

Three Moon Creek Water Supply Scheme

Scheme Summary

Irrigation pricing proposal

1 July 2025 to 30 June 2029

Context

Three Moon Creek Water Supply Scheme (Three Moon Creek) prices were set (gazetted) 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 Three Moon Creek 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

Three Moon Creek holds total water access entitlements (WAE) of 15,028ML (**Figure 1**). Most entitlements are medium priority and held by customers who use water for irrigation purposes.

Long-term (20-year) average annual usage in the scheme is 5,958ML per annum. This is equivalent to 39.9 per cent of total WAE, down from 41.8 per cent at the time of the last irrigation pricing review.

Tariff groups

Three Moon Creek has a single tariff group.

Figure 1 - Three Moon Creek water access entitlements (as at 30 June 2023)



¹ Queensland Government Gazette No. 67 (July 2020) *Sunwater Rural Water Pricing Direction Notice (No. 1) 2020*
² Queensland Government Gazette No. 25 (June 2021) *Sunwater Rural Water Pricing Direction Notice (No. 1) 2021*

³ Queensland Government Gazette No. 54 (March 2021) *Sunwater Irrigation Water Pricing Direction Notice (No. 1) 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.

Proposed prices by tariff group

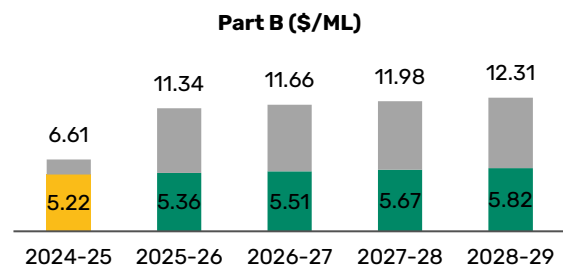
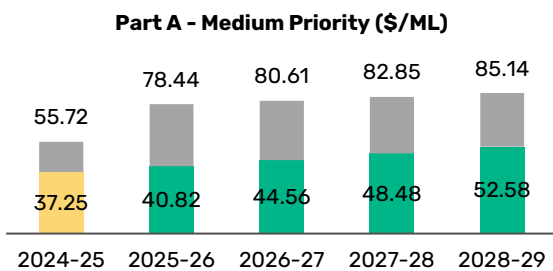
The prevailing price for 2024-25 is shown for comparison purposes with forecast prices for the review period. All discounts have been removed for ease of comparison. The green bars within the below chart reflect recommended irrigation prices for the price path period. Values shown at the top of the chart 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)

Three Moon Creek



Engagement

Sunwater contacted all Three Moon Creek 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, by hosting:

- face-to-face customer meetings in this scheme during each of the three stages of engagement
- three online forums open to irrigation customers in all schemes.

We distributed and published project communication materials, including fact sheets and copies of presentations delivered at meetings, 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
- ✓ Invitations sent via email, SMS and letter
- ✓ Subsequent reminders



- ✓ Irrigation Customer Invoice Calculator



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



- ✓ 3 face-to-face meetings
- ✓ 3 online meetings

What we heard

During our meetings we discussed matters of interest (**Table 1** to Three Moon Creek customers. Generally, we were able to address questions and queries in the meeting.

Based on discussions with customers during these meetings, Sunwater has provided additional information on renewals expenditure in our Stage 3 engagement material on future costs for the scheme (depicted by cost spikes in the renewals forecast).

GoVote

Twelve Three Moon Creek customers responded to the online survey, representing approximately 15.6 per cent of eligible irrigation customers. 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.

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

Table 1 - Key customer interests

Forum details	Attendees	Key customer interests
Stage 1 engagement		
<p><i>Forum:</i> Face-to-face engagement with <u>Three Moon Creek</u> customers</p> <p><i>Theme:</i> Learn how irrigation prices are set and how you can be involved in influencing Sunwater's pricing submission to the QCA</p>	14	Consultative Committee representation Engagement strategy QCA review – fee Inflation
<p><i>Forum:</i> Teams webinar, <u>all schemes</u> invited</p> <p><i>Theme:</i> Learn how irrigation prices are set and how you can be involved in influencing Sunwater's pricing submission to the QCA</p>	12	How prices are set - general
Stage 2 engagement		
<p><i>Forum:</i> Face-to-face engagement with <u>Three Moon Creek</u> customers</p> <p><i>Theme:</i> Draft future prices and the following proposals for customer feedback:</p> <ul style="list-style-type: none"> changes to Service and Performance Plans changes to the way renewals expenditure is recovered through irrigation prices. 	7	Inflation – impacts on opex Operational expenditure Forecasting costs RAB v annuity – forecast cost spikes and impact on prices under each methodology Community Service Obligation How Sunwater reduces insurance costs Operational expenditure Water plan amendments Costs – electricity How Sunwater reduces electricity costs QCA review – feedback Part A fixed charges
<p><i>Forum:</i> Teams webinar, <u>all schemes</u> invited</p> <p><i>Theme:</i> Draft future prices and proposals for customer feedback</p>	15	Community Service Obligation
Stage 3 engagement		
<p><i>Forum:</i> Face-to-face engagement with <u>Three Moon Creek</u> customers</p> <p><i>Theme:</i> Outline Sunwater's pricing proposal, having taken into account customer feedback and preferences</p>	3	QCA review
<p><i>Forum:</i> Teams webinar, <u>all schemes</u> invited</p> <p><i>Theme:</i> Outline Sunwater's pricing proposal, having taken into account customer feedback and preferences</p>	7	RAB v annuity

Other feedback

Sunwater did not receive any other feedback from Three Moon Creek 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**, **Figure 3** and **Figure 4**), 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 S&PP format and process.

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

Figure 5 reproduces the overall responses we received during our GoVote process.

Service standards

The current service standards that apply for the Three Moon Creek 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.

Figure 2 - How schemes responded to the RAB proposal – question and responses

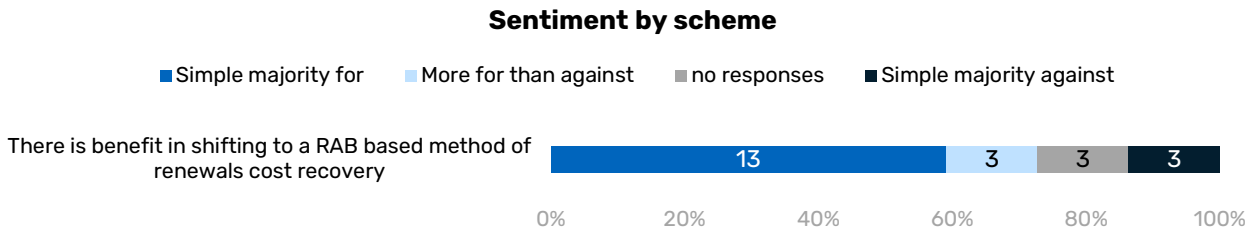


Figure 3 - How Three Moon Creek responded to the RAB proposal – question and responses

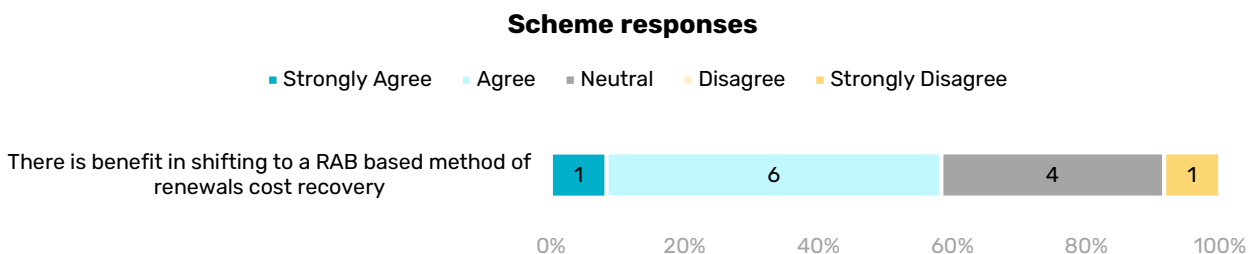


Figure 4 - How Sunwater's irrigation customers responded to the RAB proposal - question and responses

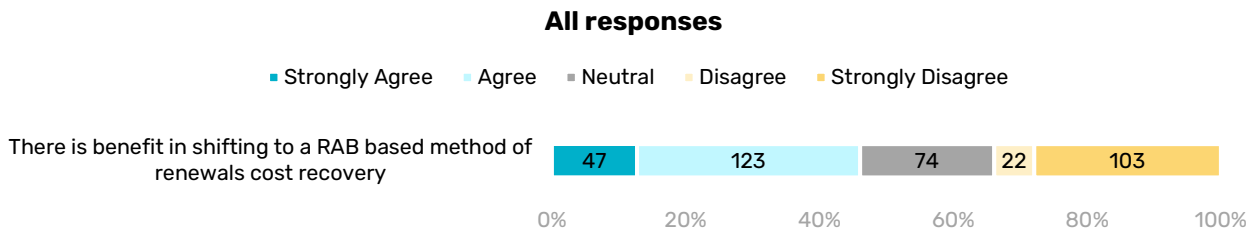


Figure 5 - How Sunwater's irrigation customers responded to the S&PP proposal - question and responses

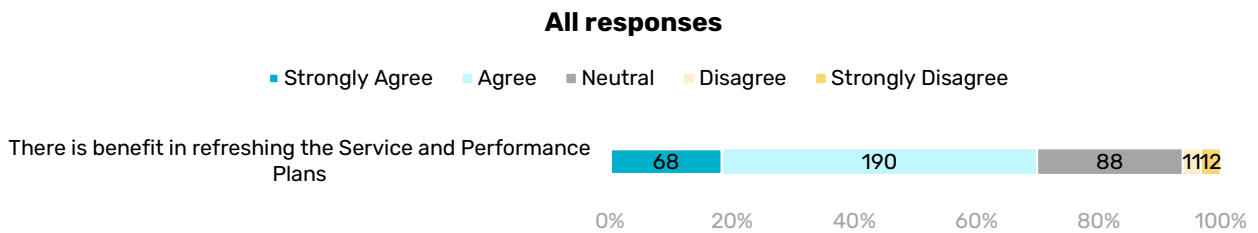


Table 2 - Service standards for Three Moon Creek

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	2 weeks
	For shutdowns planned to be less than 3 days	5 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	Within 1 working day
<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 Three Moon Creek 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 \$0.89M is shown on **Figure 6** and is \$0.19M (28 per cent) higher than the QCA’s allowance for the same year (after adjustment for actual inflation).

Key drivers of this difference include:

- increases in categories such as other expenditure (which includes land tax, rates and vehicle leasing, which was previously captured under support costs), labour (direct) and support costs
- offset by a decrease in electricity costs.

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 Three Moon Creek 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 6**) 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 Three Moon Creek over the price path period.

Figure 6 - Scheme level breakdown of difference between Sunwater's base year and QCA allowance (2022-23)

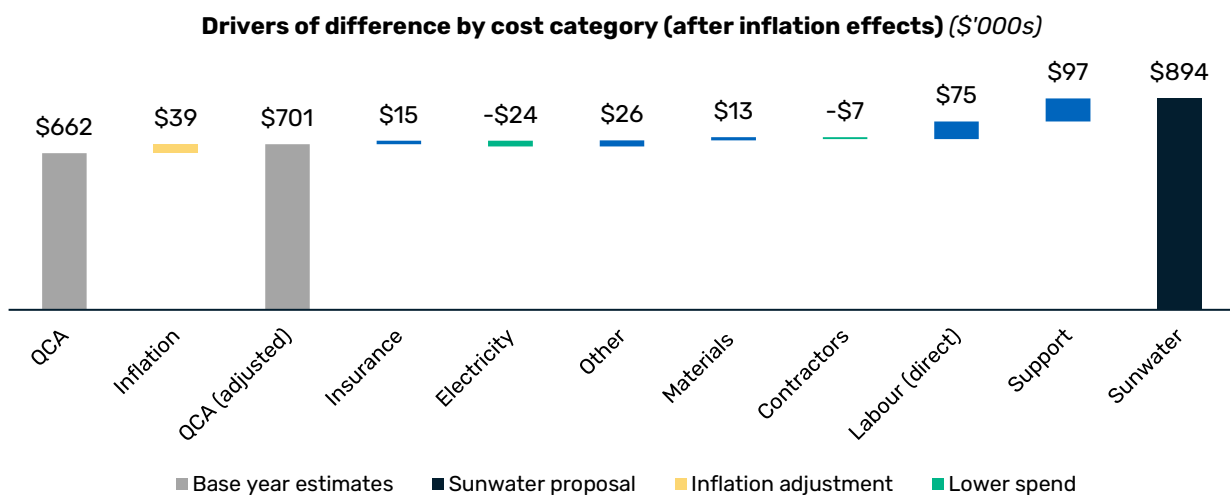
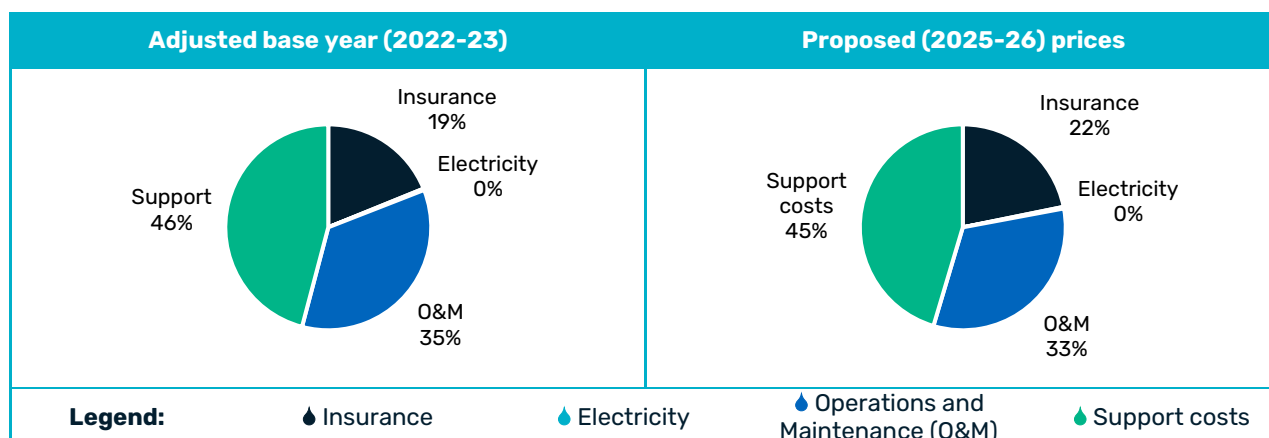


Table 3 - Three Moon Creek opex forecasts for price path period (\$'000s)

Cost categories	2025-26	2026-27	2027-28	2028-29
Insurance	\$229.5	\$234.9	\$240.2	\$245.0
Electricity	\$2.7	\$2.7	\$2.8	\$2.9
Operations and maintenance ¹	\$342.5	\$350.8	\$358.2	\$365.3
Support costs	\$477.7	\$487.6	\$498.0	\$508.1
Cost transfer				
Opex - BST sub-total	\$1,052.4	\$1,076.1	\$1,099.3	\$1,121.3
Renewals opex	\$710.9	\$882.6	\$0.0	\$328.5
Opex total	\$1,763.3	\$1,958.7	\$1,099.3	\$1,449.8

Note 1: Includes preventative and corrective maintenance categories.

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



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

Renewals (capital)

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.

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 \$3.6M in renewals activities for the 2019-20 to 2024-25 period. The QCA allowance⁴ for the same period was \$1.8M. 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.

Three Moon Creek is forecast to have a negative annuity closing balance.

The opening RAB balance for the Three Moon Creek Scheme has been set at \$2.4M, 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 7 shows the forecast for Three Moon Creek 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 \$0.731M in capital expenditure (not shown in **Table 7**) has been added to 2025-26 as the Three Moon Creek portion of the \$42.4M whole-of-business project to renew Sunwater's billing system.

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>						
Opening balance		-\$1,386.1	-\$2,225.6	-\$2,400.4	-\$2,281.9	-\$1,889.8	-\$1,651.7	Aggregate spend	
Expenditure		-\$901.3	-\$625.8	-\$350.4	-\$101.5	-\$277.2	-\$1,320.8	-\$3,576.9	
Insurance proceeds									
Annuity contribution		\$122.4	\$548.3	\$573.8	\$593.4	\$597.9	\$611.3		
Interest		-\$60.6	-\$97.3	-\$105.0	-\$99.8	-\$82.6	-\$72.2		
Closing balance¹	-\$1,386.1	-\$2,225.6	-\$2,400.4	-\$2,281.9	-\$1,889.8	-\$1,651.7	-\$2,433.4		

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.

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

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

Project name	Year	Value
20TMC06 Study - CRA Cania Dam	2020-23	\$640.0
20TMC01 Repair Downstream Right Bank Pro	2020-21	\$511.5
19TMC03 Construction of EAP Accom EXP	2020-21	\$230.4

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

Category	2025-26	2026-27	2027-28	2028-29	Aggregate	Percentage
18. Dam Instrumentation Program	\$67.1	\$0.0	\$2,492.8	\$0.0	\$2,560.0	45%
12. Civil and Roads (inlet / outlet towers)	\$608.1	\$658.3	\$0.0	\$0.0	\$1,266.5	22%
17. Arc Flash Program	\$321.6	\$199.2	\$0.0	\$0.0	\$520.7	9%
20. Dam Safety Management Program	\$0.0	\$412.6	\$0.0	\$0.0	\$412.6	7%
5. Dam-Related Works Program	\$0.0	\$79.1	\$0.0	\$166.2	\$245.3	4%
Remaining programs	\$102.7	\$121.7	\$0.0	\$6.8	\$231.2	4%
Sub-total - programs	\$1,099.6	\$1,470.9	\$2,492.8	\$173.0	\$5,236.3	93%
Projects not captured in programs	\$51.4	\$76.5	\$53.4	\$213.2	\$394.4	7%
Total	\$1,150.9	\$1,547.4	\$2,546.2	\$386.2	\$5,630.8	100%
Capex	\$440.1	\$664.8	\$2,546.2	\$57.8	\$3,708.8	66%
Renewals opex	\$710.9	\$882.6	\$0.0	\$328.5	\$1,921.9	34%

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

Project name	Year	Value	Percentage total
Instrumentation Program	2025	\$2,560.0	45%
Refurbish Upstream Rip Rap - Cania Dam	2025	\$1,235.9	22%

Beyond price path period

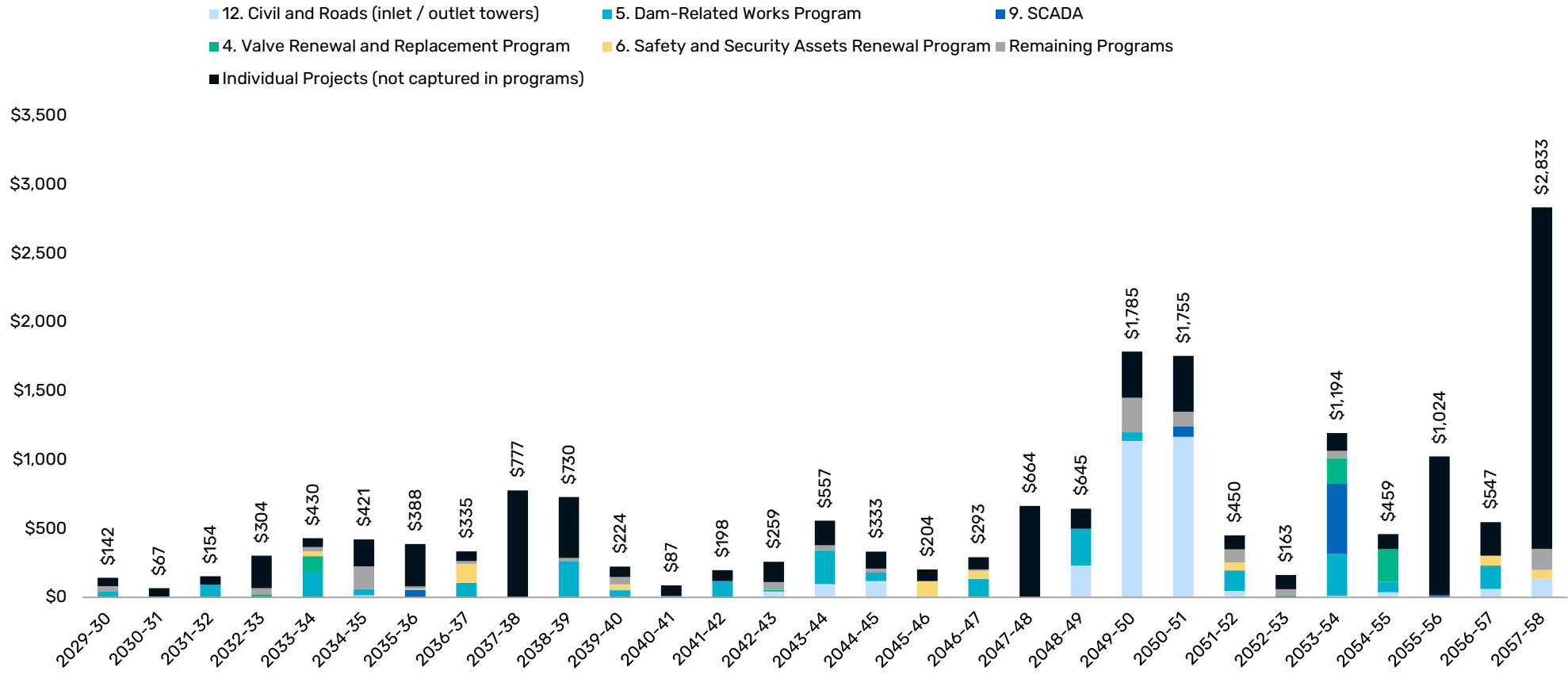
Expenditure beyond the price path is not relevant to the setting of prices for the 2025-26 to 2028-29 period under a RAB methodology. It is presented in **Figure 7** for completeness. This profile underpins the alternative annuity-base prices presented in the **Revenue and pricing** section of this summary.

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

Project name	Commencement year	Value	Percentage total
Refurbish Upstream Rip Rap - Cania Dam	2025	\$2,491	14%
Replace Meter Program - Three Moon Creek	2025	\$2,462	14%
Refurbish Access Crossing - 46M - Youlambie Diversion Channel - Access Crossings (All)	2038	\$1,477	8%
Replace Siphon - Youlambie Diversion Channel - Siphon 2046.3M - 2522.5M	2058	\$1,386	8%
Study: Dam Safety Inspection - Cania Dam Amdt 110.1	2029	\$1,212	7%
Other	Varies	\$8,393	48%
Total		\$17,421	

Figure 7 - 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.

Three Moon Creek

Recommended prices for the Three Moon Creek 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
Price path related expenditure						
Opex	\$1,052.4	\$1,076.1	\$1,099.3	\$1,121.3	\$4,349.2	58.9%
Renewals opex	\$710.9	\$882.6	\$0.0	\$328.5	\$1,921.9	26.0%
Capital returns	\$136.7	\$176.1	\$245.2	\$299.9	\$857.8	11.6%
Tax allowance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Sub-total	\$1,900.0	\$2,134.8	\$1,344.5	\$1,749.7	\$7,128.9	96.5%
Revenue adjustments						
Revenue offsets	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Insurance review	\$53.6	\$55.1	\$56.6	\$58.0	\$223.3	3.0%
QCA fee ¹	\$8.1	\$8.3	\$8.6	\$8.8	\$33.8	0.5%
Sub-total	\$61.7	\$63.4	\$65.2	\$66.8	\$257.1	3.5%
Total	\$1,961.7	\$2,198.2	\$1,409.7	\$1,816.5	\$7,386.1	100.0%

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

Table 11 - Comparison of recommended prices - Three Moon Creek tariff group

Charge	Methodology	2025-26	2026-27	2027-28	2028-29
Part A (\$/ML)	Proposed (RAB)	\$40.82	\$44.56	\$48.48	\$52.58
	Annuity	\$40.82	\$44.56	\$48.48	\$52.58
	Difference	+\$0.00	+\$0.00	+\$0.00	+\$0.00
Part B (\$/ML)	Proposed (RAB)	\$5.36	\$5.51	\$5.67	\$5.82
	Annuity	\$5.36	\$5.51	\$5.67	\$5.82
	Difference	+\$0.00	+\$0.00	+\$0.00	+\$0.00