

## Paradise Dam Community Update

### July 2020

*Sunwater understands the Bundaberg community's concern about water security for the region. Safety is the key driver for the work we are doing at Paradise Dam.*

*We are committed to ongoing customer and stakeholder engagement to ensure that water users have their voice heard as the detailed business case process to determine the future of Paradise Dam is developed.*

#### Testing Underway

Work to allow sampling of the roller compacted concrete (RCC) at Paradise Dam has commenced. Sunwater has developed a sampling and testing methodology for this important and unique work in consultation with national and international experts.

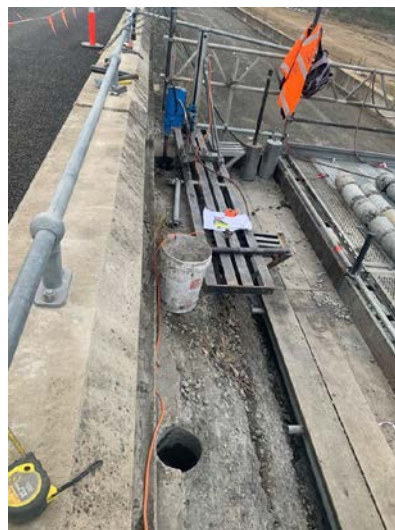
We will trial the methodology with block samples from the downstream face of the secondary spillway. Samples will be carefully extracted, and opportunities identified to improve the methodology for further sample locations across the dam.

Shear strength testing will provide a more complete understanding of the strength of the lift joints (the joints between the layers of RCC), which is a key area of weakness. The site investigations will obtain samples that can test the lift joint shear strength with a high precision laboratory apparatus.

Cutting the block sample to the required size for testing is planned to be undertaken in situ to limit sample disturbance. The primary requirement is that a lift joint is in the middle of the sample.

Our original intention was to take larger block samples sized 300mm square x 600mm deep (with one layer of RCC on each side of the lift joint). However, the best laboratory apparatus that we have identified for the trial requires a smaller block size of 270mm square x 200mm deep.

The trial samples will be tested in an accredited Brisbane laboratory, providing surety of the results. We do not want to send the samples to an international laboratory as that would introduce additional transport risks and increase the time to get results.



In addition, 200mm diameter vertical cores and inclined cores will be taken from the secondary spillway, abutments and primary spillway using triple tube drilling equipment. This equipment is ideal for acquiring large diameter cores with minimal sample disturbance. It is very rare to see this equipment in use anywhere in Australia.

The testing results will be reviewed by national and international experts and will help to inform the works needed to achieve the long-term remediation of Paradise Dam.

## Lungfish Relocation

As works have progressed at Paradise Dam several waterholes near the base of the wall needed to be drained to improve access

to the construction site. These waterholes contained a variety of fish, eels and turtles. CPB Contractors and Sunwater, together with qualified ecologists, safely relocated these species into the main river channel. This photo shows a lungfish being safely released into the downstream waters.

We have monitored lungfish at this location and along the river for over ten years. Lungfish are long-lived, large-bodied and essentially

sedentary with a restricted home range of between 1 and 1.5 kilometres, rarely extending beyond one or two pools.



## Paleoflood Study – accessing local Indigenous knowledge and science to improve our understanding of the Burnett Catchment

We are conducting a study to better understand Burnett River flood history and to gather information that will assist in planning the long-term remediation of Paradise Dam.

Both science and local Indigenous knowledge are key to our understanding of catchment flood behaviour over time. A paleoflood study looks for evidence of flood events that occurred before written records were kept using information about deposited flood sediments.

The inclusion of data from the paleoflood study and local Indigenous flood knowledge will lead to a more robust understanding of flooding within the Burnett and make it one of the best understood catchments in Australia.

We would love to hear from anyone who has local Indigenous knowledge of the Burnett Catchment and would be willing to participate in the study.

Sunwater will ensure that the scope of further works at Paradise Dam takes into account the findings of the Burnett Catchment paleoflood study. The study will improve our confidence in flood estimates for the dam, particularly around extreme flood events.

### Keep informed about Paradise Dam:

If you live immediately downstream of Paradise Dam, you can **register for SMS updates** at [sunwater.com.au](http://sunwater.com.au). **Download the Sunwater App** to receive push notifications when the dam is spilling water and to monitor dam levels.

**Follow the Sunwater Paradise Dam Facebook Page**

**Follow Sunwater** on Twitter

Visit [sunwater.com.au/projects/paradise-dam-essential-works/](http://sunwater.com.au/projects/paradise-dam-essential-works/) for updates.

Visit [bom.gov.au/qld/](http://bom.gov.au/qld/) for the latest weather information and your local council website for emergency updates.

For further information on Paradise Dam:

Community enquiries: 3120 0270 or via [paradise.dam@sunwater.com.au](mailto:paradise.dam@sunwater.com.au)

Customer enquiries: 13 15 89 or via [customersupport@sunwater.com.au](mailto:customersupport@sunwater.com.au)

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