

## Connection Standards for Lot Irrigation

To avoid potential health concerns that may arise from incorrect connection to the scheme all users of the scheme must ensure that the following connection standards are maintained:

### ✓ Irrigation System Installation

The installation of domestic (non-potable) irrigation systems will require a suitably qualified irrigation contractor to install automatic controllers, solenoid valves and the irrigation dispersal network. To minimise potential for cross-connection between potable and non-potable supplies, a licensed plumber will need to provide final signoff on the connection of the irrigation system.

A list of endorsed Waterwise Specialist can be found on the Water Corporation's website at: [http://www.watercorporation.com.au/W/waterwise\\_specialists.cfm](http://www.watercorporation.com.au/W/waterwise_specialists.cfm)

### ✓ Warning Signs and Colour Coding

All non-potable water distribution systems must be readily identifiable and distinguishable from standard potable water supplies. Prominent signage has been installed to clearly identify non-potable supply infrastructure and irrigation dispersal areas.

The internationally recognised colour for identification of non-potable water is lilac / purple. Where possible, householders should ensure that pipework, sprinklers, driplines, valve box lid and controllers are colour-coded and/or clearly identified as a non-potable source of water.



## Who is Responsible for Managing the Scheme?

Maintenance and management of the scheme will fall under the responsibility of the City of Cockburn.

For further information about the scheme please contact the City of Cockburn



### City of Cockburn

Phone: (08) 9411 3444

Address: 9 Coleville Crescent, Spearwood WA 6163

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Email: [PortCoogeeNonPotableWaterSupply@cockburn.wa.gov.au](mailto:PortCoogeeNonPotableWaterSupply@cockburn.wa.gov.au)

# Alternate Water Supply Scheme

## What is the Alternate Water Supply Scheme?

The Alternate Water Supply Scheme (AWSS) is an innovative and integrated approach to managing groundwater quality and reducing potable water demand within the Port Coogee development.

The AWSS provides residents at Port Coogee with an alternate source of high quality non-potable water that can be used for domestic irrigation purposes. Water from the AWSS will also be used to irrigate all public parks and gardens within the development.

Potable (drinking) water will be supplied via the Water Corporation's standard supply network.

## Benefits of the Scheme

The provision of an alternate water supply scheme within Port Coogee provides a unique opportunity to use groundwater for all irrigation requirements across the entire urban community.

The scheme provides a reliable source of water for irrigation of public open spaces, and will also be available for residents to use for domestic irrigation purposes. By irrigating with a source of water that is 'fit-for-purpose', residents will be helping to conserve Perth's valuable drinking water resources.



In addition to water conservation, the scheme will also improve the quality of water within the Port Coogee marina and the Cockburn Sound. As a result of historical market gardening activities in the local area, the groundwater flowing towards the ocean contains elevated levels of nutrients. By capturing, storing and reusing this nutrient-rich water for irrigation, environmental benefits achieved through the scheme include:

- Reduced nutrient flow to the ocean
- Reduced risk of algal blooms developing in the marina waters, and
- Offsetting fertiliser requirements within public open spaces.

## How the Scheme Works

Groundwater is intercepted by a slotted pipe buried in the groundwater system for 900m along Orsino Boulevard. Groundwater intercepted by this groundwater interception drain is then pumped to a large underground storage tank beneath the public park at the bottom of Huntress Avenue.

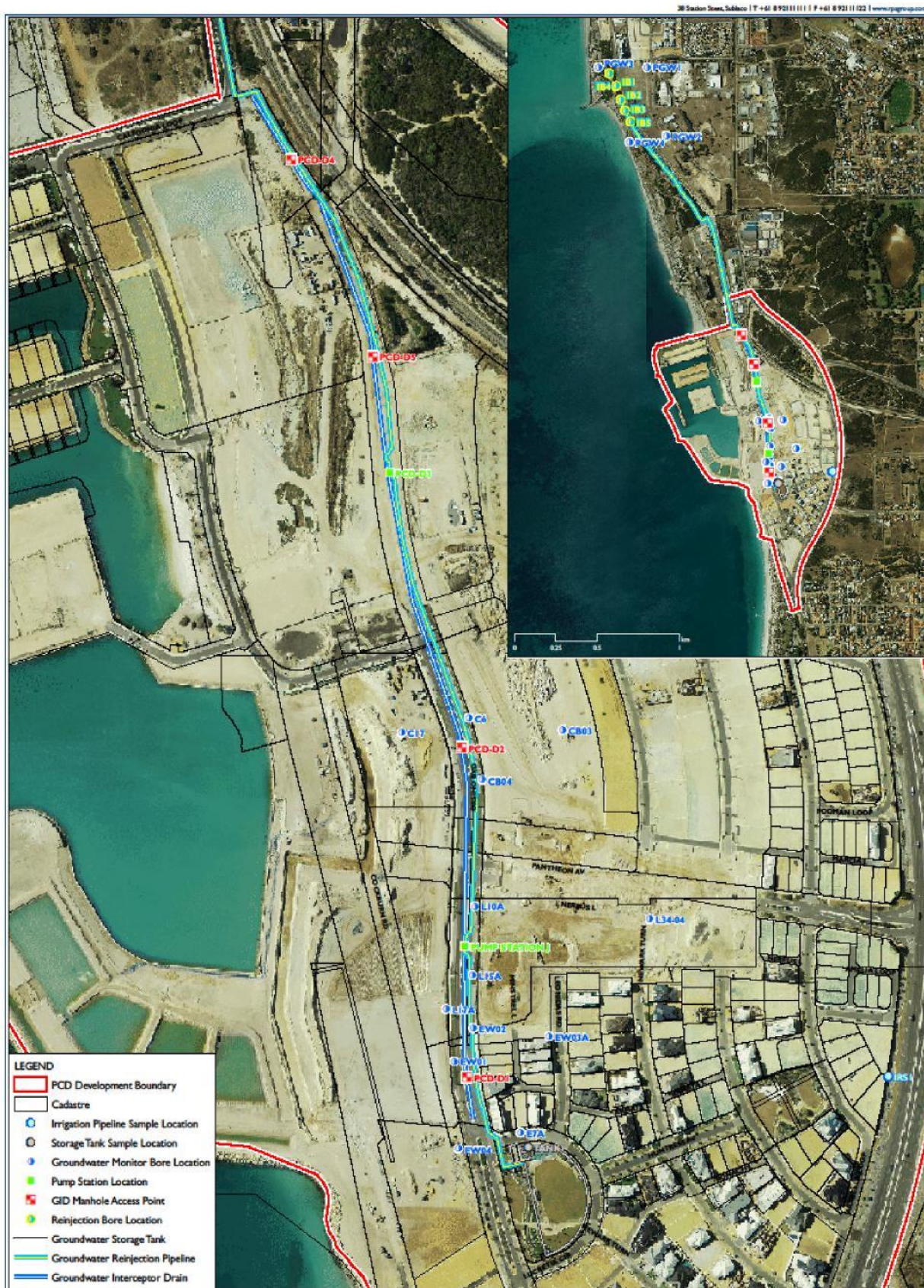


The stored water is then available on demand for household irrigation and for irrigation of public open spaces.

When irrigation demand is low, excess reclaimed groundwater is re-injected back into the aquifer through a series of re-injection bores located to the north of Port Coogee.



## Groundwater Interception Drain and Re-injection Bore Locations



## Is the Reclaimed Water Safe to Use?

The Alternate Water Supply Scheme (AWSS) was approved in February 2010 by the Department of Health. The scheme operates in accordance with the terms and conditions of a licence to take and use water granted by the Department of Water under section 5c of the Rights in Water and Irrigation Act 1914. This approval and licence condition require the AWSS to be continuously monitored and sampled monthly for water quality analysis.

The non-potable water delivered to households through the AWSS is untreated groundwater. It is not treated wastewater, and does not pose the same health concerns typically associated with recycled water. The groundwater does contain elevated concentrations of nutrients and other potential contaminants, so it is important that the AWSS is only used for approved purposes.

To ensure the continued health and safety of all customers connected to the scheme, **the non-potable scheme supply is only to be used for the irrigation of landscapes** including lawns, gardens, fruit trees and vegetables.

The reclaimed groundwater is NOT considered suitable for any of the following uses:

- |                          |                              |
|--------------------------|------------------------------|
| X Drinking               | X Washing clothes            |
| X Showering / Bathing    | X Water sources for pets     |
| X Cooking or kitchen use | X Filling of rainwater tanks |
| X Swimming pools / spas  | X Washing vehicles           |

Customers connected to the scheme will be notified if any health or environmental indicators are found to be outside the acceptable limits.

## How Do I Connect into the Scheme?

Connection to the scheme is easy.

Every lot will have direct access to the scheme infrastructure at the property boundary. To minimise the potential for cross-connection of potable and non-potable water supplies, a separate standpipe and water meter for the irrigation (non-potable) supply will be located on the opposite side of the property to the mains (potable) supply water meter.

Before connecting into the scheme, residents will need to enter into a formal Irrigation (Non-Drinking) Water Supply Agreement with the City of Cockburn. The Supply Agreement will outline the Term of Use of the scheme and provides further details on connection standards and usage charges.

Once the Supply Agreement has been signed, customers will be responsible for ensuring that connection to the alternate scheme water meter and the installation of irrigation systems on their property comply with the conditions set out in the Terms of Use documentation.

Households will have access to the scheme from the beginning of September through until the end of May. In accordance with the Water Corporation's current bore irrigation roster, households connected to the scheme will be able to irrigate 3 times per week

before 9am or after 6pm on the days designated for their property number.

The scheme will not operate during winter to keep inline with the Water Corporation's Permanent Winter Sprinkler Ban, and to allow for scheduled annual maintenance to take place.