



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



Shire of Perenjori

Non-potable strategic community
water supplies plan

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Rural Water Planning, 1800 780 300

Cover photograph: Caron Dam tank and solar array

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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 of preparing for these events and increasing 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 Perenjori 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 Perenjori, with symbols indicating the capacity, vesting and values of each site.

Shire of Perenjori map

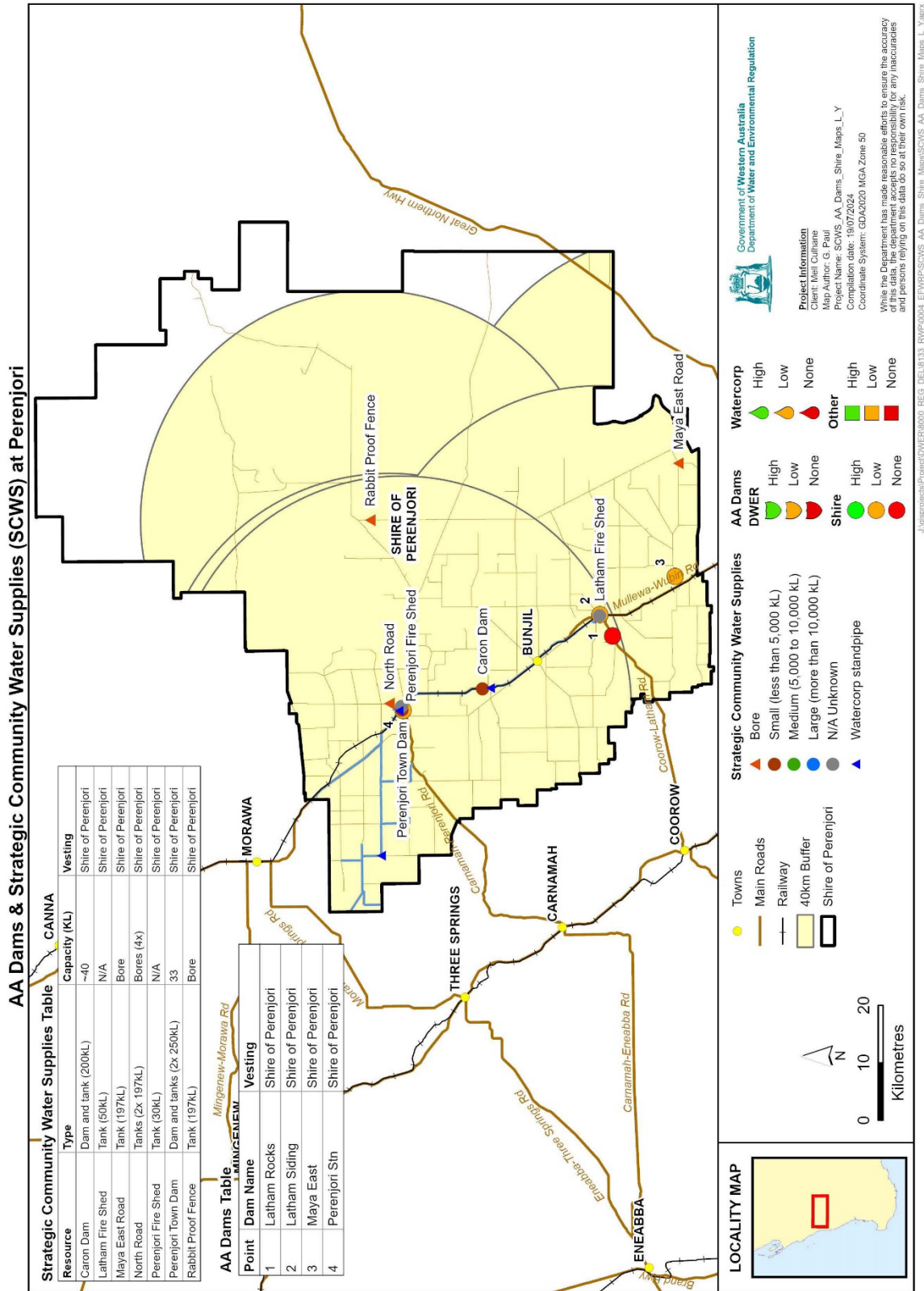


Figure 1 Location of SCWS (at 19 July 2024)

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), 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 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 Shire can switch the swipe card system to allow access without a swipe card. All local fire appliances swipe card access. The emergency access contact is the Shire Community Emergency Services Manager (CESM) 0438 277 582.

Farm bots

The Shire of Perenjori currently does not have any farm bot systems in place.

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



Tank standard camlock fitting



Swipe card standpipe system

Shire of Perenjori SCWS sites

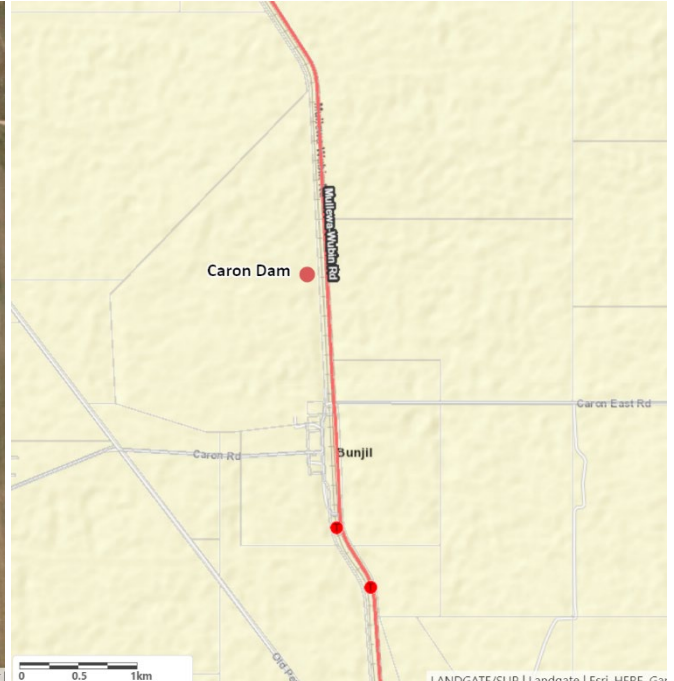
Site name	Location
Caron Dam	<i>Edge of the Caron town site Mullewa/Wubin Road Caron</i>
Maya East Road tank	<i>Maya East Road (intersection of Barker Road)</i>
Rabbit Proof Fence tank	<i>Rabbit Proof Fence Road, closest crossroad Perenjori Rothsay Road (close to Camel Soak)</i>
North Road	<i>North Road (closest crossroad Crossing Road)</i>
Perenjori Town Dam	<i>England Crescent (closest crossroad Loading Street)</i>
Latham Fire Shed	<i>Summers Road, Latham (behind Latham Bowling Club) ~390 m from Mullewa/Wubin Road</i>
Perenjori Fire Shed	<i>127 Russell Street, Perenjori</i>
Fast Fill Mobile Water Trailer	<i>Latham Bush Fire Brigade – Summers Road, Latham (behind Latham Bowling Club) ~390 m from Mullewa/Wubin Road</i>

Description of community water supplies

Caron Dam



Aerial view of Caron Dam



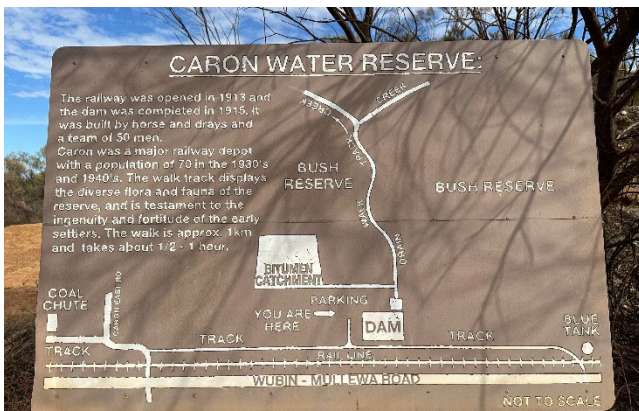
Location



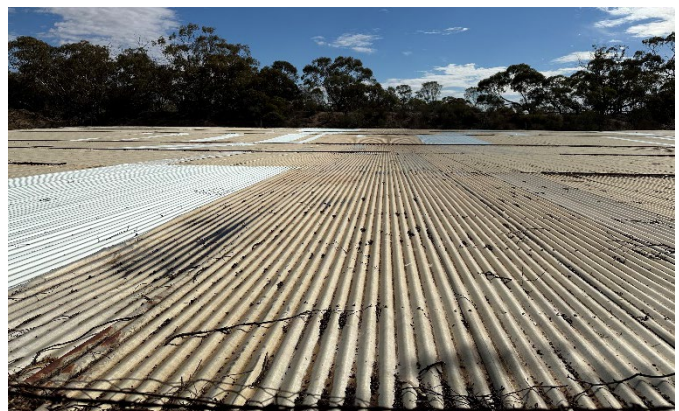
Tank (2024)



Solar array and pump



Signage



Dam roof 2024

Caron Dam site description

Vesting	Shire of Perenjori
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	R 15108
Catchment type	Earth catchment
Catchment area (ha)	4.5 ha

Location and coordinates

Location: Mullewa Wubin Road, Caron

Latitude	-29.566
Longitude	116.316
Eastings	433705.80
Northings	6729148.30

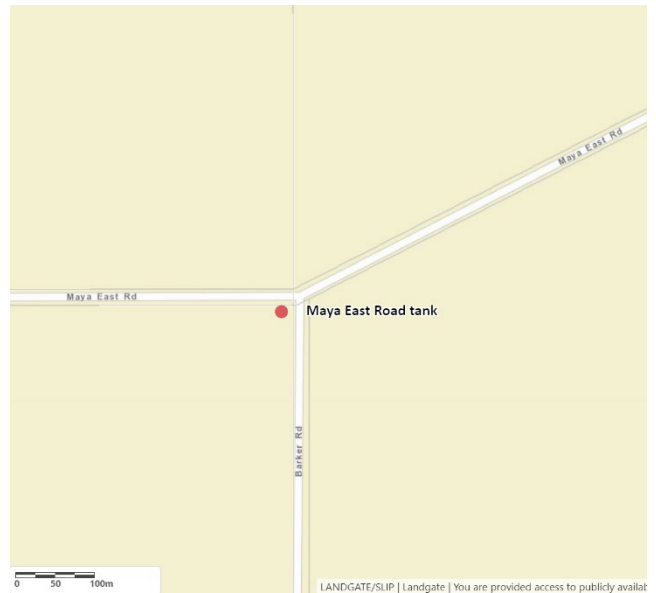
Water supply and access

Structure type	Dam
Dam capacity	40,000 kL estimate
Tank capacity	200,000 L
Camlock coupling sizes	50, 75 and 100 mm camlocks available
Standpipe Y/N	No
Pump Y/N	Yes to tank, fast fill trailer available from the Latham BFB
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Shire of Perenjori (08) 9973 0100 or CESM 0438 277 582

Maya East Road tank



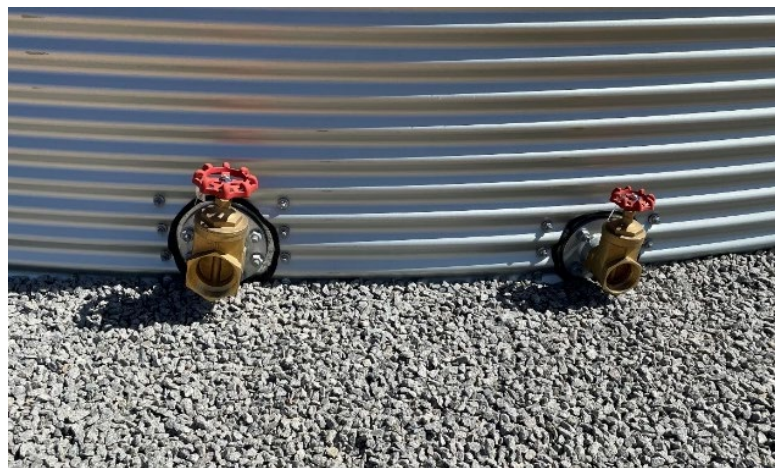
Maya East Road tank aerial



Location



Solar array and pump



Couplings on tank (camlocks attached)

Maya East Road tank site description

Vesting	Bore on private property under agreement with Shire. Tank on road reserve
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Lot 6456 on Plan 82640
Catchment type	Bore and solar pump
Catchment area (ha)	NA

Location and coordinates

Location: Maya East Road at intersection of Barker Road

Latitude	-29.87533
Longitude	116.71942
Eastings	472904.893
Northings	6694995.916

Water supply and access

Structure type	Tank
Tank capacity	1 x 197 kL steel tank
Camlock coupling sizes	50 and 75 mm camlocks available
Standpipe Y/N	No, fill point from coupling
Swipe card Y/N	Yes, contact Shire to register for use
Pump available Y/N	Solar pump to fill tank only fast fill trailer from Latham BFB
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Shire of Perenjori (08) 9973 0100 or CESM 0438 277 582

Rabbit Proof Fence tank



Aerial view of Rabbit Proof Fence tank



Location map



Tank



Couplings (camlocks attached)



Solar pump

Rabbit Proof Fence Road tank site description

Vesting	Shire of Perenjori
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Road reserve land ID 3386401
Catchment type	Bore and solar pump
Catchment area (ha)	NA

Location and coordinates

Location: Rabbit Proof Fence Road

Latitude	-29.39144
Longitude	116.61892
Eastings	463023.398
Northings	6748584.570

Water supply and access

Structure type	Tank
Tank capacity	1 x 197 kL steel tank
Camlock coupling sizes	50 and 75 mm camlocks available
Standpipe Y/N	No, fill point from coupling
Swipe card Y/N	Yes, contact Shire to register for use
Pump available Y/N	Solar pump to fill tank only, fast fill trailer from Latham BFB
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Shire of Perenjori (08) 9973 0100 or CESM 0438 277 582

North Road



Aerial view of North Road tanks



Location



Solar array adjacent to tanks



Recent aerial view of location



Tanks

North Road site description

Vesting	Shire of Perenjori
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Lot 1 on Plan 28702
Catchment type	Bores and tanks
Catchment area (ha)	NA

Location and coordinates

Location: North Road, closest crossroad Crossing Road

Latitude	-29.41940
Longitude	116.29057
Eastings	431181.426
Northings	6745337.720

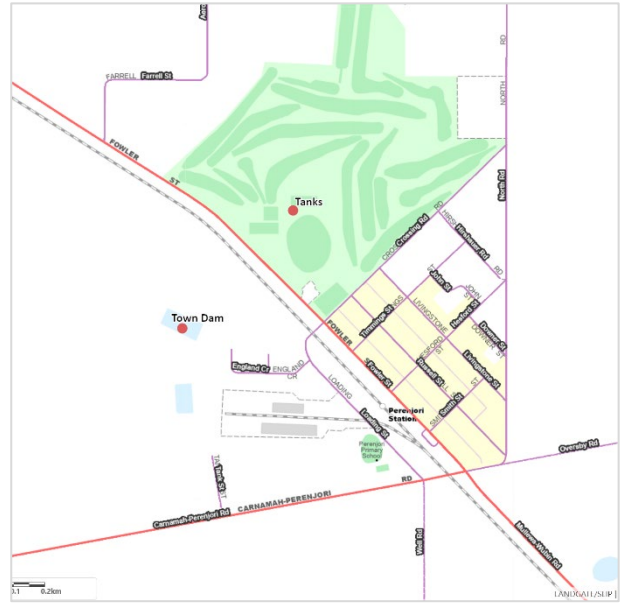
Water supply and access

Structure type	4 x bores, 2 x tanks and solar pumps for bores
Tank capacity	2 x 197 kL steel tanks
Camlock coupling sizes	50 mm outlet
Standpipe Y/N	No
Pump available Y/N	Solar pumps to fill tanks only from bores With fast fill trailer from Latham or Shire transfer pump
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Shire / CESM 0438 277 582 or Works Manager 0427 731 002

Perenjori Town Dam



Town Dam aerial



Location



2 x 250 kL tanks



Dam 1 and solar pump



Dam 2

Perenjori Town Dam site description

Vesting	Shire of Perenjori
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	R 18555
Catchment type	Earth
Catchment area	127,000 m ² roaded gravel catchment

Location and coordinates

Location: England Crescent, closest crossroad Loading Street

Latitude	-29.43922
Longitude	116.27907
Eastings	430079.411
Northings	6743134.762

Water supply and access

Structure type	Dam
Dam capacity	33,000 kL
Tank storage	2 x 250 kL
Camlock coupling sizes	100, 75 and 50 mm outlets
Standpipe Y/N	No
Pump available Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Supply comments	Pumps water to town oval tanks located off Fowler Street
Emergency access contacts	Shire of Perenjori Works Manager 0427 731 002 or CESM 0438 277 582

Latham Fire Shed



Fire shed tank aerial



Location



Tank

Latham Fire Shed site description

Vesting	Shire of Perenjori
Purpose	Strategic community water supply for emergency firefighting water
Associated reserve	R 24180
Catchment type	Roof catchment from fire shed
Catchment area (ha)	100 m ²

Location and coordinates

Location: Summers Road, Latham (behind Latham Bowling Club) ~390 m from Mullewa/Wubin Road

Latitude	-29.75052
Longitude	116.44585
Eastings	446419.91
Northings	6708729.95

Water supply and access

Structure type	Tank
Capacity	50,000 L
Tank storage	1 x 50,000 L
Camlock outlet sizes	50 mm
Standpipe Y/N	No
Swipe card Y/N	No
Pump available Y/N	Yes, transfer pumps with outlets to fill fire appliances
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Latham BFB Captain 0429 736 008 or CESM 0438 277 582

Perenjori Fire Shed



Fire shed tank aerial



Location



Fire shed tank

Perenjori Fire Shed site description

Vesting	Shire of Perenjori
Purpose	Strategic community water supply for emergency firefighting water
Associated reserve	Lot 341 on Plan 56045
Catchment type	Roof catchment from fire shed
Catchment area (ha)	150 m ²

Location and coordinates

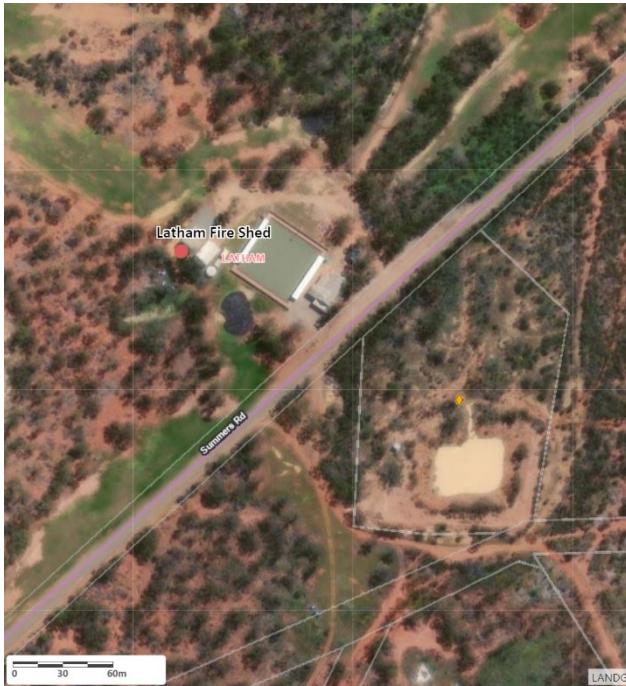
Location: 127 Russell Street, Perenjori

Latitude	-29.43881
Longitude	116.28567
Eastings	430719.261
Northings	6743184.132

Water supply and access

Structure type	Tank
Capacity	30,000 L
Tank storage	1 x 30,000 IL
Standpipe Y/N	No
Swipe card Y/N	No
Pump available Y/N	Yes, transfer pumps with outlets to fill fire appliances
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	BFB Captain 0459 802 221 or CESM 0438 277 582

Fast Fill Mobile Water Trailer



Latham fire shed aerial



Location of trailer



Fast fill trailer left and below



Fast Fill Mobile Water Trailer site description

Vesting	Shire of Perenjori
Purpose	To enable the safe and efficient transfer of water from a water source to fire fighting appliances
Associated reserve	NA
Catchment type	Trailer
Catchment area (ha)	NA

Location and coordinates

Location: Latham BFB – Summers Road, Latham (behind Latham Bowling Club) ~390 m from Mullewa/Wubin Road

Latitude	-29.75052
Longitude	116.44585
Eastings	446419.91
Northings	6708729.95

Water supply and access

Structure type	Pump and hoses mounted on trailer
Tank capacity	NA
Standpipe Y/N	No
Swipe card Y/N	NA
Pump available Y/N	Yes, transfer pumps with outlets to fill fire appliances
Heavy vehicle access	NA
Turnaround area	NA
Emergency access contacts	Latham BFB Captain 0429 736 008 or CESM 0438 277 582

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 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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