple/ lilac colour. All pipework must be coloured in accordance with AS2700, being no darker than P24 jacaranda or P12 purple and no lighter than P23 lilac.



# Water Meter Assemblies

Council will install a purple, above ground water meter at the property. This will connect to the recycled water service installed to the property boundary by the installing plumber.

Components of the recycled water meter are different to those of the drinking water meter to prevent interchange of meters.

Metered drinking water supplies greater than 20mm will require an approved backflow prevention device installed by the plumbing contractor.

A dual check valve will be provided by SA Water as



This image was reprinted from the Recycled Water Household Guide Publication on the SA Water website [www.sawater.com.au](http://www.sawater.com.au) and located on Page 5 with permission of SA Water.

part of the 20mm drinking water meter assembly, this dual check valve is to remain visible and accessible and must be in place before the final commissioning of the recycled water system.

The recycled water service will be locked into the closed position until Council have completed the final cross

connection audit to the property to ensure correct installation of the recycled water service.

The installing plumber must be present at the final cross connection audit inspection conducted by Council.

Any alteration to existing recycled water connections requires approval by Council.

## Approved Products

Only products certified by the Australian Building Codes Board under Watermark certification are permitted to be used for recycled water services connected to the Charles Sturt recycled water network.

Pipes used in construction, and to be connected to the recycled water network must be clearly and permanently identified 'Recycled Water – DO NOT DRINK' and coloured in accordance with AS2700, being no darker than P24



**WaterMark**

jacaranda or P12 purple and no lighter than P23 lilac. External metallic stand pipes must also be coloured as above.

## On the Property



The plumber is required to provide to Council, property owner and Office of Technical Regulator, a Certificate of Compliance detailing works and testing conducted on the recycled water system. Certificates of Compliance must be forwarded to the relevant parties within 7 days of the works being completed.

Under no circumstances is there to be interconnection between the recycled water service and the drinking water service.

All plumbing work within the property, including recycled water plumbing, is to be undertaken by a licensed/registered plumber and notified to the Office of Technical Regulator for auditing.

All pipework and products used in the installation of recycled water services shall comply with Section 2 of AS/NZS 3500.1 2003.

Where pipes are not integrally coloured purple, identification may be achieved by means of close fitting durable purple coloured sleeving, netting or spirally wrapped tape.

All recycled water pipes, pipe sleeves and identification tapes an outlets shall be purple and be marked with the following: RECYCLED OR RECLAIMED WATER – DO NOT DRINK.

All buried pipes must have identification tape installed on top of the recycled water pipe, running longitudinally and fastened to the pipe at not more than 3 metre intervals. This identification

tape is designed to ensure safety when digging in the vicinity of recycled water pipes to prevent rupture.

External hose tap outlets shall comply with the following:

- They shall be clearly marked with either a warning sign or prohibition sign in accordance with AS1319.
- They shall be of a type that has a removable handle except where the outlet is installed 1200mm or more above finished surface level.
- They shall be coloured, powder coated purple

All other installation requirements of Section 5 AS/NZS3500.1 Installation of Cold Water Services also apply.

# Commissioning & Auditing of System



It is the responsibility of the installing plumber to contact the Office of Technical Regulator on 1300 884 055 to book an audit inspection for stage 1 and 2 of the commissioning and installation process prior to handover and use by the property owner/occupants.

Stage 3 (final fix) auditing inspections will be conducted by Council prior to a purple meter being commissioned for

supply of recycled water. The installing plumber must contact Council on 8408 1829 to book this inspection.

The pipework must be visible at each stage for inspection.

The following commissioning process must be followed and clearly detailed in the Certificate of Compliance issued by the installing plumber.

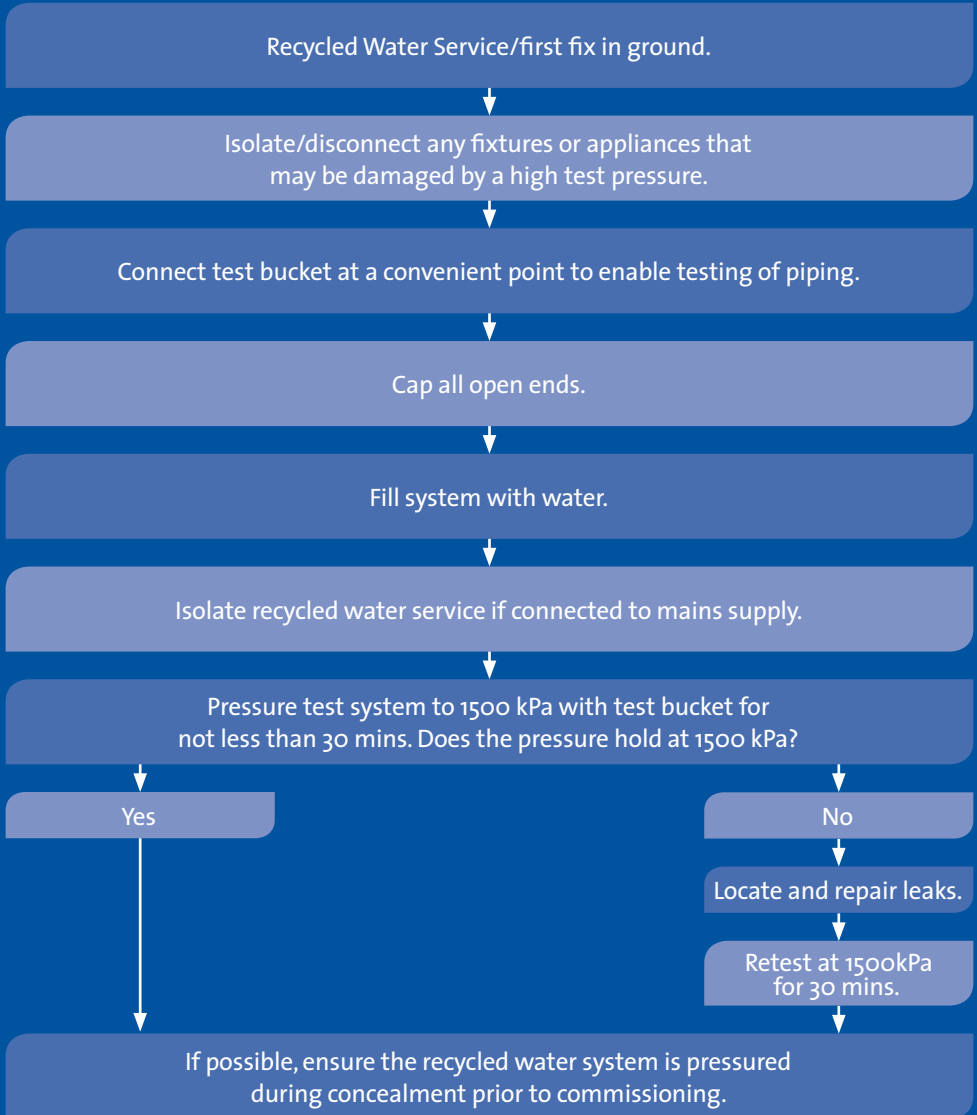
The plumbing contractor must be present at the time of the final fix auditing inspection.

Upon successful completion of the auditing and commissioning process Council will place a purple Recycled Water Label on the inside of the electricity box. This label will serve to remind the property owner and occupants of the next date for cross connection auditing.



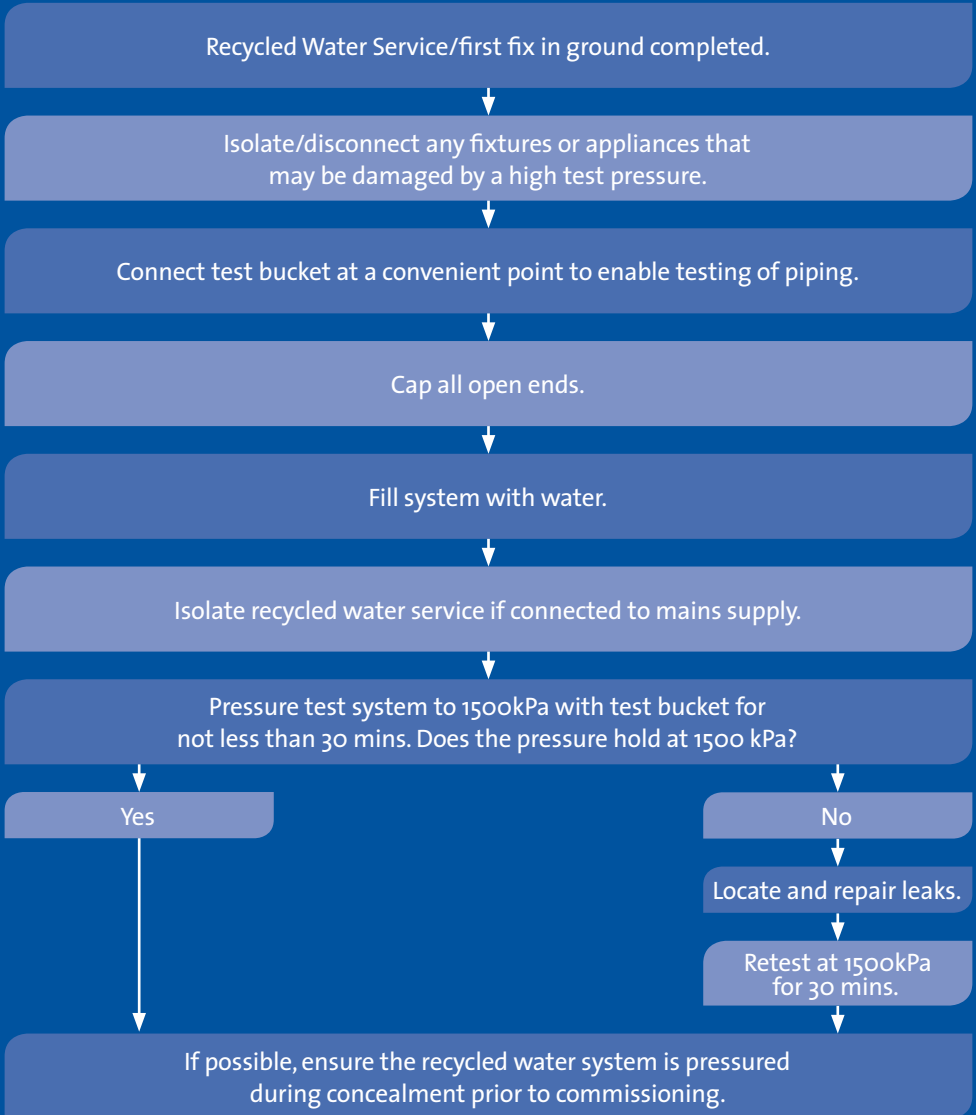
# Stage 1

## COMMISSIONING THE RECYCLED WATER SYSTEM FIRST FIX INGROUND



## Stage 2

### COMMISSIONING THE RECYCLED WATER SYSTEM FIRST FIX IN WALL



# Stage 3

## COMMISSIONING THE RECYCLED WATER SYSTEM FINAL FIX

Turn off all drinking water supply to the property at the drinking water meter.  
Turn on the recycled water supply and leave to remain on.

Turn on all sink, laundry trough, washing machine, bath, shower and hand basin taps one by one. All taps should run dry after a short time.

After all taps have run dry flush all toilets. Toilets should refill as normal if connected to recycled water supply.

Turn on all outside taps. External drinking water taps, if any, should run dry after a short time. Taps that continue to run are connected to recycled water and must be coloured purple and have appropriate warning signs attached.

To check internal appliances such as washing machines and dishwashers, turn off the recycled water main supply and turn the drinking water main supply on. Run the recycled water supply dry using an external tap.

Turn on all internal/external appliances. If they do not run they have been incorrectly connected to the recycled water supply.

Turn on recycled water main supply at the meter. Slowly turn on the recycled water tap furthest from the recycled water meter to allow air to be purged from the pipeline while line is recharging.





# What can recycled water be used for?




## **Recycled water CAN be used to:**

- Flush toilets (this consumes approximately 11% of household usage)
- Washing cars
- Watering gardens
- Filling ornamental ponds (without fish)

## **Recycled water MUST NOT be used for:**

- Drinking (human or animal consumption)
- Cooking or other kitchen purposes
- Personal washing, such as baths, showers, hand basins and bidets.
- Evaporative coolers
- Clothes washing
- Indoor household cleaning
- Swimming pools and spas
- Recreation activities involving water contact (ie children playing under sprinkler)
- Washing companion animals



## Who do I call if I have an emergency with my recycled water connections?


If the problem exists on the property side of the meter you should contact a licensed/registered plumber to resolve any plumbing problems.

If the problem exists at the meter or on Councils side of the meter, please contact Council on 8408 1111.

If you experience any issues with your drinking water supply, please contact SA Water on 1300 650 950.







Where  
can I find  
more  
information  
about  
recycled  
water?

**Department of Health**

[www.health.sa.gov.au](http://www.health.sa.gov.au)

08 8226 6000

**Environmental  
Protection Authority**

[www.epa.sa.gov.au](http://www.epa.sa.gov.au)

08 8204 2004

**Plumbing Industry of  
South Australia**

[www.piasa.com.au](http://www.piasa.com.au)

08 8292 4000

**Department of Environment,  
Water and Natural Resource**

[www.environment.sa.gov.au](http://www.environment.sa.gov.au)

08 8204 1910

**Essential Services Commission  
of South Australia**

[www.escosa.sa.gov.au](http://www.escosa.sa.gov.au)

1800 633 592

**Energy & Water Ombudsman**

1800 665 165



**City of Charles Sturt**  
72 Woodville Road  
WOODVILLE SA 5011

P 08 8408 1111  
F 08 8408 1122  
E [council@charlessturt.sa.gov.au](mailto:council@charlessturt.sa.gov.au)