

GLADSTONE AREA WATER BOARD



Contingent Supply Strategy: A framework for ensuring supply

GAWB seeks to ensure that it can efficiently supply water to meet the needs of its existing and future customers. GAWB recognises that it will need to augment its water supply at some future time, and has developed its Contingent Supply Strategy (CSS) to meet this objective.

What is the CSS?

CSS provides a mechanism for selecting and implementing a second water source so that GAWB can effectively and efficiently respond to either emerging demand or supply shortages (including shortages caused by drought).

It also enables GAWB to:

- significantly reduce the time needed to implement the new water source
- use resources efficiently
- appropriately defer development until required
- keep augmentation options open.

How does it work?

The lead-time to full operation of a second source could be six years or more.

The application of the CSS requires GAWB to undertake preparatory works for the preferred augmentation option so that an additional supply of highly reliable water can be accessed within a two-year construction timeframe. GAWB is working toward being able to defer the triggering of a source augmentation until 'as late as is safe', and is seeking relevant regulatory approvals to gain this capability.

As a result of these preparatory works, GAWB has achieved the desired state of preparedness. The implementation timeframe for GAWB's preferred water source augmentation solution has been reduced from six years to three years. The additional time gained by thorough planning and design also creates the opportunity to identify efficiencies and reduce overall infrastructure costs. ↘

Guiding principles

The actions that will be undertaken to implement the CSS and commission a second water source will adapt over time in recognition of changing circumstances. These are guided by principles which require that:

- construction of the second water source can be completed within a two-year timeframe
- construction be completed with two years of water supply remaining in Lake Awoonga (if triggered by drought) or by the date that additional demand comes on line

- GAWB select its preferred water source augmentation options, then attain and maintain capability (and preparedness) to implement the appropriate option as needed.

These principles ensure that under the CSS the timeframe required to implement water source augmentation is shorter in duration. This approach balances the benefit of minimising capital expenditure with an appropriate level of risk mitigation. ↘

GAWB's current CSS option

The principles underpinning the CSS will remain constant. However, the actions taken to execute the CSS will vary over time, depending on circumstances. The application of the CSS currently requires GAWB to be prepared to move to early works in a timely and efficient manner should a trigger event occur.

GAWB's assessment of the works which would be undertaken depended, until recently, on the scale of the additional water supply required. However in 2013 the relative costs and benefits of the preferred small-scale and large-scale augmentations were reassessed.

GAWB has now adopted the staged construction of a Gladstone-Fitzroy Pipeline (GFP), together with the construction of appropriate infrastructure on the lower Fitzroy River, as its preferred source augmentation option to address both small and large-scale augmentation requirements.

Contingent Supply Strategy: Two Sources

Water for Gladstone from Lake Awoonga and the Fitzroy River

Water is currently supplied from Lake Awoonga to power stations in Biloela (through the Callide Pipeline) and Gladstone, to Gladstone industries, and to Gladstone Regional Council for reticulation to its domestic customers. Staged construction of the Gladstone–Fitzroy Pipeline and appropriate infrastructure on the lower Fitzroy River is the current preferred source augmentation option under GAWB's Contingent Supply Strategy. Infrastructure alternatives include a possible raising of Eden Bann Weir or a new weir at Rookwood Crossing.



LEGEND

- GAWB raw water infrastructure
- GAWB potable water infrastructure
- Non-GAWB raw water infrastructure (Callide Pipeline)
- Future raw water infrastructure (Gladstone–Fitzroy Pipeline)
- Major roads