

Bowen Broken Rivers Water Supply Scheme

Scheme Summary

Irrigation pricing proposal

1 July 2025 to 30 June 2029

Context

Bowen Broken Rivers Water Supply Scheme (Bowen Broken) prices were set for the period 2020-21 through to 2024-25 (current period) via Rural Pricing Direction Notices issued by the Queensland Treasurer in 2020¹, 2021² and 2023³.

In early 2023, the Queensland Government directed the Queensland Competition Authority (the QCA) to recommend prices for Bowen Broken irrigation services for the next price path period, covering **1 July 2025 to 30 June 2029**.

This scheme level summary forms part of Sunwater’s submission to the QCA and provides irrigation customers with an overview of our proposal. It should be read in conjunction with the complete submission and includes:

- proposed prices and their basis
- engagement with customers, their feedback and how it was addressed

- operating and renewals expenditure forecasts
- the overall revenue requirement.

Entitlements and usage

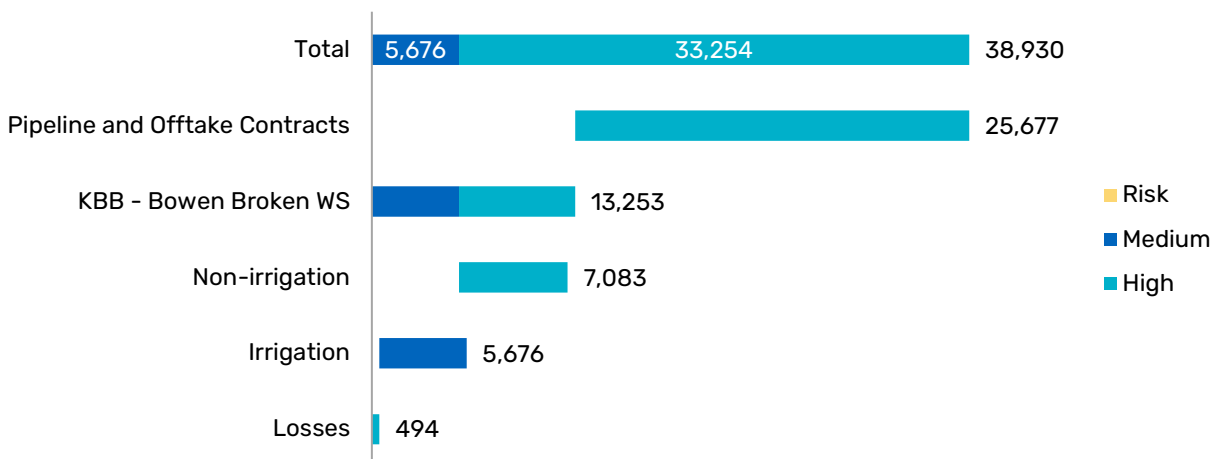
Bowen Broken holds total water access entitlements (WAE) of 38,930ML (**Figure 1**). Most entitlements are high priority and held by customers who use water for non-irrigation purposes.

Long-term (20-year) average annual usage in the scheme is 15,565ML per annum. This is equivalent to 40.0 per cent of total WAE, up from 37.2 per cent at the time of the last irrigation pricing review.

Tariff groups

Bowen Broken has one irrigation tariff group.

Figure 1 - Bowen Broken water access entitlements (as at 30 June 2023)



¹ Queensland Government Gazette No. 67(July 2020) Sunwater Rural Water Pricing Direction Notice 2020

² Queensland Government Gazette No.25 (June 2021) Sunwater Rural Water Pricing Direction Notice 2021

³ Queensland Government Gazette No.54 (March 2021) Sunwater Irrigation Water Pricing Direction Notice 2023

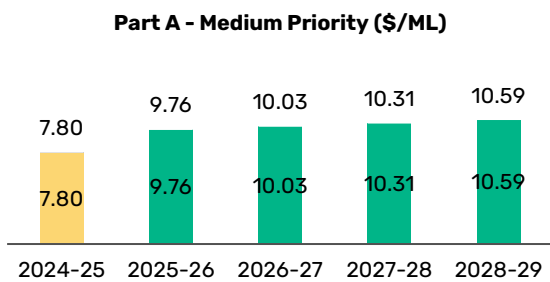
Proposal in summary

During engagement with scheme customers, Sunwater outlined proposed operating costs and renewals expenditure required to deliver irrigation services over the next price path period; required revenue and price calculations; as well as a potential cost recovery change with implications for customer prices. Balancing what we heard from customers with the benefits and risks of these changes we propose to:

1. recover renewals expenditure via a regulated asset base (RAB) methodology
2. refresh our Service and Performance Plans (S&PPs)

Further information relating to engagement outcomes is provided in the following section.

Bowen Broken Rivers



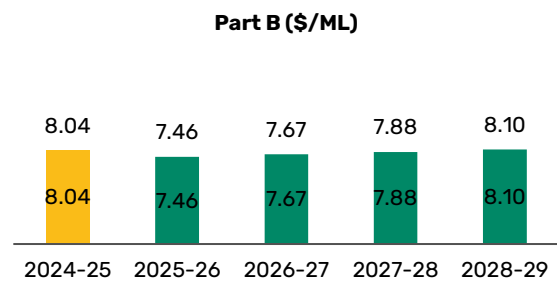
Proposed prices by tariff group

The prevailing price for 2024-25 is shown for comparison purposes with forecast prices for the review period. All discounts have been removed for ease of comparison. The green bars within the below chart reflect recommended irrigation prices for the price path period. Values shown at the top of the chart reflect cost-reflective prices for the charge. The grey bar element reflects the component of cost-reflective prices that Sunwater recovers via a community service obligation payment from the Queensland Government.

Prices reflect a RAB methodology.

Legend:

- / ■ Irrigation price (gazetted)
- / ■ Recommended irrigation price (proposed)
- / ■ Cost reflective irrigation price (proposed)



Engagement

Sunwater contacted all Bowen Broken irrigation customers multiple times during the development of the pricing proposal.

How we engaged

Over the course of the last price path, Sunwater has implemented a series of initiatives to improve customer experience and enable us to better understand and meet customers' needs and expectations. These initiatives include the Sunwater Customer App, the Online Portal, the introduction of the Water Trading Board, a formalised complaints and feedback process, and the establishment of Customer Advisory Committee forums.

Reflecting this shift, Sunwater established a three-stage stakeholder engagement strategy for this price path to inform and consult with customers during the submission development process.

We ensured every irrigation customer who wanted to engage could do so. Based on the small number of Bowen Broken irrigation customers, the remoteness of the scheme, and our knowledge of customer preferences, we invited customers to online sessions rather than trying to conduct face-to-face sessions.

We published project communication materials, including fact sheets and copies of presentations to ensure all customers had the opportunity to:

- learn about how irrigation prices are set
- review draft future costs and prices
- learn about and provide feedback on proposed changes to:
 - Service and Performance plans
 - renewals expenditure recovery through irrigation prices.



- ✓ Dedicated project website and email



- ✓ 1 scheme summary report



- ✓ Emails and SMS sent about proposals and GoVote process
- ✓ Customers called individually
- ✓ Invitations sent via email, SMS and letter.



- ✓ Irrigation Customer Invoice Calculator



- ✓ Four fact sheets
 - RAB
 - S&PPs
 - Stage 1 & 2 scheme-specific overviews



- ✓ 1 face-to-face meeting – 0 attendees
- ✓ 3 online meetings

What we heard

Based on discussions with all irrigation customers during our scheme-based and online meetings (**Table 1**), Sunwater has provided additional information on renewals expenditure in our Stage 3 engagement material on future costs for each scheme (depicted by cost spikes in the renewals forecast).

This information is contained in the **Expenditure Focus** section of this summary.

GoVote

No Bowen Broken customers responded to the online survey. Customers received multiple communications about the opportunity to participate from both Sunwater and the provider, GoVote.

For a full explanation of the GoVote process and how Sunwater used this information to finalise its proposal, refer to the Customer Engagement chapter of Sunwater’s pricing submission.

Other feedback

Sunwater did not receive any other feedback from Bowen Broken customers.

Proposal to change the method of renewal cost recovery

This proposal was put forward as a change to all water supply schemes. Considering feedback from all sources (including the GoVote results shown on **Figure 2** and **Figure 3**), and the benefits to be gained, Sunwater has included a shift to a RAB-based recovery of renewals expenditure as part of its submission.

Our full reasoning for adopting a RAB-based renewals recovery proposal is outlined in Sunwater’s pricing submission.

Proposal to refresh Service and Performance plans

This proposal was put forward as a change to all water supply schemes. Considering feedback from all sources, and the benefits to be gained, Sunwater proposes to adopt the refreshed format and process.

Our full reasoning is outlined in Sunwater’s pricing submission.

Figure 4 reproduces the overall responses we received during our GoVote process.

Table 1 - Key customer interests

Forum details	Attendees	Key customer interests
Stage 1 engagement		
<i>Forum:</i> Face-to-face engagement with <u>Bowen Broken</u> customers <i>Theme:</i> Learn how irrigation prices are set and how you can be involved in influencing Sunwater’s pricing submission to the QCA	0	
<i>Forum:</i> Teams webinar, <u>all schemes</u> invited <i>Theme:</i> Learn how irrigation prices are set and how you can be involved in influencing Sunwater’s pricing submission to the QCA	12	How prices are set - general
Stage 2 engagement		
<i>Forum:</i> Teams webinar, <u>all schemes</u> invited <i>Theme:</i> Draft future prices and proposals for customer feedback	15	Community Service Obligation
Stage 3 engagement		

<p><i>Forum:</i> Teams webinar, all schemes invited</p> <p><i>Theme:</i> Outline Sunwater's pricing proposal, having taken into account customer feedback and preferences</p>	7	RAB v annuity
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Figure 2 - How schemes responded to the RAB proposal – question and responses

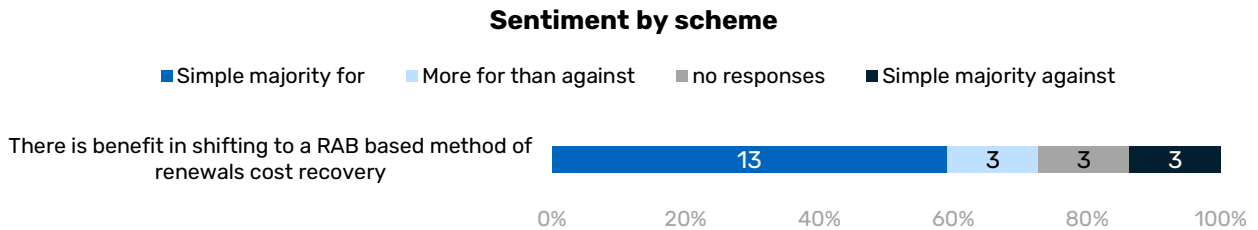


Figure 3 - How Sunwater's irrigation customers responded to the RAB proposal – question and responses

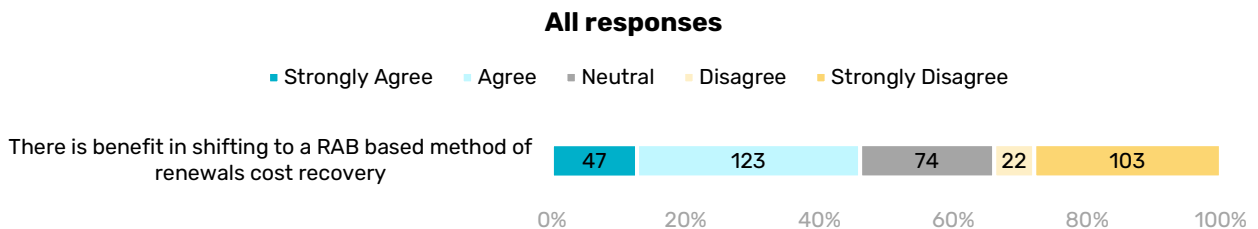
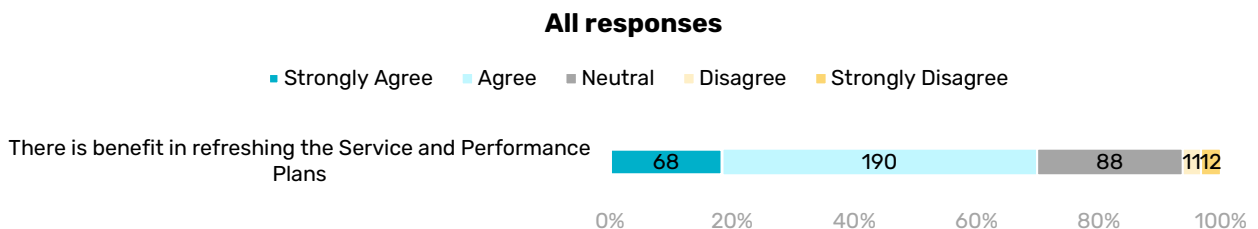


Figure 4 - How Sunwater's irrigation customers responded to the S&PP proposal – question and responses



Service standards

The current service standards that apply for the Bowen Broken scheme were included as part of our Stage 2 engagement. These are the customer service standards that drive the work we do, and influence operations, maintenance, and renewals expenditure in this scheme.

Table 2 - Service standards for Bowen Broken

Service standards	Standard	Target
<i>Planned shutdowns - notification</i>	For shutdowns planned to exceed 2 weeks	8 weeks
	For shutdowns planned to exceed 3 days	3 weeks
	For shutdowns planned to be less than 3 days	5 days
<i>Unplanned shutdowns - duration</i>	Unplanned shutdowns will be fixed so that at least partial supply can be resumed	7 days
<i>Unplanned shutdowns - notification</i>	Affected customers will be notified of the likely duration of the interruption to supply	Within 24 hours of Sunwater learning of the event or by the end of the first business day following the event, whichever is the earlier
<i>Maximum number of interruptions</i>	Planned or unplanned interruptions per water year	10
<i>Meter repairs</i>	Faults causing restrictions to supply will be repaired	2 working days
<i>Complaints and enquiries</i>	Initial response (Acknowledge)	5 working days
	Resolve or provide written response	21 days

Expenditure focus

This section shows the final forecast operating expenditure (opex) and renewals expenditure for the Bowen Broken scheme.

Operating expenditure

Sunwater’s opex forecast was developed using the base-step-trend methodology presented in our pricing submission.

Sunwater’s proposed base year (2022-23 actuals after adjustments) of \$1.54M is shown on **Figure 5** and essentially the same as the QCA’s allowance for the same year (after adjustment for actual inflation).

While the overall value is in line with the QCA’s allowance, higher labour and support costs have been offset by lower electricity, other and contractor costs as shown on **Figure 5**.

Operations and maintenance have been split into other direct costs, materials, contractors, and direct labour to better explain the drivers of higher costs.

Support costs include indirect activities (those that support a specific direct activity such as dam safety, pricing and regulation, and water planning); and local and corporate support, such as depots, local administration teams and offices, finance, payroll, procurement, human resources, information and communications technology, cybersecurity, and other necessary costs of doing business.

Price path opex forecast

The Bowen Broken opex forecast for the price path period is shown in **Table 3**.

The base-step-trend approach to develop our forecasts is described in detail in Sunwater’s pricing submission. In summary, we take the base-year (**Figure 5**) and apply assumptions relating to inflation plus a step change in opex associated with our billing system renewal.

Table 4 shows how the relative mix of opex cost categories is changing under Sunwater’s forecast prices.

For each dollar of total opex spent, the percentages shown reflect the cents the category contributes.

Forecast premium increases mean that insurance costs will account for a more significant portion of total opex for Bowen Broken over the price path period.

Renewals opex has been excluded as this is a new category that applies under a RAB-based recovery of renewals expenditure.

Renewals (capital)

All renewal costs in the Bowen Broken scheme are assigned to high priority entitlements. Medium priority prices are unaffected by the following forecasts.

This section addresses actual renewals expenditure for the 2019-20 to 2022-23 period, forecasts for the remainder of the current pricing period (2023-24 to 2024-25), and forecasts relevant for the price path period. Sunwater’s approach to the delivery and forecast of renewals expenditure is set out in our pricing submission.

Discussion of current period expenditure is presented with reference to the annuity funding methodology, while forecasts for the price path period refer to the RAB-funding methodology.

Figure 5 - Scheme level breakdown of difference between Sunwater's base year and QCA allowance (2022-23)

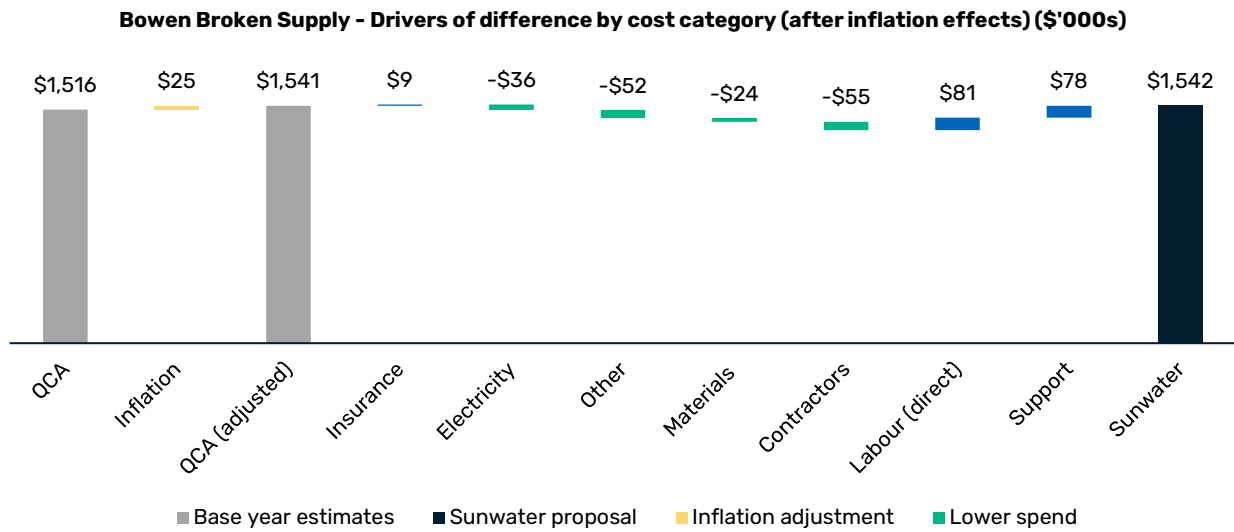
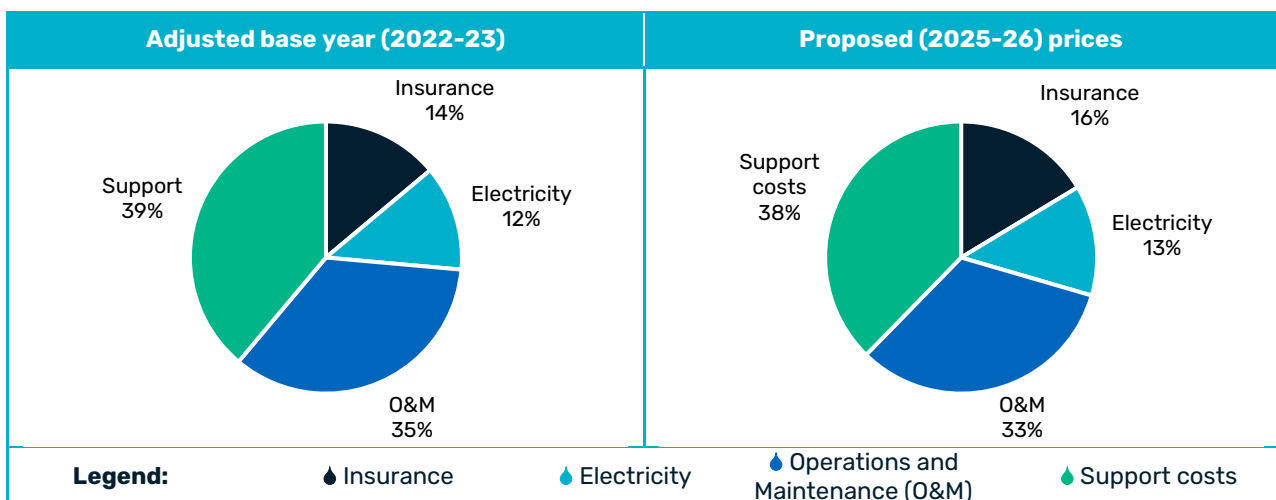


Table 3 - Bowen Broken opex forecasts for price path period ('000s)

Cost categories	2025-26	2026-27	2027-28	2028-29
Insurance	\$291.8	\$298.7	\$305.4	\$311.5
Electricity	\$234.2	\$239.8	\$245.2	\$250.1
Operations and maintenance ¹	\$584.9	\$599.0	\$611.6	\$623.8
Support costs	\$671.9	\$687.3	\$701.9	\$715.9
Opex - BST sub-total	\$1,782.8	\$1,824.8	\$1,864.1	\$1,901.3
Renewals opex	\$199.2	\$280.9	\$350.2	\$230.3
Opex total	\$1,982.0	\$2,105.7	\$2,214.3	\$2,131.6

Note 1: Includes preventative and corrective maintenance categories.

Table 4 - Relative contribution of major opex categories to total opex (prior to cost transfers)



As Sunwater’s RAB-funding methodology is a proposal for assessment by the QCA and Government, the full forecast required for an annuity-funding methodology is presented for completeness.

Current period (plus roll-forward)

Sunwater expects to have delivered \$3.8M in renewals activities for the 2019-20 to 2024-25 period. The QCA allowance⁴ for the same period was \$3.1M. This is shown in **Table 5** which also includes the roll-forward of annuity expenditure from the QCA’s 2018-19 closing balance to 30 June 2025.

Bowen Broken is forecast to have a negative annuity closing balance.

The opening RAB balance for Bowen Broken has been set at \$4.0M, consistent with the approach set out in Sunwater's pricing submission.

Significant projects delivered (or forecast to be delivered) in this period (by value) are shown in **Table 6**.

Price path period

Sunwater’s submission document describes in detail the way we have developed our renewals expenditure forecast for the next price path period.

Table 5 - Current pricing period expenditure and renewals annuity roll-forward (\$'000s)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast		
			<i>Current price path period</i>						Aggregate spend
Opening balance		-\$3,779.8	-\$5,006.1	-\$5,208.3	-\$5,018.9	-\$4,614.6	-\$4,219.8		
Expenditure		-\$1,533.4	-\$827.7	-\$430.8	-\$230.7	-\$269.1	-\$465.1	-\$3,756.8	
Insurance proceeds									
Annuity Contribution		\$472.4	\$844.3	\$847.9	\$854.4	\$865.6	\$885.0		
Interest		-\$165.3	-\$218.9	-\$227.7	-\$219.4	-\$201.8	-\$184.5		
Closing Balance¹	-\$3,779.8	-\$5,006.1	-\$5,208.3	-\$5,018.9	-\$4,614.6	-\$4,219.8	-\$3,984.4		

Note 1: Closing balance for 2018-19 was set by the QCA at the last pricing review. The calculated (forecast) 2024-25 value is used to set the opening balance of the regulated asset base for the price path period.

Table 6 - Significant projects (by value) delivered in this period (\$'000s)

Project name	Year	Value
Eungella Dam Comprehensive Risk Assessment	2020-23	\$753.9
20BBR07 Study - 20 Year Dam Safety Review - Eungella Dam	2020-22	\$652.3
20BBR03 Silt Removal at Gattonvale Pump Station	2020-23	\$305.0

⁴ Revenue Model issued by QCA with its Final Model (January 2020)

Table 7 shows the forecast for Bowen Broken Rivers for the price path period, with a focus on the top five programs by aggregate spend. Each program forecast comprises a mix of capex and opex, with values separated at the bottom of the table used for the setting of prices.

A program comprises several individual projects that have common characteristics. For example, a valve replacement program will comprise multiple valve replacements over the period. The justification (need) for each project within a program is generally the same and similar approaches are typically adopted for the estimation of project costs.

The largest projects (outside major programs) forecast to be delivered in this period (by value) are shown in **Table 8**.

An additional \$0.428M in capital expenditure (not shown in **Table 7**) has been added to 2025-26 as the Bowen Broken Rivers portion of the \$42.4M whole-of-business project to renew Sunwater’s billing system.

Beyond price path period

Expenditure beyond the price path is not relevant to the setting of prices for the 2025-26 to 2028-29 period under a RAB methodology. It is presented in **Figure 8** for completeness. This profile underpins the alternative annuity-base prices presented in the **Revenue and pricing** section of this summary.

Significant (by value) projects forecast for completion between 2029-30 and 2057-58 are shown in **Table 9**. Expenditure commencement dates are shown. For programs, expenditure will typically occur throughout the period.

Table 7 - Price path period – forecast renewals expenditure (\$'000s)

Category	2025-26	2026-27	2027-28	2028-29	Aggregate	Percentage
17. Arc Flash Program	\$324.4	\$200.9	\$0.0	\$0.0	\$525.3	29%
15. Minor Works	\$137.7	\$25.3	\$119.5	\$0.0	\$282.5	16%
5. Dam-Related Works Program	\$61.5	\$120.3	\$53.6	\$0.0	\$235.4	13%
20. Dam Safety Management Program	\$161.3	\$0.0	\$0.0	\$0.0	\$161.3	9%
7. Pump & Motor Renewal	\$0.0	\$0.0	\$0.0	\$89.7	\$89.7	5%
Remaining Programs	\$61.6	\$61.6	\$46.4	\$0.0	\$169.6	9%
Sub-total – programs	\$746.4	\$408.1	\$219.4	\$89.7	\$1,463.7	81%
Projects not captured in programs	\$0.0	\$73.7	\$130.8	\$140.5	\$345.0	19%
Total	\$746.4	\$481.8	\$350.2	\$230.3	\$1,808.8	100%
Capex	\$547.3	\$200.9	\$0.0	\$0.0	\$748.2	41%
Renewals Opex	\$199.2	\$280.9	\$350.2	\$230.3	\$1,060.6	59%

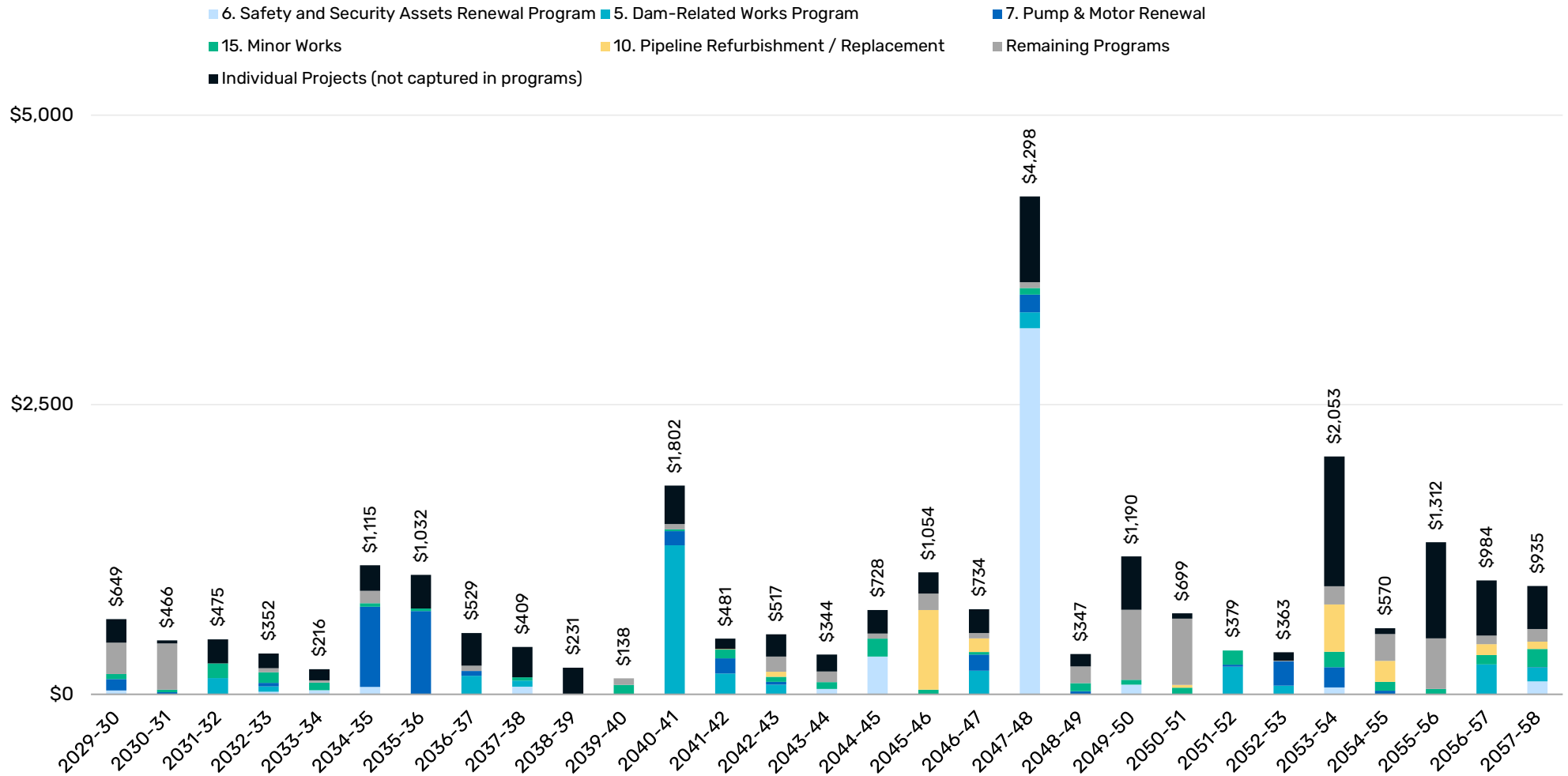
Table 8 - Significant individual projects (by value) to be delivered during the price path period (\$'000s)

Project name	Year	Value	Percentage
Dam Safety Management Program	2026	\$161.3	9%
Inspect Inspection - Eungella Dam	2027	\$120.3	7%
Replace Instrumentation - Bowen River Weir - Fishway	2028	\$92.3	5%
Refurbish Pump 3 - Gattonvale Pump Station	2029	\$89.7	5%

Table 9 - Key projects beyond the price path period (2029-30 to 2057-58) period (\$'000s)

Project name	Commencement year	Value	Percentage total
Replacement of Major Components Spillway Bridge - Eungella Dam	2048	\$3,049	12%
Inspection - Eungella Dam	2027	\$1,169	5%
Replace Control Equipment - Eungella Dam - Electrical Services	2035	\$940	4%
Dam Safety Inspection - Eungella Dam	2041	\$746	3%
Replace Pump 2 - Gattonvale Pump Station	2036	\$719	3%
Other	Varies	\$17,780	73%
Total		\$24,402	

Figure 6 - Expenditure by major program beyond the price path period (relevant under an annuity method of cost recovery)



Revenue and pricing

This section shows the final revenue requirement at scheme level. Values shown are prior to allocation to fixed (high or medium priority) or variable charges. These values represent Sunwater’s estimate of the revenue required to continue to meet customer service standards and regulatory obligations under the current regulatory framework.

Revenue requirement

Table 10 brings together the price-path related expenditure building blocks. This includes a revenue offset building block as well as adjustments for the return of annuity positive balance funds (where applicable to a scheme), insurance review event funds and the QCA’s review fee, which is applied only to irrigation entitlements.

Prices

As outlined above (and in detail in our pricing submission), Sunwater is proposing to shift to a RAB-based recovery of renewals expenditure. Prices under a RAB methodology are presented in the **Proposal in summary** section.

The following tables show recommended irrigation prices (by tariff group) for the price path period for both the RAB and annuity cost recovery methodologies. They also show the difference between the two to highlight the impact of the change on irrigators.

Bowen Broken Rivers

Recommended prices for the Bowen Broken Rivers tariff group are shown in **Table 11**.

Table 10 - Forecast revenue requirement (inclusive of revenue adjustments) (\$'000s)

Building block	2025-26	2026-27	2027-28	2028-29	Aggregate	Percentage
<i>Price path related expenditure</i>						
Opex	\$1,782.8	\$1,824.8	\$1,864.1	\$1,901.3	\$7,373.1	75.2%
Renewals opex	\$199.2	\$280.9	\$350.2	\$230.3	\$1,060.6	10.8%
Capital returns	\$226.1	\$278.3	\$297.0	\$301.1	\$1,102.4	11.2%
Tax allowance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Sub-total	\$2,208.1	\$2,384.0	\$2,511.3	\$2,432.7	\$9,536.1	97.3%
<i>Revenue adjustments</i>						
Revenue offsets	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Insurance review	\$60.2	\$61.9	\$63.6	\$65.2	\$250.8	2.6%
QCA Fee ¹	\$3.2	\$3.3	\$3.4	\$3.5	\$13.5	0.1%
Sub-total	\$63.4	\$65.2	\$67.0	\$68.7	\$264.3	2.7%
Total	\$2,271.5	\$2,449.2	\$2,578.3	\$2,501.4	\$9,800.3	100.0%

Note 1: The QCA fee is apportioned to each scheme on the basis of irrigation entitlements.

Table 11 - Comparison of recommended prices- Bowen Broken Rivers tariff group

Charge	Methodology	2025-26	2026-27	2027-28	2028-29
Part A (\$/ML)	Proposed (RAB)	\$9.76	\$10.03	\$10.31	\$10.59
	Annuity	\$9.76	\$10.03	\$10.31	\$10.59
	Difference	+\$0.00	+\$0.00	+\$0.00	+\$0.00
Part B (\$/ML)	Proposed (RAB)	\$7.46	\$7.67	\$7.88	\$8.10
	Annuity	\$7.46	\$7.67	\$7.88	\$8.10
	Difference	+\$0.00	+\$0.00	+\$0.00	+\$0.00