

Shire of Chapman Valley

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: Kingstream tank

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

Shire of Chapman Valley map

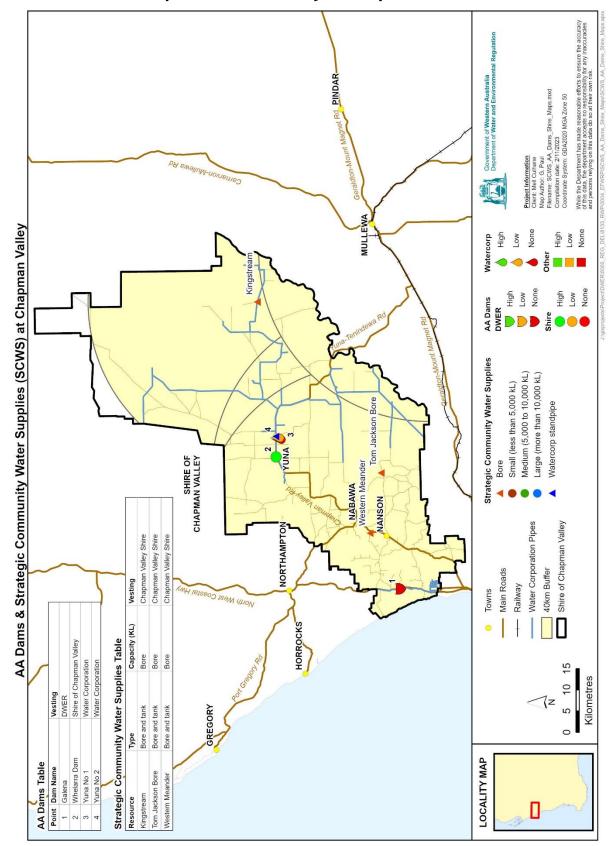


Figure 1 – Location of Strategic Community Water Supplies (at 2 November 2023)

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. The emergency access contact is the Manager Works and Services on 0419 109 816.

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



top of tank



standpipe system



and pump for bore

Shire of Chapman Valley SCWS sites

Site name	Location
Kingstream bore	Coonawa Road
	~ 10.6 km east from Wandana Rd
Tom Jackson bore	Durawah Road
	Standpipe ~ 1 km east from Indialla Road
Western Meander	Nabawa - Yetna Road
	Tank ~ 1,820 m from Chapman Valley Road and 100 m in on side road to the north

Description of community water supplies

Kingstream bore

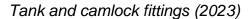




Aerial view of Kingstream bore

Location map







Bore (2023)

Kingstream site description

Vesting	Chapman Valley Shire
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Road reserve next to reserve 36388
Catchment type	Bore
Catchment area (ha)	N/A

Location and coordinates

Location: Coonawa Road ~ 10.6 km east from Wandana Road		
Latitude	-28.293	
Longitude	115.3279	
Eastings	336033.0196	
Northings	6869200.9561	

Water supply and access

Structure type	Bore and tank
Bore capacity	35 L/min
Tank storage	Yes 260kL
Standpipe Y/N	Yes, plinth with camlock fittings (1 x 100mm and 2 x 50mm)
Pump Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Supply comments	Bore drawn from 67 m
Emergency access contact	Manager Works and Services 0419 109 816

Description of community water supplies

Tom Jackson bore



Aerial view of Tom Jackson standpipe



Location map



Fill point outlets



Pump



Tank



Bore

Tom Jackson bore site description

Vesting	Chapman Valley Shire
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Lot 100 Private Land
Catchment type	Bore
Catchment area (ha)	N/A

Location and coordinates

Location: Durawah Road, Standpipe ~ 1 km east from Indialla Road		
Latitude	-28.55358	
Longitude	114.90745	
Eastings	295291.332	
Northings	6839684.972	

Water supply and access

Structure type	Bore and tank
Bore capacity	216 L/min
Tank storage	120 kL
Standpipe Y/N	Yes (swipecard)
Pump Y/N	Υ
Heavy vehicle access	Access to standpipe fill point from Durawah Rd
Turnaround area	Yes at Durawah Rd
Emergency access contact	Manager Works and Services 0419 109 816

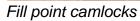
Description of community water supplies

Western Meander



Aerial view of Western Meander bore and tank locations along Nabawa-Yetna Road







Bore location







Western Meander site description

Vesting	Chapman Valley Shire
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Lot 4230 Private Land
Catchment type	Bore
Catchment area (ha)	N/A

Location and coordinates

Location: Nabawa - Yetna Road, Tank ~ 1,820 m from Chapman Valley Road and 100 m in on side road to the north

Latitude	-28.52357
Longitude	114.75419
Eastings	280231.936
Northings	6842739.475

Water supply and access

Structure type	Bore
Tank storage	Yes 150 kL settling tank
Standpipe Y/N	Yes - plinth
Pump Y/N	No
Heavy vehicle access	Yes
Turnaround area	No
Supply comment	Bore size 100mm PVC pipe. Water level in the tank is monitored by private landowners, and shire is informed if required to be filled.
Emergency access contact	Manager Works and Services 0419 109 816

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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