Queensland Competition Authority

Information sheet

Rural irrigation price review 2020-24

February 2020

Bundaberg water supply scheme and distribution system

Why are we recommending irrigation prices?

The Queensland Government directed us to recommend irrigation prices for Sunwater and Seqwater customers over the pricing period 1 July 2020 to 30 June 2024.

This includes recommending prices for irrigation customers in the **Bundaberg water supply scheme** (WSS) and **distribution system**. Prices for non-irrigation customers are outside the scope of our review.

After extensive consultation with irrigators, we have released our final report. The Government will make the final decision on irrigation prices, taking our recommendations into consideration.

How we have recommended prices

We recommended two-part tariffs for the tariff groups in this scheme. The first part (Part A and Part C) is a *fixed price* per megalitre (ML) of water access entitlement (WAE), and the second part (Part B and Part D) is a *volumetric price* per ML of water used.

The volumetric price recovers variable costs (e.g. a portion of labour costs, and electricity costs relating to pumping) that change with water usage. The remaining costs are recovered by the fixed price. We assessed all expenditure to ensure that Sunwater only recovers prudent and efficient costs.

We applied the pricing principles in the referral, as these give effect to the Government's water pricing policy. Under that policy, prices are to gradually transition over time to the 'lower bound cost target'. This target recovers the irrigation share of the scheme's operating, maintenance and capital renewal costs but does not recover a return on, or of, the scheme's existing asset base (as at 1 July 2000). We also moderated bill impacts by capping total price increases to inflation plus \$2.38/ML of WAE (from 2020–21, increasing by inflation). More details are in Part A (chapter 2) of our report.

Under our recommended prices, cost recovery for Sunwater's irrigation customers will improve from 90% in 2020–21 to 94% by 2023–24. The shortfall is currently funded by a subsidy, paid by the Queensland taxpayer, which will reduce over time as prices transition to the lower bound cost target.

What prices have we recommended?

For river-only customers in the Bundaberg WSS, our recommendations result in the fixed price remaining constant over the pricing period until it reaches the cost-reflective level

in 2023–24. The volumetric price decreases to the cost-reflective level immediately. Prices fully recover costs.

For the Bundaberg distribution system, our recommendations result in the total fixed price increasing by our estimate of inflation (2.24%) plus \$2.38/ML (2020–21 dollars) over the price path period. The total volumetric price decreases to the cost-reflective level immediately. Prices will not recover costs by the end of the pricing period. Cost recovery will increase from 77% in 2020–21 to 83% by 2023–24.

Dam safety upgrades for this scheme are due to be commissioned in 2026–27. While this will not impact on prices in this pricing period, we have estimated the impact in the year following commissioning (2027–28) to be:

- \$0.23/ML increase to the cost-reflective fixed price for the Bundaberg WSS
- \$0.57/ML increase to the total cost-reflective fixed price for the Bundaberg distribution system.

Our recommended prices are shown in the table below.

Recommended prices for irrigation customers—\$/ML

Tariff group	2019–20 (Existing)	2020–21	2021–22	2022–23	2023–24
Bundaberg WSS					
Fixed (Part A)	13.06	13.06	13.06	13.06	13.13
Volumetric (Part B)	1.31	1.01	1.03	1.06	1.08
Bundaberg distribution system					
Fixed (Part A)	7.54	10.09	12.56	12.84	13.13
Volumetric (Part B)	1.31	1.01	1.03	1.06	1.08
Fixed (Part C)	45.08	46.09	47.31	50.86	54.54
Volumetric (Part D)	58.94	54.35	55.57	56.81	58.08
Total Fixed	52.62	56.18	59.87	63.70	67.67
Total Volumetric	60.25	55.36	56.60	57.87	59.16

How we have addressed stakeholder concerns

Dam safety

Some irrigation stakeholders have raised concerns about the allocation of dam safety expenditure to irrigators.

The primary service provided by most dams that are within the scope of our review is the supply of water to users. In order to provide that service, the water business must comply with a range of regulatory obligations, including dam safety requirements. As a compliance cost, we consider that dam safety upgrade expenditure should be treated as a normal cost of operation in supplying water services to customers.

We reflected the incidental flood moderation benefits of dams by only allocating 80% of irrigators' share of dam safety upgrade expenditure to the allowable cost base.

Where a dam has a formal flood mitigation role, we consider that the costs of dam safety upgrades should be shared with beneficiaries in the broader community.

See Part A (Chapter 4) of our report for further details.

Operating costs

Some irrigation stakeholders in this scheme have raised concerns with costs incurred to implement the 2015 recommendations made by the Inspector-General Emergency Management (IGEM costs), electricity costs and insurance costs.

We accepted Sunwater's revised (lower) IGEM costs provided to us in June 2019. However, we allocated this between irrigation and non-irrigation customers using the headworks utilisation factor. More details are in Part B (section 2.9) of our report.

We accepted Sunwater's June 2019 base year electricity cost estimates for bulk schemes as they are not materially different from our alternative estimates. However, we reduced electricity costs for distribution systems by 4.8%. See Part B (section 2.5) of our report for further details.

While we accepted Sunwater's final insurance costs for 2019– 20 as a base year estimate, we also allocated these costs between irrigation and non-irrigation customers using the headworks utilisation factor. More details are in Part B (section 2.6) of our report.

Renewals annuity

Some irrigation stakeholders raised concerns about Sunwater's asset management practices and the prudency and efficiency of meter replacement costs.

We identified improvements to Sunwater's asset planning and management to ensure assets are not replaced earlier or later than required. See Part B (section 3.2) of our report for further details.

We reduced Sunwater's forecast renewals expenditure by 35.2% (relative to the November 2018 submission) to reflect our assessment of the prudent and efficient level of expenditure. See Part B (sections 3.4 and 3.5) of our report for further details.

Water use forecasts

Some irrigation stakeholders asked us to review Sunwater's use of a 15-year water use average for calculating the volumetric price.

To establish a meaningful water use denominator, we consider that the approach to estimating the assumed level of water use should be representative of normally occurring conditions, consistent with our approach to estimating base year variable costs.

The variability in climatic conditions throughout Queensland makes accurately forecasting water usage at the scheme level over a multi-year period challenging. Climatic conditions involve extreme conditions that will influence water usage by irrigators. We consider that a 20-year averaging period appropriately covers a range of conditions. See Part B (section 5.2) of our report for further details.

Recreation costs

Some irrigation stakeholders raised concerns over the recovery of renewals expenditure relating to recreation services from irrigators.

We reviewed Sunwater's forecast renewals expenditure to ensure that expenditure relating to recreational services have been excluded. See Part B (section 3.4) of our report for further details.

Distribution losses

Some irrigation stakeholders were concerned about the level of distribution loss WAE allocated to irrigators.

We estimated the costs associated with historical excess distribution loss WAEs, and allocated the bulk holding (fixed) costs of these to Sunwater on the basis that distribution system customers should not pay for distribution loss WAEs in excess of what is required to meet actual loss releases.

More details are in Part B (section 6.2) of our report.

Tariff structure

Some irrigation stakeholders were concerned about the fixed/variable tariff structure, and asked that we look into a more flexible tariff structure that could accommodate the diversity of users and the seasonal influences. In addition, electricity costs should be considered and recovered through a fixed and variable \$/ML component.

Aligning the tariff structure with the nature of the underlying costs is consistent with our recommended allocation of volume risk. It will also help to address the revenue adequacy considerations in the referral notice.

We consider that our recommended approach of assigning some electricity costs to fixed costs based on the underlying nature of the electricity tariffs better meets the requirements set out in the referral notice, which requires us to have regard to the underlying fixed and variable nature of costs in setting prices. Further details are in Part A (section 3.2) and Part B (section 7.2) of our report.

Termination fee

Some irrigation stakeholders were concerned about the level of the termination fee.

We note that a lower multiple could be applied at Sunwater's discretion, should it be consistent with Sunwater's commercial interests (e.g. in the interests of more efficient system management).

We also note that customers do have the option of permanently trading their water entitlements to other distribution system users, which does not incur a termination fee. Alternatively, customers can choose to retain ownership of their distribution system WAE and engage in temporary trading.

More details are in Part B (section 8.1) of our report.

Access charge

Some irrigation stakeholders support the inclusion of an access charge in principle. However, are concerned about what costs the access charge included.

We welcome the water businesses working with their customers to reach agreement on issues of concern. We are generally receptive to recognising such agreements when we recommend irrigation prices, subject to any agreement being consistent with the requirements set out in the referral.

Given the importance of the access charge and its impact on affordability, we have recommended that an access charge not be introduced until further consultation is undertaken with Sunwater's customers, particularly with small water users.

See Part B (section 6.3) of our report for further details.

Electricity cost pass through mechanism

Some stakeholders expressed concern for Sunwater's proposed electricity cost pass through mechanism.

We are concerned that the automatic pass through of electricity costs has the potential for large bill impacts and reduced incentives for the efficient use of electricity.

We have encouraged Sunwater to further refine the proposal and demonstrate clear customer support. The Government may wish to consider any such agreement were one to be reached subsequent to our report.

More details are in Part A (section 3.3) of our report.

Other matters raised by stakeholders

Some irrigation stakeholders in this scheme have raised concerns about price levels, affordability and the impact of higher water prices on their businesses, regional economies and local communities.

We consider that recommending prices that are consistent with the Government's pricing principles takes into account

social welfare, capacity to pay and regional development considerations. We also moderated bill impacts. More details are in Part A (chapter 2) of our report.

We have recommended a reduction in scheme costs for Bundaberg WSS and distribution system

We have reduced Sunwater's proposed WSS costs by 24% over the pricing period 1 July 2020 to 30 June 2024.

Total costs over the price path period— Bundaberg WSS (2018–19 dollars) (\$'000)



Note: 1. Revenue offsets are not included in the charts. 2. QCA Non-direct operating costs includes the QCA regulatory fees.

We have reduced Sunwater's proposed distribution system costs by 14% over the pricing period 1 July 2020 to 30 June 2024.

Total costs over the price path period— Bundaberg distribution system (2018–19 dollars) (\$'000)



Note: 1. Revenue offsets are not included in the charts. 2. QCA Non-direct operating costs includes the QCA regulatory fees.

Further details on our recommended costs for Sunwater schemes are in Part B (chapters 2 to 4) of our report.

We have assessed local impacts

The table below presents an estimate of the change in water bills (compared to the bill based on existing prices), for various levels of water use.

More details on bill impacts are in Part B (chapters 7 and 9, and appendix C) of our report.

Change in water bill

Water use as portion of entitlement held (%)	Water bill change from 2019–20 to 2020–21 (%)	Water bill change from 2019–20 to 2023–24 (%)			
Bundaberg WSS					
0	-	1			
25	(1)	-			
50	(1)	(0)			
75	(2)	(1)			
100	(2)	(1)			
Bundaberg distribution system					
0	7	29			
25	3	22			
50	1	18			
75	-	15			
100	(1)	12			

Where you can find out more

The final report is on the QCA website in three parts:

- Part A—key regulatory and pricing framework issues that apply to both Sunwater and Seqwater
- Part B—Sunwater schemes
- Part C—Seqwater schemes.

What happens next?

The Government will consider our final report and make the final decision on irrigation water prices for Sunwater and Seqwater customers over the pricing period 1 July 2020 to 30 June 2024.

Queensland Competition Authority GPO 2257 Brisbane Queensland 4001

www.qca.org.au (07) 3222 0555