



Shire of Victoria Plains

Non-potable strategic community water supplies plan

Department of Water and Environmental Regulation
Prime House, 8 Davidson Terrace
Joondalup Western Australia 6027
Locked Bag 10 Joondalup DC WA 6919

Phone: 08 6364 7000

Fax: 08 6364 7001

National Relay Service 13 36 77

wa.gov.au/dwer

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For more information about this plan, contact
Rural Water Planning, 1800 780 300.

Cover photograph: Goudge Road standpipe, Shire of Victoria Plains

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Summary

Water supply planning is essential in rural areas and requires collaboration, involvement and participation from all stakeholders, including farmland communities, local government authorities (LGAs) and State Government agencies as part of an integrated approach to sustainable water supply for the future.

This plan provides information for the shire and farmers on the location of strategic community water supplies (SCWS) and how to access non-potable water for emergency stock watering, firefighting and other local government purposes, including what facilities are available at each site.

Introduction

Over the past 40 years recurrent water supply problems have affected the dryland agricultural region. Emerging climate changes are likely to increase the occurrences of low rainfall years, resulting in water shortages and restrictions in rural communities.

Facing long-term water security challenges, farmers are encouraged to proactively develop and maintain on-farm water infrastructure to better prepare for dry periods.

Rural water planning recognises the importance to prepare for these events and increase the opportunities to deliver an assured water supply to farmland communities in the dryland agriculture areas of Western Australia (WA).

SCWS planning is one of the key roles of the Department of Water and Environmental Regulation's (the department's) rural water planning program. The aim is to ensure dryland agricultural areas are safeguarded wherever possible against serious water deficiencies.

While landholder self-sufficiency must remain the primary objective, the rural water planning program recognises the importance of emergency off-farm water supplies to farming communities. It also builds on the SCWS network across the dryland agricultural area through the community water supplies partnership (CWSP) program and the agricultural areas (AA) dam works program.

Both programs establish and improve non-potable water supplies with an aim to ensure water is available for emergency livestock watering and firefighting. The CWSP program also aims to reduce reliance on potable scheme water supplies for non-potable needs and to increase water availability for public amenities such as sportsgrounds.

This SCWS plan has been compiled for the Shire of Victoria Plains to provide a clear description of each of the SCWS in the shire available for firefighting purposes, and to farmers and farming communities in times of emergency.

Strategic community water supplies and agricultural area dams

A network of SCWS has been developed across WA's dryland agricultural areas to provide an important source of non-potable water primarily for farming and firefighting needs.

These supplies are prioritised for emergency use in times when low rainfall causes on-farm supplies to become depleted and farmers need to travel to access water for livestock.

Vesting of the strategic dams, tanks, bores and other assets in each LGA varies, with some sites owned by government agencies (including the department), Water Corporation, the LGA itself, or by private entities where an agreement has been made to allow access.

It is important that these water supplies are carefully managed to ensure water is available during times of emergency.

The department keeps in regular contact with rural communities to monitor the condition of SCWS and identify and address any maintenance issues.

Each year, the department's rural water program undertakes works to maintain and upgrade sites vested with it and sites in priority areas vulnerable to dry conditions.

AA dams have been developed since the early 1990s to provide water and support the growth of farming in the dryland agricultural area. There are about 480 of the original 681 AA dams that range from high value to no value in terms of their condition and serviceability.

SCWS are a subset of the AA dams that are reliable, in good to excellent repair and retain a high value. The department uses LGA maps to determine which sites are worth upgrading and to identify priority areas to develop new SCWS.

The following map (Figure 1) shows the location of the strategic community supplies and AA dams in the Shire of Victoria Plains, with symbols indicating the capacity, vesting and values of each site.

Shire of Victoria Plains map

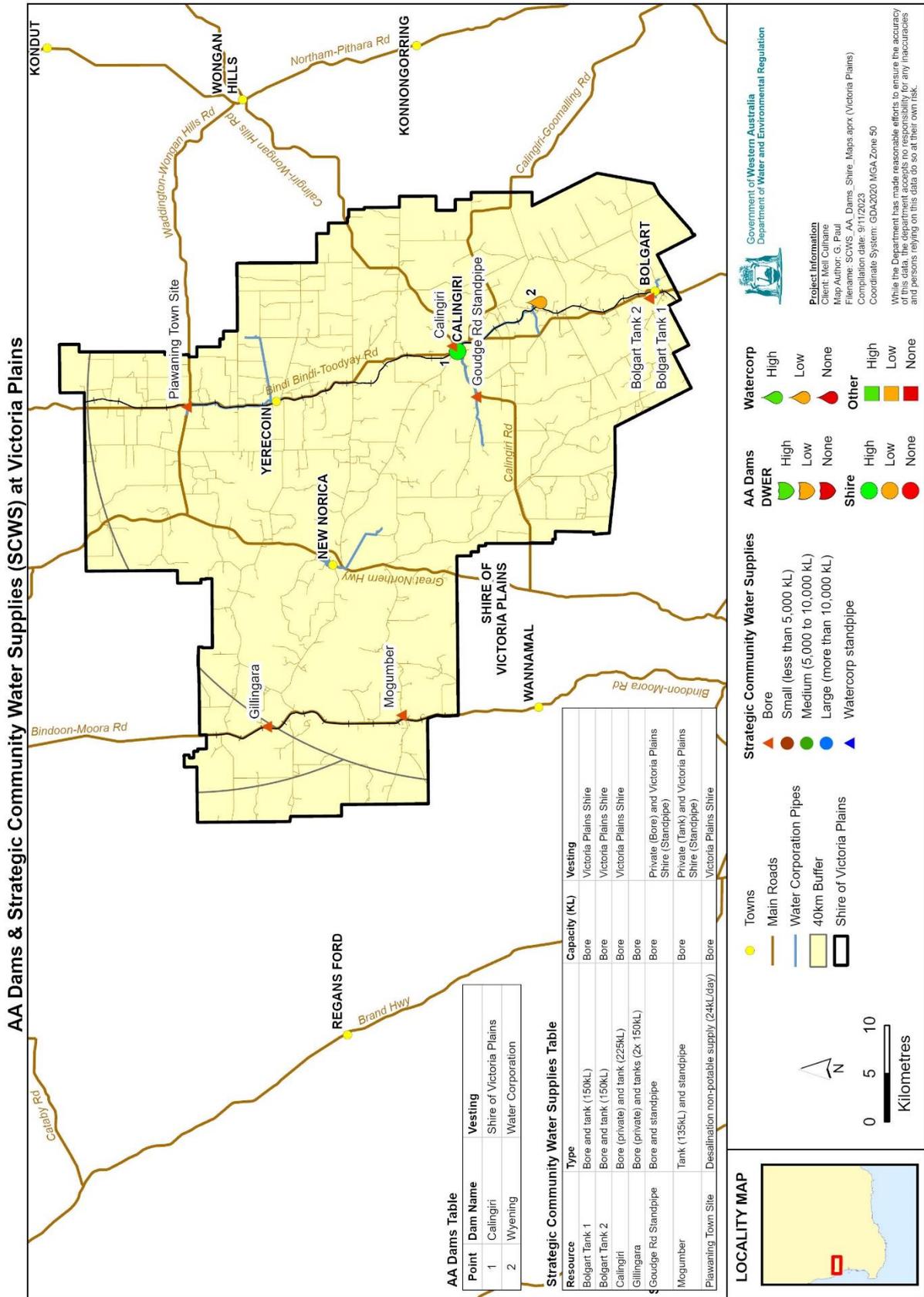


Figure 1- Location of Strategic Community Water Supplies (at 9 November 2023)

Strategic community water supply access

Overview of different fill points

Each SCWS will have a fill point to allow access to water supply for agricultural purposes. Each fill point will have a camlock fitting. Standard sizes of camlocks include 50 mm (2 inch) and an 80 mm (3 inch) fitting and in some cases a 100 mm (4 inch) connection is fitted for firefighting purposes. These camlock fittings will be available where there is a tank, standpipe, swipe card system or bore fill point. When accessing water directly from dams without a tank storage, you will need to bring your own pump to extract water.

Swipe card systems

Swipe card systems are metered fill points that require a swipe card or fob from your shire to access the water supply. Contact your local shire office to obtain a swipe card to access these water supplies.

During emergencies such as bushfires, the shire can switch the swipe card system to allow access without a swipe card. Both swipe card sites are turned to manual during the fire season. The emergency access contact is the Community Emergency Services Manager (CESM) on 0499516763.

Farm bots

Some tanks are fitted with farm bots, which regularly record the water level and feed this information into a website. You can access this website at app.farmbot.com.au (Login ID: **public.access** Password: **access1**) to view water tank levels for tanks fitted with farm bots.

Below are examples of different fill points you may come across in your shire.



Tank standard camlock fitting



Farm bot positioned on top of tank



Swipe card standpipe system



Tank, electric swipe card and pump for bore

Shire of Victoria Plains SCWS sites

Site name	Location
Bolgart tank 1	Bolgart East Road <i>~ 30m from Phillips Road</i>
Bolgart tank 2	Lot 23 Smith Street <i>Standpipe is located on George Street.</i>
Calingiri (Multiple)	<ol style="list-style-type: none"> 1. Calingiri Sports Ground Tanks 2. Goudge Road Standpipe Cnr of Calingiri Road - Goudge Road 3. Goudge Road Tanks ~ 1 km west from cnr Calingiri Road - Goudge Road
Gillingara <i>Contact shire CESM prior to accessing water</i>	5590 Bindoon Moora Road <i>~ 2.7 km northwest of Gillingarra Road</i>
Mogumber	Mogumber – Yarawindah Road <i>~ 400 m East of Bindoon-Moora Road</i>
Piawaning Town Site	Downey Street <i>~200 m north of Waddington – Wongan Hills Road</i>

Description of community water supplies

Bolgart tank 1



Aerial view of Bolgart tank 1



Location map



Tank at Bolgart tank 1



Standpipe at Bolgart tank 1

Bolgart tank 1 site description

Vesting	Shire of Victoria Plains
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	42324
Catchment Type	Sump
Catchment Area (ha)	Unknown

Location and coordinates

Location: Bolgart East Road ~ 30 m from Phillips Road

Latitude	-31.268493000
Longitude	116.500358000
Eastings	453862.14027
Northings	6539652.49582

Water supply and access

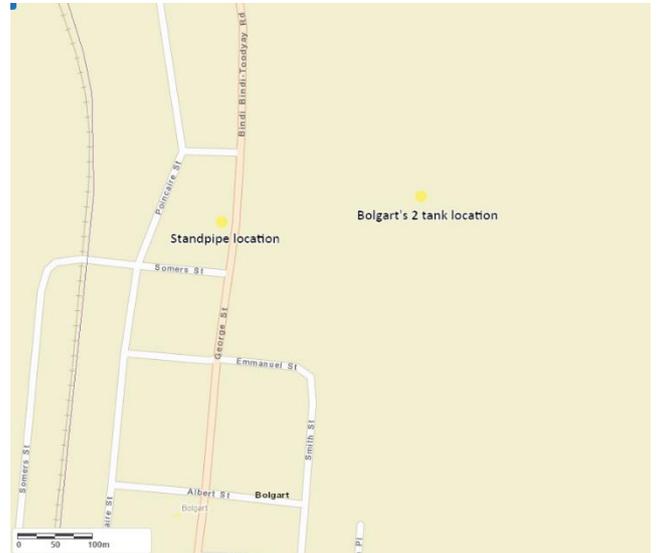
Structure Type	Tank and standpipe
Sump Capacity	Unknown
Tank Storage	150 kL
Standpipe Y/N	Yes overhead and dual camlock system
Pump Y/N	No
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Supply Comments	Water is pumped from sump located 900m south of town, to two 150 kL tanks situated to the east and north of the town. Standpipes are located near both tank sites. See Appendix A for map of Bolgart community water supply installed in 2013.
Emergency access contact	CESM 0499 516 763

Description of community water supplies

Bolgart tank 2



Aerial view of Bolgart tank 2 and standpipe location



Location map



Bolgart standpipes 2023



Bolgart tank 2 site description

Vesting	Victoria Plains
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	42324
Catchment Type	Sump
Catchment Area (ha)	Unknown

Location and coordinates

Location: Tank is located on Lot 23 Smith Street. Standpipe is located on George Street.

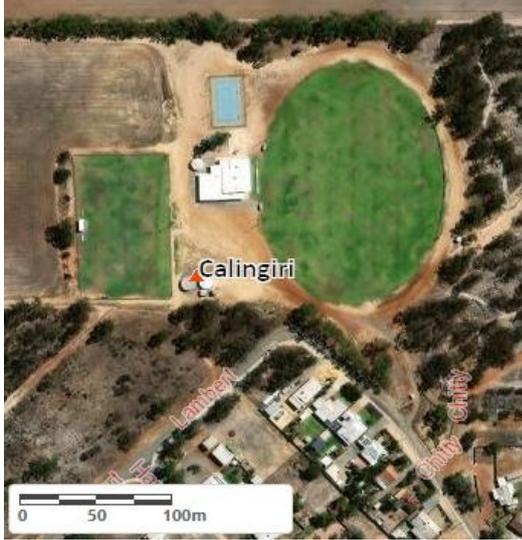
Latitude	-31.27091
Longitude	116.50896
Eastings	453254.76675
Northings	6540270.26397

Water supply and access

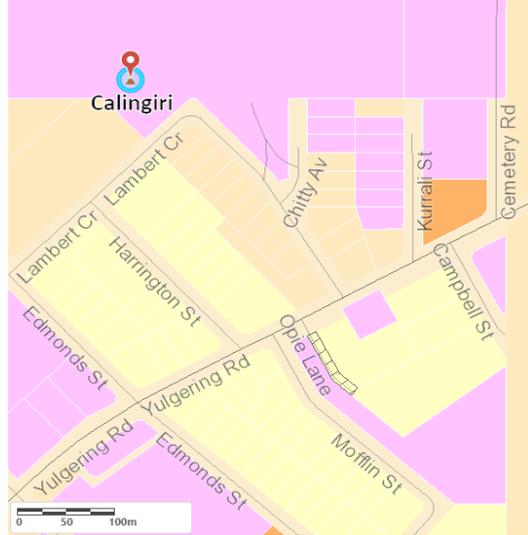
Structure Type	Tank and Standpipe
Tank Storage	150 kL
Standpipe Y/N	Yes
Pump Y/N	No
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Emergency access contact	CESM 0499 516 763

Description of community water supplies

Calingiri



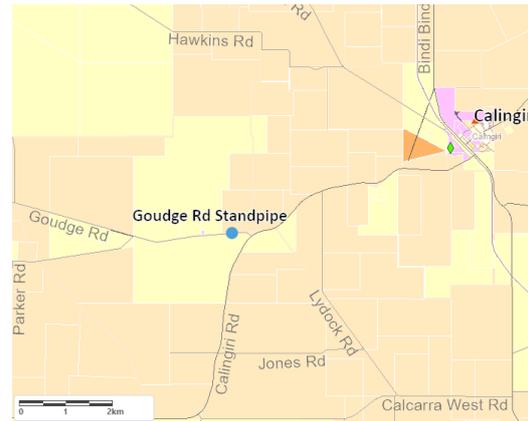
Aerial Calingiri sports oval tanks



Location map tanks at oval



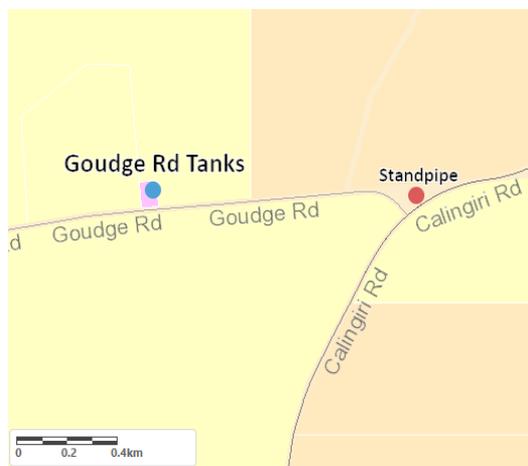
Aerial of standpipe Goudge Road



Location map Goudge Road



Aerial of Goudge Road tanks



Location map Goudge Road tanks



225 kL tank (Feb 2010)



Plaque drought proofing



Second 225 kL concrete tank



Standpipe (Feb 2010)

Calingiri sites description

Vesting	Shire of Victoria Plains
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	26577
AA Dam #	346
Catchment Type	Bore (Private)
Bore Location	Parker Rd Bore

Location and coordinates

Location: Calingiri Sports Ground Tanks

Latitude	-31.085356772
Longitude	116.449411558
Eastings	447483.987244
Northings	6560808.046180

Location: Goudge Road Standpipe cnr of Calingiri Road - Goudge Road

Latitude	-31.10721616079809
Longitude	116.38770206920381
Eastings	437984.89192
Northings	6555733.06664

Location: Goudge Road Tanks ~ 1 km west from cnr Calingiri Road - Goudge Road

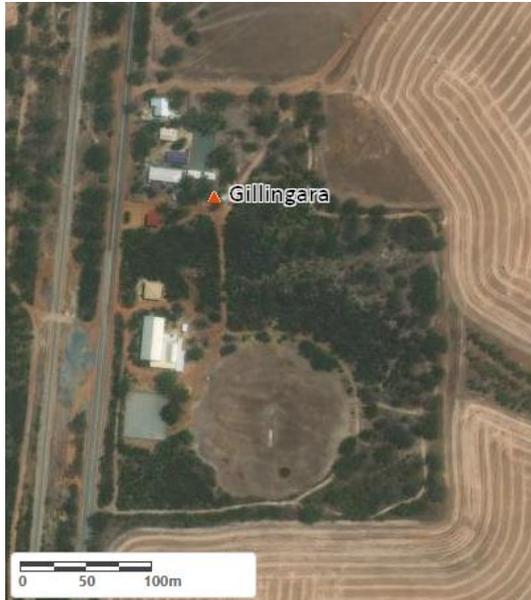
Latitude	-31.10721616079809
Longitude	116.38770206920381
Eastings	437984.89192
Northings	6555733.06664

Water supply and access

Structure Type	Bore, Tanks and Standpipe
Tank Storage	2 x 225 kL (In town at the oval)
Standpipe Y/N	Yes overhead
Pump Y/N	No
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Water Supply Comments	Sports oval tank water is sourced from Yenart Spring Water quality 273 mS/m – TDS 1502 ppm. Water is pumped from Parker Rd Bore to Tanks at Goudge Road. Then pumped to standpipe at Goudge Road.
Emergency access contact	CESM 0499 516 763

Description of community water supplies

Gillingara



Aerial view of Gillingara



Location map



Tanks 2 x 150 kL (Feb 2010)



Standpipe (2009)



Standpipe couplings (2009)

Gillingarra site description

Vesting	This is currently under review by DPLH. Contact shire prior to accessing water from this location.
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	Lot 4079
Catchment Type	Bore
Catchment Area (ha)	N/A

Location and coordinates

Location: 5590 Bindoon Moora Road ~ 2.7 km northwest of Gillingarra Road

Latitude	-30.911123571
Longitude	116.037363235
Eastings	408013.679319
Northings	6579850.753490

Water supply and access

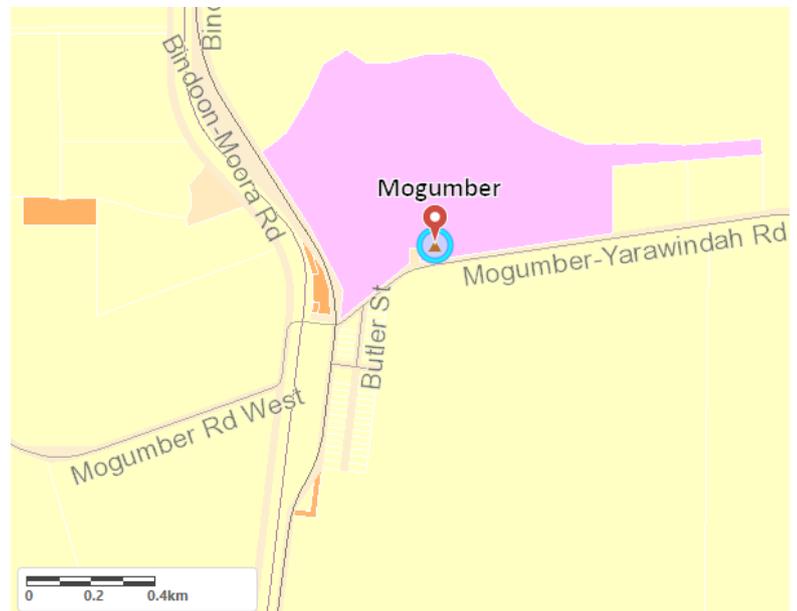
Structure Type	Bore and Tanks
Bore Capacity	60,000 kL
Tank Storage	2 x 150 kL ~ 330m east from bore (Located on private land, access requires permission from farm owners prior to entry)
Standpipe Y/N	Yes overhead
Pump Y/N	No – Gravity Fed
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Emergency access contact	Contact CESM 0499 516 763 prior to accessing water from this location.

Description of community water supplies

Mogumber



Aerial view of Mogumber



Location map



Tank and couplings (Feb 2010)



Standpipe (Feb 2010)

Mogumber description

Vesting	Standpipe - Shire of Victoria Plains Tank – Private property
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	8588
Catchment Type	Water is carted via truck to fill tank on private property adjacent to telecommunications tower. Tank gravity feeds the standpipe located on shire reserve.
Catchment Area (ha)	N/A

Location and coordinates

Location: Mogumber – Yarawindah Road ~ 400 m East of Bindoon-Moora Road

Latitude	-31.036148847
Longitude	116.048407188
Eastings	409187.499443
Northings	6566003.021050

Water supply and access

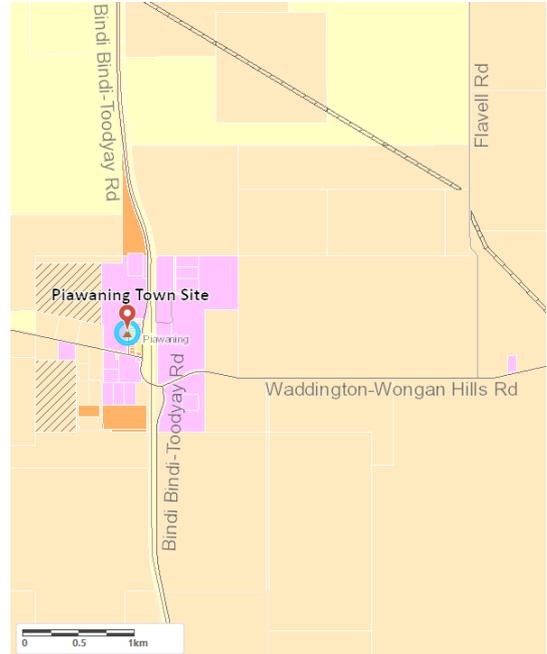
Structure Type	Bore and Tank
Bore Capacity	60 kL/day
Tank Storage	Yes 135kL
Standpipe Y/N	Yes overhead
Pump Y/N	No
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Emergency access contact	CESM 0499 516 763

Description of community water supplies

Piawaning town site



Aerial location Piawaning town site



Location map



Opening of desalination plant (2017)



Tanks with processed water



Standpipe



Desalination plant

Piawaning town site description

Vesting	Shire of Victoria Plains
Purpose	Strategic community water supply for agricultural purposes, including emergency stock, firefighting and local government uses.
Associated Reserve	Crown Reserve 38404 (new bore)
Catchment Type	Desalination non potable supply
Catchment Area (ha)	Bore

Location and coordinates

Location: Downey Street ~200 m north of Waddington – Wongan Hills Road

Latitude	-30.8386
Longitude	116.3849
Eastings	441179.617315
Northings	6588123.160830

Water supply and access

Structure Type	Bore - Desalination non potable supply
Desalination Capacity	24 kL/day from 80.4 kL brine water
Water Salinity	18 ppm (raw brine water), 1.5 ppm (once processed)
Tank Storage	Yes 2 x 250 kL
Standpipe Y/N	Yes
Pump Y/N	Yes
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Emergency access contact	CESM 0499 516 763

Appendices

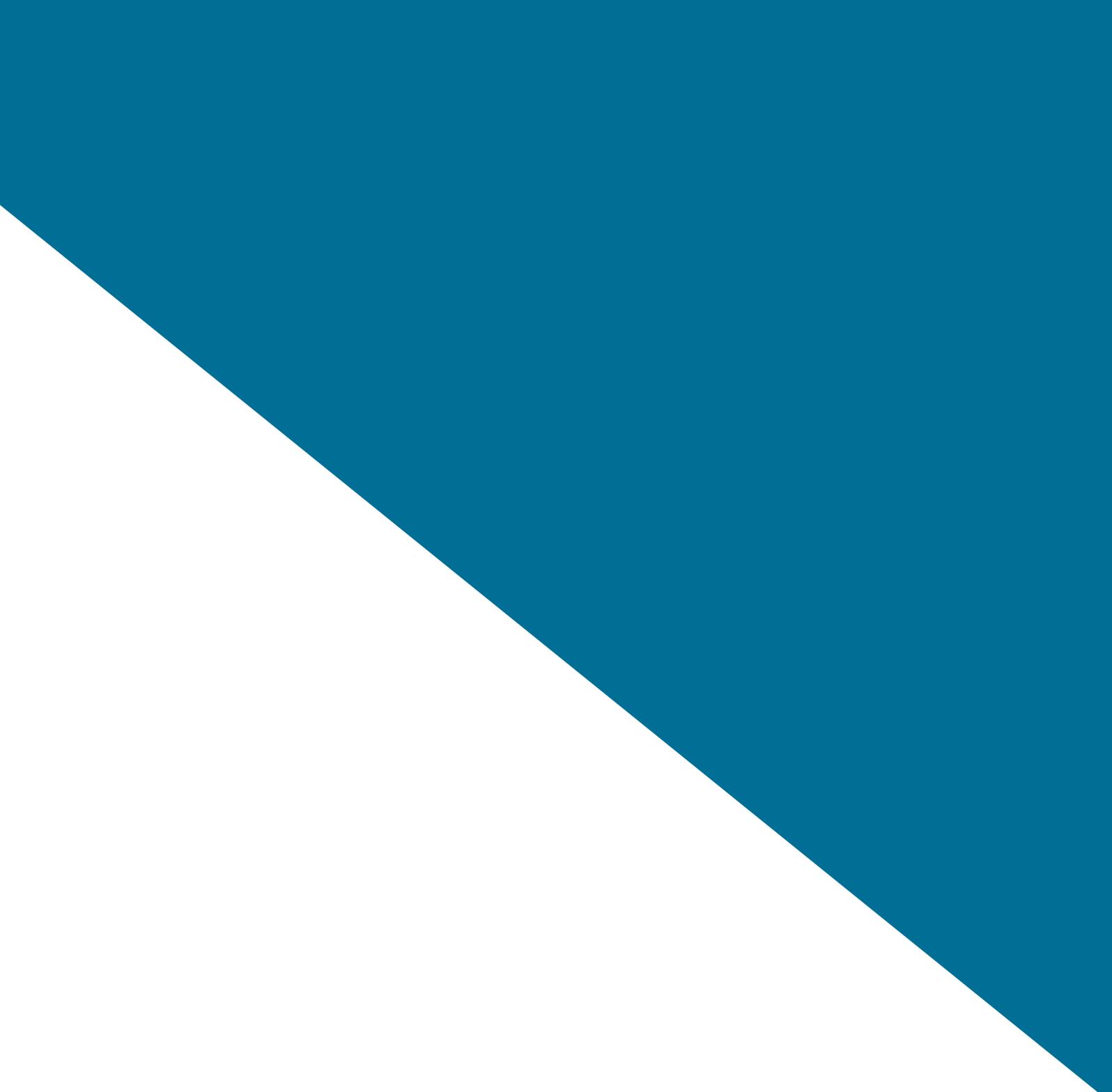
Appendix A – Bolgart community water supply project 2013

Bolgart CWSP 2013



Glossary

Camlock	A male hose coupling fixed for connection of a water hose. Camlocks can be attached to fill points such as tanks, or standpipes to allow access to water supply. Camlock sizes vary from site to site and generally include 50 mm (2 inch), 80 mm (3 inch) as a standard. At some sites a 100 mm (4 inch) camlock has been included for firefighting purposes.
Catchment types	<p>Earth – land cleared, cambered, and compacted to provide a catchment area for surface water.</p> <p>Bitumen – catchment lined with bitumen to allow capture of surface water.</p> <p>Rock catchment – rock that slopes, has containment walls to capture surface water to a storage source (e.g. a tank or a concrete dam).</p> <p>Bore – a drilled casing that accesses ground water to provide a water supply.</p> <p>CBH – water is captured from CBH grain silo storage facility and stored in a dam or tank.</p>
Fill point	Location where a water supply can be accessed from using camlock fittings either via standpipe, swipe card system, tank or bore.
Farm bot	A device fitted to some tanks to regularly record the water level and feed this information into a website. You can access this website at app.farmbot.com.au (Login ID: public.access Password: access1) to see water tank levels for tanks fitted with farm bots.
Non-potable	Water not suitable for human consumption.
Solar pump	A pump powered through solar that pumps water from one location to another (e.g. from dam to dam or from dam to tank).
Staff gauges	A marker measuring tool positioned at surveyed depths in a dam to indicate water levels.
Standpipe	A pipe overhead, on a plinth or raised off the ground to provide a fill point for water supply.
Swipe card	A metered fill point requiring a card to be swiped to start pumping system. Contact the LGA for further information.
Vesting	Person or governing agency with responsibility for managing land.



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