



# Water

*Water is an essential component in terminal operations, especially dust management activities, with between one and three megalitres used daily depending on weather conditions. A combination of constant monitoring, the use of new technology, operational efficiencies and ongoing education programs work to ensure DBCT P/L remains an organisation where "waterwise" practices are standard operating procedure.*

## WHERE IT COMES FROM

Water used at the terminal is obtained via three methods:

### THE PIPELINE

The lessee of Dalrymple Bay Coal Terminal, Babcock and Brown Infrastructure, has a contract to purchase 500 megalitres from SunWater each year, based on a take-or-pay approach.

This is pumped onto the site via a 400-megalitre storage lagoon and pipeline commissioned by Ports Corporation of Queensland. The pipeline was completed in late 2004 and also services nearby Hay Point Coal Terminal.

### ON-SITE COLLECTION

DBCT has two dams on site with a combined storage capacity of 1120 megalitres. Water is transferred between the dams to minimise evaporation and ensure maximum storage capabilities, with excess water only discharged if all dams are running at capacity.

Any discharge is closely monitored and controlled in accordance with DBCT P/L's water quality management standard and Environmental Protection Agency (EPA) requirements.

### BORES

DBCT has seven bores but has not harvested water from any of these since February 2005.

Prior to this date only one bore, located in the rail loop, was used sporadically to supplement water necessary for dust suppression activities.

This bore, GW8, sources its water from the Campwyn Beds, which is a separate water body to that which supplies Lake Barfield and

the residential bores in the community of Salonika Beach. The water drawn from this bore has a high salt content, making it unfit for human consumption or residential use.

### LAKE BARFIELD

DBCT P/L does not pump water from Lake Barfield, nor does it source water from Grendon Creek.

## EVERY DROP COUNTS

### REUSE

Water use at the Terminal is closely monitored, with the vast majority of water collected, recycled and reused on site.

The stockyard and its surrounds are designed to harvest any runoff for reuse and all water used at Rail Receiving is recycled and returned to the industrial dam for reuse.

In addition to this and in an arrangement unique to DBCT, all water used off-shore on the jetty and wharf is collected and returned to shore for reuse via a waste water return system. This system collects all wash down, waste and belt-cleaning water used offshore and returns it to the mainland on the conveyor system.

### BEING WATERWISE

Operational considerations help to minimise water usage. For example, a vacuum truck is used to remove coal particles from terminal roads rather than hosing them off, and water trucks are often used to dampen coal stockpiles rather than using sprinkler systems as they are more water-efficient in certain conditions.



# DALRYMPLE BAY COAL TERMINAL

Technological advances are also constantly monitored in order to identify more water-efficient alternatives to existing systems.

## **EDUCATION PROGRAMS**

Regular presentations and training sessions involving DBCT P/L employees help to re-enforce the importance of water conservation on site and reiterate each staff member's personal responsibility to keep water use as low as practicable.

## **THE FUTURE**

Water capacity will be significantly increased following the expansion of existing dams in the Terminal's Rail Receiving area. Not only will this provide additional water for wash down and dust suppression purposes, it will also reduce the potential for uncontrolled water discharge from the site.

