



Government of **Western Australia**
Department of **Water and Environmental Regulation**



Shire of Morawa

Non-potable strategic community water supplies plan

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Rural Water Planning, 1800 780 300

Cover photograph: Canna Dam, Shire of Morawa

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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). It advises 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 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 with an aim to ensure water is available for emergency livestock watering, firefighting and for other farm needs. 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 Morawa 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 AA 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 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.

Figure 1 shows the location of the strategic community supplies and AA Dams in the Shire of Morawa, with symbols indicating the capacity, vesting and values of each site.

Shire of Morawa map

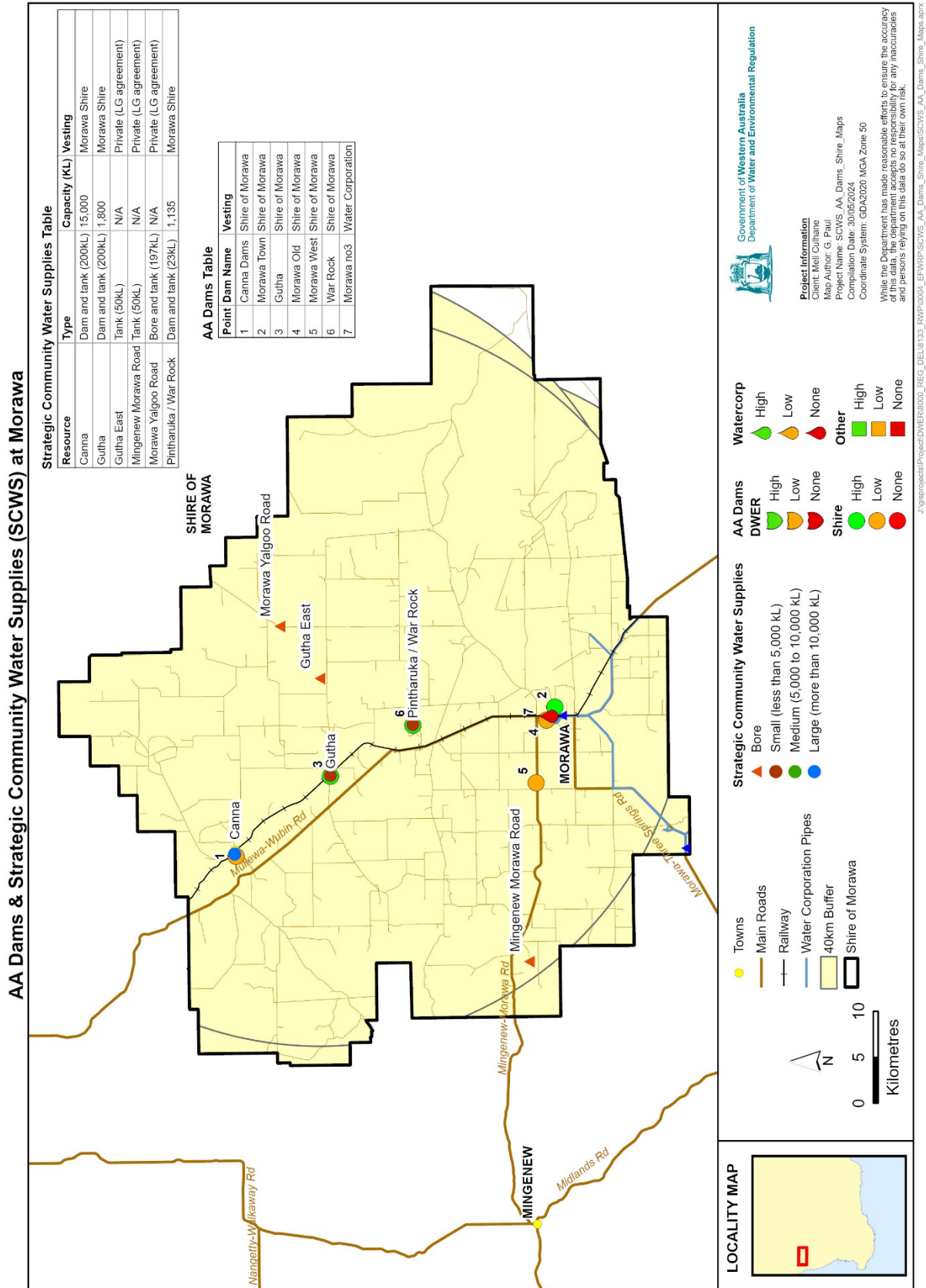


Figure 1 Location of strategic community water supplies (at 30 May 2024)

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 tank storage, you will need to bring your own pump to extract water.

Emergency access

All tanks in the Shire of Morawa have male camlock fittings. The emergency access contact is the Community Emergency Services Manager (CESM) 0438 277 582 or Shire of Morawa (08) 9971 1204.

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



Tank standard camlock fitting



Tank outlets

Shire of Morawa SCWS sites

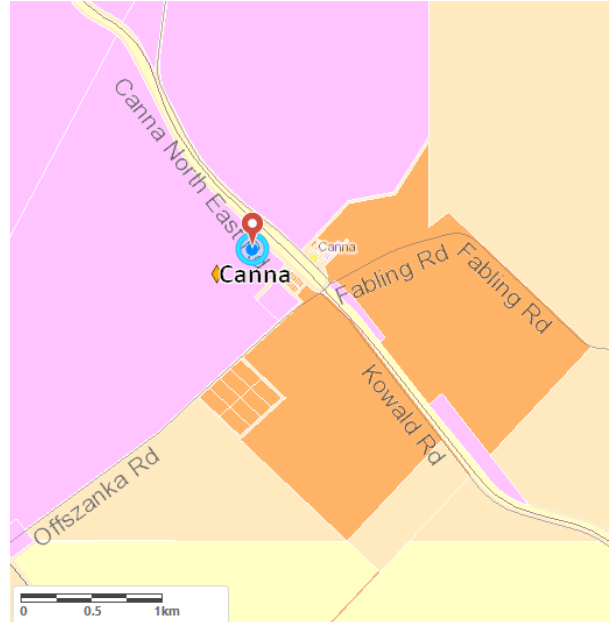
Site name	Location
Canna	Canna Northeast Road (opposite CBH)
Gutha	Gutha West Road <i>~50 m west of Simpson Street</i>
Pintharuka / War Rock	Pintharuka Dam Road <i>~2.8 km east of Mullewa Wubin Road</i>
Morawa Yalgoo Road	Morawa Yalgoo Road <i>~1.5 km south of Madden Road</i>
Mingenew Morawa Road	Mingenew Morawa Road intersection of Yongarloos Road <i>~2.6 km along farm access road</i>
Gutha East	Gutha East Road <i>~1.8 km west of Bore Road</i>

Description of community water supplies

Canna



Aerial view of Canna Dam



Location map



Canna Dam north-eastern end with tank



New tank (2024)



Solar array and pump (2024)

Canna site description

Vesting	Shire of Morawa
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	16491
Catchment type	CBH hardstand, road and earth catchment water drains
Catchment area (ha)	CBH ~3 ha

Location and coordinates

Location: Canna – North East Road (opposite CBH)

Latitude	-28.897410432
Longitude	115.858563902
Eastings	388710.650324
Northings	6802844.601330

Water supply and access

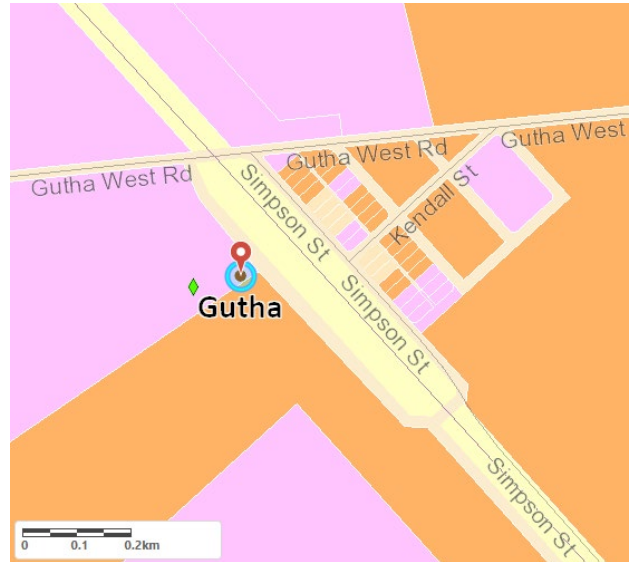
Structure type	Earth dam
Capacity	15,000 kL
Tank storage	Yes 200,000 L
Outlet sizes	50, 75 and 100 mm male camlocks
Standpipe Y/N	No, tank has multiple outlets
Pump Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contact	Shire of Morawa 9971 1204 / CESM 0438 277 582

Description of Community Water Supplies

Gutha



Aerial view of Gutha



Location map



Gutha concrete lined dam roofed (Sept 2021)



Solar connections



Tank and solar array installed in 2024

Gutha site description

Vesting	Shire of Morawa
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	18321
AA Dam #	31
Catchment type	CBH hardstand, old town site, roaded catchment
Catchment area (ha)	30 ha

Location and coordinates

Location: Gutha West Road ~50 m west of Simpson Street

Latitude	-28.992116193
Longitude	115.945305070
Eastings	397261.89200
Northings	6792429.48816

Water supply and access

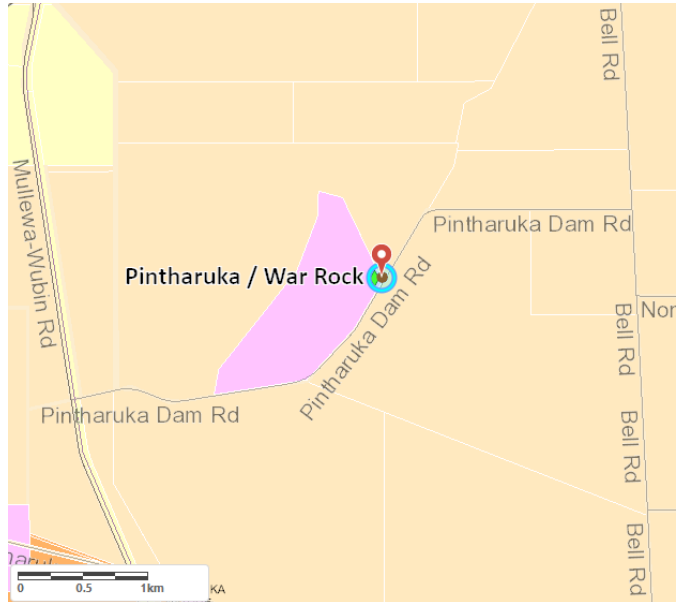
Structure type	Concrete lined dam
Capacity	1,800 kL
Tank storage	Yes 200,000 L
Outlet sizes	50, 75 and 100 mm camlocks
Standpipe Y/N	No
Pump Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contact	Shire of Morawa 9971 1204 / CESM 0438 277 582

Description of community water supplies

Pintharuka / War Rock



Aerial view of Pintharuka / War Rock



Location map



War Rock catchment (gnamma hole)



Dam, drain and silt trap



Tank, windmill and standpipe

Pintharuka / War Rock site description

Vesting	Shire of Morawa
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	22125
AA Dam #	496
Catchment type	Rock catchment
Catchment area (ha)	0.68 ha

Location and coordinates

Location: Pintharuka Dam Road ~2.8 km east of Mullewa/Wubin Road

Latitude	-29.073373602
Longitude	116.001052253
Eastings	402768.730248
Northings	6783473.268010

Water supply and access

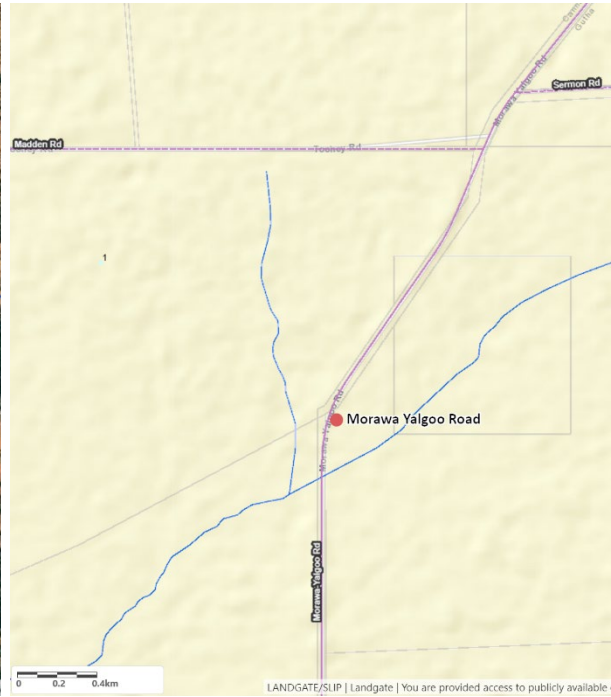
Structure type	Dam and tank
Tank storage	23 kL
Standpipe Y/N	Yes
Pump Y/N	Yes, windmill
Heavy vehicle access	Yes
Turnaround area	Yes
Water supply comments	Water captured on War Rock Catchment and drained to Pintharuka Dam
Emergency access contact	Shire of Morawa 9971 1204 / CESM 0438 277 582

Description of community water supplies

Morawa Yalgoo Road



Tank aerial map



Tank location



Morawa Yalgoo Road tank



Solar panels and pump



Outlets

Morawa Yalgoo Road site description

Vesting	Private property with formal agreement in place
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	16491
Catchment type	Bore
Catchment area (ha)	NA

Location and coordinates

Location: Morawa Yalgoo Road ~1.5 km south of Madden Road

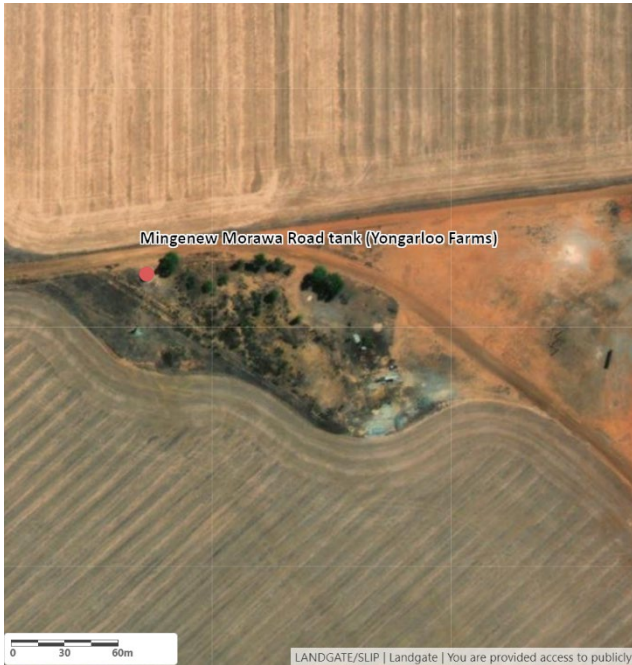
Latitude	-28.94364
Longitude	116.11205
Eastings	413465.001
Northings	6797934.037

Water supply and access

Structure type	Steel tank
Tank storage	Yes 197,000 L
Outlet sizes	50 mm camlock
Standpipe Y/N	No
Pump Y/N	Solar pump
Heavy vehicle access	Yes
Turnaround area	Yes
Supply comments	Portable pump from Bush Fire Brigade / draft from tank
Emergency access contact	Shire of Morawa 9971 1204 / CESM 0438 277 582

Description of community water supplies

Mingenew Morawa Road



Tank aerial map



Tank location on Yongarloo Farms



Poly tank

Mingenew Morawa Road site description

Vesting	Private property with agreement between landowner and Shire
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Lot 4 on plan 11978
Catchment type	NA
Catchment area (ha)	NA

Location and coordinates

Location: Mingেনew Morawa Road intersection of Yongarloo Road ~2.6 km along farm access road

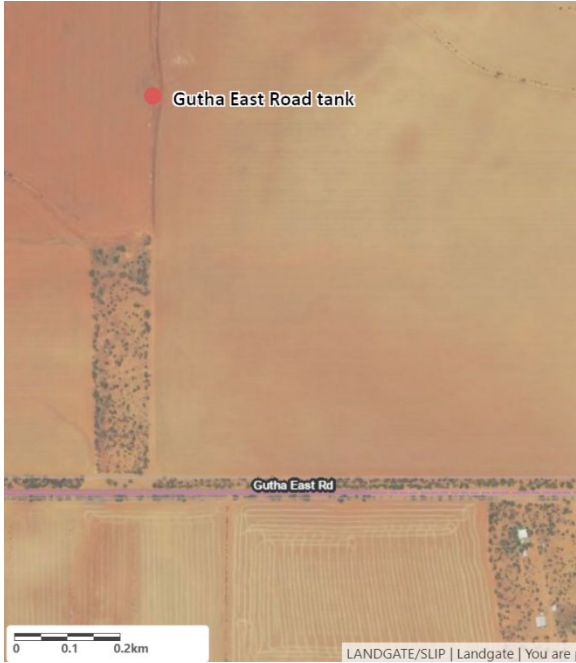
Latitude	-29.18544
Longitude	115.73508
Eastings	377012.142
Northings	6770806.850

Water supply and access

Structure type	Poly tank filled from farmers' water supply system
Tank storage	Yes 50,000 L
Standpipe Y/N	No, draft from tank
Pump Y/N	No, portable pump available from BFB
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contact	Shire of Morawa 9971 1204 / CESM 0438 277 582 or Farm owner D Yewers Yongarloo Farms 0427 015 311

Description of community water supplies

Gutha East



Tank aerial map



Tank location



Poly tank

Gutha East site description

Vesting	Private property with agreement between landowner and Shire
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Lot 2 on plan 7135
Catchment type	NA
Catchment area (ha)	NA

Location and coordinates

Location: Gutha East Road ~1.8 km west of Bore Road

Latitude	-28.98255
Longitude	116.05369
Eastings	407811.754
Northings	6793578.787

Water supply and access

Structure type	Poly tank filled by farmers' bore which is reliant on power supply
Tank storage	Yes, 50,000 L
Standpipe Y/N	No, draft from tank
Pump Y/N	No, portable available from BFB
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contact	Shire of Morawa 9971 1204 / CESM 0438 277 582 or Farm owner Rod Maddern 0427 003 905

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	<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 groundwater 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.
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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