sunwater

Fact sheet
November 2024

Bundaberg Scheme Distribution Capacity Upgrade

Project purpose

In early 2024, Sunwater commenced the detailed business case process for the Bundaberg Scheme Distribution Capacity Upgrade (BSDCU) Project to investigate capacity constraints in the Bundaberg Water Supply Scheme (BWSS).

The project focuses on developing solutions to two overarching issues:

- **Current state problem:** Sections of the BWSS are operating at capacity during times of peak demand as the region diversifies and expands cropping.
- **Future state problem:** The BWSS distribution network will require upgrades to meet water demand forecasts and accommodate further changes and expansion to cropping regimes.

The detailed business case will refine the scope of work, cost estimates and staging timeframes for upgrading and expanding the BWSS and is being developed in line with the Queensland Government Business Case Development Framework (BCDF), which provides a consistent and rigorous approach to proposal development.

Background

Bundaberg Water Supply Scheme

Sunwater owns and operates the BWSS that supplies water to highly productive irrigation areas near Bundaberg in Central Queensland. The scheme sources water from Fred Haigh Dam and Paradise Dam and distributes water through more than 600 kilometres of channels and pipelines.

The BWSS is divided into two sub-schemes: Kolan River and Burnett River. These sub-schemes use five separate delivery systems:

- the Isis and Woongarra systems, which distribute water from the Burnett River in the south
- the Gin Gin-Bingera, Abbotsford and Gooburrum systems, which distribute water from the Kolan River in the north.

Changes to crop types and water demand

There has been a major diversification in crop types in the Bundaberg region. The BWSS was originally designed to support sugar cane production, which historically was the dominant crop in the region. As crops in the region continue to diversify to include tree crops and other types of horticulture, we need to assess the scheme's capacity to continue to deliver water effectively while matching changes in water demand.

A large portion of the distribution scheme has reached capacity, including several pump stations, channels and pipelines. This has been verified by previous studies conducted for the Paradise Dam Improvement Project (PDIP), a separate project to BSDCU.

What's involved?

We are taking a two-phase approach for this stage of the project. The key activities involved in each phase are detailed below.

Phase 1 – Options analysis (we are here)

2024–2025

- Confirming the service need and identifying the problems to be addressed and any potential opportunities.
- Seeking to understand the timing and location of water demand in the scheme and how it varies for key crops. Information gathered through stakeholder interviews and a customer survey will complement the findings of the demand assessment previously undertaken in the region.
- Developing engineering options based on the updated demand assessment and Sunwater's operational requirements (including necessary shutdowns for planned corrective maintenance).
- Evaluating the engineering options and recommending preferred solutions to progress to Phase 2 for development.

Phase 2 – Design and detailed business case

2025–2026

- Reviewing and confirming service need.
- Developing design to progress the engineering options identified in Phase 1.
- Undertaking key investigations to support development of the detailed business case e.g. financial, environmental, social, sustainability, cultural heritage.
- Defining the project's delivery plan.
- Documenting outcomes and recommendations from Phase 2 activities in a detailed business case to inform an investment decision.

What's next?

We're committed to keeping customers informed about how the BSDCU project is progressing and providing opportunities for you to share your insights. We will provide project updates to the Bundaberg Customer Advisory Committee, the Paradise Dam Reference Group and directly to customers as we finalise the demand assessment and develop the detailed business case.

Contact Sunwater:

13 15 89 **Live chat via sunwater.com.au, Monday–Friday 8.30am–4.30pm**

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