## sunwater

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Our ref: 2541898/2665589

8 November 2021

Water Section, Specialised Enforcement and Advocacy Division Australian Competition and Consumer Commission GPO Box 3131 Canberra ACT 2601

Dear ,

On 27 October 2021, the Australian Competition and Consumer Commission (ACCC) determined that Sunwater Limited (Sunwater) is a Part 6 operator under rule 23 of the *Water Charge Rules 2010 (Cth)* (the Rules) for the Chinchilla Weir, Cunnamulla, Macintyre Brook, Maranoa River, St George and Upper Condamine bulk water supply schemes.

In accordance with subrule 23C(1) of the Rules, I am writing to apply for an exemption from the requirements set out in Divisions 2, 3 and 4 of Part 6 of the Rules for these schemes.

Sunwater considers that the Queensland regulatory regime that Sunwater operates under allows for the investigation of Sunwater's pricing practices by an independent economic regulator, applying criteria and an approach that is well aligned with, and will contribute to, the achievement of the water charging objectives and principles in the *Water Act 2007 (Cth)* without the application of Part 6 of the Rules. Therefore, there will be limited incremental gains in terms of the achievement of these objectives and principles through the application of Part 6 to Sunwater.

I also note that the Sunwater bulk water supply schemes form a very small proportion of the water infrastructure and water supply volumes in the Basin, such that the application of Part 6 to Sunwater:

- would not materially contribute to the achievement of the water charging objectives and principles in respect of the Basin as a whole
- would create perverse outcomes in Queensland, through applying Part 6 of the Rules to a small proportion of Sunwater operations, giving rise to inconsistent pricing arrangements across Sunwater's operations and increased regulatory costs.

The enclosed exemption application provides further justification for these positions and additional information to assist the ACCC in making its decision on whether to grant Sunwater an exemption.

Yours sincerely



Glenn Stockton AM Chief Executive Officer

Attached - Sunwater exemption from Part 6 of Water Charge Rules application

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# sunwater

# **Exemption application**

Application to the Australian Competition and Consumer Commission to exempt Sunwater from the requirements set out in Part 6 of the *Water Charge Rules 2010* 

4 November 2021

### **Contents**

Introduction	3
Water charging objectives and principles	4
Current regulatory arrangements in Queensland	4
Water charging objectives	7
Water charging principles	12
Matters the ACCC must have regard to	19
Total volume of water access rights in relation to bulk water services provided	19
Total volume of water subject to water sharing arrangements in relation to which the open infrastructure services	•
Infrastructure services	21
Proportion of revenue to be recovered from infrastructure charges	25
Other matters	26
Conclusion	28
Timing for exemption	28
Appendix 1—Scheme maps	29
Chinchilla Weir bulk water supply scheme	29
Cunnamulla bulk water supply scheme	30
Macintyre Brook bulk water supply scheme	31
Maranoa River bulk water supply scheme	32
St George bulk water supply scheme	33
Upper Condamine bulk water supply scheme	34

### Introduction

On 1 July 2020, Sunwater Limited (Sunwater) notified the Australian Competition and Consumer Commission (ACCC) that we are a Part 6 operator under rule [23] of the *Water Charge Rules 2010 (Cth)* (the Rules) for the following bulk water supply schemes located in the Murray-Darling Basin (the Basin):

- Chinchilla Weir
- Cunnamulla
- Macintyre Brook
- Maranoa River
- St George
- Upper Condamine.

The ACCC subsequently determined that Sunwater is a Part 6 operator on 27 October 2021.

In accordance with subrule 23C(1), Sunwater is applying for an exemption from the requirements set out in Part 6 of the Rules for each of the above schemes.

In doing so, Sunwater acknowledges that under subrule 23C(4), the ACCC may only grant such an exemption if it is satisfied that the application of Part 6 to Sunwater would not materially contribute to the achievement of the Basin water charging objectives and principles.

Sunwater considers that the ACCC can, and should, be so satisfied because:

- the Queensland regulatory regime that Sunwater operates under allows for the investigation of Sunwater's pricing practices by an independent economic regulator, applying criteria and an approach that is well aligned with, and will contribute to, the achievement of the water charging objectives and principles in the *Water Act 2007 (Cth)* without the application of Part 6 of the Rules
- as a consequence of that regime, there will be limited incremental gains in terms of the achievement of the water charging objectives and principles through the application of Part 6 to Sunwater
- the Sunwater bulk water supply schemes form a very small proportion of the water infrastructure and water supply volumes in the Basin such that the application of Part 6 to Sunwater:
  - would not materially contribute to the achievement of the water charging objectives and principles in respect of the Basin as a whole
  - in fact, would create perverse outcomes in Queensland, through applying Part 6 of the Rules to a small proportion of Sunwater operations, giving rise to inconsistent pricing arrangements across Sunwater's operations and increased regulatory costs through subjecting Sunwater to two different regulatory regimes.

These matters are discussed further below.

### Water charging objectives and principles

Under subrule 23C(4) of the Rules, the ACCC may grant an exemption only if the ACCC is satisfied that the application of Divisions 2, 3 and 4 of Part 6 would not materially contribute to the achievement of the Basin water charging objectives and principles set out in Schedule 2 of the Water Act 2007.<sup>1</sup>

In this section, we outline the current regulatory arrangements in Queensland and how these arrangements are meeting the Basin water charging objectives and principles. As a result of that existing regime, Sunwater submits that applying Part 6 of the Rules to our Basin schemes will not materially contribute to the achievement of these objectives and principles.

### Current regulatory arrangements in Queensland Irrigation pricing

Under section 23 of the Queensland Competition Authority Act 1997 (Qld) (the QCA Act), the responsible Minister (currently the Treasurer of Queensland) may direct the QCA to investigate the pricing practices of Sunwater's monopoly business activities. In undertaking an investigation, the QCA is required to have regard to the matters listed in section 26 of the QCA Act and the Treasurer's referral.<sup>2</sup> These matters are similar to many of the water charging objectives and principles set out in the Water Act 2007, and, as noted by the ACCC previously, are broadly consistent with the Part 6 requirements.<sup>3</sup>

In particular, both contain a very clear focus on efficient resource allocation and ensuring appropriate pricing based on efficient costs (including an appropriate rate of return). The high degree of alignment between the section 26 criteria and the Basin water charging objectives and principles is shown in Table 1.

Table 1 Alignment between s 26 criteria and Basin water charging objectives and principles

Schedule 2 Water Act 2007 ref	Basin water charging objective or principle	Aligned s 26 of the QCA Act matter and QCA approach
2(a)	To promote the economically efficient and sustainable use of:  (i) water resources; and (ii) water infrastructure assets; and (iii) government resources devoted to the management of water resources.	s 26(1)(a) the need for efficient resource allocation s 26(1)(j) the need for pricing practices not to discourage socially desirable investment
2(b)	To ensure sufficient revenue streams to allow efficient delivery of the required services.	s 26(1)(d)(i) the cost of providing the goods or services in an efficient way, having regard to relevant interstate and international benchmarks s 26(1)(e) the appropriate rate of return on assets  In practice, these factors result in the QCA applying a regulatory building blocks methodology to determine the 'lower bound' costs as the target for the price path.
2(d)	To give effect to the principle of user pays and achieve pricing transparency in respect of water storage and delivery in irrigation systems.	As noted above the QCA applies a regulatory building blocks methodology on a scheme basis, and pricing directions are transitioning irrigation pricing towards users paying for the efficient costs of supply. The QCA investigation process is transparent and publicly reported, as is the shareholding Ministers' ultimate pricing directions.

<sup>&</sup>lt;sup>1</sup> www.legislation.gov.au/Details/C2021C00327

<sup>&</sup>lt;sup>2</sup> Section 24 of the QCA Act.

<sup>&</sup>lt;sup>3</sup> ACCC (2016), Review of the Water Charge Rules, Final Advice, September 2016, Canberra, p226.

Schedule 2 Water Act 2007 ref	Basin water charging objective or principle	Aligned s 26 of the QCA Act matter and QCA approach
3(2)	Water charges are to include a consumption- based component.	The QCA recommends and the shareholding Ministers' pricing determinations adopt a two-part tariff, including a variable consumption-based component broadly aligned to variable costs of supply.
3(3)	Water charges are to be based on full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities where feasible and practical.	s 26(1)(c) the protection of consumers from abuses of monopoly power s 26(1)(e) the appropriate rate of return on assets s 26(1)(g) the impact on the environment of prices charged
3(6)	If full cost recovery is unlikely to be achieved and a Community Service Obligation (CSO) is deemed necessary:  (a) the size of the subsidy is to be reported publicly; and  (b) where practicable, subsidies or CSOs are to be reduced or eliminated.	The QCA recommendations place irrigation pricing on a pricing path towards lower bound cost recovery. The shareholding Ministers take this into account when determining irrigation price paths.  The existing CSO is publicly reported by both the Queensland Government and Sunwater.
5	The cost of environmental externalities is to be included in water charges where found to be feasible.	s 26(1)(g) the impact on the environment of prices charged
6	Independent and public benchmarking or efficiency reviews of pricing and service quality relevant to regulated water charges is or are to be undertaken based on a nationally consistent framework.	s 26(1)(d)(i) the cost of providing the goods or services in an efficient way, having regard to relevant interstate and international benchmarks In practice, this results in the QCA looking to infrastructure providers in other Basin states as appropriate benchmarks.

The most recent irrigation price investigation for Sunwater's bulk water supply schemes (including the six Basin schemes) and distribution systems was completed by the QCA in February 2020.<sup>4</sup> The investigation covered irrigation prices to apply for the period of 1 July 2020 to 30 June 2024.

The approach the QCA took involved:

- establishing total lower bound costs at the scheme/system level. Specifically, the QCA determined:
  - o prudent and efficient operational, maintenance and administrative costs
  - an appropriate allowance for prudent and efficient expenditure on renewing existing assets,
     i.e. those assets commissioned prior to 1 July 2000<sup>5,6</sup>
- establishing forecast water allocations and usage, to use as a basis for revenue allocation and calculating prices
- determining the structure of cost-reflective fixed and volumetric<sup>7</sup> prices, including the allocation of revenue between these prices
- applying the pricing principles in the referral to calculate recommended prices.<sup>8</sup>

A key pricing principle was for irrigation prices to transition to lower bound cost-reflective prices.

<sup>&</sup>lt;sup>4</sup> www.qca.org.au/project/rural-water/irrigation-price-investigations/

<sup>&</sup>lt;sup>5</sup> The Treasurer also asked the QCA to assess Sunwater's dam improvement costs and calculate two sets of prices, one set where all dam improvement costs are excluded and one set where an appropriate allowance for capital expenditure forecast to be incurred from 1 July 2020 onwards was included. The Queensland Government later decided to cover these costs via a CSO.

<sup>&</sup>lt;sup>6</sup> Costs associated with recreational facilities were excluded, in line with the referral, as there was no customer support for these costs to be recovered.

<sup>&</sup>lt;sup>7</sup> May also be referred to as a variable price.

<sup>&</sup>lt;sup>8</sup> QCA (2020), *Rural irrigation price review 2020–24, Part B: Sunwater*, Viewed 6 November 2020, <u>www.qca.org.au/wp-</u>

The QCA released its final report on 10 February 2020. The Queensland Government considered the QCA's final recommendations before setting rural irrigation water prices for 2020/21 and the 2021/22 to 2023/24 period and directing Sunwater to charge these prices. 10

Where the Queensland Government has set irrigation prices below the level necessary for Sunwater to recover the lower bound cost of supplying water to irrigators, the Queensland Government provides a CSO to Sunwater to offset the reduced revenue. The QCA's lower bound cost-reflective prices are used in the CSO calculation.

### Non-irrigation pricing

Non-irrigation pricing in the Basin schemes is not currently regulated. Sunwater currently has contracts with a small number of non-irrigation water users in the Basin schemes (refer to Table 2 below). The charges payable by these customers are escalated annually, based on the terms and conditions of their contracts. Consistent with the achievement of the water charging objectives, where Sunwater is entitled to review these charges (and if required in consultation with relevant stakeholders), Sunwater seeks to transition water charges to the full recovery of:

- operational, maintenance and administrative costs
- externalities
- taxes
- the return of and on capital investment.

Table 2 Summary of non-irrigation customers in Basin schemes

Scheme	Non-irrigation customer numbers	Notes	
Chinchilla Weir	5	Includes one urban authority.	
Cunnamulla	2	Includes one urban authority.	
Macintyre Brook	6	Includes one urban authority and the Queensland Government.	
Maranoa River	0	-	
St George	2	Includes one urban authority.	
Upper Condamine	3	Includes two urban authorities.	

#### Miscellaneous fees

Sunwater sets fees for ancillary services we provide to customers, as shown in Table 3. These fees are generally based on an estimate of the efficient cost of the service being provided.

### Table 3 Miscellaneous fees

<ul> <li>Administration and transfer fee – Sale</li> <li>Administration and transfer fee – Lease</li> <li>Connection</li> <li>Disconnection</li> </ul>	<ul> <li>Riparian allowance</li> <li>Short term supply</li> <li>Special meter reading</li> <li>Stream flow period</li> </ul>
<ul> <li>Meter testing</li> <li>New or additional meter application</li> <li>Reconnection</li> </ul>	<ul> <li>Temporary Transfer adjustment fees</li> <li>Water Allocation Register search fee</li> </ul>

<sup>&</sup>lt;sup>9</sup> On 23 April 2021, the QCA issued a note to correct the recommended prices for one tariff group and to correct the cost-reflective prices for four tariff groups.

<sup>&</sup>lt;sup>10</sup> For 2020/21, refer to the Sunwater Rural Water Pricing Direction Notice (No.1) 2020 at: www.publications.qld.gov.au/dataset/gazettes-july-2020/resource/62be988b-3638-4b61-a6ea-781c1e795e47 For 2021/22 to 2023/24, refer to the Sunwater Rural Water Pricing Direction Notice (No. 1) 2021 at: www.publications.qld.gov.au/dataset/gazettes-june-2021/resource/ec639817-40e5-4095-a8fd-1b5bc886b8bf

As illustrated later in this application, the revenue we expect to receive from these fees is immaterial compared to the forecast revenue from fixed (Part A) and volumetric (Part B) charges, and the CSO. Sunwater has therefore not specifically addressed these fees in the following sections, apart from trading-related fees.

Further information on these fees is contained in each Basin scheme's schedule of charges, available at: <a href="https://www.sunwater.com.au/customer/fees-and-charges/">www.sunwater.com.au/customer/fees-and-charges/</a>

#### Water trading

In Queensland, water allocations are separate from a land title and can be purchased and sold independently. Any water allocation holder may trade their allocation, except where restricted by physical constraints or water supply considerations. These restrictions are reflected in the maximum and minimum caps on trade contained in the scheme's water management protocol (permanent trades) and the operations manual (temporary transfers). Prices are set by the market, reflecting supply and demand factors.

Water trading in Sunwater's Basin schemes is generally limited to intra-scheme trading. This is a product of the physical nature of the water resources and infrastructure, not a regulatory constraint, because our Basin schemes are separated by hundreds of kilometres of unregulated ephemeral streams with highly variable flows. These physical constraints restrict the movement of water between schemes and to other states. The exception is the Macintyre Brook bulk water supply scheme, where temporary transfers may occur with the Queensland Border Rivers water supply scheme.<sup>11</sup>

We facilitate water trading by:

- processing and approving supplemented temporary transfers between customers, via paper form or our online customer service portal, Sunwater Online<sup>12</sup>
- processing contracts related to property and water allocation transfers, including:
  - purchases/transfers
  - o changes to a water allocation (zone, priority and purpose)
  - leases
  - o subdivisions/amalgamations<sup>13</sup>
- selling our available water allocations on the temporary and permanent markets via our water broker, Ruralco Water. Water allocations are generally traded via the online platform Waterexchange, in line with our Water Trading Code of Conduct.<sup>14</sup>

All trades/transfers are processed in accordance with the relevant trading rules contained in the *Water Regulation 2016 (Qld)*, water plans, water management protocols and operations manuals.<sup>15</sup> These trading rules are in line with the *Basin Plan 2012 (Cth)*, providing a consistent water trading environment across the Basin.

Further information on water markets and trading in Queensland can be found here: <a href="https://www.business.qld.gov.au/industries/mining-energy-water/water/water-markets">www.business.qld.gov.au/industries/mining-energy-water/water/water-markets</a>

### Water charging objectives

This section outlines the water charging objectives from Schedule 2 of the Water Act 2007 and how the current Queensland arrangements are meeting these objectives. The ACCC may grant an exemption only

 $<sup>^{11}</sup>$  Historically, water has only been transferred from Macintyre Brook to Border Rivers.

<sup>&</sup>lt;sup>12</sup> Temporary transfers are also referred to as seasonal water assignments. Refer to: <a href="https://www.sunwater.com.au/customer/managing-your-account/temporary-transfers/">www.sunwater.com.au/customer/managing-your-account/temporary-transfers/</a>

<sup>13</sup> www.sunwater.com.au/customer/property-water-allocation-transfer-process/

<sup>14</sup> www.sunwater.com.au/water-for-sale/water-trading/

<sup>&</sup>lt;sup>15</sup> www.business.qld.gov.au/industries/mining-energy-water/water/catchments-planning/water-plan-areas

if it is satisfied that Part 6 regulation would not materially contribute to the achievement of these objectives and the water charging principles.

The water charging objectives are:

- (a) to promote the economically efficient and sustainable use of:
  - (i) water resources; and
  - (ii) water infrastructure assets; and
  - (iii) government resources devoted to the management of water resources; and
- (b) to ensure sufficient revenue streams to allow efficient delivery of the required services; and
- (c) to facilitate the efficient functioning of water markets (including inter-jurisdictional water markets, and in both rural and urban settings); and
- (d) to give effect to the principles of user-pays and achieve pricing transparency in respect of water storage and delivery in irrigation systems and cost recovery for water planning and management; and
- (e) to avoid perverse or unintended pricing outcomes.

### Economically efficient and sustainable use of water resources and water infrastructure assets

The economically efficient and sustainable use of water resources and water infrastructure assets can be addressed through infrastructure charges in two main ways:

- 1. Establishing infrastructure charges using a business's prudent and efficient costs, including the costs of complying with relevant legislative and regulatory obligations. This helps signal to customers the true costs of storing and delivering water to them, which may in turn encourage efficient consumption and investment decisions.
- 2. Including a consumption-based component in infrastructure charges that recovers variable costs. This provides a signal to customers of the cost impact their water use has on the network and promotes the economically efficient use of water infrastructure assets (including on-farm efficiency).

Water trading also facilitates the efficient allocation of water resources to higher value uses, by allowing water users to buy and sell water in response to their individual needs. We discuss how our current pricing policies support trade in our Basin schemes later in this application.

As demonstrated below, the current arrangements in Queensland address this water charging objective. The application of Part 6 of the Rules would therefore not materially contribute to the achievement of this objective.

### Prudent and efficient costs

For irrigation customers, the QCA assesses the prudency and efficiency of Sunwater's lower bound costs as part of its irrigation price investigation. It then establishes lower bound cost-reflective prices using these costs and recommends prices to the Queensland Government based on the pricing principles contained in the Treasurer's referral.

The Queensland Government's pricing principles recognise that transition paths to lower bound pricing may be required due to customers' capacity to pay. While the signal to irrigation customers of the true costs of supply in some schemes may be partially tempered by the application of these pricing principles and any subsequent decision made by the Queensland Government in relation to irrigation prices, Sunwater notes that this would still occur under Part 6 regulation once any government contributions related to the provision of infrastructure services are taken into account, as per subrule 29(2)(b)(i) of the Rules.

Upper bound prices have generally been determined by Sunwater using the QCA's prudent and efficient lower bound costs from the 2012 irrigation price review, plus full cost recovery building blocks.

### Consumption-based component in infrastructure charges

A two-part tariff structure currently applies for both irrigation and non-irrigation customers in the Basin schemes. This tariff structure broadly aligns our fixed costs to a fixed tariff and variable costs to a volumetric (usage) tariff. Consistent with the water charging objective of promoting efficient use of water resources and water infrastructure assets:

- the volumetric tariff component provides a price signal to customers of the cost impact their water use has on the network
- the fixed tariff component provides a signal to customers of the cost impact of making the contracted capacity in the network available,

to allow customers to make efficient and informed decisions about whether their use will generate benefits in excess of costs.

### Sufficient revenue streams to allow efficient delivery of the required service (revenue adequacy)

This water charging objective can be achieved by ensuring Sunwater earns sufficient revenue to recover our prudent and efficient costs in supplying water to our customers. This requires the tariff structure to be aligned with the underlying cost structure of Sunwater's business operations, which are predominantly fixed.

For irrigation customers, revenue adequacy is currently achieved in Sunwater's Basin schemes through:

- setting irrigation prices in line with the Queensland Government's water pricing policy, with any shortfall in revenue between those prices and the lower bound cost-reflective prices calculated by the QCA subsidised via a CSO
- a two-part tariff structure that broadly aligns our fixed costs to a fixed tariff and variable costs to a volumetric (usage) tariff. This structure ensures sufficient revenue is collected from the fixed component to cover our fixed costs.
- the ability for Sunwater to apply for a within-period revenue adjustment when there is a material change in electricity prices, insurance premiums, off-stream pumping costs, or costs arising from a policy change or regulatory impost which cannot be managed during the price path period.<sup>16</sup>

For non-irrigation customers, revenue adequacy is considered when reviewing charges. As discussed above, Sunwater seeks to move towards full cost recovery. This is generally based upon a similar methodology to that applied by the QCA for irrigation prices, with the addition of full cost recovery building blocks such as asset valuations and an appropriate weighted average cost of capital.

Sunwater therefore does not believe the application of Part 6 of the Rules would materially contribute to the achievement of this water charging objective.

### Efficient functioning of water markets

Price regulation can facilitate an efficient and well-functioning water market by ensuring infrastructure charges:

- reflect the business's underlying costs, thereby removing any potential market distortions
- signal to the water market the value of water use, enabling water use efficiency and the reallocation of water to higher use purposes
- are published, allowing market participants to make informed investment, usage and trading decisions.

We have discussed elsewhere in this exemption application how Sunwater's infrastructure charges currently address these factors through: a two-part tariff structure that is broadly aligned to our cost structure; the establishment of infrastructure charges using prudent and efficient costs; and the publication of each scheme's schedule of charges in accordance with Part 4 of the Rules.

<sup>&</sup>lt;sup>16</sup> QCA (2020), *Rural irrigation price review 2020–24, Part A: Overview, Final Report*, Viewed 28 September 2020, www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-final-report-part-a-overview-final.pdf, p43.

In addition to the above factors, transaction costs associated with water trading should be efficient so as to not provide a barrier that prevents water resources being allocated to their highest value use. Sunwater has several water trading application fees, as described in Table 4. These fees recover our prudent and efficient administration costs of manually processing a trade application and help signal to the market the true costs involved with trading.

Table 4 Water trading application fees

Fee	Description of fee
Administration and transfer fee – Sale	Costs associated with processing contracts related to a purchase or transfer of a water allocation, or a change to a water allocation. An invoice for the fee is emailed to the solicitor/purchaser/customer upon receipt of the application.
Administration and transfer fee – Lease	Costs associated with processing contracts related to a lease. An invoice for the fee is emailed to the solicitor/lessee upon receipt of the application.
Water Allocation Register search fee	Payable by the relevant buyer or solicitor if a Registration Confirmation Statement has not been provided to Sunwater. This charge recovers the actual costs Sunwater incurs from CITEC CONFIRM (an information broker) for a title search.

Sunwater does not currently levy a fee for processing a temporary transfer application. However, a Temporary Transfer adjustment fee applies where subsidised rural irrigation water is temporarily transferred for non-irrigation usage that is not subject to the Queensland Government's Rural Water Pricing Direction Notice. This enables Sunwater to recover the full cost of delivering water to the non-irrigation customer.

Further, we do not currently charge customers to process a subdivision/amalgamation application or when we trade our own allocations. However, fees and charges may be payable by the customer to the Department of Regional Development, Manufacturing and Water (DRDMW) and/or to the water broker.

As a result of these arrangements, there is a reasonable volume of water trading that occurs within each Basin scheme. In 2020/21, Sunwater:

- processed and approved the temporary transfer of 17,831 ML<sup>17</sup> within the Basin schemes (which
  included 80 ML of Sunwater-owned water allocations) and the temporary transfer of 2177 ML<sup>18</sup> from
  the Macintyre Brook bulk water supply scheme to the Queensland Border Rivers water supply scheme
- facilitated the permanent transfer of 6544 ML between Basin customers.

As illustrated above, the current pricing arrangements are meeting this water charging objective and applying Part 6 of the Rules would not materially contribute to its achievement.

### User pays and price transparency

The user pays objective is currently achieved by allocating costs to individual schemes and developing scheme-specific infrastructure charges which distinguish between customer segments, priority groups and operational systems (where significant cost differences apply<sup>19</sup>).

<sup>&</sup>lt;sup>17</sup> Reflects the seller "at farm" volumes. Excludes temporary transfers of unused annual resource cap amounts ("CAP temporary transfers") in the Macintyre Brook and St George schemes and temporary transfers to the Queensland Border Rivers water supply scheme.

<sup>&</sup>lt;sup>18</sup> Reflects the seller "at farm" volumes. Inter-scheme trading has been relatively low in recent years due to drought conditions which have affected dam levels and available water.

<sup>&</sup>lt;sup>19</sup> An example of this is the Upper Condamine scheme. The North Branch and North Branch – Risk A tariff groups for irrigation customers have a higher volumetric tariff than the rest of the scheme due to relift pumping costs.

Cross subsidisation is avoided by ensuring all customers are allocated a share of total scheme costs. Fixed costs are allocated between medium and high priority users<sup>20</sup> using a combination of the Headworks Utilisation Factor<sup>21</sup> and nominal water allocations. Variable costs are allocated based on assumed water usage. Similarly, cross subsidisation between operational systems, e.g. river and relift, is minimised by ensuring customers are not paying for services they are not benefiting from such as relift pumping costs. More information about the allocation process used in the 2021–2024 irrigation price review is outlined in sections 5.2, 7.3 and 7.4 of the QCA's final Part B report.<sup>22</sup> A similar allocation process was adopted in the 2012 irrigation price review—the non-irrigation share of the QCA's recommended lower bound costs from this review was used as a building block in the establishment of upper bound prices in 2012.

In terms of pricing transparency, the QCA undertakes a public investigation into irrigation prices. All interested stakeholders, including non-irrigation customers, can participate in this process (through the making of submissions) and influence the QCA's recommendations. Sunwater also consulted with stakeholders, including Irrigator Advisory Committees, in the lead up to the 2021–2024 irrigation price review on our proposed costs. Further, Sunwater provides information to non-irrigation customers as part of any review process and on request. The QCA's draft and final recommendations are also published, as are the Queensland Government's pricing directions.

During the price path period, Sunwater maintains transparency of our costs through the publication of an annual Service and Performance Plan for each Basin scheme (except Maranoa River<sup>23</sup>). The purpose of these plans is to:

- present Sunwater's projected scheme-level costs for the upcoming five-year period
- consult with customers on forecast scheme-level costs for the upcoming financial year and the forward program of works
- examine Sunwater's performance in the most recently completed financial year against previous forecasts and QCA-recommended costs, service targets and electricity usage and efficiency-related metrics.

Finally, all fees and charges in the Basin schemes are published in accordance with Part 4 of the Rules. This provides useful information to current and prospective water users, allowing them to compare charges across regions and make decisions on where to locate their business. We also publish each scheme's service targets, which were established in consultation with customers, on our website: www.sunwater.com.au/schemes/

Sunwater therefore believes the current arrangements in Queensland address this water charging objective and the application of Part 6 regulation would not materially contribute to the achievement of this objective.

#### Avoiding perverse or unintended consequences

Perverse and unintended pricing outcomes can primarily be avoided by establishing transition paths for tariff groups or customers experiencing significant price increases, and by providing stakeholders the opportunity to have their views heard during price review processes, such as the QCA's irrigation price investigation. For non-irrigation customers, they can also be mitigated by applying a similar methodology to that applied by the QCA for irrigation prices.

<sup>&</sup>lt;sup>20</sup> Higher priority represents a higher reliability of water supply. This means access to medium priority water is often prohibited before access to higher priority water begins to reduce. On this basis, high priority water allocations have a higher proportion of fixed revenues allocated to them as they derive greater benefit from the infrastructure.

 $<sup>\</sup>frac{21}{\text{www.qca.org.au/wp-content/uploads/2019/05/34198}} \ \ \text{SunWater-Submission-Irrigation-Price-Review-Appendix-J-Headworks-} \\ \underline{\text{Utilisation-Factors-technical-paper.pdf}}$ 

<sup>&</sup>lt;sup>22</sup> www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-part-b-sunwater-final-report.pdf

<sup>&</sup>lt;sup>23</sup> A plan is not prepared because customers are not currently paying irrigation charges.

The current Queensland water pricing framework allows for smoothed transition paths, recognising that immediate increases to full cost recovery prices may affect user profitability and, depending on their capacity to pay, could impact the viability of some users or even the scheme. For non-irrigation customers, Sunwater may negotiate a transition plan if the customer is likely to experience a significant price shock due to the application of an immediate increase to full cost recovery prices at their review date. Meanwhile, the irrigation pricing framework allows for prices to gradually transition to lower bound cost-based pricing, with the shortfall in revenue covered by a CSO. These transition paths are described in more detail below.

The application of Part 6 of the Rules would therefore not materially contribute to the achievement of this water charging objective.

Sunwater also believes that it would be a perverse outcome and inconsistent with this objective to apply Part 6 of the Rules to the small proportion of Sunwater operations that are in the Basin, given that would result in:

- inconsistent pricing arrangements across Sunwater's operations
- increased regulatory costs due to Sunwater being subjected to two overlapping regulatory regimes.

### Water charging principles

This section outlines the water charging principles from Schedule 2 of the Water Act 2007 and how the current Queensland arrangements are meeting these principles. The ACCC may grant an exemption only if it is satisfied that Part 6 regulation would not materially contribute to the achievement of these principles and the water charging objectives.

### Water storage and delivery

- 1. Pricing policies for water storage and delivery in rural systems are to be developed to facilitate efficient water use and trade in water entitlements.
- 2. Water charges are to include a consumption-based component.
- 3. Water charges are to be based on full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities where feasible and practical.
- 4. Water charges in the rural water sector are to continue to move towards upper bound pricing where practicable.
- 5. In subclause (4):
  - *upper bound pricing* means the level at which, to avoid monopoly rents, a water business should not recover more than:
    - (a) the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes; and
    - (b) provision for the cost of asset consumption; and
    - (c) provision for the cost of capital (calculated using a weighted average cost of capital).
- 6. If full cost recovery is unlikely to be achieved and a Community Service Obligation is deemed necessary:
  - (a) the size of the subsidy is to be reported publicly; and
  - (b) where practicable, subsidies or Community Service Obligations are to be reduced or eliminated.
- 7. Pricing policies should ensure consistency across sectors and jurisdictions where entitlements are able to be traded.

### Facilitating efficient water use and trade in water entitlements

Sunwater recognises the benefits of water trading, including:

- encouraging the efficient use of water by facilitating allocation holders to sell, lease or temporary transfer spare water
- providing flexibility to allocation holders who want to stop production or change their business operations, thereby allowing water to move to its highest value use.

Sunwater's fixed (Part A) tariff is currently applied regardless of the amount of water taken in the year. This incentivises customers who are not using their water allocations to partially or fully trade their

allocations (on a permanent or temporary basis) to minimise or recoup their fixed costs. Further, our pricing policies do not prevent water from moving between industries—around 18 per cent of water allocations in the Basin were traded in 2020/21, as illustrated above.

This demonstrates the pricing policies affecting Sunwater's Basin schemes are facilitating efficient water use and trade, and the application of Part 6 of the Rules would not materially contribute to the achievement of this water charging principle.

### Consumption-based water charges

Sunwater uses a two-part tariff structure to recover the costs of providing bulk water services in our Basin schemes. The tariff structure is comprised of:

- a fixed (Part A) tariff, which is charged according to the nominal volume<sup>24</sup> of the water allocation held by the customer, regardless of the amount of water taken in the year
- a volumetric (Part B) tariff, which is charged per megalitre of water taken by the customer, measured at the water meter or 'offtake'.

The primary objective of this tariff structure is for fixed costs (which represent most of our costs) to be recovered through the fixed tariff and for variable costs to be recovered through the volumetric (usage) tariff.

Given a consumption-based tariff that recovers our variable costs is already in place, the application of Part 6 of the Rules would not materially contribute to the achievement of this water charging principle.

### Irrigation prices—Full cost recovery and CSO

The Queensland Government's current water pricing policy for irrigation customers 'is generally for prices to move towards recovering the irrigation share of the scheme's operating, maintenance and refurbishment costs, but not any share of the initial costs of building any assets constructed before 2000.'25 In other words, irrigation prices are required to transition to lower bound cost-reflective prices.

The Queensland Government's policies are reflected through the pricing principles contained in the referral to the QCA and the Rural Water Pricing Direction Notice/s. The QCA's application of the pricing principles for the 2021–2024 price path period is outlined in Table 5.

<sup>&</sup>lt;sup>24</sup> The term "nominal volume" is defined in the *Water Act 2000 (Qld)* to mean 'the number used to calculate the allocation's share of the water available to be taken by holders of water allocations in the same priority group'.

<sup>&</sup>lt;sup>25</sup> Queensland Government (2020), *Seqwater and Sunwater irrigation pricing,* Viewed 24 August 2020, www.business.qld.gov.au/industries/mining-energy-water/water/industry-infrastructure/pricing/irrigation

Table 5 QCA application of pricing principles, 2021–2024

Tariff groups with above lower bound prices	Fixed price—above cost-reflective price	Maintained in nominal terms until lower bound cost target is reached	
Prince	Volumetric price—above cost-reflective price	Immediately reduced to cost-reflective price	
	Volumetric price—less than or equal to cost-reflective price	Increased by inflation until overall prices reach the lower bound cost target	
Tariff groups with below lower bound prices	Fixed price—below cost-reflective price	Annual increases of inflation plus an additional component of \$2.38/ML of water allocation (from 2020/21, increasing by inflation) until the lower bound cost target is reached	
	Volumetric price—above cost-reflective price	Immediately reduced to cost-reflective price	
	Volumetric price—less than or equal to cost-reflective price	Increased by inflation until the fixed price reaches the fixed component of the lower bound cost target. The volumetric price then increases each year by inflation plus \$2.38/ML of water allocation (from 2020/21, increasing by inflation) until the lower bound cost target is reached	

Source: QCA (2020), Rural irrigation price review 2020–24, Part B: Sunwater, Viewed 21 August 2020, www.qca.org.au/project/rural-water/irrigation-price-investigations/

Where irrigation prices are set below the level necessary for Sunwater to recover the prudent and efficient lower bound costs of supplying water to irrigators, the Queensland Government provides a CSO to Sunwater to offset the shortfall in revenue. This approach is consistent with paragraph 66(v)(c) of the National Water Initiative (NWI), which recognises that rural and regional service providers that cannot achieve full cost recovery may require a CSO. The difference between lower bound prices and upper bound prices (or between prices above lower bound prices but below upper bound prices) is forgone revenue.

In 2020/21, Sunwater received a CSO for all irrigation tariff groups in the Basin schemes apart from the Chinchilla Weir tariff group. Actual CSO payments made to Sunwater are transparent and reported annually by both Sunwater $^{26}$  and the Queensland Audit Office. $^{27}$  A CSO agreement for 2021/22 to 2023/24 is not currently in place.

Sunwater notes the amount of government contributions to be paid to Sunwater for infrastructure services provided and a decision on whether to forgo a return on capital are matters for the Queensland Government, irrespective of the price regulation framework in force. If the ACCC were to regulate infrastructure charges in Sunwater's Basin schemes, it would also be required to take the Queensland Government's decisions on these matters into account under subrules 29(2)(b)(i) and 29(2)(b)(ii) of the Rules.

Sunwater therefore does not believe applying Part 6 regulation would materially contribute to the achievement of these water charging principles.

### Non-irrigation prices—Full cost recovery and CSO

Prices for non-irrigation customers are prescribed in existing contracts. For new non-irrigation customers or in situations where Sunwater is entitled to review existing non-irrigation customer charges under contractual arrangements, the current light-handed approach to price regulation has proven to be

<sup>&</sup>lt;sup>26</sup> See, for example, page 58 of Sunwater's 2020/21 Annual Report at: <a href="https://www.sunwater.com.au/about/publications/">www.sunwater.com.au/about/publications/</a>

<sup>&</sup>lt;sup>27</sup> See, for example, page 24 of the Queensland Audit Office's Financial Audit Report, Water 2020, Report 9: 2020-21 at: <a href="https://www.qao.qld.gov.au/sites/default/files/2021-01/Water%20200%20%28Report%209%E2%80%942020%E2%80%9321%29">https://www.qao.qld.gov.au/sites/default/files/2021-01/Water%20200%20%28Report%209%E2%80%942020%E2%80%9321%29</a> 0.pdf

workable. It has enabled Sunwater and non-irrigation customers to bi-laterally negotiate transition paths to full cost recovery where required, with each transition path determined based on individual circumstances and impacts.

Since 2012, non-irrigation infrastructure charges (other than those subject to the Rural Water Pricing Direction Notice (or aligned with a charge the subject of this direction)) have been maintained in real terms by escalation from the previous year at the Brisbane All Groups Consumer Price Index (CPI) for March, except where individual supply contract terms indicate otherwise. Increases greater than CPI typically apply when prices are below lower bound costs.

Sunwater has been exploring transition pathways to upper bound pricing in line with the NWI for urban customers in collaboration with customers, the Local Government Association of Queensland, DRDMW and our shareholding Ministers. This would allow for small progressive increases over several years to avoid price shocks to urban customers and their communities.

The current arrangements are seeking to meet the water charging principles related to full cost recovery and transitioning to upper bound pricing.

Sunwater does not receive a CSO payment for non-irrigation water users in the Basin schemes.

### Consistent pricing policies across sectors and jurisdictions

This principle relates to having consistent pricing policies for regulated charges across interconnected markets to minimise trade distortions which may affect the efficient use of, and investment in, water infrastructure.

As discussed above, the Macintyre Brook bulk water supply scheme is Sunwater's only Basin scheme that is connected to another market, through inter-scheme temporary transfers with the Queensland Border Rivers water supply scheme.

Sunwater understands infrastructure charges in the Queensland Border Rivers water supply scheme are set under Schedule 14 of the Water Regulation and are generally indexed annually by CPI. This differs to how Sunwater's infrastructure charges are established, though similarities in pricing policies exist, e.g. a two-part tariff structure is in place for both schemes and neither Sunwater nor DRDMW levy an application fee for temporary transfers.

We recognise that, if the requirements of Part 6 of the Rules were applied to both schemes, it would lead to more consistent pricing policies across the schemes.

However, consideration should be given to:

- 1. the number of schemes affected—only one of Sunwater's Basin schemes would be impacted—relative to the disproportionate regulatory burden that would be placed on all of Sunwater's operations in the Basin.
- 2. the trading framework—only temporary transfers to the Queensland Border Rivers water supply scheme Zone B from the Macintyre Brook bulk water supply scheme are permitted. Sunwater does not have formal agreements in place to facilitate inter-scheme permanent transfers or inter-state trading. Despite this, the State of Queensland as the resource operations licence holder for the Border Rivers water supply scheme has an inter-state trading agreement with the State of New South Wales (NSW) and acts as an intermediator and on-trades temporary transfers from the Macintyre Brook water supply scheme to NSW water users located in Border Rivers Zone B.
- 3. whether better achieving this water charging principle alone outweighs the increased costs of Part 6 regulation, particularly when the current Queensland water charging regulatory arrangements achieve the other water charging objectives and principles from the Water Act 2007.

After considering these matters, we do not consider that applying Part 6 regulation to all of Sunwater's operations in the Basin to better meet this water charging principle alone is warranted.

### Cost recovery for planning and management

- 1. All costs associated with water planning and management must be identified, including the costs of underpinning water markets (such as the provision of registers, accounting and measurement frameworks and performance monitoring and benchmarking).
- 2. The proportion of costs that can be attributed to water access entitlement holders is to be identified consistently with the principles set out in subclauses (3) and (4).
- 3. Water planning and management charges are to be linked as closely as possible to the costs of activities or products.
- 4. Water planning and management charges are to exclude activities undertaken for the Government (such as policy development and Ministerial or Parliamentary services).
- 5. States and Territories are to report publicly on cost recovery for water planning and management annually. The reports are to include:
  - (a) the total cost of water planning and management; and
  - (b) the proportion of the total cost of water planning and management attributed to water access entitlement holders, and the basis upon which this proportion is determined.

This water charging principle is not relevant to the ACCC's consideration of our exemption application.

Part 6 of the Rules relates to the approval or determination of infrastructure charges. This excludes, by definition, planning and management charges. Therefore, the application of Part 6 regulation (or otherwise) would have no impact on the achievement of this water charging principle.

### **Environmental externalities**

- 1. Market-based mechanisms (such as pricing to account for positive and negative environmental externalities associated with water use) are to be pursued where feasible.
- 2. The cost of environmental externalities is to be included in water charges where found to be feasible.

Environmental externalities associated with water use include (but are not limited to): altered river flows; excess nutrients/chemicals; turbidity; salinity; and aquatic habitat removal and disturbance.

In Queensland, these externalities are primarily managed through the following mechanisms:

- the 'impact on the environment of prices charged' and 'legislation and government policies relating to ecologically sustainable development' being matters the QCA is specifically required to have regard to under section 26 of the QCA Act in investigating Sunwater's irrigation pricing<sup>28</sup>
- the water planning framework (see below)
- specifying conditions on resource operations licences, distribution operations licences and water allocations
- water allocations held by the Commonwealth Environmental Water Holder in the Macintyre Brook and St George bulk water supply schemes
- the development of Healthy Waters Management Plans under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 (Qld)
- water monitoring activities, including water quality, stream flow and environmental monitoring programs such as the resource operations licences' monitoring conditions and Environmental Flows Assessment Program.

The Water Act 2000 provides a robust framework to sustainably manage and allocate Queensland's water resources. It is supported by water plans and other implementation instruments including water

<sup>28</sup> s 26(1)(g) and 26(1)(k) of the QCA Act

management protocols, resource operations licences, distribution operations licences<sup>29</sup> and operations manuals.

Water plans for each plan area are tailored to balance the needs of water users and the environment. Each water plan has a set of environmental outcomes, as well as environmental flow objectives designed to protect the health of natural ecosystems.

The other implementation instruments specify rules and strategies to support the delivery of the environmental outcomes/objectives. For example, the resource operations licences must state environmental conditions such as timeframes and the volumes required to be released from storages for environmental purposes; operations manuals may provide rules to ensure waterholes are maintained for aquatic refugia; and water management protocols set out general water sharing rules. The resource operations licences also detail certain environmental monitoring and reporting requirements that the holder must abide by, such as annually reporting on the impact of water storage operation on natural ecosystems.

In Sunwater's case, the costs of complying with these environmental obligations are recovered through infrastructure charges levied on all water users. We do not apply an "environmental externality" charge specific to individual customers. Doing so is not considered feasible given the difficulty of determining the exact costs of such compliance.

Given environmental externalities are sufficiently addressed through the Queensland regulatory framework and other mechanisms established by the Queensland Government, and the cost of complying with our environmental obligations are already being recovered through infrastructure charges, Sunwater does not believe the application of Part 6 of the Rules would materially contribute to the achievement of this water charging principle.

### Benchmarking and efficiency reviews

- 1. Independent and public benchmarking or efficiency reviews of pricing and service quality relevant to regulated water charges is or are to be undertaken based on a nationally consistent framework.
- 2. The costs of operating these benchmarking and efficiency review systems are to be met through recovery of regulated water charges.

National Performance Reporting for rural water service providers was discontinued in 2014, following the release of the 2012/13 report by the former National Water Commission (NWC). The NWC highlighted there was little support to continue this publication, with stakeholders expressing concerns that the report was not delivering material benefits.<sup>30</sup>

The Productivity Commission noted this in its 2017 Inquiry Report on National Water Reform, indicating that rural performance benchmarking 'should not be pursued while ever the costs exceed the benefits'.<sup>31</sup> It further stated that the 'benefits are likely to remain limited as…there are significant differences across bulk water operations that make meaningful comparisons difficult.'<sup>32</sup> Such differences include:

- the scale and nature of bulk water operations, including different economies-of-scale
- · the range or mix of services provided
- service levels
- input prices
- seasonal conditions

<sup>&</sup>lt;sup>29</sup> Not applicable to Sunwater.

<sup>&</sup>lt;sup>30</sup> National Water Commission (2014), Australia's water blueprint: national reform assessment 2014, September 2014, Canberra.

<sup>&</sup>lt;sup>31</sup> Productivity Commission (2017), *Productivity Commission Inquiry Report: National Water Reform, No.87*, 19 December 2017, Canberra, p433.

<sup>32</sup> Ibid.

- exposure to extreme weather events like floods
- business conditions, including legislative and regulatory requirements, environmental management requirements and cost allocation methodologies.

Sunwater is not aware of any plans to re-establish a national benchmarking framework for rural water service providers.<sup>33</sup> Without this framework (and a detailed understanding of the differences between water utilities), it is difficult to robustly benchmark Sunwater's costs or use the results in a deterministic manner.

However, in investigating Sunwater's pricing the QCA is required to have regard to 'the cost of providing the goods or services in an efficient way, having regard to relevant interstate and international benchmarks'.34

Consistent with that requirement, in its 2021–2024 irrigation price review, the QCA used benchmarking as one of many tools to assess Sunwater's historical local area support and corporate support costs. The QCA compared our expenditure against other regulated water utilities of a similar size and/or service offering using two measures:

- corporate expenditure per total operating expenditure
- corporate expenditure per megalitre of water delivered.

The QCA's consultant, AECOM, also benchmarked our total operating expenditure per megalitre of water delivered.

The QCA and AECOM found Sunwater's expenditure to be consistent with, or lower than, comparator businesses. However, they both noted the limitations of the analysis. The QCA stated the analysis 'is indicative only and...is subject to qualification including differences in the activities undertaken by the businesses and the operating environments that they face.'35 While AECOM noted that 'Benchmarking of bulk water supply companies has limited value given the vastly different operating structures of various bulk water supply companies.'36

Since there is no nationally consistent framework for rural water service providers and the QCA is required to (and does) utilise benchmarking to the extent practicable when considering Sunwater's costs, Sunwater considers the application of Part 6 of the Rules would not materially contribute to the achievement of this water charging principle.

<sup>&</sup>lt;sup>33</sup> Sunwater notes that the ACCC's annual water monitoring report covers changes in regulated water charges and trends. However, it does not benchmark costs or service quality.

<sup>34</sup> s 26(1)(d)(i) of the QCA Act

<sup>&</sup>lt;sup>35</sup> QCA (2020), Rural irrigation price review 2020–24, Part B: Sunwater, Viewed 17 August 2020, www.qca.org.au/project/ruralwater/irrigation-price-investigations/p33.

<sup>&</sup>lt;sup>36</sup> AECOM (2020), Rural Irrigation Operational Expenditure Review, Sunwater, Viewed 17 August 2020, www.qca.org.au/project/rural-water/irrigation-price-investigations/ p152.

### Matters the ACCC must have regard to

Under subrule 23C(5), in making the decision to grant an exemption to Sunwater, the ACCC must have regard to the following matters:

- (a) the total volume of water access rights in relation to which bulk water services are provided by the operator, if applicable
- (b) the total volume of water subject to water sharing arrangements in relation to which the operator provides infrastructure services, if applicable
- (c) the infrastructure services provided by the operator
- (d) any preferences expressed by the operator's customers to the ACCC
- (e) any views expressed by a State Agency to the ACCC
- (f) whether the relevant law of a State is being transitioned so that the operator's infrastructure charges will at a future date be determined or approved by a single State Agency in a way that is consistent with paragraph 29(2)(b) [of the Rules]
- (g) the proportion of the infrastructure operator's revenue to be recovered from infrastructure charges
- (h) any other matters that the ACCC considers relevant.

Sunwater has addressed matters (a), (b), (c), (g) and (h) below. We are not aware of customers or a State Agency (as defined in the Rules) expressing views on the matter (as referred to in matters (d) and (e)).

### Total volume of water access rights in relation to bulk water services provided

The total volume of water access rights,<sup>37</sup> by each of the Sunwater Basin schemes, is provided in Table 6 below. They represent less than one per cent of the total surface and groundwater entitlements held in the Basin (18,650 GL)<sup>38</sup> and are insignificant in the context of the overall Basin water resources.

Table 6 Water allocations held, by scheme	Table 6	Water a	llocations	held, b	v scheme
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Scheme	Water allocations (ML)	Total water allocations as a % of total Basin entitlements	Irrigation water allocations as a % of total Basin entitlements	Non-irrigation water allocations (excl. Sunwater) as a % of total Basin entitlements
Chinchilla Weir	4049	0.02%	0.01%	0.01%
Cunnamulla	2612	0.01%	0.01%	0.00%
Macintyre Brook	24,997	0.13%	0.09%	0.04%
Maranoa River	805	0.00%	0.00%	0.00%
St George	84,575	0.45%	0.44%	0.02%
Upper Condamine	33,960	0.18%	0.16%	0.02%
Total	150,998	0.81%	0.72%	0.08%

The total volume of water allocations held in the six Basin schemes is also immaterial when compared to Sunwater's total operations (5.8 per cent of 2620 GL).

Sunwater submits that, taking into account the small volumes of the Basin impacted, the additional regulatory costs and burdens of application of Part 6 to Sunwater's Basin schemes would be disproportionate to any perceived incremental benefits of applying the regime beyond the outcomes delivered by the existing state-based regulatory regime.

<sup>&</sup>lt;sup>37</sup> Referred to as "water allocations" in Queensland. All data presented is as at 30 June 2019 and represents the nominal volume of water allocations. The percentage of water allocation available to the customer can be as high as 100 per cent or as low as 0 per cent, depending on the level of water storages.

<sup>&</sup>lt;sup>38</sup> Bureau of Meteorology (2021), *Murray-Darling Basin: Key findings, For the water account period 1 July 2019–30 June 2020,* Viewed 14 October 2021, <a href="https://www.bom.gov.au/water/nwa/2020/mdb/index.shtml">www.bom.gov.au/water/nwa/2020/mdb/index.shtml</a>

## Total volume of water subject to water sharing arrangements in relation to which the operator provides infrastructure services

Sunwater does not have any water sharing arrangements with other Basin states but does allow temporary transfers from the Macintyre Brook bulk water supply scheme to the Border Rivers water supply scheme Zone B. If water users from NSW wish to access temporary transfers from the Macintyre Brook bulk water supply scheme, the State of Queensland (represented by DRDMW) can act as an intermediator and on-trade temporary transfers from Macintyre Brook.

The Macintyre Brook operations manual states the rules and restrictions for temporary transfers (referred to as a seasonal water assignment). The maximum allowable volume is dependent on the current volume in Macintyre Brook Zone C. As at close of business 7 October 2021, there is 12,868 ML of allocated volume in Zone C with the maximum allowable volume being 21,945 ML. This means, currently, there is potentially up to 9077 ML of water allocation which is subject to such water sharing arrangements.

Figure 1 outlines the administrative process for trading from the Macintyre Brook bulk water supply scheme to the Border Rivers water supply scheme.<sup>39</sup>

Figure 1 Macintyre Brook – Border Rivers trading process

Seller	Provides a completed temporary transfer request form to Sunwater
unwater	Checks the seller's account to ensure there are no overdue amounts  Calculates potential losses that would occur when water is transferred from Macintyre Brook scheme to Border Rivers  Informs DRDMW of the temporary transfer amount (inclusive of losses)
RDMW	Advises whether they wish to proceed with the temporary transfer (stage 1 approval)
unwater	• Upon approval, temporary transfers the water from the seller's Macintyre Brook account to Sunwater's trading account • Advises DRDMW
RDMW	• Advises of stage 2 approval
inwater	• The Brisbane office advises the regional team that the temporary transfer has been approved and to release the water • Advises the customer that the temporary transfer has been approved and places a Part B (volumetric) charge against the seller's account for the "at farm" value of the transferred amount
Seller	• Informs Sunwater's regional team of the amount of water used
inwater	Adds the transaction to the Sunwater trading account removing the amount of water used

Sunwater continues to charge the seller for the Part A (fixed) prices. The seller also gets charged the Part B (volumetric) prices for the "at farm" amount, i.e. after losses.

Given the limited degree of overlap and water sharing arrangements (being relevant to only one of the Sunwater Basin schemes), Sunwater submits that it would be disproportionate to apply Part 6 to all of Sunwater Basin's schemes due to a desire for greater national consistency.

<sup>&</sup>lt;sup>39</sup> The seller in the Macintyre Brook bulk water supply scheme is usually the buyer in the Border Rivers scheme.

#### Infrastructure services

Sunwater provides bulk water storage in each Basin scheme via dams and/or weirs and releases water to offtakes or interconnection points located in-stream or in-storage. We hold a resource operations licence for each scheme, which allows us to interfere with the flow of water to operate the relevant water infrastructure and use watercourses to deliver water to water allocation holders.

The infrastructure services provided by Sunwater are explained below, with additional information available in the water planning documents at: <a href="https://www.business.qld.gov.au/industries/mining-energy-water/water/catchments-planning/water-plan-areas">www.business.qld.gov.au/industries/mining-energy-water/water/catchments-planning/water-plan-areas</a>

The assets used by Sunwater to deliver infrastructure services in the Basin schemes are small-scale. Three of the schemes are supplied by low-capacity weirs. The largest dam, Leslie Dam (106.2 GL) in the Upper Condamine scheme, is significantly smaller than other dams owned and operated by Sunwater<sup>40</sup> and those of other Basin infrastructure operators, such as Lake Eildon (3334 GL) in Victoria and Blowering Dam (1628 GL) in NSW.

Sunwater notes that the application of Part 6 to Sunwater's Basin schemes would result in some of its smallest operated water infrastructure assets being subject to the highest extent of regulation.

### Chinchilla Weir

The Chinchilla Weir bulk water supply scheme regulates flows on the Condamine River between AMTD<sup>41</sup> 643.7 km (downstream limit) and AMTD 743.6 km (upstream limit), including sections of tributaries where supplemented water is accessible. It is centred on Chinchilla Weir and is approximately 8 km southwest of the town of Chinchilla. A map of the scheme's location is provided in **Appendix 1**.

Chinchilla Weir is a concrete faced earth-fill structure built in 1973 on the Condamine River at AMTD 697.0 km with a total storage capacity of 9780 ML. The weir is used to provide irrigation supply to the surrounding alluvial flats and to supply water to the town of Chinchilla. Upstream irrigators pump directly from the stored water at the weir, and downstream irrigators take from the regulated flows released by the weir. It is the only headworks for the Chinchilla Weir bulk water supply scheme.

A breakdown of customer numbers, water allocations held by each customer segment and 2020/21 water deliveries is provided in the table below. Irrigation customers hold most water allocations in this scheme.

Customer segment	Customer numbers	Water allocations (ML)	% of total scheme water allocations	2020/21 water deliveries (ML)
Industrial	4	350	8.6%	7
Irrigation	23	2533	62.6%	1292
Urban	1	1160	28.6%	456
Sunwater	n/a	6	0.1%	0
Total	28	4049	100.0%	1756

Table 7 Customer information—Chinchilla Weir

### Cunnamulla

The Cunnamulla bulk water supply scheme operates on a section of the Warrego River between Allan Tannock Weir (AMTD 124.8 km) and the upstream limit of the weir ponded area (AMTD 142 km). A map of the scheme's location is provided in **Appendix 1**.

<sup>&</sup>lt;sup>40</sup> For example, Burdekin Falls Dam (1860 GL), Fairbairn Dam (1301 GL), Fred Haigh Dam (561 GL) and Peter Faust Dam (491 GL).

<sup>&</sup>lt;sup>41</sup> Adopted Middle Thread Distance (AMTD) is the distance in kilometres, measured along the middle of a watercourse, from a specific point in the watercourse to the watercourse's mouth, the watercourse's junction with the main watercourse or the border between the State and NSW.

Allan Tannock Weir is the only storage for this scheme. It is a sheet piling and concrete construction with a fixed crest spillway. It was built in 1991 on the Warrego River and has a total storage capacity of 4770 ML.

The scheme supplies water to landholders directly from the weir pond, as well as downstream of the weir along the Warrego River. These water users mainly grow grapes, cotton and fodder crops. Bulk water is also supplied to the Paroo Shire Council when required, e.g. for use at parks and gardens.

A breakdown of customer numbers, water allocations held by each customer segment and 2020/21 water deliveries is provided in the table below. Irrigation customers hold most water allocations in this scheme.

Table 8 Customer information—Cunnamulla

Customer segment	Customer numbers	Water allocations (ML)	% of total scheme water allocations	2020/21 water deliveries (ML)
Industrial	1	4	0.2%	0
Irrigation	22	2408	92.2%	2413
Urban	1	80	3.1%	64
Sunwater	n/a	120	4.6%	0
Total	24	2612	100.0%	2476

### Macintyre Brook

The Macintyre Brook bulk water supply scheme regulates water flow on the Macintyre Brook and is centred on the major storage at Coolmunda Dam. A map of the scheme's location is provided in **Appendix 1**.

Under the Macintyre Brook Water Supply Scheme Resource Operations Licence, Sunwater is authorised to use the ponded area of Coolmunda Dam upstream of AMTD 78 km on the Macintyre Brook and the Macintyre Brook downstream of Coolmunda Dam to the junction with the Dumaresq River (AMTD 78 km to 0 km) to distribute supplemented water.

Coolmunda Dam is a zoned earth and rockfill wall structure with a concrete spillway, seven automatic counter balanced radial gates and an outlet works consisting of a 915 mm diameter steel pipe. It was constructed on the Macintyre Brook and became operational in 1968. The dam is approximately 15 km east of the town of Inglewood and has a total storage capacity of 69,000 ML.

In addition, Sunwater owns and operates the following assets:

- Ben Dor Weir—a mass concrete gravity weir with central ogee spillway. It is located downstream of Inglewood and has a total storage capacity of 700 ML.
- Whetstone Weir—a sheet piling weir with concrete cap, which is located downstream of Inglewood. It has a total storage capacity of 506 ML.
- Greenup Weir—a timber piled structure, with a total storage capacity of 370 ML. It is located
  upstream of Inglewood. This weir is not essential for the effective operation of the scheme and, due
  to its age, there is currently a 'no maintenance' strategy. However, Sunwater is currently investigating
  a potential refurbishment of the weir, pending the outcome of a 2021/22 options study/business case
  and customer consultation.

The scheme services water users on the Macintyre Brook, the town of Inglewood, and irrigation and industrial users. The water supplied supports sheep and cattle grazing, timber milling, fodder, grains and horticulture crops.

A breakdown of customer numbers, water allocations held by each customer segment and 2020/21 water deliveries is provided in the table below. Irrigation customers hold most water allocations in this scheme.

Table 9 Customer information—Macintyre Brook

Customer segment	Customer numbers	Water allocations (ML)	% of total scheme water allocations	2020/21 water deliveries (ML)
Industrial	2	6410	25.6%	0
Irrigation <sup>1</sup>	83	17,319	69.3%	3611
Urban	4	322	1.3%	194
Sunwater	n/a	946	3.8%	2108
Total	89	24,997	100.0%	5913

Includes the Commonwealth Environmental Water Holder.

#### Maranoa River

The Maranoa River bulk water supply scheme operates on a section of the Maranoa River between the Neil Turner Weir (AMTD 222.2 km) and the upstream limit of the weir ponded area (AMTD 229.2 km). A map of the scheme's location is provided in Appendix 1.

The main asset in this scheme is Neil Turner Weir, which was built in 1984 on the Maranoa River at AMTD 222.2 km on the northern side of the town of Mitchell. This weir is a sand filled concrete faced cascading structure made up from rock filled precast units. It has a total storage capacity of 1470 ML (based on a siltation survey in 1996). However, due to high siltation levels, access to water supply by customers is extremely unreliable. As a result, Sunwater has not levied any fixed or volumetric charges on the scheme's four irrigation customers since 2014.

A breakdown of customer numbers, water allocations held by each customer segment and 2020/21 water deliveries is provided in the table below. Irrigation customers hold all water allocations in this scheme, except for 5 ML which is held by Sunwater.

Table 10 Customer information—Maranoa River

Customer segment	Customer numbers	Water allocations (ML)	% of total scheme water allocations	2020/21 water deliveries (ML)
Industrial	0	0	0.0%	0
Irrigation	4	800	99.4%	0
Urban	0	0	0.0%	0
Sunwater	n/a	5	0.6%	0
Total	4	805	100.0%	0

The St George bulk water supply scheme is centred on the town of St George and regulates water along the Balonne River via Beardmore Dam and Jack Taylor Weir. A map of the scheme's location is provided in Appendix 1.42

Under the St George Water Supply Scheme Resource Operations Licence, Sunwater is authorised to use the following watercourses to distribute water (including sections of tributaries where supplemented water is accessible):

- Balonne River—from the upstream extent of the ponded area of EJ Beardmore Dam downstream to the bifurcation of the Culgoa River and the Balonne Minor (AMTD 305.0 km - 164.3 km)
- Maranoa River—from the upstream extent of the ponded area of EJ Beardmore Dam downstream to the confluence of the Maranoa River with the Balonne River (AMTD 6.5 km - 0.0 km)

<sup>&</sup>lt;sup>42</sup> Mallawa Irrigation Ltd owns and operates the St George distribution system.

 Thuraggi Watercourse—from the headworks of EJ Beardmore Dam to 400 metres along Thuraggi Watercourse (AMTD 0.0 km – 0.4 km).

The main storages for the scheme are Beardmore Dam and Jack Taylor Weir. Beardmore Dam is a rockfill constructed dam situated approximately 21 km north of St George on the Balonne River at AMTD 251.4 km. It was constructed between 1968 and 1972, and has a total storage capacity of 81,700 ML. Jack Taylor Weir is also located on the Balonne River, downstream of St George at AMTD 229.6 km. The weir ponds water for irrigators, and has a total storage capacity of 10,270 ML.

The scheme supplies water to the town of St George and surrounding irrigation customers, who grow cotton, wheat, grapes, melons and small crops. A breakdown of customer numbers, water allocations held by each customer segment and 2020/21 water deliveries is provided in the table below. Irrigation customers hold most water allocations in this scheme.

Table 11 Customer information—St George

Customer segment	Customer numbers	Water allocations (ML)	% of total scheme water allocations	2020/21 water deliveries (ML)
Industrial	1	60	0.1%	0
Irrigation <sup>1</sup>	173	81,471	96.3%	88,264
Urban	1	3024	3.6%	1146
Sunwater	n/a	20	0.0%	112
Total	175	84,575	100.0%	89,521

<sup>1.</sup> Includes Mallawa Irrigation Ltd and the Commonwealth Environmental Water Holder.

### **Upper Condamine**

The Upper Condamine bulk water supply scheme is centred on Leslie Dam and regulates water flows along a section of the Condamine River. A map of the scheme's location is provided in **Appendix 1**.

Under the Upper Condamine Water Supply Scheme Resource Operations Licence, Sunwater is authorised to use the following watercourses to distribute water (including sections of tributaries where supplemented water is accessible):

- Sandy Creek—from the upstream extent of the ponded area of Leslie Dam to the confluence of Sandy Creek with the Condamine River (AMTD 20.0 km – 0.0 km)
- Condamine River—from the confluence with Sandy Creek downstream to Cecil Plains Weir (AMTD 1077.9 km – 891.1 km)
- North Branch Condamine River—from the Yarramalong Diversion pipeline outlet to the end of the supplemented section (AMTD 97.0 km 10.0 km).

The primary storage for the scheme is Leslie Dam, which is a mass gravity concrete structure that was built in 1965. The dam is on Sandy Creek (AMTD 8.40 km), a tributary of the Condamine River, and is approximately 13 km west of the town of Warwick. Downstream of the confluence of Sandy Creek and the Condamine River is Cecil Plains Weir, Talgai Weir, Yarramalong Weir (which includes a pump station to supply the North Branch of the Condamine River) and Lemon Tree Weir. The North Branch system is fed via a pump station at Yarramalong Weir and is regulated by Melrose Weir, Wando Weir and Nangwee Weir.

The function and capacities of the key infrastructure assets is provided in Table 12.

Table 12 Upper Condamine—key infrastructure

Asset	Function	Total capacity (ML)
Leslie Dam	Headworks for the Upper Condamine bulk water supply scheme.	106,200
Cecil Plains Weir	Mass concrete with a centre spillway built on the Condamine River at AMTD 891.1 km in 1947. Supplies Condamine River riparian landholders and irrigators.	700
Talgai Weir	Concrete faced earth-fill structure built in 1981. Located on the Condamine River at AMTD 1029.3 km. Supplies Condamine River riparian landholders.	640
Yarramalong Weir	Sheet piling filled with free draining sandfill under impervious clay and topped with either reinforced concrete or concreted rockfill. Built on the Condamine River at AMTD 966.2 km in 1989. Supplies Condamine River riparian landholders and acts as a pump pool for Yarramalong pump station.	390
Wando Weir	Grassed flat earthen bank incorporating a v-shaped concrete sill at the head of a long and shallow rock mattress covered spillway. Built in 1980 on the Condamine River North Branch at AMTD 37.0 km. Supplies irrigators in the North Branch system.	310
Lemon Tree Weir	Concrete faced earth-fill wall built in 1979 on the Condamine River at AMTD 943.4 km. Supplies Condamine River riparian landholders and irrigators.	300
Melrose Weir	Grassed earthen construction with a small curved concrete spillway built in 1978 on the Condamine River North Branch at AMTD 50.0 km. Supplies irrigators in the North Branch system.	160
Nangwee Weir	Concrete faced earth-fill embankment built in 1995 on the Condamine River North Branch at AMTD 17.0 km. Supplies irrigators in North Branch system.	80
Yarramalong pump station	A pump station located on the right bank of the Condamine River and diversion to North Branch, which has three submersible pumps. Pumps from Yarramalong Weir into the North Branch system.	346 ML/day

The scheme provides water for irrigation along the Condamine River and supplements the town water supplies of Warwick and Cecil Plains. A breakdown of customer numbers, water allocations held by each customer segment and 2020/21 water deliveries is provided in the table below. Irrigation customers hold most water allocations in this scheme.

Table 13 Customer information—Upper Condamine

Customer segment			% of total scheme water allocations	for the property of the control of t	
Industrial	1	4	0.0%	1	
Irrigation	88	30,363	89.4%	4408	
Urban	2	3332	9.8%	1591	
Sunwater	n/a	261	0.8%	0	
Total	91	33,960	100.0%	6000	

### Proportion of revenue to be recovered from infrastructure charges

In 2021/22, Sunwater expects to recover \$6.57 million from infrastructure charges. Sunwater has also estimated that we will receive a CSO payment from the Queensland Government of approximately \$0.95 million for the Basin schemes (refer to Table 14). Together, this represents less than 2 per cent of Sunwater's total forecast revenue across all schemes and revenue sources (\$483 million). This is because the assets and infrastructure services provided in the Basin schemes are relatively small, particularly when compared to non-Basin schemes.

Sunwater's revenue from Basin-related infrastructure charges also represents a tiny proportion of the total revenue expected to be received from infrastructure charges imposed by water infrastructure providers across the Basin.

Table 14 Forecast 2021/22 revenue, by revenue type and scheme (\$'000)1

Revenue type	Chinchilla Weir	Cunnamulla	Macintyre Brook	Maranoa River	St George	Upper Condamine
Irrigation charges	90	89	1011	s <del>=</del> .	1756	1172
Industrial charges	57	5	345	4 <del>5</del> 7	7	0 <del>5</del> 0
Urban charges	101	=	75		198	1670
Other charges	1	7.	770	-	1	-
Irrigation CSO <sup>2</sup>	-	14	351	39	343	207
Total	249	103	1782	39	2305	3049

Based on the Sunwater Financial Model. Inputs, such as water allocations, used in this modelling may differ slightly to those stated elsewhere in this application due to the use of different datasets.

Forecast 2021/22 revenue is comparable to actual revenue received in 2020/21, which was \$6.93 million across all Basin schemes (inclusive of the fixed CSO).

#### Other matters

### Increased regulatory burden, system and compliance costs

As discussed above, irrigation prices for all bulk water supply schemes and distribution systems owned and operated by Sunwater are currently set by our shareholding Ministers, based on advice from the QCA as an independent economic regulator.<sup>43</sup>

If Sunwater does not receive an exemption from Part 6 regulation, we would need to resource two separate regulatory reviews (the ACCC for Basin schemes and the QCA for non-Basin schemes); the costs of which will ultimately be passed on to customers.

Sunwater's project costs for the 2021–2024 QCA irrigation price review were approximately \$2.50 million. Project expenditure related to the following types of activities:

- the preparation of Sunwater's submission to the QCA and the response to the draft report
- the development of Service and Performance Plans (formerly referred to as Network Service Plans)
- the creation of a transparent price model for public release
- consultation with irrigation customers on forecast costs and pricing-related matters, including face-toface meetings with Irrigator Advisory Committees and Sunwater's Customer Reference Group
- attendance at QCA public forums
- responding to requests for information from the QCA, its consultants and stakeholders.

Even with synergies being achieved across the business, the duplication of many activities (and therefore costs) will be unavoidable. For example, Sunwater would be required to prepare two submissions and manage two separate requests for information processes. There will also be increased administration costs associated with completing timesheets to ensure project costs are being allocated to the appropriate schemes.

Further, by applying Part 6 regulation in the Basin schemes, the ACCC would duplicate the resources and capacity already held by the QCA. This will create significant diseconomies of scale in price regulation.

<sup>2.</sup> Estimate only. Sunwater does not currently have a CSO agreement in place with the Queensland Government.

<sup>&</sup>lt;sup>43</sup> Following an investigation into Sunwater's pricing practices, as directed under section 23 of the QCA Act.

Importantly for customers, the regulatory fee<sup>44</sup> imposed by the QCA for undertaking the irrigation price review would be spread across six fewer schemes. Meanwhile, the ACCC regulatory fee will only be spread across the six Basin schemes. Given the small size of these schemes, the costs of ACCC price regulation could be significant in the context of the overall scheme costs.

We therefore consider that the increased regulatory burden and compliance costs (including administrative and system costs) of maintaining two different price regulation regimes outweigh any perceived benefits of having the ACCC regulate prices in the Basin schemes.

### Prices for most water allocation holders are subject to state-based price regulation

Irrigation customers hold 89.3 per cent of total water allocations in the Basin schemes. These customers are subject to the state-based regulatory pricing regime and can participate in the irrigation price review process through lodging submissions to the QCA or attending the QCA's public forums.

As discussed above, the factors the QCA considers when determining lower bound cost-reflective prices are very similar to the water charging objectives and principles under the Rules. There does not appear to be any market failure at present, with the QCA process being effective in preventing infrastructure charges being above efficient levels.

### Effective negotiations with non-irrigation customers

Sunwater has 18 urban and industrial customers in our Basin schemes. Together, these customers hold 9.8 per cent of total water allocations.

Sunwater negotiates in good faith with current and prospective water users, ensuring they are provided with relevant information for them to engage in effective negotiation with us. We publish full cost recovery prices, which are consistent with generally accepted pricing principles applied to infrastructure assets in Australia, in the Basin schemes' schedule of charges.<sup>45</sup>

We note the responsible Minister (currently the Treasurer of Queensland) has the discretion to request the QCA to undertake a pricing investigation into all our monopoly activities under section 23 of the QCA Act (including as they relate to non-irrigation prices) even though they have not traditionally done so to date. In practical terms, this is most likely to occur in response to a pricing dispute between Sunwater and our non-irrigation customers. It is noted that there have been no pricing investigations to date and Sunwater is not aware of any substantive complaint about our current negotiation framework.

<sup>&</sup>lt;sup>44</sup> For the 2021–2024 irrigation price review, the referral capped the regulatory fee to be recovered from Sunwater and Seqwater at \$2.50 million. Sunwater's share of the regulatory fee was \$2.36 million.

<sup>45</sup> www.sunwater.com.au/customer/fees-and-charges

### Conclusion

Based on the analysis set out above, Sunwater submits that the ACCC should be satisfied that the application of Part 6 does not materially contribute to the achievement of the Basin water charging objectives and principles.

### Timing for exemption

Where an exemption is granted, the Rules provide that the exemption may be for a specified period or for an unspecified period that is subject to review at specified times.<sup>46</sup>

Sunwater submits that it is the nature of the existing Queensland regulatory regime that results in the application of Part 6 not materially contributing to the achievement of the Basin water charging objectives and principles.

Accordingly, Sunwater considers that an exemption should be granted for Sunwater's Basin operations, with a future review by the ACCC occurring in the event of any subsequent material changes to the current Queensland regulatory regime, including the QCA Act.

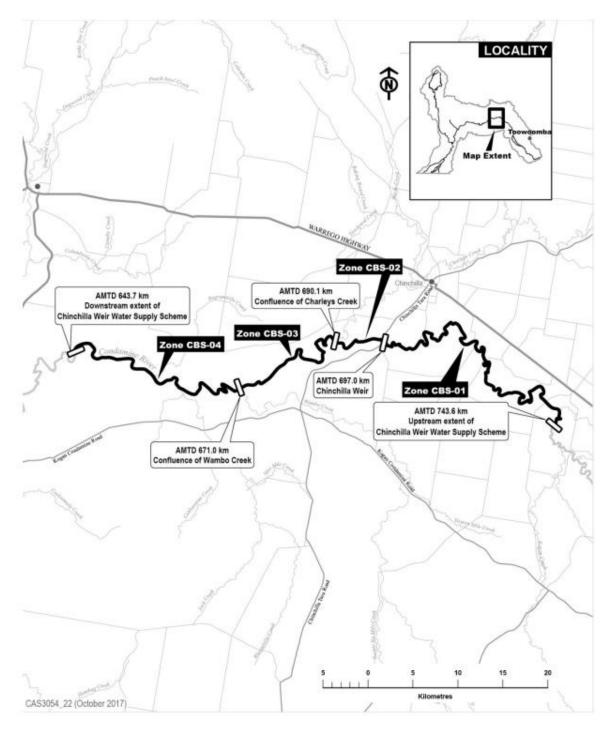
<sup>&</sup>lt;sup>46</sup> Subrule 23C(6).

### Appendix 1—Scheme maps

This appendix contains maps of each Sunwater Basin scheme. An additional map showing the general location of all Queensland Basin schemes is available at:

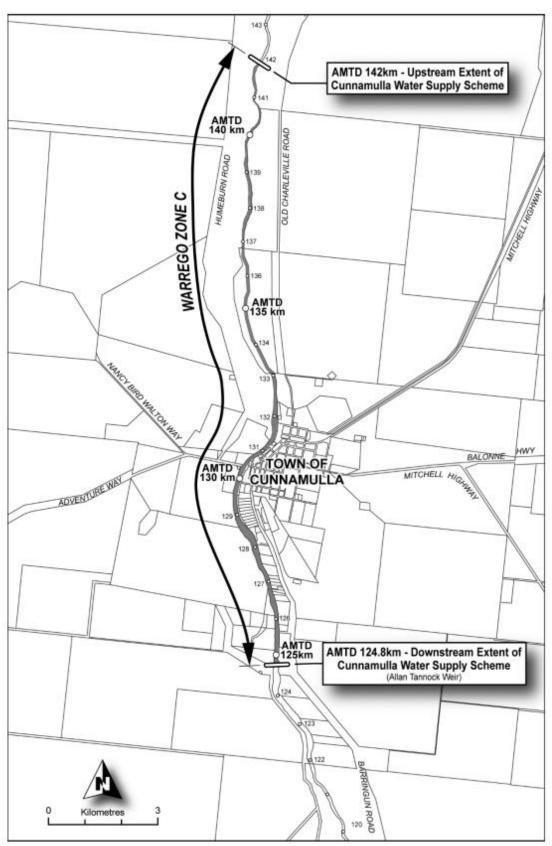
www.rdmw.qld.gov.au/ data/assets/pdf file/0020/104843/map-qmdb.pdf

### Chinchilla Weir bulk water supply scheme



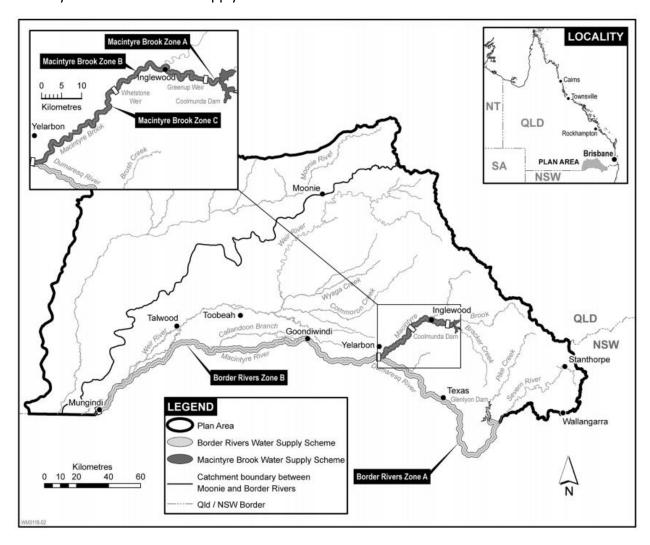
Source: Department of Natural Resources, Mines and Energy (DNRME) (2019), Chinchilla Weir Water Supply Scheme Operations Manual, Viewed 14 October 2021, www.rdmw.qld.gov.au/ data/assets/pdf\_file/0005/1434677/chinchilla-weir-operationsmanual.pdf

### Cunnamulla bulk water supply scheme



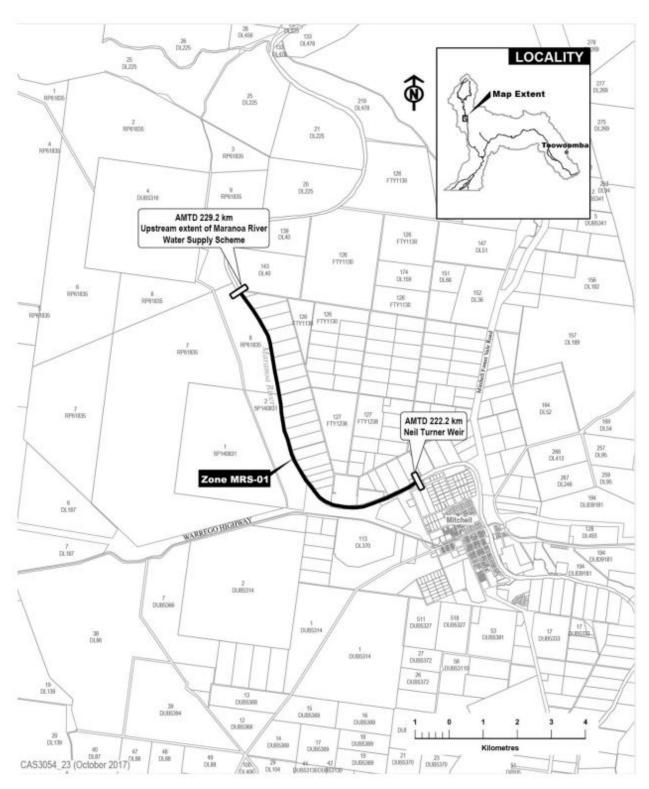
Source: DRDMW (2021), Cunnamulla Water Supply Scheme Operations Manual, Viewed 14 October 2021, www.rdmw.qld.gov.au/ data/assets/pdf file/0011/1579637/cunamulla-wss-operations-manual.pdf

### Macintyre Brook bulk water supply scheme



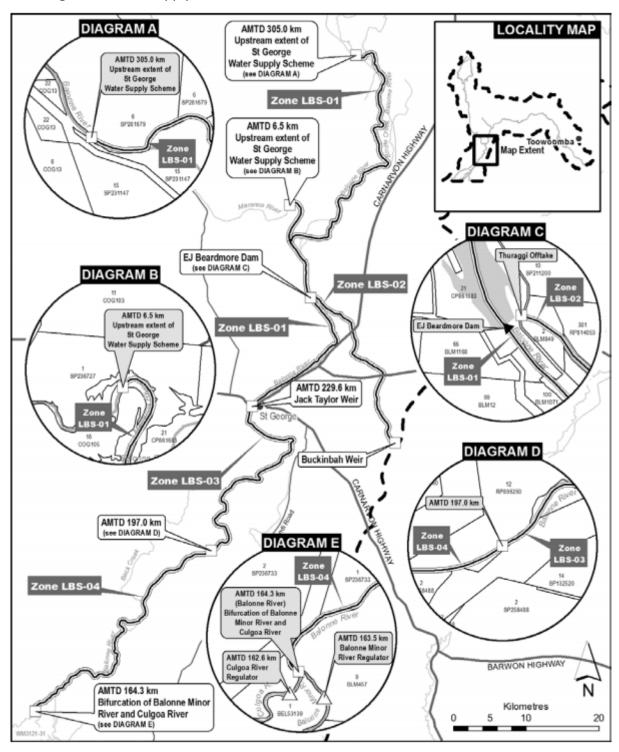
Source: DNRME (2019), Border Rivers and Moonie Water Management Protocol, Viewed 14 October 2021, www.rdmw.qld.gov.au/ data/assets/pdf file/0004/1434748/border-rivers-moonie-protocol.pdf

### Maranoa River bulk water supply scheme



Source: DNRME (2019), Maranoa River Water Supply Scheme Operations Manual, Viewed 14 October 2021, www.rdmw.qld.gov.au/ data/assets/pdf file/0004/1434739/maranoa-operations-manual.pdf

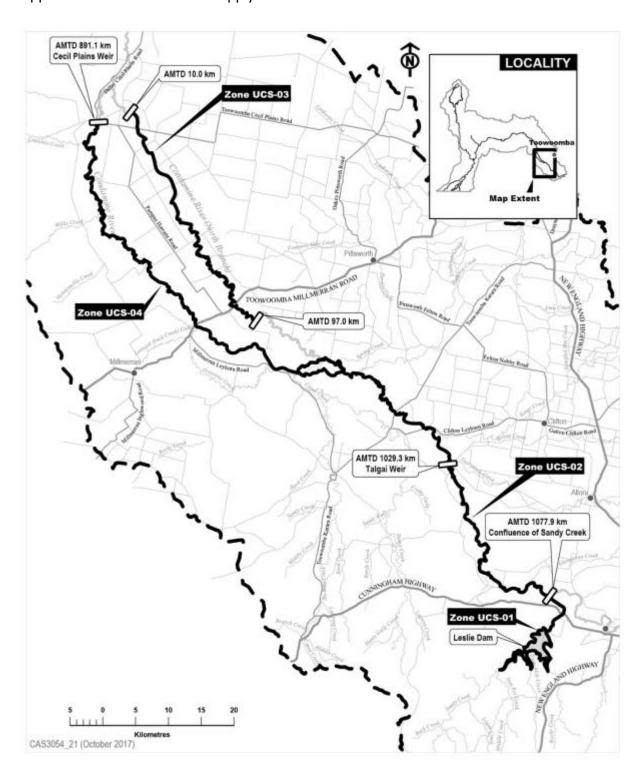
### St George bulk water supply scheme



Note: Sunwater delivers water via the first 400 metres of the Thuraggi watercourse only.

Source: DNRME (2019), Condamine and Balonne Water Management Protocol, Viewed 14 October 2021, www.rdmw.qld.gov.au/ data/assets/pdf file/0011/1434737/condamine-balonne-protocol.pdf

### Upper Condamine bulk water supply scheme



Source: DNRME (2019), Upper Condamine Water Supply Scheme Operations Manual, Viewed 14 October 2021, www.rdmw.qld.gov.au/ data/assets/pdf file/0006/1434741/upper-condamine-operations-manual.pdf