

Review of RAB-based irrigation prices 2027-29

**Stakeholder workshops
Sunwater schemes**

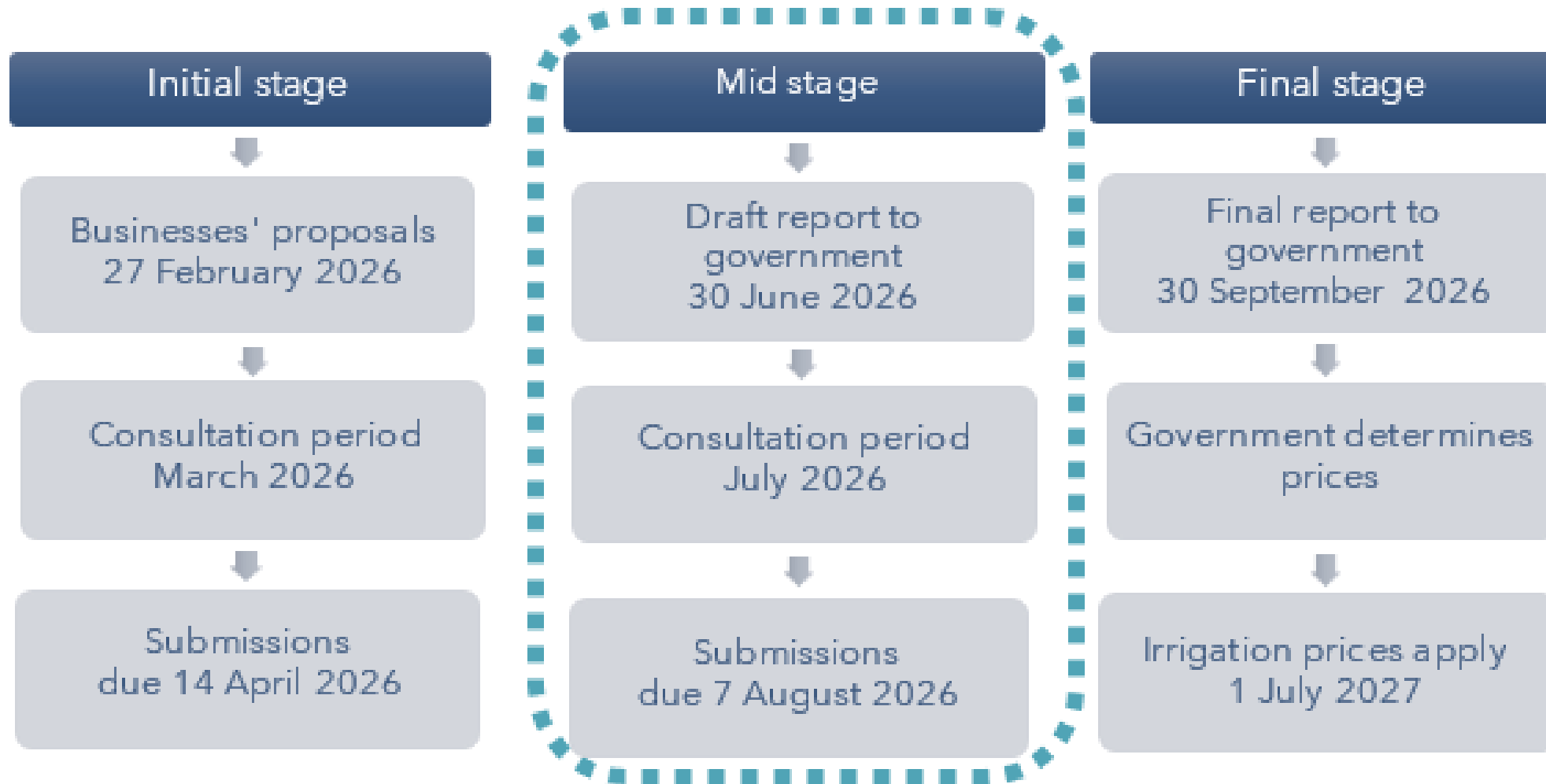
Purpose of this workshop

At today's session, we want to talk through:

- key aspects of our draft report, including:
 - our preliminary assessment of the relative merits of both approaches
 - how transitional impacts are managed
 - draft prices over 2027-28 and 2028-29 under each approach, and longer-term modelled prices.
- information to help stakeholders with their submissions
- Q & A.

We will publish a summary of the issues raised at each workshop and expect the discussions will inform our ongoing assessment and final report.

Review timeline



Scope of this review

- The QCA has been asked to report on:
 - the relative merits of the RAB and annuity approaches
 - appropriate RAB-based and annuity-based prices for 2027-28 and 2028-29
 - the results of a comparison between annuity- and RAB-based prices.
- Prices should use the **2025 review inputs and methods**, except for:
 - applying the RAB
 - excluding CASPr costs for Sunwater.
- The Queensland Government will consider the QCA's report when setting irrigation prices for 2027-28 and 2028-29.

Burning issues or questions?

Are there any key issues or questions you would like us to cover?

How the approaches work

Annuity approach

- 30-year renewals forecast is recovered as a smooth annual allowance,
- At each price review, the annuity is recalculated by updating:
 - the annuity balance to reflect actual prudent and efficient renewals
 - long-term forecasts for the upcoming 30 years.

RAB approach

- Renewals opex is fully recovered in the year it is forecast to occur,
- Renewals capex is added to the RAB when it is forecast to occur and recovered over the life of the asset.
- At each price review, capital revenues are recalculated by:
 - updating the RAB for actual prudent and efficient renewals capex
 - adjusting for any over- or under-recovery.

Annuity: smooths cost recovery over the 30-year planning period

RAB: aligns cost recovery more closely with the timing of delivered works

Use of the rate of return under each approach

- The rate of return is a key input under both the RAB and renewals annuity approaches. In our review, we use the weighted average cost of capital (WACC) as the rate of return.
- Under a RAB approach, the WACC is used to determine the return on the RAB. This approach separately identifies return on capital and return of capital through depreciation.
- Under an annuity approach, the WACC is used in the annuity calculation and in the treatment of annuity balances. The annuity incorporates the time value of money in a smoothed allowance, rather than separately identifying return on capital and depreciation.
- This means both approaches reflect the financing implications of recovering capex over time, but in different ways. Under the annuity approach, this financing effect can increase or reduce the allowance depending on the annuity balance.
- The main difference is how cost recovery is expressed and timed. Both approaches recover the same underlying renewals expenditure.

Relative merits - overview

We assess both approaches against key criteria based on regulatory objectives and stakeholder feedback.

- ⚙️ **investment incentives:** how the approach affects incentives for efficient project delivery
- ⚖️ **risk allocation:** how the approach allocates risk between the business and customers
- 📊 **long-term pricing outcomes and price stability:** how prices evolve under the approach
- 👥 **intergenerational equity:** how costs are allocated between current and future customers
- 🔍 **transparency:** how easily the link between costs and service outcomes is understood

Investment incentives

Annuity approach

- Links revenue to forecast long-term renewals requirements.
- Weaker link between project delivery and revenue recovery.

RAB approach

- Links revenue more closely to project delivery
- Can provide stronger incentives for cost control and delivery, supported by:
 - clear capitalisation rules
 - ongoing regulatory scrutiny and oversight
 - governance, transparency and engagement

👉 Stronger links between expenditure and revenue under the RAB approach can improve incentives for efficient delivery and cost control

Risk allocation

Key principle: Risk should be borne by the party best able to manage it

Annuity approach

- Revenue relies on long-term renewals forecasts.
- Customers bear more forecast risk.

RAB approach

- Revenue is based on delivered and approved expenditure.
- Business bears more financing risk.

👉 **In general:** A well-designed RAB approach is more likely to allocate risk efficiently.

Longer-term pricing outcomes

Stakeholder concern

RAB-based price targets may be lower in early years until a crossover point where they remain higher in later years.

What the QCA found

- The timing and magnitude of any crossover is highly sensitive to assumptions.
- QCA modelling indicates broad alignment between RAB-based and annuity-based price targets over 30 years.
- Outcomes vary across tariff groups due to different starting positions and future renewals profiles.

Why caution is needed

- The modelling relies on simplified assumptions.
- It does not reflect behavioural, planning or regulatory responses over time.
- Assumptions become increasingly uncertain over longer horizons.

Price target stability

Annuity approach

- Can deliver stable price targets if forecasts are reliable and forecast profile remains stable.
- Price targets can change at review points when forecast requirements are reassessed.

RAB approach

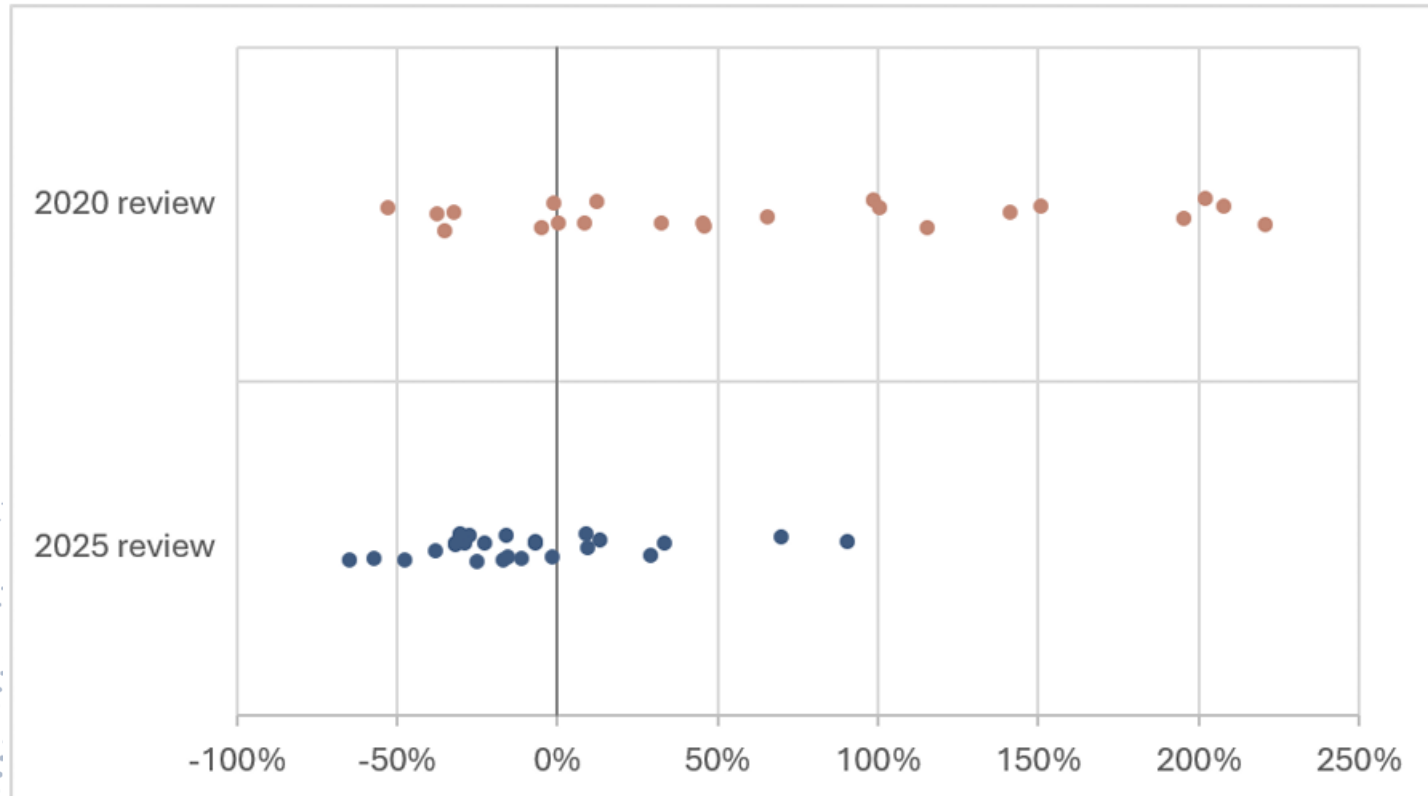
- Less reliance on long-term forecasts.
- Prices are more sensitive to the timing of projects and lumpy expenditure.

- 👉 Price targets can change under both approaches when forecasts or project timing change.
- 👉 Neither approach is clearly more stable over the long term.

Price target stability

- Annuity-based price targets can change at review points when forecasts are reassessed.
- Due to differences between forecast and actual renewals and updates to forward renewals.

Step change in renewals allowance due to changes in forecasts (%)



Intergenerational equity

Annuity approach

- Can spread costs more evenly across customer cohorts over time where renewals needs remain broadly stable and long-term forecasts are accurate.
- However, if forecast expenditure is later revised down (up), current customers may have contributed more (less) than ultimately required.

RAB approach

- Aligns cost recovery more closely with the timing and service life of renewals expenditure.
- However, this alignment may be less direct during transition, as existing annuity balances are recovered over tailored depreciation periods.

👉 Both approaches can support intergenerational equity, but through different mechanisms.

Transparency and accountability

Annuity approach

- Can provide forward visibility of long-term renewals plans.
- More familiar to irrigators.

RAB approach

- Supports a clearer audit trail:
 - projects → asset base → prices
- More technical and less familiar initially.

Key point

Both approaches require clear communication and ongoing customer engagement.

Overall assessment

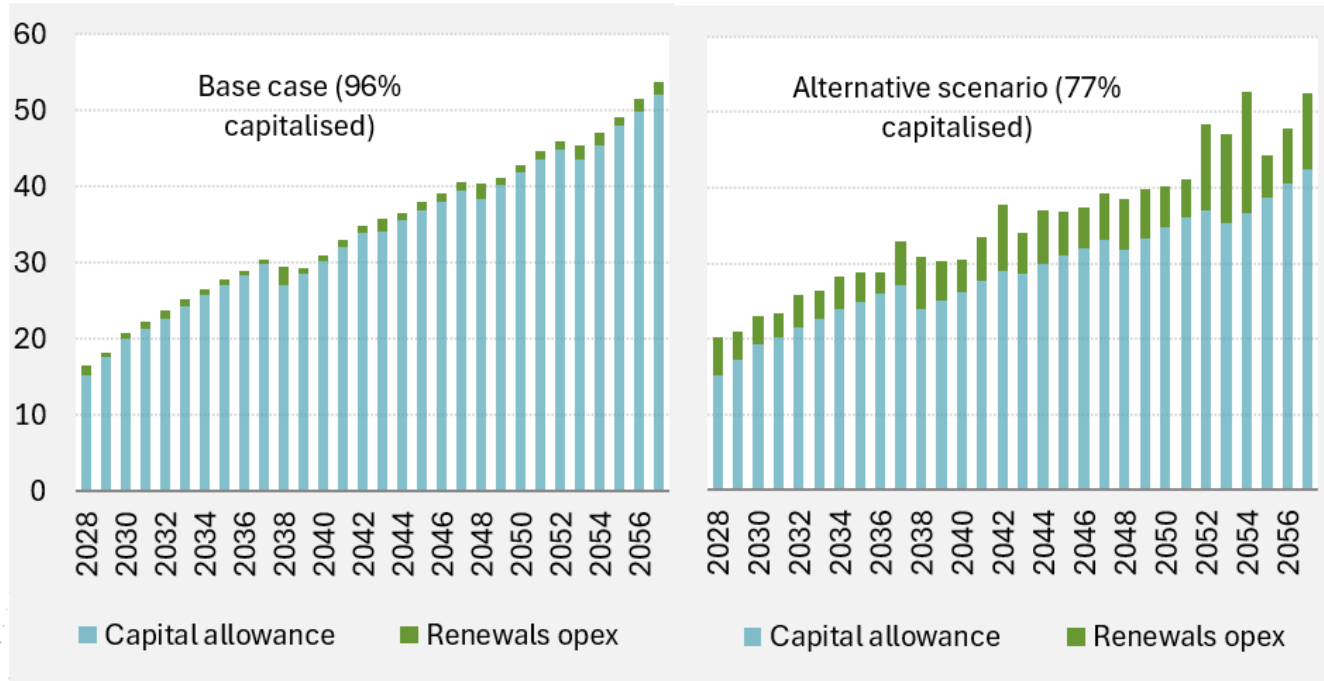
- The **RAB approach**:
 - strengthens incentives and improves risk allocation
 - aligns the contributions of different customer cohorts with the timing and service life of renewals.
- The **annuity approach** may spread costs more evenly across customer cohorts over time where renewals needs are stable and forecasts are reliable.
- Neither approach has a clear advantage in terms of overall price stability over the long term.
- Both approaches provide transparency with appropriate governance arrangements.

Key inputs to RAB approach – expense categorisation

- Expense categorisation determines whether costs are recovered immediately (opex) or over the useful life of the renewal (capex).
- Sunwater developed a draft revised capitalisation procedure, then used a keyword search resulting in 96% of its forecast renewals being capitalised.
- Our draft view is that Sunwater's revised capitalisation procedure provides a clearer and more consistent basis for distinguishing opex and capex.
- We have relied on Sunwater's proposed classification of forecast renewals, given:
 - constrained timeframe and practical difficulties in reclassifying the program
 - allocation of risk – Sunwater cannot recover any actual renewals expenditure in 2027-28 or 2028-29 that is subsequently classified as opex.

Key inputs to RAB approach – expense categorisation

- We also modelled a scenario where a lower proportion of renewals is capitalised.
- Lower capitalisation rate increases allowance in the short term and reduces it later.



Sunwater's reclassification risk

If the interim capitalisation approach overstates the capitalised share in 2027-28 and 2028-29:

- actual renewals is added to RAB
- opex remains as forecast
- forecast renewals capex that is subsequently classified as opex cannot be recovered.

- Application of a revised capitalisation procedure to actual renewals will require further review and validation if a RAB approach is adopted at the next price review.

Key inputs to RAB approach – setting the initial RAB

- Sunwater proposed to set the initial RAB using annuity balances at 30 June 2027:
 - schemes with negative annuity balance would have initial RAB set at this value
 - schemes with positive annuity balance would have initial RAB of zero, with positive balance returned via bill rebate.
- We consider this reasonable, since asset base for existing assets (as at 1 July 2000) should not be considered.
- Closing annuity balances reflect whether, since 1 July 2000, revenue recovered through the annuity (including an allowance for financing costs) has been:
 - less than renewals expenditure incurred (a negative balance), or
 - greater than renewals expenditure incurred (a positive balance).

[**Note:** initial RABs are available in the scheme information sheets on the QCA website.]

How we assessed options for managing RAB transition

- Sunwater engaged with customers on:
 - recovery (depreciation) periods for negative annuity balances (25 or 50 years)
 - return periods for positive annuity balances (4 or 8 years).
- We sought to balance maintaining Sunwater's cash flows with customer outcomes, particularly price stability.
- In developing proposed transition settings, we considered:
 - the stability of price targets over time, including avoiding material changes
 - returning positive balances to customers who contributed to them.

Our draft transition settings

- A RAB transition places downward pressure on fixed price targets as only a small proportion of lifecycle renewals enters the initial RAB, with future renewals added only after delivery.
- Recovery/return periods for existing annuity balances can be used to manage transitional impacts.

[**Note:** proposed asset lives for initial RABs are available in the scheme information sheets on the QCA website. For schemes with positive annuity balances, we proposed rebating this to customers over 4 years.]

Pricing implications

- We have assessed how price targets and prices change over the longer term under the RAB approach compared with the annuity approach.
- Over the long-term, RAB-based prices are broadly aligned with annuity prices.

[**Note:** long-term fixed price targets and fixed prices are available in the scheme information sheets on the QCA website.]

Draft price recommendations

[**Note:** the presenter went through draft price targets and prices for 2027-28 and 2028-29 for the relevant schemes. This information is available in the scheme information sheets on the QCA website.]

Review of stakeholder modelling (Highlander)

What the modelling shows

- Lower prices initially under RAB.
- Higher prices in later periods.
- Smoother price paths under annuity.

How we use it

- Useful for illustrating broad differences.
- Not a prediction of actual outcomes.

Review of stakeholder modelling (Highlander)

⚠️ Our key concerns

- Does not reflect regulatory pricing processes.
- Relies on several simplifying assumptions:
 - historical renewals were known in advance (no forecast risk or adjustments)
 - different calculation methods for annuity and RAB to QCA approach
 - long-term renewals are not inflation adjusted
 - simplified asset life assumptions
 - does not reflect behavioural, planning or regulatory responses over time.

👉 These limitations:

- overstate annuity smoothness and understate uncertainty
- understate long-term annuity costs, with most schemes reducing over 50-year period despite inflation (~3.7x)
- overstate long-term RAB costs as uses longer asset lives (50 years) than Sunwater.

Making a submission

- Providing written submissions is the most effective way to provide feedback.
- Submissions can be made through our website or by post.
- We welcome joint or collaborative submissions.
- We publish submissions on our website.

Next steps

- Submissions are due by **7 August 2026**.
- Information about how to make a submission is available on our website: www.qca.org.au/submissions
- All submissions received by the due date will be considered in preparing the final report.

Questions?

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