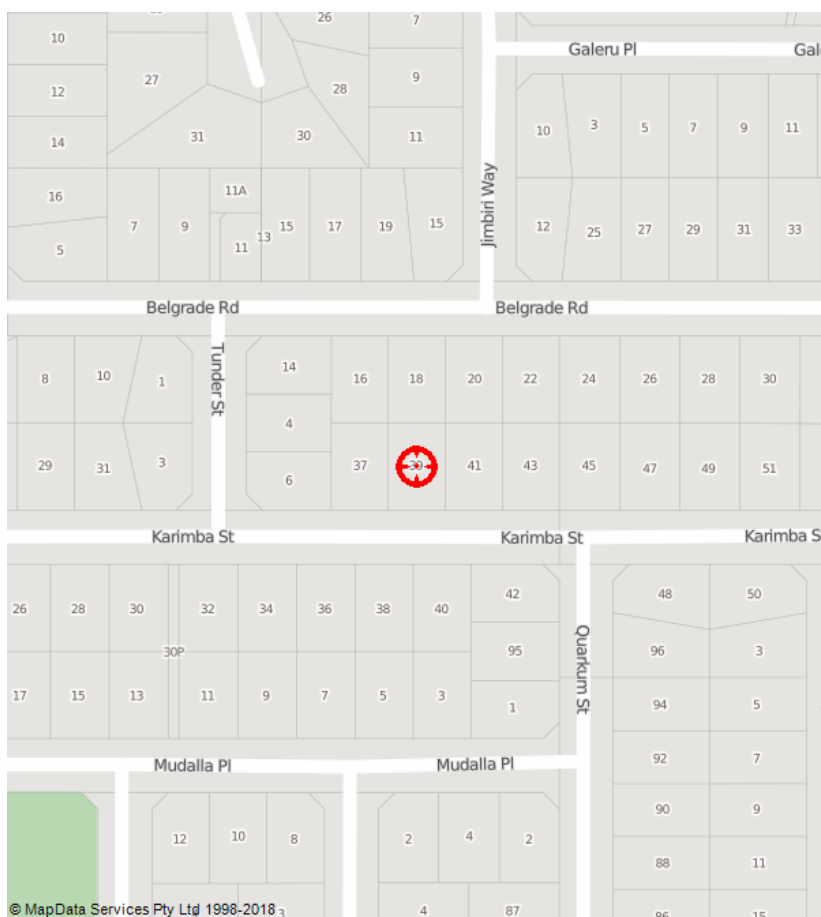




# Perth Groundwater Map

39 KARIMBA STREET WANNEROO 6065



## Depth to Groundwater

**38.5 metres**

## Depth of Water

**57.0 metres**



## Depths

### Depth from ground level to:

Water table: 38.5 m

Base of Aquifer: 95.5 m

### Levels relative to AHD (~sea level):

Natural Surface: 75.5 m

Water table: 37.0 m

Base of Aquifer: -20.0 m

## Water Quality

**Groundwater Salinity:** 250-500

**Surface Geology Type:** Tamala Limestone: Aeolian calcarenite, variably lithified, leached quartz sand|Qpcs

**Iron Staining Risk:** High risk

**Garden Bore Suitability:** Suitable

**Acid Sulfate Class:** No known risk

**Public Drinking Water Source Areas (PDWSA):** N/A

## User Comments:

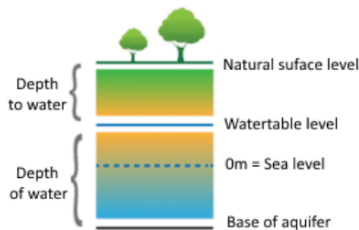
*The following comments were entered by the user*

Generated from Groundwater Map

## Depth to Groundwater

Estimates may fluctuate between 0.5 and 3m due to seasonal variation. Under normal circumstances, a garden bore will be drilled to a depth 10m below the water table. Add 10m to the depth-to-groundwater to estimate the drilling depth. Groundwater level contours are estimated based on recorded groundwater levels measured in May of 2003 (end of summer). Changes in groundwater and natural surface levels can occur over time, and it should be clearly understood that the Department of Water is not in a position to guarantee the accuracy of the data.

The data is not suitable for calculating the depth of water bodies such as rivers or lakes.



For further information, contact the Department of Water Information Line on (08) 6364 6505 or email: [wir@water.wa.gov.au](mailto:wir@water.wa.gov.au)

## Groundwater Salinity

The salinity of the groundwater below the Perth metropolitan area varies considerably. In general, areas underlain by sand or limestone will have access to groundwater with a quality that is suitable for watering household gardens.

<b>Fresh</b>	0-500 mg/L
<b>Marginal</b>	501-1000 mg/L
<b>Brackish</b>	1001-3000 mg/L
<b>Saline</b>	over 3000 mg/L

## Surface Geology Type

Derived from 250k Geology dataset re-classified based on groundwater significance, it is comprised of Tertiary to Quaternary sediments of the Safety Bay Sand, Becher Sand, Tamala Limestone, Bassendean Sand, Gnangara Sand, Guildford Clay, Yoganup Formation and Ascot Formation. It consists of up to 90m sequences of sand, limestone, silt and clay. Similar to the Superficial formations of the Northern Perth Basin, the sand and limestone occurs at the coast, the Bassendean Sand and Gnangara Sands in the central Swan Coastal Plain, and clayey deposits of the Guildford Formation further east at the foot of the Darling and Gingin Scarps. The Gnangara Mound north of the Swan River and the Jandakot Mound south of the Canning River are the main flow systems. There are smaller flow systems such as the Safety Bay, Stake Hill, Swan Helena, Cloverdale, Armadale, Byford and Serpentine mounds in the centre and south.

## Iron Staining Risk

Many areas across the Perth metropolitan area are affected by surface staining from groundwater. The map does not include all locations that may have iron staining potential, and as soil strata are highly variable, bores should be checked to confirm the status of local iron staining risk.

The Iron Staining Risk theme is divided into two categories:

- High risk: Areas having an elevated iron / manganese staining risk.
- Low risk: Areas low in iron concentration, away from past or present wetlands with neutral to alkaline pH.

## Garden Bore Suitability

The Garden Bore Suitability risk has been assessed as one of two classes:

- Suitable: Use of groundwater for domestic irrigation supported in preference to scheme water.
- Unsuitable: Additional domestic garden bores not supported as water quantity or quality may not be appropriate

To view the Departments policy on Garden Bores, see

[https://www.water.wa.gov.au/\\_data/assets/pdf\\_file/0014/1706/99735.pdf](https://www.water.wa.gov.au/_data/assets/pdf_file/0014/1706/99735.pdf)

## Acid Sulfate Class

The disturbance risk has been assessed as one of three classes:

- Class 1: High risk of Acid Sulfate Soils occurring within 3m of natural soil surface.
- Class 2: Moderate risk of Acid Sulfate Soils occurring within 3m of natural soil surface
- Class 3: Low risk of Acid Sulfate Soils occurring within 3m of natural surface.

## Public Drinking Water

Perth relies heavily upon groundwater resources to provide drinking water to consumers. Accordingly, specific areas are identified for protection in legislation to ensure that Perth can continue to receive safe, good quality drinking water to protect public health for now and into the future at a reasonable cost to consumers.

- Priority 1 (**P1**) areas are defined and managed to ensure there is no degradation of the quality of the drinking water source with the objective of *risk avoidance*.
- Priority 2 (**P2**) areas are defined and managed to maintain or improve the quality of the drinking water source with the objective of *risk minimisation*.
- Priority 3 (**P3**) areas are defined and managed to maintain the quality of the drinking water source for as long as possible with the objective of *risk management*.
- Not assigned. Priority areas have not yet been assigned to this source.
- N/A. Not in a public drinking water source area.

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