

# City of Albany

non-potable strategic community water supplies plan

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

Cover photograph: Gnowellan Road Bore Tanks with Tracy Calvert, Jo Slattery, Garry Turner

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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 City of Albany and farmers on the location of strategic community water supplies (SCWS). It advises how to access non-potable water for emergency stock watering and firefighting purposes, including the facilities 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.

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

Rural water planning recognises the importance of preparing for these events to increase the opportunities for delivering an assured water supply to farmland communities in the dryland agricultural 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 program. The aim is to safeguard dryland agricultural areas wherever possible against serious water deficiencies.

While landholder self-sufficiency must remain the primary objective, the rural water 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 to ensure that water is available for emergency livestock watering, firefighting and other farm needs. The CWSP program 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 City of Albany to provide a clear description of each of the SCWS in the City 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 for farming and firefighting needs.

These supplies are 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 and essential farming purposes.

Vesting of the strategic dams and bores 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 is 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.

Figure 1 shows the location of the SCWS and AA dams in the City of Albany, with symbols indicating the capacity, vesting and values of each site.

# City of Albany map

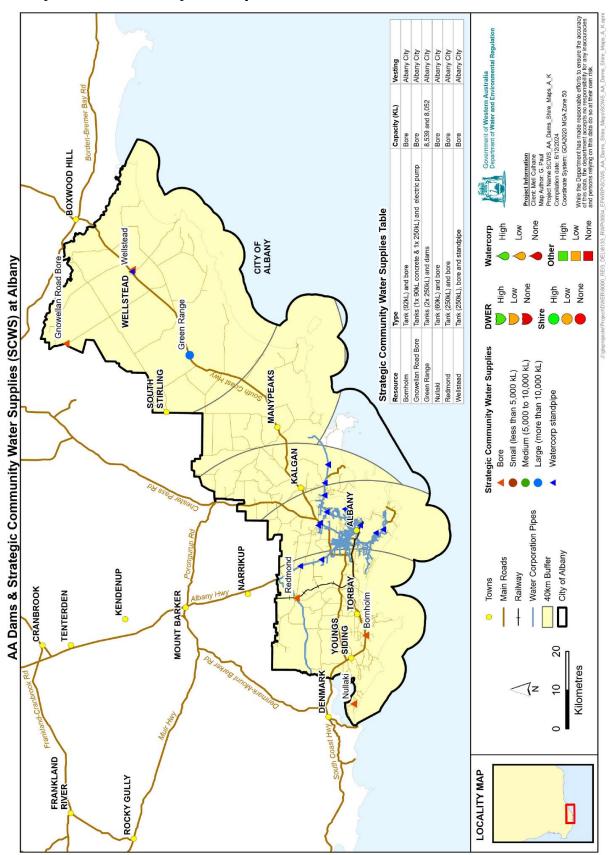


Figure 1 Location of SCWS (at 6 December 2024)

## 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), 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 LGA to access the water supply. Contact your local LGA office to obtain a swipe card to access these water supplies.

During emergencies such as bushfires, the City can switch the swipe card system to allow access without a swipe card. All local fire appliances have swipe card access. The emergency access contact is the Community Emergency Services Manager (CESM) on 0428 035 292.

#### 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 <a href="mailto:app.farmbot.com.au">app.farmbot.com.au</a> (Login ID: <a href="public.access">public.access</a> Password: <a href="mailto:access">access</a>1) to view water tank levels for tanks fitted with farm bots.

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



Tank standard camlock fitting



Farm bot positioned on top of tank



Swipe card standpipe system



Tank, electric swipe card and pump for bore

# City of Albany SCWS sites

Site name	Location
Gnowellan Road Bore	Gnowellen Road
	~13.5 km north of Chillinup Road
Green Range	South Coast Highway at Green Range Country Club
Wellstead	Barr Street
	~270 m southwest from Fenwick Street
Redmond	Redmond Hay River Road
	~145 m west from Redmond Street
Bornholm	Lower Denmark Road
	~110 m west of Shepherds Lagoon Road, east side of Bornholm BFB shed
Nullaki	Eden Road
	~47 m east of Nullaki Drive

### **Gnowellan Road Bore**



Gnowellan Road Bore

Ruch Rd

Rd

Gnowellan Road Bore

Ruch Rd

Chillinup Rd

Chillinup Rd

Chillinup Rd

Aerial of Gnowellan Road bore

Location map



Concrete tanks, 90 kL concrete and 250 kL steel tank on Gnowellan Road (July 2022)



Camlock couplings on 250 kL steel tank



Standpipe with pump switch

## Gnowellen Road Bore site description

Vesting	City of Albany
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	Road reserve
Catchment type	Bore
Catchment area (ha)	N/A

#### **Location and coordinates**

Location: Gnowellen Road ~13.5 km north of Chillinup Road	
Latitude	-34.3442
Longitude	118.3993
Eastings	628699.2664
Northings	6198790.8384

Structure type	Bore, tanks and electric pump
Bore capacity	Unknown
Tank storage	1 x 90 kL and 1 x 250 kL
Standpipe Y/N	Yes, overhead
Pump Y/N	Yes, electric pump for standpipe
Heavy vehicle access	Yes
Turnaround area	Yes, smaller trucks
Emergency access contacts	CESM - 0428 035 292

## Green Range





Aerial view of Green Range tanks

Location map



Green Range tanks



Outlets

## Green Range site description

Vesting	City of Albany
Purpose	SCWS for agricultural purposes including emergency stock and fire water
Associated Reserve	28701
Catchment type	Earth
Catchment area (ha)	Unknown

#### **Location and coordinates**

Location: South Coast Highway at Green Range Country Club	
Latitude	-34.63194
Longitude	118.37233
Eastings	625789.78
Northings	616696.44

Structure type	Tanks, dam
Dam capacity	8,539 kL and 8,052 kL (Based on 6 m depth and 0.4 m batter)
Tank storage	2 x 250 kL
Coupling size	50mm (2inch) and 75mm (3inch)
Standpipe Y/N	No
Pump Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes, smaller trucks
Supply notes	Tanks are filled from dams located to the south ~1.36 km. These dams are pumped between each other then piped to tanks at Green Range.
Emergency access contacts	CESM - 0428 035 292
Emergency access contacts	CESM - 0428 035 292

## Wellstead





Aerial view of Wellstead Barr Street tanks and standpipe

Location map



Wellstead tank





Outlets



Standpipe

## Wellstead site description

Vesting	City of Albany
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	28228
Catchment type	Bore
Catchment area (ha)	N/A

#### **Location and coordinates**

Location: Barr Street ~270 m southwest from Fenwick Street	
Latitude	-34.49581
Longitude	118.60961
Eastings	647781.98373
Northings	6181691.23873

Structure type	Bore, tank, standpipe
Bore capacity	Unknown
Tank storage	250 kL
Coupling size	50 mm (2 inch) and 75 mm (3 inch)
Standpipe Y/N	Yes
Swipecard system Y/N	Yes
Pump Y/N	Yes
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	CESM - 0428 035 292

## Redmond



Tanks
Redmond Hay River

Aerial view of Redmond tank located at community hall.

Location map



Redmond tank







Tank outlet

Outlet

## Redmond site description

Vesting	City of Albany
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	32825
Catchment type	Bore
Catchment area (ha)	N/A

#### **Location and coordinates**

Location: Redmond Hay River Road ~145 m west from Redmond Street	
Latitude	-34.88588
Longitude	117.69092
Eastings	563135.535
Northings	6139394.562

Structure type	Bore, tank
Bore capacity	Unknown
Tank storage	250 kL
Coupling size	50 mm (2 inch) and 75 mm (3 inch)
Standpipe Y/N	No
Pump Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	CESM - 0428 035 292





Aerial view of Bornholm tank located at bushfire brigade shed

Location map



Tanks



Outlets

## Bornholm site description

Vesting	City of Albany
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	45478
Catchment type	Bore
Catchment area (ha)	N/A

#### **Location and coordinates**

# Location: Lower Denmark Road ~110 m west of Shepherds Lagoon Road, east side of Bornholm BFB shed

Latitude	-35.04642
Longitude	117.58698
Eastings	553533
Northings	6121652

Structure type	Bore, tank
Bore capacity	Unknown
Tank storage	92 kL
Coupling size	50 mm (2 inch) and 75 mm (3 inch)
Standpipe Y/N	No
Pump Y/N	Yes
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	CESM - 0428 035 292

## Nullaki





Aerial view of tank location at bushfire brigade

Location map



Tank



Outlet

## Nullaki site description

Vesting	City of Albany
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	46319
Catchment type	Bore
Catchment area (ha)	N/A

#### **Location and coordinates**

Location: Eden Road ~47 m east of Nullaki Drive	
Latitude	-35.01917
Longitude	117.392758
Eastings	535832
Northings	6124761

Structure type	Bore, tank
Bore capacity	Unknown
Tank storage	60 kL
Coupling size	50 mm (2 inch)
Standpipe Y/N	No
Pump Y/N	Noi
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	CESM - 0428 035 292

## 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) and 80 mm (3 inch) as a standard. At

some sites a 100 mm (4 inch) camlock has been included for

firefighting purposes.

Catchment types

Earth – land cleared, cambered, and compacted to provide a

catchment area for surface water.

Bitumen – catchment lined with bitumen to allow capture of surface

water.

Rock catchment – rock that slopes, has containment walls to capture surface water to a storage source (e.g. a tank or a concrete dam).

Bore – a drilled casing that accesses groundwater to provide a water

supply.

CBH – water is captured from a CBH grain silo storage facility and

stored in a dam or tank.

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.

Fill point Location where a water supply can be accessed from using camlock

fittings either via standpipe, swipe card system, tank or bore.

**Non-potable** Water not suitable for human consumption.

**Solar pump** A pump powered via solar energy 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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