

Shire of Yilgarn

Non-potable strategic community water supplies plan

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

Cover photograph: Mt Hampton Dam, Shire of Yilgarn.

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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 and firefighting 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 Yilgarn 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 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..

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 Yilgarn, with symbols indicating the capacity, vesting and values of each site.

Shire of Yilgarn map

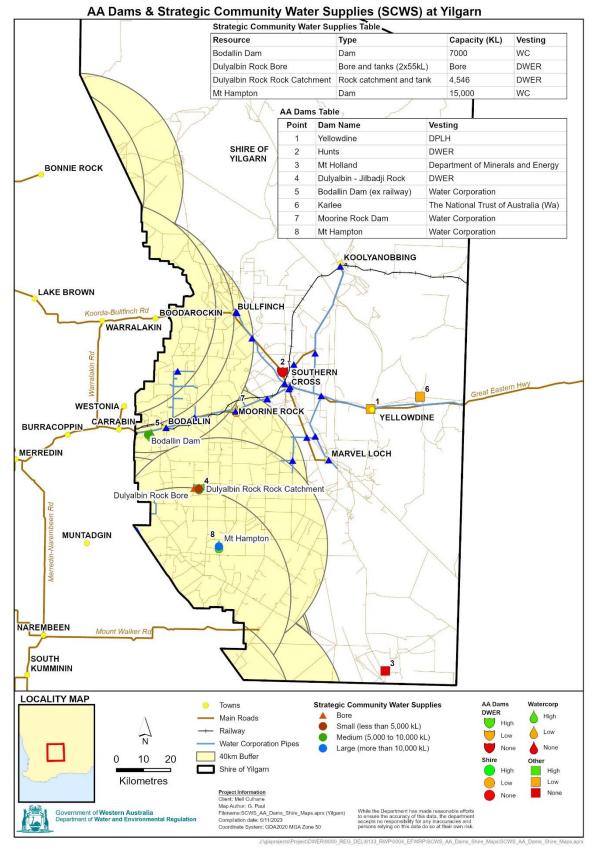


Figure 1 – Location of Strategic Community Water Supplies (at 6 November 2023)

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. All local fire appliances have swipe card access. To arrange opening of the standpipe remotely, contact 0407 491 027, 0427 775 325 or 08 9049 1001.

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 <u>app.farmbot.com.au</u> (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

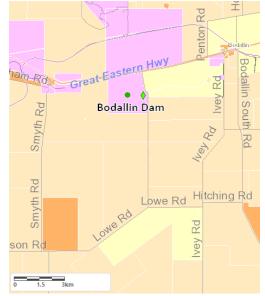
Shire of Yilgarn SCWS sites

Site name	Location
Bodallin Dam	South off Great Eastern Hwy ~ 5 km from Smyth Road Junction No restriction on access Currently no filling equipment onsite
Dulyalbin Rock bore	Lapsley Road 3 km north of Harvey Road No restriction on access
Dulyalbin Rock catchment	Boronia Road No. 223, 2.4 km off Harvey Road ~ 3.7 km west off Nulla Nulla South Road No restriction on access
Mt Hampton	Moorine South Road ~ 3 km from Cramphorne Road No restriction on access May need pump if levels low

Description of community water supplies Bodallin Dam



Aerial of Bodallin Dam



Location map



Bodallin Dam (December 2022)



Bodallin Dam (December 2022)



Steps into inlet drain



Inlet drain to dam

Bodallin site description

Vesting	Currently in process of vesting change from Water Corporation to the Shire
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	28291
AA Dam #	5006
Catchment Type	Earth and rock
Catchment Area (ha)	Unknown

Location and coordinates

Location: South off Great Eastern Hwy ~ 5 km from Smyth Road Junction

Latitude	-31.395331
Longitude	118.791273
Eastings	670309.024529
Northings	6525196.969660

Structure Type	Dam
Capacity	7,000 kL
Tank Storage	No (proposed 250 kL tank for 2023)
Standpipe Y/N	No
Pump Y/N	No
Heavy Vehicle Access	No
Turnaround Area	Small turnaround
Comments	Proposed works to install a tank, solar pump and upgrade the turnaround area in March 2023
Emergency access contact	0407 491 027, 0427 775 325 or 08 9049 1001

Description of community water supplies

Dulyalbin Rock bore



Aerial of Dulyalbin Rock bore







Dulyalbin Rock bore, generator and pump (Oct 2012)



Dulyalbin 3 x tanks 55 kL (Oct 2012)

Dulyalbin Rock bore description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	20212
Catchment Type	Bore
Catchment Area (ha)	N/A

Location and coordinates

Location: Lapsley Road 3 km north of Harvey RoadLatitude-31.570843Longitude118.971967Eastings687141.984254Northings6505445.022050

Structure Type	Bore
Capacity	70 kL/Day
Tank Storage	3 x 55 KL
Standpipe Y/N	No
Pump Y/N	Yes
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Supply Comment	Bore is pumped to nearby tanks for access to water supply.
Emergency access contact	0407 491 027, 0427 775 325 or 08 9049 1001

Description of community water supplies Dulyalbin Rock - Rock catchment



Aerial of Dulyalbin Rock



Dulyalbin tank (Oct 2012)



Situation of tank in catchment



Location map



Dulyalbin couplings (Oct 2012)



Signage (Oct 2012)

Dulyalbin Rock catchment site description

Vesting	Department of Water Environment Regulation
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	20212
AA Dam #	2017
Catchment Type	Rock catchment
Catchment Area (ha)	~ 340ha

Location and coordinates

Location: Boronia Road No. 223, 2.4 km off Harvey Road or ~ 3.7 km west off Nulla Nulla South Road

Latitude	-31.571888
Longitude	118.990690
Eastings	688917.034538
Northings	6505296.979570

Structure Type	Rock catchment & tank
Capacity	4,546 kL
Tank Storage	Yes
Camlock Coupling	Couplings located near tank as fill point
Standpipe Y/N	No
Pump Y/N	No
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Supply comments	Please note there is a logbook in place for this site with a fee, contact shire for more details.
Emergency access contact	0407 491 027, 0427 775 325 or 08 9049 1001

Description of community water supplies

Mt Hampton



Aerial of Mt Hampton dam



Mt Hampton dam (Dec 2022)



Mt Hampton rock catchment (Oct 2012)



Location map



Couplings (Dec 2022)



Dam situation in catchment (2003)

Mt Hampton site description

Vesting	Currently in process of transferring Management Order from Water Corp to Shire.
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated Reserve	20526
AA Dam #	5009
Catchment Type	Rock and earth
Catchment Area (ha)	~96ha

Location and coordinates

Location: Moorine South Road ~ 3 km from Cramphorne Road

Latitude	-31.761518852
Longitude	119.073104856
Eastings	696340.218111
Northings	6484127.401410

Structure Type	Dam
Dam Capacity	15,000 kL
Standpipe Y/N	No
Camlock Coupling	Fill point with 3 coupling sizes 3" 2" 1.5"
Pump Y/N	No
Heavy Vehicle Access	Yes
Turnaround Area	Yes
Emergency access contact	0407 491 027, 0427 775 325 or 08 9049 1001

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	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 ground water to provide a water supply.
	CBH – water is captured from CBH grain silo storage facility and stored in a dam or tank.
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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