

Bundaberg Water Supply Scheme Customer Update

Fact Sheet: Options to reintroduce water for sale during the Paradise Dam Improvement Project

Updated 2 December 2022

The Paradise Dam Improvement Project (PDIP) will see the dam returned to its original height, as part of significant safety improvement works. Sunwater has a dedicated and growing team working to prepare for works at the dam. Current activities include procurement of specialist consultants, progressing additional geotechnical investigations, design development, and commercial planning. Enabling works for the PDIP are planned to commence in 2023 and work at the dam is scheduled to commence in 2024.

This customer update shares information about options for making permanent water available for sale during the PDIP. It addresses these questions:

- How much water has been sold in the Bundaberg Water Supply Scheme (BWSS)?
- Can Sunwater currently sell permanent water in the BWSS?
- How could permanent water be reintroduced for sale?
- What volume of water could be reintroduced for permanent sale before completion of PDIP?
- Is Sunwater planning on applying to change the water-sharing rules?
- What feedback has Sunwater already received?
- When was permanent water last sold?
- What options do customers currently have to access more water?
- Will Sunwater consider making early sales to secure the water that will be available on completion of PDIP?
- Will water releases be required during work at the dam?
- How will distribution constraints in the scheme be addressed?

Previous drop-in sessions

Sunwater representatives offered drop-in sessions in Bundaberg on Wednesday 23 and Thursday 24 November 2022 regarding options to reintroduce water for sale during the PDIP.

These were combined with Bundaberg Water Supply Scheme customer information sessions held by Sunwater and the Department of Regional Development, Manufacturing and Water.

Background

- The Burnett Basin Water Plan (2014) provides a framework to sustainably manage and allocate water resources, balancing the needs of water users and the environment in this region, and expires in September 2024. The Department of Regional Development, Manufacturing and Water (DRDMW) is currently working with the Department of Environment and Science (DES) to update the hydrologic model and include more recent hydrologic data (from 2008 – 2020) to help inform a review of the plan. RDMW will undertake engagement with stakeholders regarding the plan review process over the coming years.
- The water allocation granted when Paradise Dam was first built is known as Burnett Water Pty Ltd Allocation (Burnett Water).
- An amendment to water-sharing rules was approved in March 2020 to enable Sunwater to maximise announced allocations (AAs) in the Burnett River sub-scheme during the Essential Works at Paradise Dam.
- As a result, Sunwater's unsold Burnett Water allocations (high and medium priority) were quarantined, this means removed from the AA calculations (therefore mitigating the impact of the reduced full supply level and maximising AAs for existing customers). Other parameters such as transmission and operating loss and high priority reserve were also altered to reflect the removal of the unsold water.
- Sunwater committed to revisiting water-sharing rule options following a decision on the future of Paradise Dam and is now sharing information about available options.

How much water has been sold in the BWSS?

- The BWSS is required to supply a total of 44,372 ML of high priority (HP) and 335,957 ML of medium priority (MP) water across the Burnett River and Kolan sub-schemes.
- Of these volumes, Paradise Dam contributed an additional yield of 20,000 ML of HP and 124,000 ML of MP distributed between the two sub-schemes when it was built.
- The following table shows the MP/HP breakdown of Burnett Water Allocations across the two sub-schemes, and the volumes sold and unsold (quarantined).

Sub-scheme		Paradise Dam Yield (known as Burnett Water Pty Ltd Allocation)	Allocations sold to date	Allocations unsold/quarantined
Burnett River sub-scheme	MP	102,345 ML	18,985 ML	83,360 ML – Quarantined
	HP	19,999 ML	2,848 ML	17,151 ML – Quarantined
Kolan sub-scheme	MP	21,655 ML	5,201 ML	16,454 ML – Unsold
	HP	1 ML	1 ML	0 ML

- The current volume of all Bundaberg WSS water allocations (including quarantined allocations) is published online [here](#).

Can Sunwater currently sell permanent water in the BWSS?

- Sunwater isn't currently selling new permanent water in the Burnett River sub-scheme as all unsold water has been quarantined to maximise allocations.
- The 2020 amendment to water-sharing rules quarantined all unsold water in the Burnett River sub-scheme in order to maximise allocations whilst the Essential Works were underway at the dam.
- No changes were made to the Kolan River sub-scheme, however, approximately 16,500 ML of MP unsold allocation is also currently being reserved by Sunwater as it may impact on existing customers in the Burnett River sub-scheme (this is because the Burnett Water Pty Ltd allocation is allowed, pending trading zone restrictions, to be moved around the BWSS). If conditions are met which mitigate these impacts, Sunwater has offered small volumes of the Kolan unsold volumes on the temporary trade market.

How could permanent water be reintroduced for sale?

- A further change to water-sharing rules is required to reintroduce unsold volumes for sale.
- All quarantined water will be reintroduced for sale on completion of PDIP. Options to reintroduce smaller volumes, possibly in a staged way over time, or pre-sales prior to completion of PDIP, are being considered.
- Changes to water-sharing rules only occur following customer consultation and the approval of an application to amend the Operations Manual by Sunwater to the Department of Regional Development Manufacturing and Water (DRDMW).
- Ideally any change to water-sharing rules would come into effect at the beginning of a new water year (i.e., 1 July). Planning for such a change would need to commence approximately nine months prior (i.e., in September/October). As such, the earliest new permanent water could be made available for sale is 1 July 2024.
- It is important to understand that releasing any volumes from quarantine during the PDIP would negatively impact on AAs as explained below.

What volume of water could be reintroduced for permanent sale before completion of PDIP?

- Sunwater has undertaken preliminary modelling to determine the volume that could be reintroduced for sale whilst ensuring compliance with water allocation security objectives and environmental requirements.
- A maximum of 14,000 ML of MP water could be removed from quarantine and reintroduced for sale before completion of PDIP. This would have an impact on AAs. The magnitude of the impact on AAs varies depending on:
 - the volume released from quarantine – the greater volume released the greater negative AA impact
 - the storage levels across the scheme at the beginning of the water year – the higher the storage the greater the negative impact on AAs.
- For example, if 14,000 ML of MP is released for permanent sale this could reduce the MP AA by up to 8% in a wet year and up to 2% in a dry year.
- If only 5,000 ML of MP is released this could reduce the MP AA by up to 2% in a wet year or have minimal change in a dry year.
- Any changes to water-sharing rules would come into effect at the beginning of a new water year (AAs cannot decrease in a water year).

Is Sunwater planning on applying to change the water-sharing rules?

- Sunwater has no immediate plans to change the water-sharing rules, but can plan to do so in consultation with BWSS customers as the PDIP progresses
- Further customer engagement and customer support would be required before Sunwater would make an application to change the water-sharing rules.

What feedback has Sunwater already received?

- In July this year we shared information about the available options at meetings of the BWSS Irrigator Advisory Committee (IAC) and the Paradise Dam Reference Group and then shared a draft version of this update with grower group members of those committees to seek early feedback.
- Initial feedback from those groups includes the following points:
 - there is no immediate need to consider changing the water-sharing rules.
 - a number of members are of the view that any negative impact on AAs is not desirable, and no permanent water should be sold until the review of the Burnett Basin Water Plan is complete and PDIP is complete and the dam is returned to its original height.
 - some would like to see some water made available to take the pressure off Temporary Transfer (TT) prices.
 - customers and potential customers are keen to understand options for early sales to secure water on completion of PDIP to provide growers more certainty to plan for the future.
 - some would like Sunwater to reconsider options again as PDIP planning progresses.

When was permanent water last sold?

- Permanent water was last sold in the scheme in 2019.
- Demand in the scheme has been tempered due to wet conditions. We understand there is demand for more water in coming years. The future water demand study (conducted in 2020) indicated a demand range up to an additional 25,000 ML of MP water sales between 2022 and 2028.

What options do customers currently have to access more water?

- The TT market has been active this water year and has quieted due to large inflows.
- The TT market is unlikely to meet demand in drier years.

Will Sunwater consider making early sales to secure the water that will be available on completion of PDIP?

- Sunwater understands this is important to allow business planning and is investigating options to introduce early sales ahead of PDIP completion. Sunwater is of the view that this process is best commenced once PDIP site activities have progressed.
- Considerations will include the staging, timing, sale methodology and contract terms that could be used for a sale.

Will water releases be required during work at the dam?

- The storage level at Paradise Dam will need to be managed during PDIP to ensure a safe working environment.
- Enabling works for the PDIP are planned to commence in 2023 and work at the dam is scheduled to commence in 2024.
- The storage level will need to be lowered below the current primary spillway to ensure safe work on the outlet works at the dam. Outlet works are critical to ensure that the dam level can be managed safely during PDIP. Sunwater is currently developing plans for the first phase of outlet works and will share information as planning progresses. A longer-term period of storage management will be required for the main dam works.
- Detailed work methods will be established to confirm the scale and duration of storage management throughout the project and Sunwater will aim to minimise releases where possible.
- Sunwater will work with DRDMW to consider customer access to releases and provide further information as planning progresses and before PDIP works commence.

How will distribution constraints in the scheme be addressed?

- Sunwater will develop a business case to further investigate capacity constraints within the scheme's existing distribution network.
- Sunwater will continue to engage with customers to develop plans to alleviate network constraints so that water distribution can keep pace with demand.
- The funding approach for this work is yet to be confirmed.
- If new permanent sales are to proceed before this work is completed, new sales will need to be assessed on case-by-case basis to take into account distribution constraints in some locations and off-peak constraints may be necessary.

What happens next?

- We are seeking feedback from scheme customers to determine broader views on considering advance sales, or any potential triggers that could be used to start a process to release quarantined water for permanent sale prior to completion of PDIP.
- Sunwater is holding customer drop-in information sessions this month as outlined on page 1 or you can contact us with your feedback (details below).
- Sunwater will conduct further customer communications and engagement once we have information regarding specific storage management requirements for PDIP.

Contact us

If you have questions or feedback please contact Sunwater using these details:

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Customer Support

Phone 13 15 89 or live chat via sunwater.com.au, Monday-Friday 8.30am-4.30pm.