



Central Lockyer Valley Water Supply Scheme

Scheme submission to QCA

2020-21 to 2023-24

Submitted: 30 November 2018



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1. Introduction

1.1 Review context

The Queensland Competition Authority (QCA) has been directed by the Queensland Government to recommend irrigation prices for the Central Lockyer Valley Water Supply Scheme (the Scheme) for the four-year regulatory period 1 July 2020 to 30 June 2024. Prices are to recover the efficient operating, maintenance and administration costs, and an annuity to recover renewals expenditure.

2. Scheme Details

2.1 Scheme background and context

The Central Lockyer Valley Water Supply Scheme was established to support irrigation in dairy, vegetable and forage crops sectors following construction of various weirs from the 1940s to 1980s, Bill Gunn Dam and Lake Clarendon in 1988 and 1992 respectively and the Morton Vale Pipeline in 1995. Releases from the dams are made manually. The Scheme is also located in the Clarendon Sub-artesian Area which is a benefitted groundwater area.

The Scheme is currently regulated under the Interim Resource Operations Licence for the Central Lockyer Valley Water Supply Scheme. However, a proposed draft amendment to the Water Plan (Moreton) 2007 will transition these interim planning arrangements to a Resource Operations Licence. The amendment will also convert all existing water entitlements into tradable volumetric water allocations. The draft water plan amendment is currently undergoing a period of public consultation, with final submissions due by 18 January 2019. The water plan is expected to be finalised in April 2019.

The water year runs from 1 July to 30 June.

The Scheme consists of two tariff groups, “Central Lockyer Valley” and “Morton Vale Pipeline”.

2.2 Infrastructure details

The table below sets out the bulk water assets, owned and operated by Seqwater, that comprise the scheme.

Table 1: Bulk water assets

Dams/ off-stream storages	Weirs	Other bulk water assets	Distribution assets
<ul style="list-style-type: none"> • Bill Gunn Dam (Lake Dyer), • Clarendon Dam (Lake Clarendon) 	<ul style="list-style-type: none"> • Kentville Weir • Jordan I & II Weirs • Wilson Weir • Clarendon Weir • Glenore Grove Weir • Laidley Creek Diversion Weir • Showgrounds Weir • Crowley Vale Weir 	<ul style="list-style-type: none"> • Redbank Creek Pump Station • Clarendon Pump Station • Clarendon Diversion Channels • Gauging stations 	<ul style="list-style-type: none"> • Morton Vale Pipeline • Customer water meters

Source: Seqwater (2018)

2.3 Customer service standards

Service standards for the Central Lockyer Valley Water Supply Scheme are attached in Appendix 1.

Seqwater publishes a performance report each year on the Central Lockyer Valley WSS page on Seqwater's website.

2.4 Customers and water entitlements serviced

The Scheme supplies water to 250 customers holding interim water allocations or licences. The following table sets out the ownership of water allocations in the Scheme. For the Central Lockyer irrigation allocations, these are as per the IROL as they have not yet been assigned to customers.

Table 2: Ownership of water allocations

Customer type	Number of customers	Medium priority* water allocations (ML)	High priority water allocations (ML)
Irrigation – Morton Vale	43	3,420	–
Irrigation – Risk-A & Risk-B	82	3,115	–
Irrigation - groundwater	106	9,340	–
Other	5	10	–
Laidley Golf Club	1	60	–
Crowley Vale Water Board	1	325	–
Seqwater	–	87	184
Totals	250	16,357	184

Source: Seqwater (2018)

Notes: Irrigation customers yet not be verified against the definition given in the Referral Notice

* includes Risk-A, Risk-B and groundwater licences

2.5 Water availability and use

2.5.1 Water availability

The announced allocation determines the percentage of nominal water allocation volume that is available in each water year. Under the IROL, announced allocation determinations are required for the Morton Vale Water Supply System (medium priority) and for the Crowley Vale Water Board (Risk-A). Announced allocation procedures have yet to be developed and implemented for other surface water and for groundwater allocation groups.

The following table sets out the announced allocations since 2007-08.

Table 3: Announced allocations history

Year	MP % (Morton Vale Pipeline)	Risk A % (Crowley Vale Water Board)	Year	MP % (Morton Vale Pipeline)	Risk A % (Crowley Vale Water Board)
2007-08	20	0	2013-14	100	100
2008-09	81	58	2014-15	100	100
2009-10	100	100	2015-16	100	100
2010-11	100	100	2016-17	73	0
2011-12	100	100	2017-18	23	0
2012-13	100	100	2018-19	0	0

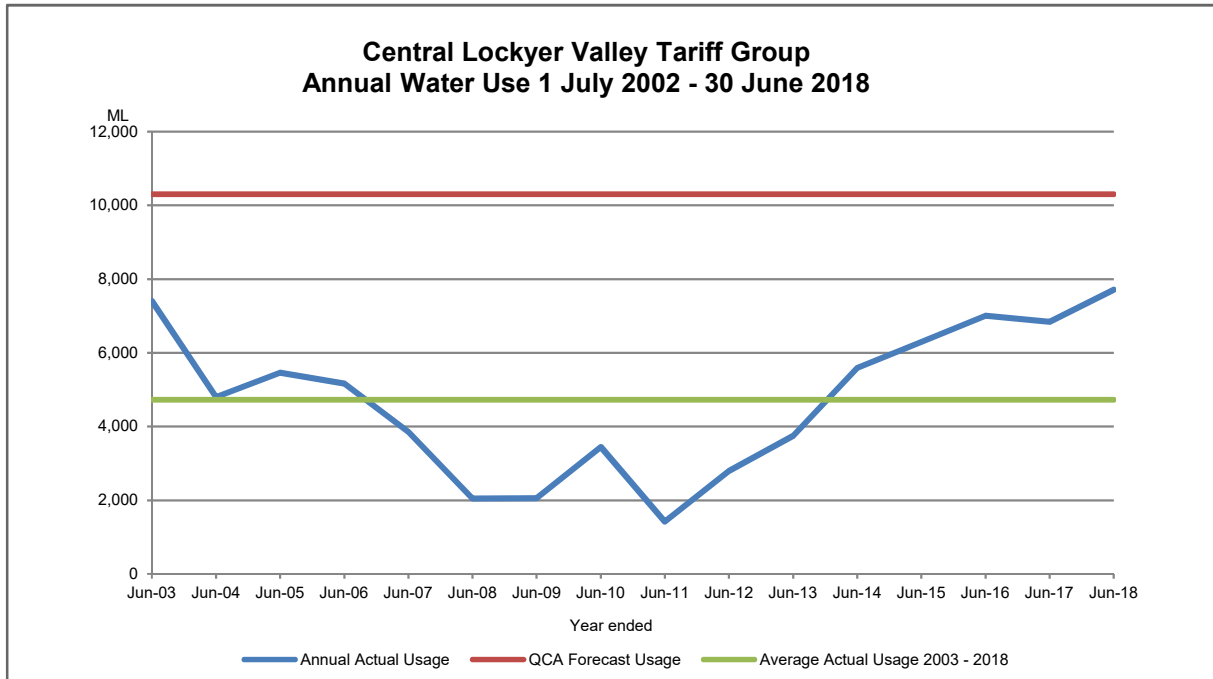
Source: Seqwater (2018)

2.5.2 Water use

Figures 1 and 2 below show the actual water usage per year from the 2002-03 water year to the 2017-18 water year for the Central Lockyer Valley and Morton Vale Pipeline tariff groups respectively.

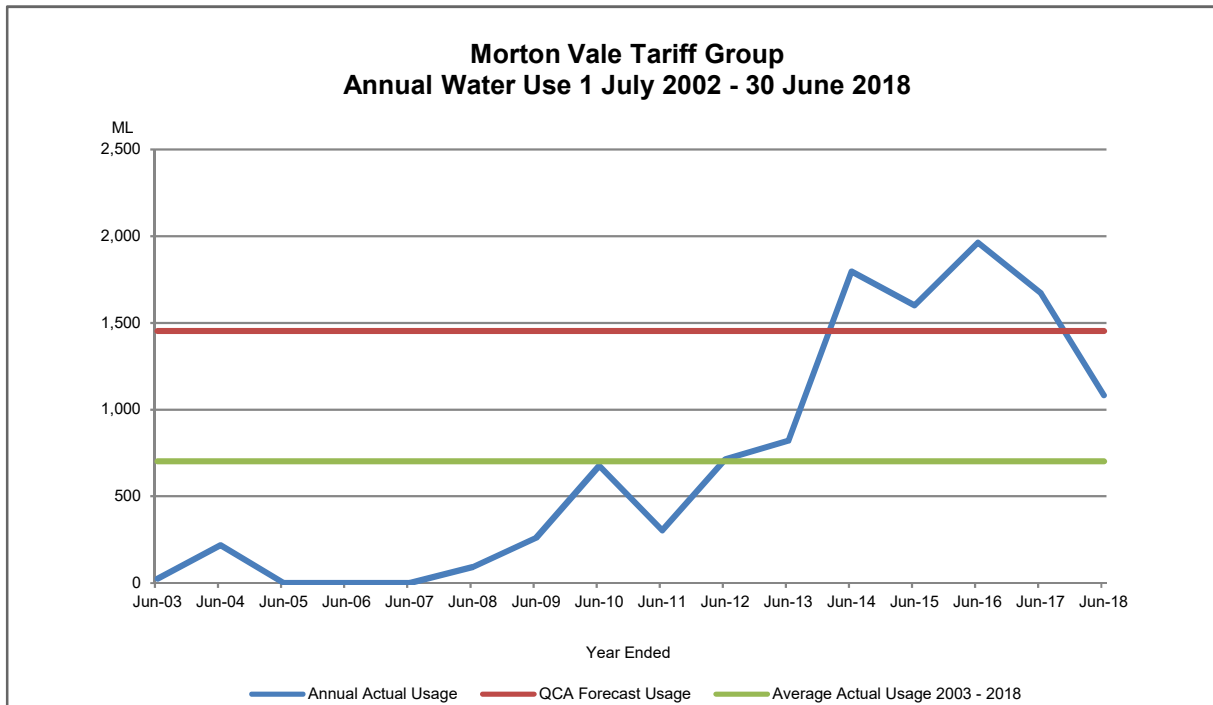
Also shown is the usage assumption for the current approved price path for 2013-17 (now extended to 2019) which is 10,303ML or 81% of the nominal volume for Central Lockyer Valley tariff group and 1,453ML or 42% for Morton Vale Pipeline tariff group. The current usage assumptions have been extrapolated to prior years for comparison purposes only.

Figure 1: Central Lockyer Valley annual water usage for years ending 30 June 2003 to 30 June 2018



Source: Seqwater (2018)

Figure 2: Morton Vale Pipeline annual water usage for years ending 30 June 2003 to 30 June 2018



Source: Seqwater (2018)

3. Irrigation Customer Consultation

Seqwater is committed to customer engagement as required under its Statement of Obligations. Annual Customer engagement includes customer forums and web-based information. Attendance at forums is open to all irrigation customers of the Scheme and other stakeholders. All customer or stakeholder submissions in relation to the annual NSPs will be published on Seqwater's website along with Seqwater's responses and decisions.

In preparation for this price review, Seqwater undertook additional customer engagement to gain feedback for its submission to QCA. This included establishing customer reference groups and expanding the content for the annual forum.

A customer reference group was established for this scheme combined with the Lower Lockyer which originally included three members. This group was not formally elected by customers and was not a decision-making group. Rather the members provided a small reference group with whom we could share matters of detail and seek feedback for how to most appropriately share information with the wider scheme at the forums.

The annual forum was held this year in September 2018. All customers were invited to attend and 13 customers attended.

After the forums were held, additional members showed interest to join the reference group and we held an additional reference group meeting separately with Morton Vale Pipeline customers.

Customers were also invited to complete a survey to provide feedback to Seqwater either online or at the forums.

3.1 Reference group feedback

The combined Lockyer reference group met on three occasions (18 April 2018, 22 August 2018 and 19 October 2018) with one separate meeting with Morton Vale Pipeline customer reference group (16 October 2018).

The key feedback provided by the reference group included:

- Reliability of these schemes remains the key issue for customers in this scheme – customers noted these schemes only supply the water demand 11% of the time.
- Irrigators are seeking Part A relief during drought times (particularly Morton Vale Pipeline customers who currently face fixed charges) – we note this issue has been raised with their Local Member and is a policy decision for Government.
- Customers have raised issues regarding the water planning process underway with DNRME
- The forecast inflation measure of 2.5% was questioned by customers. Customers are not able to get inflation increases on prices for their crops. Crop prices are largely fixed with no inflation as years go by, yet inflation measures built into water pricing which they feel creates further affordability concerns.
- The reference group discussed electricity costs, which led to a discussion regarding a desire for different tariff groups within Central Lockyer for this issue, Seqwater explained

this is not within the scope of this review and would need to be addressed after the water planning process.

- Seqwater understands Lockyer irrigation customers will be providing submissions regarding the issues they would like investigated regarding the performance and affordability of the schemes. Seqwater supports these issues being investigated either by QCA or Government.

3.2 Customer forum feedback

Seqwater presented to the Central Lockyer and Morton Vale Pipeline irrigators at the forum including an annual update on operations and renewals activities, then provided more detail regarding the cost position and pricing proposals for the upcoming price review. These messages were consistently provided to each scheme in the same format.

Discussion at the forum was dominated by discussions of the poor performance of the scheme. In particular, with the current drought conditions, there was concern over paying fixed charges when no water is available to take. There were also concerns raised regarding the current water planning process underway by DNRME.

There were several suggestions made by the irrigators to improve the operation of the scheme including using the Morton Vale pipeline to recharge part of the scheme to reduce the need to pump for recharge. This would require some capital works which Seqwater will investigate further. Similarly, an improvement for the first lateral pipeline (MV1) off the Morton Vale pipeline would allow these customers to continue to access water when the dam levels fall. These suggestions will be further investigated by Seqwater.

Irrigators noted that the time to fill Lake Clarendon is critical to their service. The time is currently 90 days and the tasks to ensure this process runs smoothly were noted as the most important for the customers.

Customers in this scheme did raise whether 30-year planning for renewals was too far ahead given uncertainty. This was supported by the discussion regarding the poor performance of the scheme.

There were also questions raised regarding the Morton Vale contract which Seqwater tried to explain. The contract includes both the regulated charges which are set by the Ministers via the Rural Pricing Direction Notice issued under the *Water Act 2000*, and also includes a capital charge which was for the recovery of investment in the pipeline at the time of construction. Seqwater has not been charging the capital charge under the contract and has only been charging the regulated charges.

Customers raised concerns regarding meter replacement costs. Seqwater has undertaken further work to reduce meter replacement costs compared to the forecasts shown at the forums.

Irrigators also raised concern with the application of 2.5% as the measure used for inflation both in the current price path and Seqwater's forecasts. Particularly, as actual CPI has been less than this rate in recent years. Seqwater noted this was the measure used by the QCA at the last review and has continued to use this on that basis. Seqwater noted this measure may be reviewed by the QCA.

Customers did not indicate support for Seqwater’s proposal given their concerns regarding the performance of the scheme, and issues with the current planning process underway by DNRME. However, there was understanding that Seqwater was doing its best within constraints. Customers supported the long-term water usage volumes. Customers were appreciative of the opportunity to talk with Seqwater and raise their concerns.

Seqwater understands the Lockyer customers will prepare a submission on their concerns. Seqwater supports these issues being reviewed by either QCA or Government.

3.3 Survey results

No customers in this scheme responded to Seqwater’s survey.

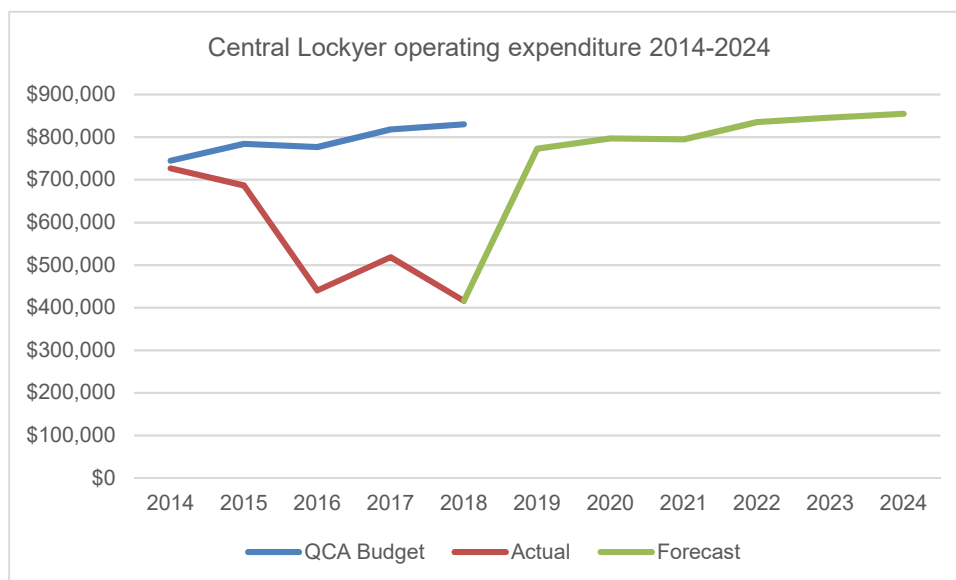
4. Financial Performance

4.1 Operating expenditure

4.1.1 Overview

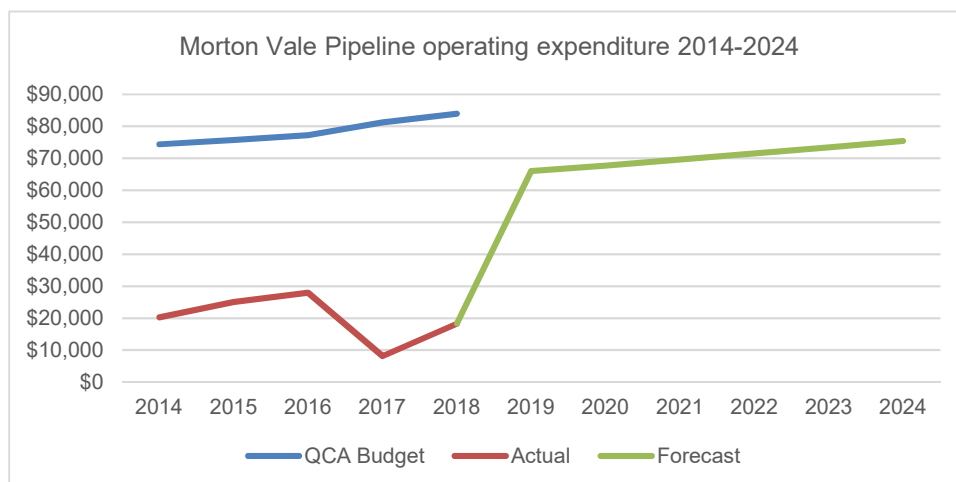
Over the past five years, Seqwater has spent 29% less than the QCA’s operational expenditure allowance in the Central Lockyer scheme. This significant cost reduction was primarily due to lower electricity and repairs & maintenance costs than the QCA allowed.

Figure 3: Operating expenditure (\$ million, nominal) – Central Lockyer



Source: Seqwater (2018)

Figure 4: Operating expenditure (\$ million, nominal) – Morton Vale



Source: Seqwater (2018)

4.1.2 2013-18 extended price path cost/budget comparison

The forecast operating costs set as a budget target by the QCA for the 2013-17 regulatory period extended to 2017-18 and the corresponding actual costs and actual revenues are set out in the tables below. The 2017-18 forecast costs were calculated by applying the QCA's cost escalation rates to the 2016-17 forecast operating costs. The 2017-18 budget was then amended to include additional rates and internal vehicle hire costs incurred by the scheme but not included in the cost submission for the previous price review.

Table 4: Central Lockyer Valley 2013-17 price path budget and actual costs extended to 2017-18 (\$Nominal)

Operating cost category	2013-14		2014-15		2015-16		2016-17		2017-18	
	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$
Direct										
Labour	123,931	151,914	126,438	144,399	128,964	120,521	131,508	118,230	136,242	120,473
Electricity	110,343	34,054	113,101	117,468	115,929	-8,619	118,827	26,197	121,798	1,970
Other	12,770	24,819	13,074	19,415	13,382	19,197	13,695	26,045	25,878	26,224
R&M	157,020	136,098	160,814	84,067	164,660	66,317	168,557	70,819	175,299	103,360
Rates	-	-	-	-	-	-	524	657	673	541
Dam safety	-	-	24,204	-	-	-	24,643	5,763	-	-
Consultation	7,175	-	7,354	-	7,538	-	7,727	-	7,920	-
Total direct	411,239	346,885	444,985	365,349	430,474	197,416	465,480	247,711	467,810	252,568
Indirect										
Operations	169,791	191,340	172,306	172,127	174,815	130,934	177,317	169,422	182,726	111,720
Non-infrastructure	17,295	17,091	17,458	15,055	17,617	13,155	17,774	14,906	18,218	4,178
Insurance	146,289	171,593	149,946	134,056	153,695	99,048	157,537	86,230	161,476	47,655
Total indirect	333,376	380,024	339,709	321,238	346,127	243,137	352,629	270,558	362,420	163,553
Total operating	744,614	726,909	784,694	686,587	776,601	440,553	818,109	518,269	830,230	416,121
Revenue										
Irrigators		128,515		79,940		85,953		93,225		108,071
CSO		477,642		695,835		713,231		731,062		738,016
Total revenue		606,157		775,775		799,184		824,287		846,087

Source: Seqwater (2018)

Variances between budget and actual expenditure have been explained in the annual network service plan for each year. The network service plans are published on Seqwater's website. The material variances relate to:

- Clarendon Dam is an off-stream storage. Electricity costs are incurred when available water is pumped into the dam. As there was less water available than forecast, electricity costs were also lower than forecast.
- Repairs and maintenance costs were less than budget because continuing low water levels has reduced operational wear and tear on the assets thus reducing normal levels of repairs and maintenance.

During the price path, Seqwater found additional costs that were not previously costed to the scheme and consequently, were not included in the cost base submitted to the QCA in the previous price review. In these cases, Seqwater has amended the 2016-17 forecast base costs before applying the QCA's escalation rates through to 2018-19. These adjustments, relating to the costs of vehicles and mobile plant and local council rates (not for Morton Vale Pipeline) were explained in the 2017-18 network service plan published on Seqwater's website.

Table 5: Morton Vale Pipeline 2013-17 price path budget and actual costs extended to 2017-18 (\$Nominal)

Operating cost category	2013-14		2014-15		2015-16		2016-17		2017-18	
	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$
Direct										
Labour	36,756	10,669	37,499	8,009	38,248	13,776	39,003	1,396	40,407	12,044
Electricity	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	1,549	2,586	2,586	2,651	4,727
R&M	10,218	180	10,465	7,438	10,716	-	10,969	-	11,408	-
Rates	-	-	-	-	-	-	-	-	-	-
Dam safety	-	-	-	-	-	-	-	-	-	-
Consultation	-	-	-	-	-	-	-	-	-	-
Total direct	46,974	10,849	47,964	15,447	48,964	15,325	52,558	3,982	54,466	16,771
Indirect										
Operations	22,590	5,984	22,925	7,278	23,259	10,164	23,592	2,724	24,311	745
Non-Infrastructure	2,301	534	2,323	637	2,344	1,021	2,365	240	2,424	28
Insurance	2,498	2,931	2,561	1,657	2,625	1,457	2,690	1,180	2,758	753
Total indirect	27,390	9,449	27,808	9,572	28,227	12,642	28,647	4,144	29,493	1,526
Total operating	74,364	20,298	75,773	25,019	77,191	27,967	81,205	8,126	83,958	18,297
Revenue										
Irrigators		131,998		127,831		129,761		151,091		149,197
CSO		216,429		93,602		88,672		83,415		77,829
Total revenue		348,427		221,433		218,433		234,506		227,026

Source: Seqwater (2018)

In Morton Vale, Seqwater spent approximately 75% of what the QCA allowed. This was a result of:

- Lower labour costs as staff were generally only required for surveillance activities and to read meters.
- Repairs and maintenance were lower, due to the reduced need to undertake these activities than forecast.

4.1.3 2019-20 extended price path budget

The following tables set out the extended budgets for 2018-19 and 2019-20. The 2018-19 and 2019-20 budgets were calculated by applying the QCA's escalation rates to the 2017-18 extended budget amended to include additional costs as explained in section 4.1.1 above.

Table 6: Central Lockyer Valley forecast operating costs 2018-19 and 2019-20 (\$Nominal)

Operating cost category	2018-19 Budget \$	2019-20 Budget \$
Direct		
Labour	141,147	146,228
Electricity	124,843	127,964
Other	26,734	27,619
R&M	182,311	189,604
Rates	690	707
Dam safety	–	26,537
Consultation	8,118	8,321
Total direct	483,842	526,980
Indirect		
Operations	188,299	194,042
Non-infrastructure	18,674	19,141
Insurance	165,513	169,650
Total indirect	372,485	382,833
Total operating	856,327	909,813

Source: Seqwater (2018)

Table 7: Morton Vale Pipeline forecast operating costs 2018-19 and 2019-20 (\$Nominal)

Operating cost category	2018-19 Budget \$	2019-20 Budget \$
Direct		
Labour	41,862	43,369
Electricity	–	–
Other	2,717	2,785
R&M	11,864	12,339
Rates	–	–
Dam safety	–	–
Consultation	–	–
Total direct	56,443	58,492
Indirect		
Operations	25,053	25,817
Non-infrastructure	2,484	2,547
Insurance	2,827	2,897
Total indirect	30,364	31,261
Total operating	86,807	89,753

Source: Seqwater (2018)

4.1.4 2018-19 Base year

Seqwater submitted its entire operating costs program to the QCA for its review, as part of the bulk water price investigation. This was based on a base year of 2018-19. To ensure consistency, we have adopted the QCA's approved 2018-19 costs as the base year to forecast operating costs. This is consistent with the referral notice. Costs associated with the management of recreation activities were removed.

Table 8: 2018-19 Base Year Comparison (\$Nominal) – Central Lockyer

Cost category	QCA extended budget \$	Seqwater Base year \$	Rationale for Base year forecast
Direct			
Labour	141,147	118,517	Labour costs are shared between four schemes (Central Lockyer, Morton Vale, Lower Lockyer and Central Brisbane). The total labour costs are forecast to be \$288,144. 40% of this is allocated to the Central Lockyer based on managerial estimates and work history.
Electricity	124,843	124,843	Electricity costs depend on the amount of water in the dam and the amount of water available to pump in during opportunistic events when the creek is flowing. The QCA considered this in detail in the previous review and we consider it appropriate to maintain this approach.
Other	26,734	40,636	Regulatory water quality testing has not previously been costed to Bill Gunn Dam or to Clarendon Dam – but to Atkinson Dam. Therefore, an additional \$13,633 has been added to account for this cost.
R&M	182,311	166,751	Maintenance activities include de-silting weirs and channels (\$50,000), mowing (\$54,637), fencing (\$25,000)
Rates	551	555	Based on 2017-18 actual plus 2.5%
Dam safety	–	–	None scheduled in this year
Consultation	8,118	–	Seqwater includes consultation costs as an overhead
Insurance	165,513	67,131	Seqwater allocates the overall insurance premium depending on the asset replacement costs.
Total direct	641,099	518,432	
Indirect			
Operations	188,299	233,904	Indirect costs based on the indirect allocators.
Non-infrastructure	18,674	9,331	
Total indirect	215,091	243,236	
Total operating	856,190	761,668	

Source: Seqwater (2018)

Table 9: 2018-19 Base Year Comparison (\$Nominal) – Morton Vale Pipeline

Cost category	QCA extended budget \$	Seqwater Base year \$	Rationale for Base year forecast
Direct			
Labour	41,862	29,629	Labour costs are shared between four schemes (Central Lockyer, Morton Vale, Lower Lockyer and Central Brisbane). The total labour costs are forecast to be \$288,144. 10% of this is allocated to Morton Vale based on managerial experience.
Electricity	–	–	
Other	2,717	9,247	This comprises of a meter (\$1,000), consumables, (\$5,125) and plant a fleet hire (\$3,122) based on recent costs
R&M	11,864	5,000	Repairs and maintenance costs relate to repairing leaks in the seals between the pipes. The cost is very unpredictable. Accordingly, a low estimate has been provided.
Rates	–	–	Based on 2017-18 actual plus 2.5%
Dam safety	–	–	None scheduled in this year
Consultation	–	–	Seqwater includes consultation costs as an overhead
Insurance	2,827	1,061	Seqwater allocates the overall insurance premium proportional to the total asset replacement costs.
Total direct	59,270	44,937	
Indirect			
Operations	25,053	20,274	Indirect costs based on the indirect allocators.
Non-infrastructure	2,484	809	
Total indirect	27,537	21,083	
Total operating	86,807	66,020	

Source: Seqwater (2018)

4.1.5 2021-24 budget forecast

In preparing these operating cost forecasts, Seqwater began with the scheme’s direct operating costs budget for 2018-19 as the base year. Consistent with the referral notice, costs associated with the management of recreation activities were removed.

The scheme’s share of the corporate insurance premium proportional to the value of scheme assets was calculated and included.

The scheme’s share of indirect costs, proportional to the total of scheme direct costs was calculated and added to give the total forecast operating costs in the base year. These costs were then escalated by an allowance for CPI and projected forward to 2020-21 to 2023-24.

The following tables set out the forecast operating costs for the scheme for 2020-21 to 2023-24.

Table 10: Central Lockyer Valley forecast operating costs budget for 2020-21 to 2023-24 (\$Nominal)

Operating cost category	2020-21	2021-22	2022-23	2023-24
	Budget \$	Budget \$	Budget \$	Budget \$
Direct				
Labour	125,734	129,632	133,405	137,287
Electricity	113,188	117,376	127,987	127,411
Repairs & Maintenance	175,141	179,677	184,295	189,031
Other	42,631	43,715	44,822	45,957
Local government rates	582	596	611	626
Dam safety inspection	8,307	26,857	8,727	0
Insurance	70,357	72,116	73,919	75,767
Total direct	535,941	569,969	573,766	576,079
Indirect				
Operations	248,891	255,113	261,491	268,028
Non-infrastructure	9,929	10,177	10,432	10,693
Total indirect	258,820	265,291	271,923	278,721
Total operating	794,761	835,260	845,689	854,800

Source: Seqwater (2018)

Table 11: Morton Vale Pipeline forecast operating costs budget for 2020-21 to 2023-24 (\$Nominal)

Operating cost category	2020-21	2021-22	2022-23	2023-24
	Budget \$	Budget \$	Budget \$	Budget \$
Direct				
Labour	31,434	32,408	33,351	34,322
Electricity	–	–	–	–
Repairs & Maintenance	5,252	5,388	5,526	5,668
Other	9,692	9,934	10,183	10,437
Local government rates	–	–	–	–
Dam safety inspection	–	–	–	–
Insurance	1,112	1,139	1,168	1,197
Total direct	47,489	48,869	50,228	51,624
Indirect				
Operations	21,249	21,780	22,325	22,883
Non-infrastructure	848	869	891	913
Total indirect	22,096	22,649	23,215	23,795
Total operating	69,585	71,518	73,443	75,419

Source: Seqwater (2018)

4.2 Renewals

4.2.1 Asset Restoration Reserve

In September 2017, Seqwater engaged Indec Consulting to undertake an independent review of the Asset Restoration Reserves (ARR) for each of Seqwater's irrigation schemes. On the recommendation of the consultant, Seqwater has recast the ARR for Central Lockyer and for Morton Vale Pipeline and the updated accounts are presented below.

Table 12: Central Lockyer Valley tariff group ARR 2013-14 to 2019-20 (\$Nominal)

Asset Restoration Reserve	2013-14 Actual (\$)	2014-15 Actual (\$)	2015-16 Actual (\$)	2016-17 Actual (\$)	2017-18 Actual (\$)	2018-19 Estimate (\$)	2019-20 Estimate (\$)
Opening Balance 1 July	226,978	-688,664	-783,968	-823,620	-1,375,576	-1,471,889	-1,785,487
Interest for year*	14,073	-42,697	-48,606	-51,064	-85,286	-91,257	-110,700
Revenue – irrigation	143,504	212,599	213,006	212,882	218,204	223,659	229,250
Expenditure for year - non-metering	-113,496	-153,514	-94,460	-533,103	-41,049	-72,000	-102,000
Expenditure for year - metering	-109,973	-111,692	-109,593	-180,670	-188,183	-374,000	-340,000
Flood costs not claimable	-849,749	–	–	–	–	–	–
Closing Balance 30 June	-688,664	-783,968	-823,620	-1,375,576	-1,471,889	-1,785,487	-2,108,937

Source: Seqwater (2018)

* The interest rate is based on the QCA's recommended weighted average cost of capital (WACC) of 6.2% post-tax nominal.

Table 13: Morton Vale Pipeline tariff group ARR for 2013-14 to 2019-20 (\$Nominal)

Asset Restoration Reserve	2013-14 Actual (\$)	2014-15 Actual (\$)	2015-16 Actual (\$)	2016-17 Actual (\$)	2017-18 Actual (\$)	2018-19 Estimate (\$)	2019-20 Estimate (\$)
Opening Balance 1 July	417,301	473,462	482,158	491,744	502,276	512,963	463,800
Interest for year*	25,873	29,355	29,894	30,488	31,141	31,804	28,756
Revenue for year	30,288	-20,659	-20,307	-19,956	-20,455	-20,966	-21,491
Expenditure for year - non-metering	–	–	–	–	–	–	-288,000
Expenditure for year - metering	–	–	–	–	–	-60,000	-60,000
Closing Balance 30 June	473,462	482,158	491,744	502,276	512,963	463,800	123,065

Source: Seqwater (2018)

* The interest rate is based on the QCA's recommended weighted average cost of capital (WACC) of 6.2% post-tax nominal.

4.2.2 Renewals expenditure

4.2.2.1 2014-18 renewals

The following tables set out the renewals projects that were undertaken from 2013-14 to 2017-18. Total expenditure is shown (not just the amount allocated to irrigators). Actual expenditure is shown against QCA's renewals budgets for the scheme¹.

Table 14: Central Lockyer Valley renewals expenditure compared to budget 2013-14 to 2017-18

2013-14		2014-15		2015-16		2016-17		2017-18	
Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$
241,925	1,073,218	296,402	265,206	371,993	204,053	282,813	713,773	324,310	229,231

Source: Seqwater (2018)

¹ Sourced from the QCA pricing model.

In total, Seqwater spent \$968,039 more than the QCA allowed. However, \$831,293 was spent on uninsured flood events, which reduces the variance to \$136,745 or approximately 9%. Details of the renewals expenditure including explanations of variances from Seqwater's budget are set out in the annual network service plan for each year. The network service plans are published on Seqwater's website.

Table 15: Morton Vale Pipeline renewals expenditure compared to budget 2013-14 to 2017-18

2013-14		2014-15		2015-16		2016-17		2017-18	
Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$	Budget \$	Actual \$
-	-	31,702	-	18,898	-	19,654	-	20,145	-

Source: Seqwater (2018)

In Morton Vale, Seqwater did not undertake any renewals projects. Details of the renewals expenditure including explanations of variances from Seqwater's budget are set out in the annual network service plan for each year. The network service plans are published on Seqwater's website.

4.2.2.2 2019-20 forecast renewals

Forecast renewals expenditure for 2018-19 and 2019-20 is set out in the tables below.

Table 16: Central Lockyer Valley forecast renewals expenditure for 2018-19 and 2019-20 (\$Nominal)

2018-19 renewals budget		2019-20 renewals budget	
Metering \$	Non-metering \$	Metering \$	Non-metering \$
374,000	72,000	340,000	120,000

Source: Seqwater (2018)

Table 17: Morton Vale Pipeline forecast renewals expenditure for 2018-19 and 2019-20 (\$Nominal)

2018-19 renewals budget		2019-20 renewals budget	
Metering \$	Non-metering \$	Metering \$	Non-metering \$
60,000	-	60,000	288,000

Source: Seqwater (2018)

4.2.2.3 2021-24 forecast renewals

Forecast renewals expenditure for the next price path period of 2020-21 to 2023-24 is set out in the tables below.

Table 18: Central Lockyer Valley forecast renewals expenditure for 2020-21 to 2023-24 (\$Nominal)

2020-21		2021-22		2022-23		2023-24	
Metering \$	Non-metering \$	Metering \$	Non-metering \$	Metering \$	Non-metering \$	Metering \$	Non-metering \$
356,341	41,398	365,250	735,871	–	47,899	–	158,575

Source: Seqwater (2018)

Table 19: Morton Vale Pipeline forecast renewals expenditure for 2020-21 to 2023-24

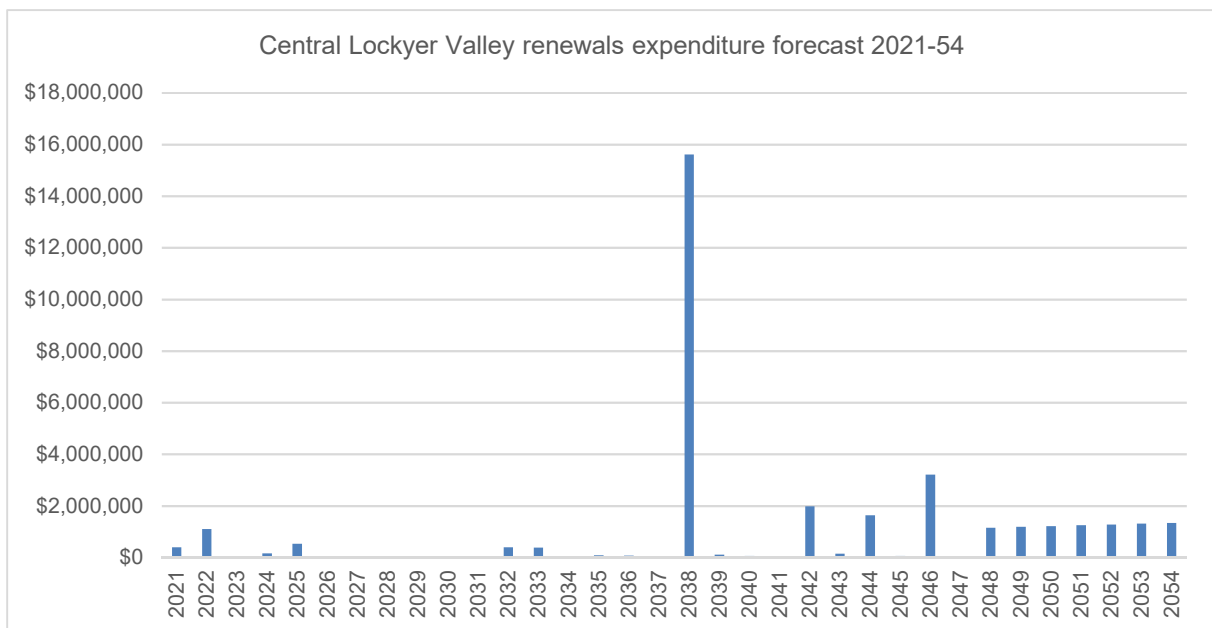
2020-21		2021-22		2022-23		2023-24	
Metering \$	Non-metering \$	Metering \$	Non-metering \$	Metering \$	Non-metering \$	Metering \$	Non-metering \$
–	–	–	–	–	–	–	–

Source: Seqwater (2018)

Seqwater is proposing a 30-year rolling annuity. Each year, the 30 year forecast rolls forward one year so that there is constantly a 30-year forecast of costs in the annuity calculation.

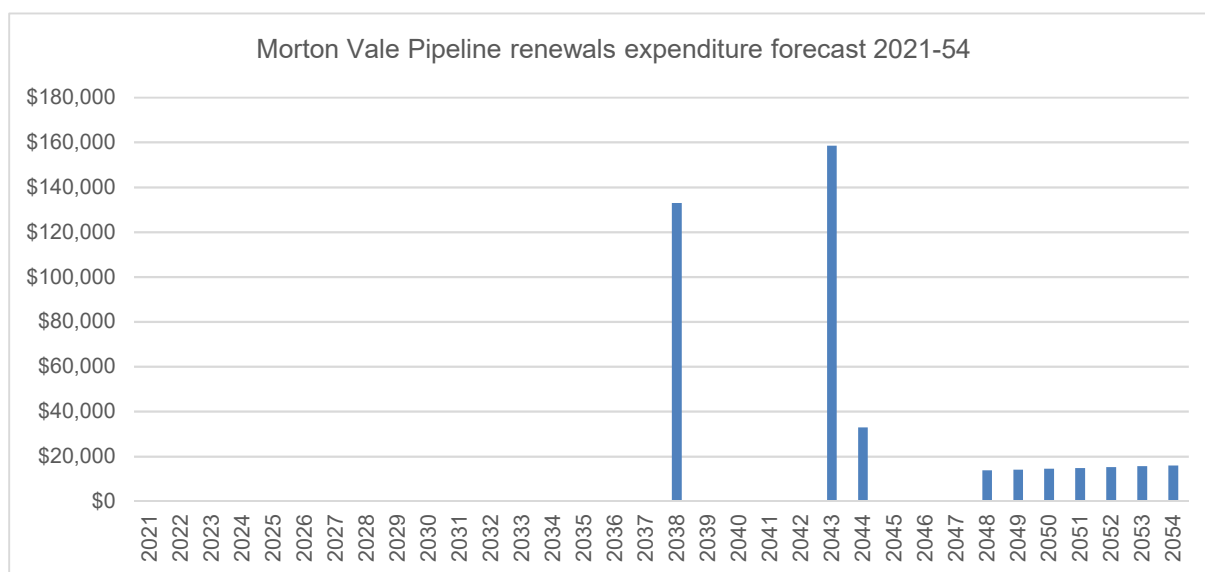
Proposed expenditure over the period 2020-21 to 2053-54 for Central Lockyer Valley and for Morton Vale Pipeline is shown in the charts below.

Figure 5: Central Lockyer Valley forecast renewals expenditure 2021-54



Source: Seqwater (2018)

Figure 6: Morton Vale Pipeline forecast renewals expenditure 2021-54



Source: Seqwater (2018)

5. Total costs and proposed prices

The cost target for irrigation prices includes the costs of operations, administration, maintenance and renewals. Each of these components have been discussed in the sections above. Together they form the cost target for irrigation prices.

The total maximum allowable revenue (MAR) is shown below. As this scheme has only irrigation customers, all these costs relate to irrigation.

Table 20: Central Lockyer Valley total forecast maximum allowable revenue (\$Nominal)

Cost type	2020-21 \$	2021-22 \$	2022-23 \$	2023-24 \$
Direct operating costs	529,979	563,629	567,383	569,671
Indirect operating costs	308,796	316,516	324,429	332,539
Rolling Annuity	652,762	657,432	662,157	666,937
Revenue Offset	-1,420	-1,455	-1,492	-1,529
Efficiency Target	-3,152	-4,860	-6,696	-8,554
Maximum allowable revenue	1,486,965	1,531,262	1,545,782	1,559,065

Source: Seqwater (2018)

Table 21: Morton Vale Pipeline total forecast maximum allowable revenue (\$Nominal)

Cost type	2020-21 \$	2021-22 \$	2022-23 \$	2023-24 \$
Direct operating costs	47,489	48,869	50,228	51,624
Indirect operating costs	33,752	34,595	35,460	36,347
Rolling Annuity	11,560	11,622	11,685	11,747
Revenue Offset	0	0	0	0
Efficiency Target	-278	-429	-588	-754
Maximum allowable revenue	92,522	94,658	96,785	98,963

Source: Seqwater (2018)

Seqwater considers that most of our costs do not vary with water use. Accordingly, we consider it appropriate to recover the majority of costs through the fixed charge. We have calculated the prices needed to recover these costs over the price path period, such that they increase smoothly by 2.5% and are not impacted by one-off costs.

Seqwater's proposed cost reflective prices for Central Lockyer Valley and Morton Vale Pipeline are set out below, these are costs per megalitre, the prices to be recommended by QCA will follow the Government's pricing policies.

Table 22: Central Lockyer Valley proposed cost reflective water prices 2021-24 (Nominal \$/ML)

Tariff	2020-21 (\$)/ML	2021-22 (\$)/ML	2022-23 (\$)/ML	2023-24 (\$)/ML
Cost reflective fixed Part A	88.61	90.82	93.09	95.42
Cost reflective variable Part B	5.77	5.92	6.07	6.22

Source: Seqwater (2018)

Table 23: Morton Vale Pipeline proposed cost reflective water prices 2021-24 (Nominal \$/ML)

Tariff	2020-21 (\$)/ML	2021-22 (\$)/ML	2022-23 (\$)/ML	2023-24 (\$)/ML
Cost reflective fixed Part A	88.61	90.82	93.09	95.42
Cost reflective variable Part B	5.77	5.92	6.07	6.22
Cost reflective fixed Part C	30.39	31.15	31.93	32.73
Cost reflective variable Part D	3.16	3.24	3.32	3.41
Total cost reflective Part A & Part C	118.99	121.97	125.02	128.14
Total cost reflective Part B & Part D	8.94	9.16	9.39	9.63

Source: Seqwater (2018)

Appendix 1: Central Lockyer Valley WSS service targets

These service targets were agreed at the Central Lockyer Valley Water Supply Scheme consultation forum held on 16 June 2014.

Planned shutdowns

Definition: A planned shutdown occurs when customers' supply is interrupted or restricted due to the performance of work by Seqwater that is planned in advance.

In managing planned shutdowns, Seqwater recognises that the following are important service issues:

- That you will be notified about a shutdown so that you can plan ahead;
- The timing of the shutdown should suit most customers;
- The duration of the shutdown should minimise the impact on customers while enabling Seqwater to perform maintenance on the Scheme.

Planned shutdowns – timing target

The timing of all planned shutdowns will be set following consultation with the Irrigation Consultation Forum (for a shutdown affecting a large part of the scheme) or customer groups or individuals (for shutdowns effecting small areas).

Planned shutdowns – duration target

Seqwater will complete all planned shutdowns within the period notified to customers unless later varied by agreement with the groups originally consulted, or unless circumstances arise that are beyond Seqwater's control, such as adverse weather conditions.

Planned shutdowns – notice target

For shutdowns planned to exceed 2 weeks, 8 weeks written notice will be provided to each customer affected by the shutdown. A reminder notice will be sent 2 weeks before the commencement of the shutdown.

For shutdowns planned to exceed 3 days but are less than 2 weeks, at least 2 weeks written notice by letter, fax, telephone, text, email or verbal advice will be provided to each customer affected by the shutdown unless the shutdown is opportunistic in which case less than 2 weeks' notice may be given.

For shutdowns planned to be less than 3 days, at least 5 days' notice will be provided at least verbally to each customer affected.

Each notice will state the start date, and anticipated shutdown duration.

Note: A courtesy reminder may be placed in the local newspaper one week before the planned shutdowns commence.

Unplanned shutdowns

Definition: An unplanned shutdown is an unforeseen or unplanned failure of Seqwater's water delivery infrastructure that stops or restricts the supply of water to a customer for more than 2 hours (including emergency repairs). It does not include events that are beyond Seqwater's control (e.g. power failure, or storm) and does not include interruptions to supply caused by errors in estimating water demand and releases, or the taking of water without authorisation.

Unplanned shutdown – duration targets

- Unplanned Shutdowns will be fixed so that at least partial supply can be resumed to those customers requiring water within 48 hours of Seqwater being notified of the event.
- Some events may interrupt supply greater than the above standard and are excluded from these targets. Seqwater will publish these events from time to time.

Unplanned shutdown – notice target

Seqwater will notify all affected customers requiring water verbally or by email, text, telephone, radio announcement or fax of the likely duration of the interruption to supply within 24 hours of learning of the event, or by the end of the first business day following the event, whichever is the earlier.

Unplanned shutdown – meter repairs target

Faults causing restrictions to supply will be repaired within one working day of Seqwater being notified.

Frequency of interruptions to supply

No customer will experience more than 6 planned or unplanned interruptions per water year (as defined above).

Complaints

Seqwater will provide an initial response to all complaints in writing, including email, or by telephone within 5 working days of receiving a complaint by the customer:

Seqwater will either resolve a customer's complaint, or provide a written response providing reasons why the complaint has not or cannot be resolved within 21 days of receiving the complaint.