

2018/19 to 2023/24 Network Service Plan

Bowen Broken Rivers Bulk Water Service Contract

31 July 2018

Final

Contents

1. Introduction	2
2. Delivering services to customers	3
3. Financial summary – revenue and expenditure	5
4. Cost of delivering services – routine expenditure	7
5. Cost of delivering services – non-routine expenditure	10
6. Annuity balance	12
Appendix 1 : SunWater’s asset management framework	14
Appendix 2 : Total expenditure by expense type	15
Appendix 3 : Routine expenditure	18
Appendix 4 : Non-routine projects for 2018/19 to 2023/24	20

Disclaimer

This Network Service Plan (NSP) has been prepared by SunWater to provide indicative information to our customers for the purpose of consultation. It contains estimates and forecasts which are based upon a number of assumptions. The actual financial performance of the Service Contract to which this NSP relates, and the operations and activities actually undertaken by SunWater during the relevant periods, may vary materially from the information contained in this NSP. This NSP should not be relied upon beyond its purpose as a tool for consultation and you should not rely on the information contained in this NSP in making decisions about your circumstances. SunWater will not be responsible or liable for any loss (including consequential loss), claim or damage (including in tort) that is in any way connected with the use of this NSP or the information contained within it.

Our plan for Bowen Broken Rivers

We’re focused on reliability, efficiency and safety, ensuring through ongoing consultation that the Bowen Broken Rivers Bulk Water Service Contract continues to meet the needs and expectations of our diverse customer base.

In this Network Service Plan (NSP) we outline a range of proposed immediate refurbishment and longer-term improvement projects, and provide a detailed breakdown of anticipated costs for review.

Our focus during the 2018/19 to 2023/24 NSP period will be on continuing to ensure dam safety compliance is maintained and any refurbishment and corrective work that is identified through our regular inspection regime is completed. Major refurbishments at both Eungella Dam and Gattonvale Off-stream Storage are scheduled for 2018/19.

It is important to us that our customers are consulted in making important decisions. We welcome and encourage your feedback on this NSP, and look forward to working with you to deliver the programs of work.



Robert Lewis
General Manager Central

1. Introduction

A Network Service Plan details a range of proposed immediate and longer-term improvement projects, and provides a detailed breakdown of anticipated costs for review.

NSPs are an important part of our asset management framework, feeding into our strategic asset management and corporate strategic plans, as illustrated in **Appendix 1**.

The purpose of this year’s NSP is twofold:

1. to consult with customers on routine and non-routine expenditure throughout the coming financial year
2. to present to customers SunWater’s projected efficient costs for the six year period from 2018/19 to 2023/24.

In particular, the NSP covers:

- past performance for routine and non-routine expenditure
- forecast routine and non-routine expenditure for 2018/19 to 2023/24.

In this NSP, the focus of consultation was the draft budget figures for 2018/19 and thereafter. We have retained prior year actual results in **Appendix 2** for reference, as requested by customers.

Input from customers is a valuable part of SunWater’s planning processes and ensures that we invest in areas which support the services we provide to customers. Figure 1 below shows how SunWater and customers generally work together in relation to NSPs.

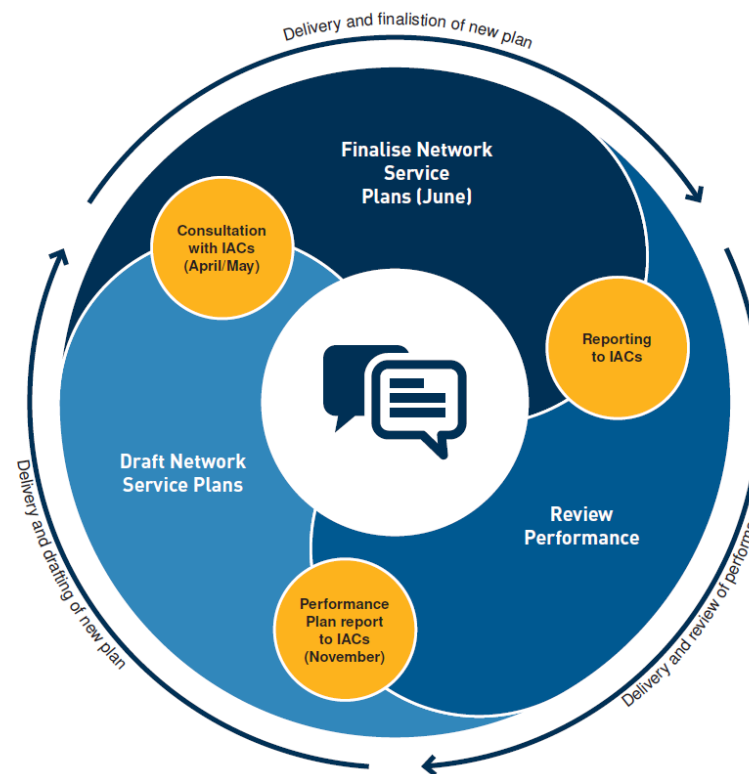
To have your say and shape future NSPs, please contact us via email or post:

Email: nspfeedback@sunwater.com.au

Post: NSP Feedback
PO Box 15536 City East
Brisbane Qld 4002

We consider and respond to all submissions, publishing all responses on our website.

Figure 1: Customer consultation and Network Service Plans



2. Delivering services to customers

At SunWater we are committed to working collaboratively with our customers to deliver value and fit-for-purpose water solutions. SunWater's Customer Service Commitment can be viewed at: www.sunwater.com.au

2.1 Our customers

The primary purpose of this Service Contract is industrial. Water is also supplied to irrigation farms downstream of Bowen River Weir.

The water entitlements for each customer segment are shown in Table 1.

Table 1: Water entitlement and usage data¹

Customer Segment	Total Water Entitlements (ML)	High-A1 Priority Water Entitlements (ML)	High-A2 Priority Water Entitlements (ML)	Medium Priority Water Entitlements (ML)	Water Deliveries 2016/17 (ML)
Irrigation	5676	0	0	5676	476
Urban	0	0	0	0	0
Industrial	6200	0	6200	0	1345
SunWater (excluding distribution loss)	376	162	214	0	0
SunWater distribution loss	494	494	0	0	0
Total	12,746	656	6414	5676	1821

1. Bulk water only.

The 2018/19 charges and cost per megalitre are shown in Table 2. The Bowen Broken Rivers Bulk Water Service Contract is not expected to fully recover irrigation's share of costs.

Table 2: Irrigation charges for 2018/19

Product		2018/19 (\$/ML)	Cost (\$/ML) ^{1,2}	Subsidy (\$/ML)
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon entitlement)	12.20	10.38	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon usage)	6.78	21.33	14.55

1. Costs reflect lower bound cost recovery ie recovery of future replacement and ongoing maintenance and operations. Charges do not allow for any returns on existing assets.
2. The notional High Priority Allocation Charge cost per megalitre is \$52.74.

2.2 Service targets

SunWater and customers have agreed Water Supply Arrangements and Service Targets for the Bowen Broken Rivers Bulk Water Service Contract.

Table 3 below sets out our performance in 2016/17 against the service targets for: issuing notification of planned shutdowns; the duration of unplanned shutdowns; and the frequency of interruptions to supply.

In addition, SunWater will be setting targets for the time it takes to resolve complaints and will be able to report our performance against these targets in future NSPs.

Table 3: Service targets and performance

Service target		Target	Number of exceptions 2016/17
Planned shutdowns – notification	For shutdowns planned to exceed 2 weeks	8 weeks	0
	For shutdowns planned to exceed 3 days	3 weeks	0
	For shutdowns planned to be less than 3 days	5 days	0
Unplanned shutdowns – duration	Unplanned shutdowns will be fixed so that at least partial supply can be resumed	7 days	0
Maximum number of interruptions	Planned or unplanned interruptions per water year	6	0

2.3 Key infrastructure

Table 4 lists the key infrastructure used to deliver bulk water services to our customers in Bowen Broken Rivers.

Table 4: Key infrastructure

Asset	Description	Total storage capacity (ML)
Eungella Dam	Earth and rock fill embankment with an uncontrolled concrete ogee crest spillway that has a concrete lined sideways-chute. Classified as a referable dam under the <i>Water Supply (Safety and Reliability) Act 2008</i> .	112,400
Gattonvale Off-stream Storage	Incorporates a river water harvesting pump station with a nominal capacity of 250 ML/day	5232
Bowen River Weir	Combination of mass concrete, tiered sheet piling and rock gabions and mattresses	943

3. Financial summary – revenue and expenditure

All financial figures in this report are presented in nominal dollars.

A high-level summary of the budgeted financial performance of the Bowen Broken Rivers Bulk Water Service Contract is presented in Table 5.

The revenue SunWater receives from urban and industrial customers is agreed by term contract. The revenue we receive from irrigation customers is determined by the Queensland Government based on recommendations made by the Queensland Competition Authority (QCA) as part of its review of irrigation charges and is intended to allow SunWater to recover its prudent and efficient costs of operating the Service Contract.

SunWater anticipates no material change to revenue for the Bowen Broken Rivers Bulk Water Service Contract in 2018/19.

In 2018/19, SunWater plans to increase routine and non-routine expenditure for the Bowen Broken Rivers Bulk Water Service Contract, with a focus on projects that improve efficiency and performance, and allow us to deliver the best possible service to our customers. This will continue to be our focus throughout the upcoming price path period.

Further detail on the planned spend and annuity revenue is outlined on subsequent pages of this NSP and a further breakdown of expenditure by type can be found in **Appendix 2**.

Table 5: Service contract financial summary¹

Bowen Broken Rivers Service Contract	2014/15 Actual \$'000	2015/16 Actual \$'000	2016/17 Actual \$'000	2017/18 Estimate \$'000	2018/19 Forecast \$'000
Revenue					
Irrigation	71.5	74.3	68.7	83.2	85.3
Community Service Obligation	-	-	-	-	-
Industrial ²	5171.9	5266.2	5170.8	5153.4	5357.0
Urban	-	-	-	-	-
Revenue transfers ³	478.3	503.3	504.2	567.5	571.1
Drainage	-	-	-	-	-
Other	83.3	10.3	8.5	11.0	11.0
Insurance proceeds – flood	-	-	-	-	-
Revenue Total	5805.1	5854.2	5752.2	5815.2	6024.4
Less – Routine expenditure	(1093.4)	(1274.3)	(1317.6)	(1197.8)	(1678.6)
Less – Non-routine expenditure					
Annuity funded	(355.2)	(151.0)	(273.3)	(1253.1)	(1881.5)
Non annuity funded ⁴	(449.0)	(911.4)	-	-	-
Surplus (deficit)	3907.4	3517.5	4161.3	3364.2	2464.3

1. Totals may not add due to rounding.
2. Forecast revenues for industrial customers are based on current contractual arrangements.
3. Revenue transfers represent the cost of bulk water supplies delivered through the Collinsville and Eungella pipelines. The revenue accrues to the pipeline systems before it is transferred to the Bulk Water Service Contract as a contribution to the cost of the bulk water service.
4. This is expenditure which has not been funded by irrigation customers. An example of this in the Bowen Broken Rivers Bulk Water Service Contract is the dam improvement program (DIP).

As part of our commitment to transparency, Figure 2 and Figure 3 show a high-level breakdown of total Service Contract costs. The item 'Annuity Contribution' refers to the annualised renewals annuity component of the Service Contract's total costs.

Figure 2: Breakdown of total service contract costs – 2018/19 forecast

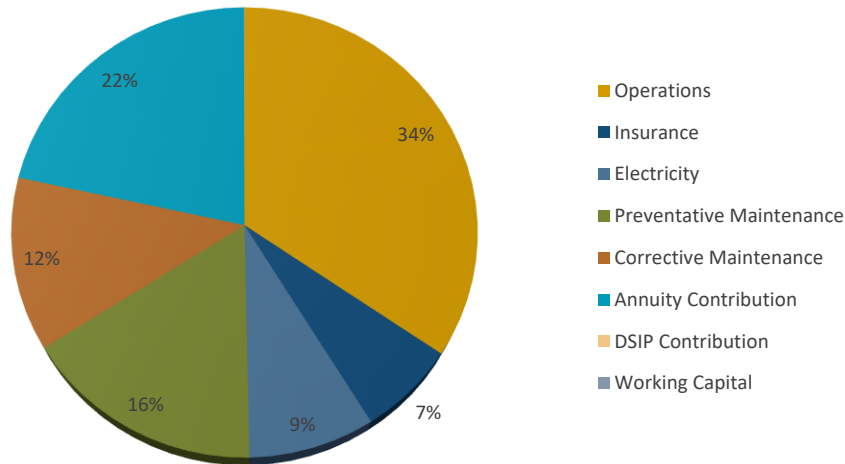
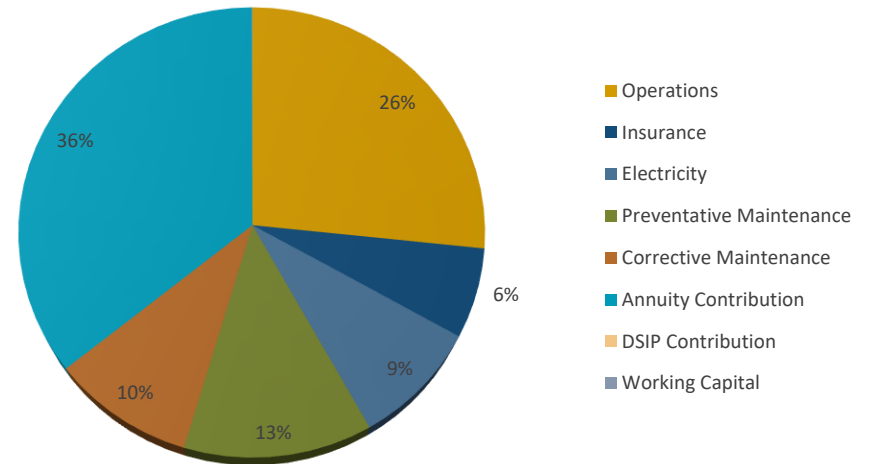


Figure 3: Breakdown of total service contract costs – 2019/20 to 2023/24 forecasts



4. Cost of delivering services – routine expenditure

Routine (or annual) expenditure includes funds for operations activities (operations, electricity and insurance), preventative maintenance and corrective maintenance.

SunWater has budgeted an increase in Bowen Broken Rivers Bulk Water Service Contract's routine operating expenditure in 2018/19 (refer to Table 6). SunWater's proposed budgets for routine operating expenditure for 2019/20 to 2023/24 are also presented in this table.

From 2019/20, SunWater has built into forecast costs an efficiency saving of 0.2 per cent every year (cumulative).

Following consultation with customers on the draft NSPs and a further review of potential savings in non-direct costs, SunWater has included an additional one-off reduction in routine non-direct expenditure from 2019/20 onwards comprising: an 8.00 per cent reduction in corporate support costs, a 1.00 per cent reduction in local area support costs and a 1.85 per cent reduction in indirect costs.

The data presented in Table 6 includes direct expenses and a share of local area support costs, indirect costs and corporate support costs. For a more detailed breakdown and explanation of these costs, refer to **Appendix 2**.

Table 6: Routine operating expenditure^{1,2}

Bowen Broken Rivers Service Contract	2016/17			2017/18 ³		2018/19 ³		2019/20	2020/21	2021/22	2022/23	2023/24
	SunWater Actual \$'000	QCA Recommended \$'000	Variance \$'000	SunWater Estimate \$'000	2016/17 QCA Recommended (adjusted) \$'000	SunWater Forecast \$'000	2016/17 QCA Recommended (adjusted) \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000
Electricity	159.9	154.1	5.8	69.9	157.9	182.3	161.9	205.7	204.7	211.4	216.9	212.8
Insurance	147.0	51.1	95.9	147.0	52.4	143.1	53.7	146.4	149.8	153.2	156.7	160.3
Operations	559.3	480.4	79.0	528.5	492.4	737.8	504.7	602.5	618.3	634.6	651.2	668.3
Operations Total	866.2	685.6	180.6	745.4	702.7	1063.3	720.3	954.6	972.7	999.2	1024.9	1041.5
Preventative maintenance	317.5	205.9	111.6	207.8	211.0	349.5	216.3	286.9	294.2	301.7	309.4	317.3
Corrective maintenance	133.9	230.9	(96.9)	244.6	236.6	265.8	242.5	219.4	224.9	230.5	236.2	242.1
Routine Total	1317.6	1122.3	195.4	1197.8	1150.3	1678.6	1179.1	1460.9	1491.9	1531.4	1570.5	1600.9

1. Totals may not add due to rounding.

2. SunWater's 2019/20 to 2023/24 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.

3. For 2017/18 and 2018/19 SunWater has included and reported against the 2016/17 QCA recommended costs adjusted for inflation which was assumed to be 2.5%.

4.1 Operations

Bowen Broken Rivers Bulk Water Service Contract's total operations budget in 2018/19 is 47.63 per cent above the QCA's recommended costs (adjusted for inflation). This variance is largely driven by higher than projected insurance costs and overheads, which includes the ongoing implementation costs of the Inspector-General Emergency Management (IGEM) Review recommendations. For further detail on what is included in operations expenditure, refer to **Appendix 3**.

Electricity

One of the key challenges for SunWater is managing the cost of electricity. SunWater is therefore targeting several initiatives over the next 24 months to help manage these costs, including:

- annual tariff reviews to match electricity usage with the best electricity tariff
- testing the contestable market for potential savings
- ensuring our assets are operating as efficiently as possible
- operational management of usage and demand patterns to reduce the impact of demand charges.

Insurance

Insurance is one of SunWater's largest expenditure items and these costs have increased significantly in recent years due to multiple flood events in Queensland and global insurable events impacting premiums. Although SunWater is subject to market forces in the pricing of insurance premiums, we have also been actively managing insurance premium costs by reviewing coverage levels and policy specifications including deductibles to ensure that our insurance coverage is appropriate and reflective of the risks faced by our business.

Although insurance premiums are forecast to increase globally in 2018/19, SunWater is forecasting a small reduction in our insurance costs in 2018/19 compared to the 2017/18 budget as a result of the review of our insurance coverage and recent market testing.

4.2 Preventative maintenance

Preventative maintenance underpins the ongoing operational performance and service capacity of Bowen Broken Rivers Bulk Water Service Contract's physical assets.

Preventative maintenance is cyclical in nature with a typical interval of 12 months or less, however, the intervals can be longer. Bowen Broken Rivers Bulk Water Service Contract's preventative maintenance for 2018/19 is budgeted to be 61.59 per cent above with the QCA's recommended costs (adjusted for inflation). This variance is largely driven by higher than projected other costs and contractor costs, and overheads.

For more information on what is included as preventative maintenance, refer to **Appendix 3**.

4.3 Corrective maintenance

Corrective maintenance is identified in several ways including:

- through the performance of preventative maintenance
- operation of assets and equipment
- operational inspections where defects are identified
- through continuous monitoring by control systems, hazard inspections, safety audits and from incident and accident investigation outcomes.

Corrective maintenance includes activities to correct unexpected failures or to return an asset to an acceptable level of performance or condition. While these are difficult to forecast with accuracy, history has shown that such events can be expected and need to be factored into expenditure forecasts. SunWater conducts two types of corrective maintenance: scheduled and emergency.

Corrective maintenance expenditure forecasts include provision for labour, materials and plant hire, but do not include costs of damage arising from major unexpected events, such as floods. These costs are categorised as non-routine corrective maintenance, which is discussed in the following section.

Bowen Broken Rivers Bulk Water Service Contract's corrective maintenance for 2018/19 is budgeted to be broadly in line with the QCA's recommended costs (adjusted for inflation).

Scheduled corrective maintenance

Scheduled corrective maintenance is maintenance that can be planned and scheduled. For a list of what this typically includes, refer to **Appendix 3**. This work is managed on a risk and priority basis with as much forward planning as possible to cater for pricing cycles.

Emergency corrective maintenance

Emergency corrective maintenance (or breakdown maintenance) includes works required to restore system supply and capacity or equipment operation after an unplanned event. It is carried out immediately to restore normal operation or supply to customers or to meet regulatory obligations (eg rectify a safety hazard). For a list of what this typically includes, refer to **Appendix 3**.

5. Cost of delivering services – non-routine expenditure

SunWater’s approach to managing non-routine expenditure is underpinned by the concept of ‘optimised life cycle cost’, which seeks to optimise capital outlays and ongoing maintenance spend.

Our whole-of-life asset replacement and maintenance strategy looks at the risk and condition of each asset and uses this information to estimate the future work required to ensure it will continue to provide the required level of service into the future.

Having up-to-date knowledge of asset conditions is essential to this process. Information from our continuous program of asset inspections and condition assessments feeds into the annual review of the renewals program.

Non-routine expenditure is funded via an annuity. This expenditure could be capital or operating expenditure. The annuity approach acknowledges a long-term view of renewals spend and seeks to reduce the burden on future generations of water users.

The QCA applied a 20 year planning period for the purpose of calculating the 2012/13 to 2016/17 renewals annuity. For 2018/19 to 2023/24, SunWater is proposing to adopt a 30 year planning period. Our forecast annuity funded non-routine expenditure presented in Table 7 and elsewhere in this NSP reflects this proposal.

While the immediate program for the 2018/19 budget is well defined, estimates become more uncertain further into the planning timeline. As such, the program of works is not a specific forecast of when individual projects are expected to be executed, but rather a portfolio-level estimate based on the best-available risk and condition information for the Service Contract as a whole.

At SunWater, we focus on ensuring our assets are maintained to the required standard at the lowest cost. Our review of the renewals profiles also extends to considering the key asset replacement assumptions so that the profile better reflects likely spend each year and moves away from assuming assets are replaced at end of standard life, based on their replacement costs.

Table 7 sets out our non-routine annuity and non-annuity funded expenditure.

Details of the major non-routine projects planned for the period from 2018/19 to 2023/24 are set out in **Appendix 4**.

Table 7: Non-routine expenditure¹

Bowen Broken Rivers Service Contract	2016/17			2017/18 ²		2018/19 ²		2019/20	2020/21	2021/22	2022/23	2023/24
	SunWater Actual \$'000	QCA Recommended \$'000	Variance \$'000	SunWater Estimate \$'000	QCA Forecast \$'000	SunWater Forecast \$'000	QCA Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000
Annuity funded												
Operations	23.1	-	23.1	8.2	-	-	-	-	-	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-
Corrective maintenance (flood)	41.6	-	41.6	-	-	583.7	-	-	-	-	-	-
Renewals	208.5	89.0	119.5	1244.9	41.0	1297.9	58.3	806.8	224.9	183.7	135.5	324.6
Non-routine total	273.3	89.0	184.3	1253.1	41.0	1881.5	58.3	806.8	224.9	183.7	135.5	324.6
Non annuity funded												
Other	-			-		-		-	-	-	-	-

1. Totals may not add due to rounding.

2. The QCA Forecast for 2017/18 and 2018/19 are based upon the modelling undertaken by the QCA as part of the 2012 irrigation pricing review.

6. Annuity balance

Annuities are managed by SunWater on behalf of each Service Contract. They allow for customer charges to reflect a constant amount necessary to recoup the costs of refurbishment/rehabilitation of the assets over a pre-determined period of time. The forecast annuity balances, and the impacts of budgeted non-routine spend, are shown in Table 8 below.

The QCA and SunWater closing balances will differ due to differences in the expenditure profile allowed by the QCA in 2012 and actual expenditure incurred by SunWater between 2012/13 and 2018/19. Contributing factors include: repairing damage following flood events in 2010/11 and 2016/17, interest/financing costs, repairing the embankment at Gattonvale Off-stream Storage following Cyclone Debbie and plugging the base of the intake tower at Eungella Dam.

Table 8: Annuity balance¹

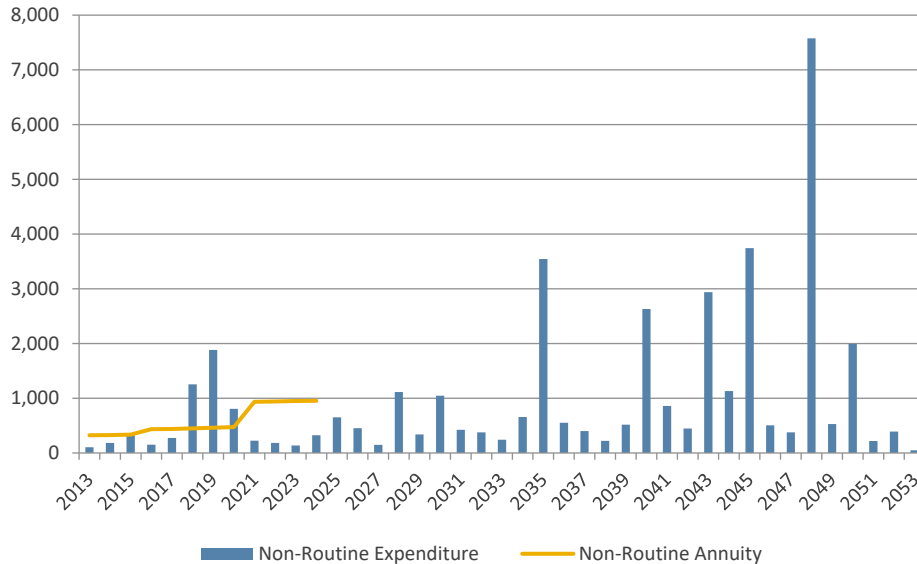
Bowen Broken Rivers Service Contract	2016/17 Actual \$'000	2017/18 Estimate \$'000	2018/19 Forecast \$'000	2019/20 Forecast \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000
Annuity								
Opening balance ²	(2799.3)	(2843.5)	(3860.0)	(5569.8)	(5744.8)	(5366.7)	(4919.3)	(4390.2)
Spend	(273.3)	(1253.1)	(1881.5)	(806.8)	(224.9)	(183.7)	(135.5)	(324.6)
Insurance proceeds receipts (if applicable)								
Prior year	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-
Annuity contribution ³	438.7	449.7	460.9	472.4	935.5	941.5	949.4	953.8
Interest/financing costs	(209.7)	(213.0)	(289.1)	(417.2)	(332.4)	(310.6)	(284.7)	(254.1)
SunWater – Closing Balance	(2843.5)	(3860.0)	(5569.8)	(6321.4)	(5366.7)	(4919.3)	(4390.2)	(4015.0)
QCA – Closing Balance	(1770.3)	(1494.3)	(1203.6)					
Difference	(1073.3)	(2365.7)	(4366.2)					

- Totals may not add due to rounding.
- The difference in the closing balance for 2019/20 and the opening balance for 2020/21 relates primarily to expenditure incurred prior to the start of the 2012 price path. For example, flood repairs associated with an insurance claim that were still outstanding in 2012. These amounts have been carried forward to 2020/21 so that they can be considered as part of the QCA's review of expenditure for the new irrigation price path.
- The annuity contribution is included in the prices paid by customers. It was set by the QCA for 2012/13 to 2016/17 and is rolled forward with CPI for 2017/18, 2018/19 and 2019/20. Thereafter the annuity contribution is based upon SunWater's forecast and will be included as part of SunWater's submission to the QCA for the upcoming price review.

6.1 Overview of annuity-funded, non-routine projects to 2052/53

The estimated renewals expenditure out to 2052/53 is shown in Figure 4 below.

Figure 4: Annuity expenditure to 2052/53 (\$'000)



The renewals annuity presented above is calculated over a 30 year planning period, with projects forecast to occur up to 2052/53 affecting the renewals annuity. The greater the value of the project, the more significant impact upon the renewals annuity.

6.2 Options assessment

SunWater is committed to maintaining assets that are fit for service with the lowest possible lifecycle cost.

In response to a recommendation from the QCA in 2012, SunWater has been preparing options analyses for all material renewals projects within the planning period. SunWater now has the benefit of learnings, having applied this approach for number of years, and has reflected and considered whether it is the most efficient approach or whether there is another way to approach this which provides customers with reassurance that SunWater’s renewals expenditure is prudent and justified.

Following consultation with IACs, SunWater has decided to implement a new procedure for options assessments.

SunWater will continue to prepare an options analysis and supporting investigation where:

- there is no obvious solution
- the current maintenance strategy is changing
- technology has changed significantly, or
- there is a high risk in the project execution.

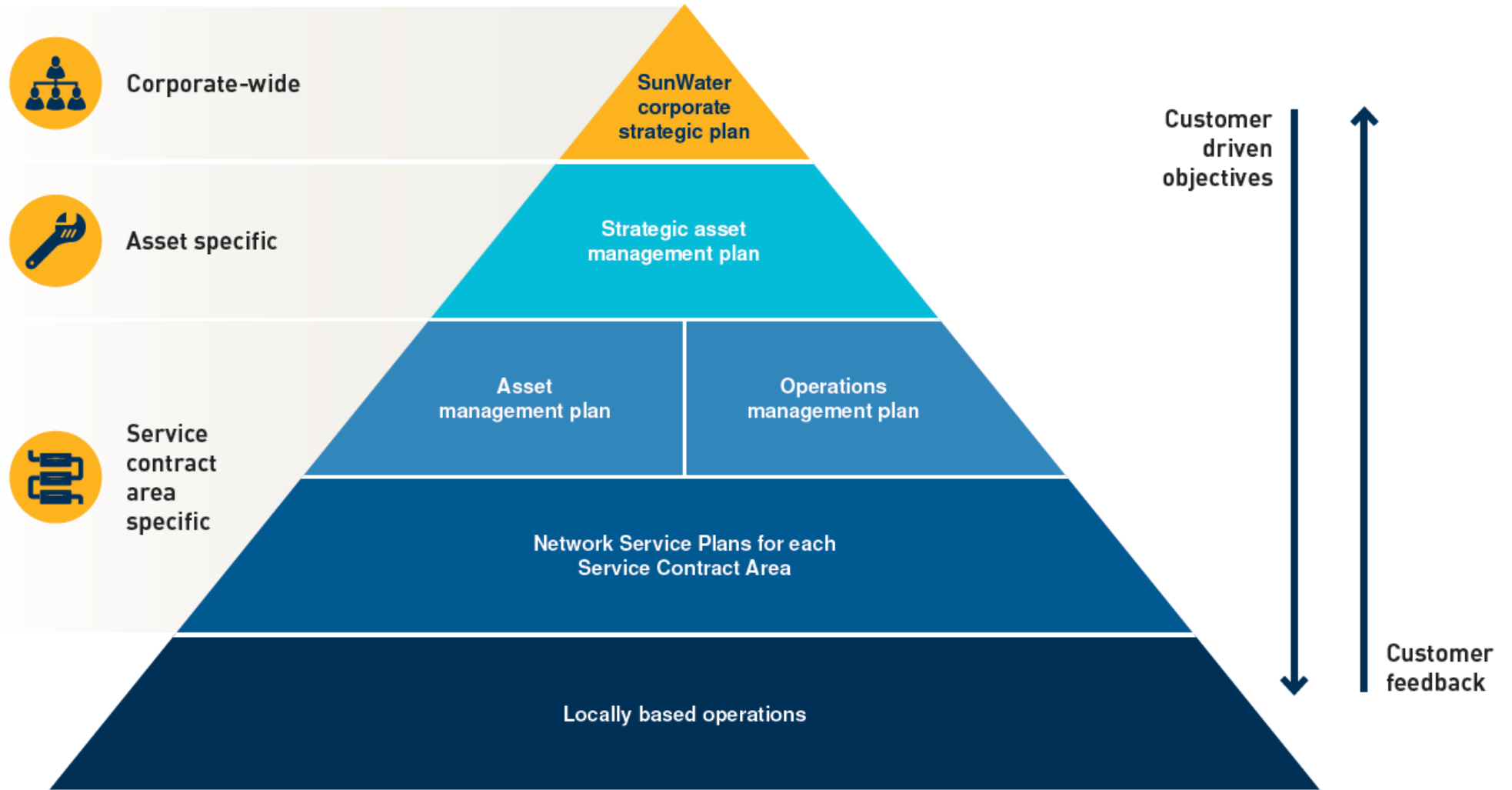
For less complex (more routine) renewals projects with fewer practical outcomes, SunWater will use its engineering knowledge and experience to determine the optimum solution.

This approach takes the emphasis off the value of the renewals project and focuses on solutions and risk. It ensures that SunWater invests resources appropriately in those projects that would benefit from an options analysis.

SunWater will transition to this new approach, given options analyses have already been prepared for the 2018/19 material renewals projects. In the future, the Network Service Plans will identify renewals projects that we expect to prepare an options analysis for under the new approach. Customers will be able to provide feedback through the consultation process.

Appendix 1: SunWater's asset management framework

Figure 5: SunWater's asset management framework



Appendix 2: Total expenditure by expense type

Table 9: Expenditure for activity by type¹

Bowen Broken Rivers Service Contract	2014/15			2015/16			2016/17			2017/18		2018/19		2019/20	2020/21	2021/22	2022/23	2023/24
	SunWater Actual \$'000	QCA Recommended \$'000	Variance \$'000	SunWater Actual \$'000	QCA Recommended \$'000	Variance \$'000	SunWater Actual \$'000	QCA Recommended \$'000	Variance \$'000	SunWater Estimate \$'000	2016/17 QCA Recommended (Adjusted) \$'000	SunWater Forecast \$'000	2016/17 QCA Recommended (Adjusted) \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000
Routine spend																		
Operations																		
Labour	134.5	130.4	4.1	113.2	134.6	(21.4)	128.8	138.9	(10.0)	139.1	142.3	150.6	145.9	126.1	129.7	133.5	137.4	141.4
Contractors	115.9	31.7	84.2	117.8	32.7	85.1	101.4	33.2	68.1	72.0	34.1	65.0	34.9	54.1	55.4	56.7	58.1	59.5
Materials	13.2	6.6	6.6	4.2	6.8	(2.5)	6.4	6.9	(0.4)	9.0	7.0	10.0	7.2	8.3	8.5	8.7	8.9	9.1
Electricity	176.7	133.3	43.3	171.1	144.0	27.1	159.9	154.1	5.8	69.9	157.9	182.3	161.9	205.7	204.7	211.4	216.9	212.8
Insurance	119.4	49.4	70.0	103.4	50.2	53.2	147.0	51.1	95.9	147.0	52.4	143.1	53.7	146.4	149.8	153.2	156.7	160.3
Other	53.5	43.0	10.5	35.9	43.8	(7.9)	45.6	44.5	1.0	42.0	45.6	55.0	46.8	45.7	46.7	47.8	48.9	50.0
Local area support costs	98.7	-	98.7	97.2	-	97.2	110.3	-	110.3	108.5	-	180.4	-	148.7	152.5	156.5	160.6	164.8
Corporate support costs	62.0	134.2	(72.2)	44.7	132.1	(87.4)	51.0	135.0	(84.0)	72.3	138.3	97.9	141.8	73.8	75.7	77.7	79.7	81.8
Indirect costs	102.7	136.3	(33.5)	123.5	129.5	(5.9)	115.9	121.9	(6.0)	85.6	124.9	178.9	128.1	145.9	149.7	153.6	157.6	161.7
Preventative maintenance																		
Labour	32.8	54.6	(21.8)	63.7	56.4	7.3	67.0	58.2	8.9	52.2	59.6	56.7	61.1	47.4	48.8	50.2	51.7	53.2
Contractors	63.7	32.8	30.9	86.4	33.8	52.6	91.6	34.4	57.2	60.0	35.2	60.0	36.1	49.9	51.1	52.3	53.6	54.9
Materials	0.7	6.0	(5.3)	3.5	6.2	(2.7)	1.1	6.3	(5.2)	5.0	6.5	5.0	6.6	4.2	4.2	4.3	4.4	4.5
Other	3.7	3.3	0.4	9.9	3.4	6.5	35.8	3.4	32.3	8.0	3.5	85.0	3.6	70.6	72.2	73.9	75.6	77.3
Local area support costs	23.5	-	23.5	54.6	-	54.6	57.3	-	57.3	40.7	-	72.5	-	59.7	61.3	62.9	64.5	66.2
Corporate support costs	15.1	55.5	(40.5)	22.8	54.6	(31.9)	25.1	55.8	(30.7)	25.7	57.2	36.8	58.7	27.8	28.5	29.2	30.0	30.8
Indirect costs	25.5	52.9	(27.4)	56.1	50.3	5.8	39.6	47.8	(8.1)	16.3	48.9	33.5	50.2	27.3	28.0	28.8	29.5	30.3
Corrective maintenance																		
Labour	4.1	36.0	(31.9)	10.0	37.2	(27.2)	15.2	38.4	(23.2)	10.0	39.3	25.5	40.3	21.3	22.0	22.6	23.3	23.9
Contractors	34.3	89.6	(55.2)	111.3	92.4	18.9	74.4	94.0	(19.6)	188.0	96.3	150.0	98.8	124.8	127.8	130.9	134.0	137.2
Materials	2.5	18.6	(16.0)	2.9	19.2	(16.2)	2.2	19.5	(17.3)	5.0	20.0	10.0	20.5	8.3	8.5	8.7	8.9	9.1
Other	1.5	5.5	(3.9)	15.2	5.6	9.6	11.3	5.7	5.6	16.0	5.9	16.0	6.0	13.3	13.6	13.9	14.2	14.6
Local area support costs	2.9	-	2.9	8.6	-	8.6	13.1	-	13.1	7.8	-	32.6	-	26.9	27.6	28.3	29.1	29.8
Corporate support costs	3.4	41.2	(37.9)	9.3	40.8	(31.6)	8.7	41.7	(33.1)	14.7	42.8	16.6	43.9	12.5	12.8	13.2	13.5	13.9
Indirect costs	3.2	34.9	(31.7)	9.1	33.2	(24.1)	9.0	31.5	(22.5)	3.1	32.3	15.1	33.1	12.3	12.6	12.9	13.3	13.6
Routine total	1093.4	1095.7	(2.3)	1274.3	1106.7	167.6	1317.6	1122.3	195.4	1197.8	1150.3	1678.6	1179.1	1460.9	1491.9	1531.4	1570.5	1600.9
Non-routine spend																		
Labour	80.2	60.2	20.0	26.3	37.7	(11.4)	44.3	15.2	29.2	162.7	7.5	149.3	10.7	107.0	31.2	30.6	22.7	43.1
Contractors	112.1	33.4	78.8	62.8	41.0	21.8	135.4	16.2	119.2	595.7	7.0	945.9	9.9	473.5	134.0	35.7	27.1	140.8
Materials	-	32.8	(32.8)	-	41.0	(41.0)	0.8	16.2	(15.4)	187.0	6.9	420.6	9.9	-	-	32.5	23.8	29.9
Other	7.1	18.2	(11.1)	6.3	22.4	(16.1)	8.6	8.8	(0.2)	21.1	3.8	44.6	5.4	18.4	1.0	17.7	13.0	17.3
Local area support costs	57.9	63.4	(5.5)	22.6	46.7	(24.1)	38.1	18.4	19.7	126.9	8.5	135.8	12.0	60.8	14.4	24.5	18.2	33.8
Corporate support costs	36.2	-	36.2	10.8	-	10.8	19.7	-	19.7	108.9	-	97.1	-	88.8	25.9	18.8	18.8	35.8
Indirect costs	61.7	58.4	3.3	22.1	38.6	(16.6)	26.3	14.2	12.2	50.8	7.4	88.3	10.5	58.4	18.4	17.1	12.1	23.9
Non-routine total	355.2	266.3	89.0	151.0	227.4	(76.4)	273.3	89.0	184.3	1253.1	41.0	1881.5	58.3	806.8	224.9	183.7	135.5	324.6
Total spend	1448.7	1362.0	86.7	1425.3	1334.1	91.2	1590.9	1211.3	379.6	2450.9	1191.4	3560.1	1237.4	2267.8	1716.8	1715.1	1706.1	1925.4

1. Totals may not add due to rounding.

Direct costs

Direct costs are those costs which are able to be directly attributable to either an asset or a service contract eg maintenance or insurance of an asset or the electricity and other operations costs for a service contract.

Local area support costs

Local area support costs are spread across service contracts managed in each locality. They are costs which support local people doing their jobs eg regional accommodation costs, local administration support and training.

In 2018/19 the Bowen Broken Rivers Bulk Water Service Contract is allocated 1.356 per cent of the forecast total local area support costs. Forecast local overheads in 2018/19 are higher than previous years and now more closely reflect actual local overheads in each region rather than local overheads averaged across SunWater.

Indirect costs

Indirect cost pools capture costs such as billing and customer support, irrigation pricing regulation and asset management (including dam safety, asset systems, channels and drainage) that have not been directly charged. They also include flood room operations, the IGEM emergency management program, water planning, hydrographic services, and environmental support costs. Indirect costs are based on a user pays approach eg service contracts without a dam or weir are not apportioned dam safety costs.

In 2018/19 the Bowen Broken Rivers Bulk Water Service Contract is allocated 1.291 per cent of the forecast total indirect costs. Increases in indirect costs allocated to Operations are largely driven by new IGEM costs, which are \$90,000 in 2018/19 for this Service Contract.

Corporate support costs

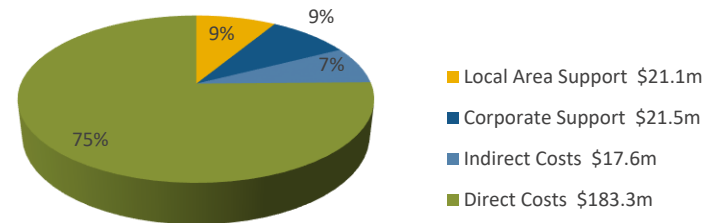
Corporate support costs are more generic than indirect costs and local area support costs, and are spread across all service contacts based on direct labour. They include the cost of human resources and payroll, information and communications technology, corporate communications, legal, property, finance,

and internal audit, plus the costs of the Chief Executive Officer, Chief Financial Officer and the SunWater Board, where these costs are not directly charged to activities within service contracts.

In 2017/18 SunWater completed a corporate restructure which resulted in a net reduction of 20 positions from the business and a reduction in total corporate overhead costs. Despite this, corporate overheads allocated to each service contract have increased since 2017/18. Contributing factors to the increase are: the transfer of St George and potential transfer of Dawson distribution schemes to locally managed entities and less charging of labour to direct costs.

In 2018/19 the Bowen Broken Rivers Bulk Water Service Contract is allocated 0.704 per cent of the forecast total corporate support costs.

Figure 6: Total SunWater cost pools – 2018/19 forecast



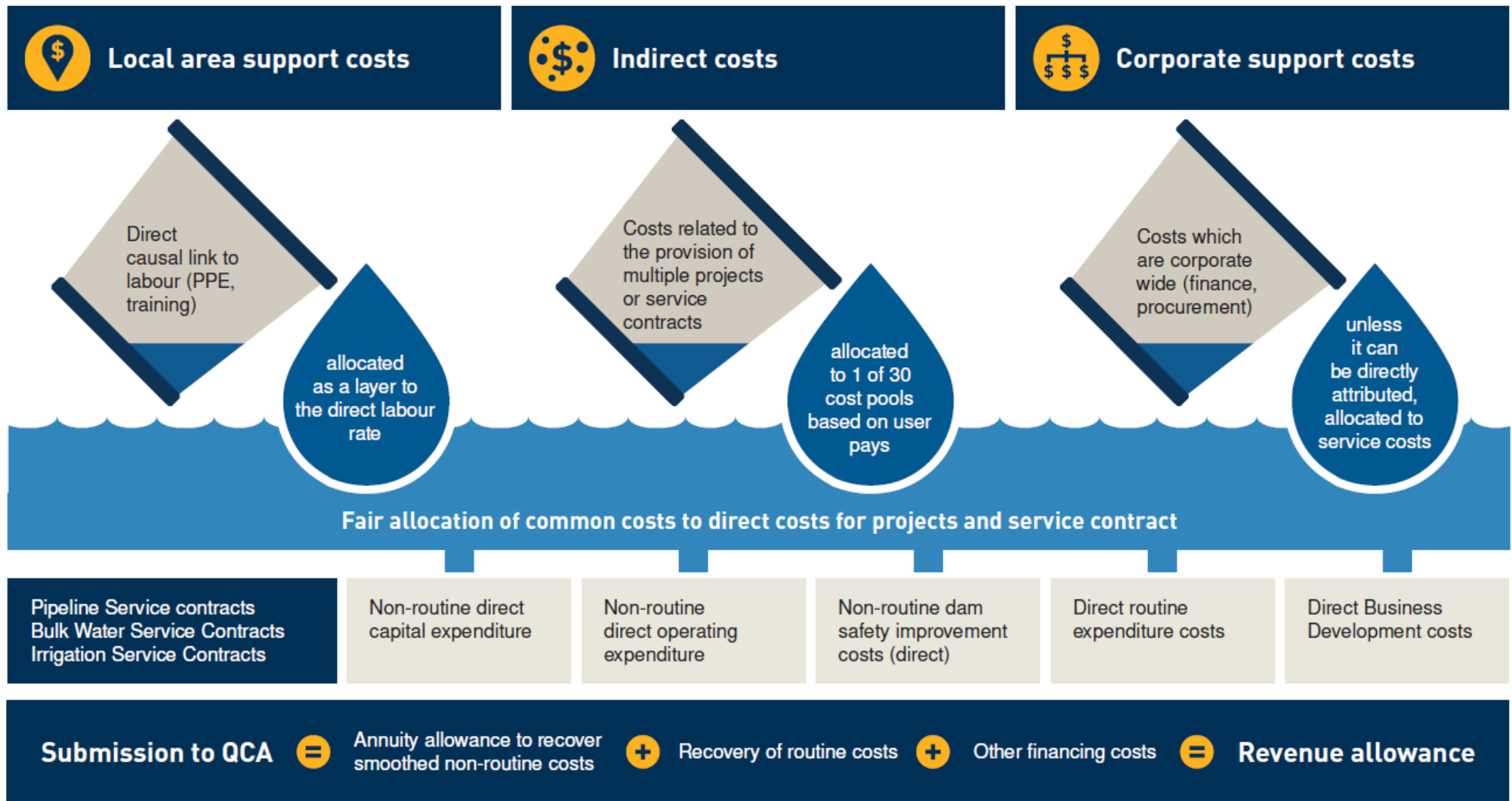
In the 2012 irrigation pricing review, the QCA reviewed and accepted SunWater’s methodology for recovering local area support costs, indirect costs and corporate support costs. In 2018 we reviewed the cost allocation methodology and made changes to increase the transparency of local overhead costs and the allocation of corporate support costs to direct expenses. We also:

- removed the cascading of corporate overheads into indirect costs
- made the local overhead rate specific to each region
- simplified the cost drivers to labour only, removing the 5 per cent on direct cash costs excluding labour and electricity.

Forecast figures contained in this NSP reflect this change in approach.

Figure 7 below illustrates the allocation of costs associated with providing services.

Figure 7: How are SunWater's costs allocated to each service contract?



Appendix 3: Routine expenditure

Operations

Operations expenditure includes day-to-day costs associated with management of the Service Contract, water delivery and meeting compliance obligations. Specific activities include the direct and non-direct costs of:

- scheduling and delivering water, including processing water orders, releasing water, operating pump stations and monitoring customer deliveries
- Emergency Action Plans and seasonal event responses
- meter reading
- administration of water accounts, billing and receipting payments
- customer management, including enquiries, complaints and maintaining the customer service help desk
- Service Contract management, including licences and permits, rates, land management, planning and reporting
- insurance
- monitoring the security of infrastructure and unauthorised access
- managing engagement associated with the Service Contract
- managing enquiries from adjoining landholders and developers that require input from and negotiations with SunWater's property and legal sections
- daily dam inspections and other surveillance activities.

Preventative maintenance

Preventative maintenance for the Bowen Broken Rivers Bulk Water Service Contract includes:

- Condition monitoring — the inspection, testing or measurement of physical assets to report and record condition and performance to determine maintenance requirements. Condition monitoring is carried out on electrical, mechanical and civil assets, including pump stations (pumps, electrical motors, valves, switchboards and associated equipment), pipelines (valves, air valves, scours easements etc.) and other infrastructure.

- Servicing — planned maintenance activities carried out routinely on physical assets including valves, gauging stations, cranes, sump pumps and associated equipment.
- Weed control — management of weeds, including spraying and other activities to control nuisance and noxious weeds.

Scheduled corrective maintenance

Scheduled corrective maintenance varies by asset type and typically includes minor corrective works on:

- Pipelines:
 - repairing pipe breaks, air and scour valves and concrete structures
 - erosion control and repairing rock protection works.
- Service Contract roads:
 - repairing pot holes and grading roads
 - repairing, replacing, and painting guide posts and signs.
- Pump stations:
 - repairing pumps, motors, concrete structures and control buildings
 - de-silting intake structures.
- Storages (balancing storages and reservoirs):
 - repairing control gates, valves and concrete structures
 - repairing walls, embankments and spillways.
- Meters:
 - repairing bulk water meters and customer meters.

Emergency corrective maintenance

Emergency corrective maintenance typically includes restoring systems and equipment after faults or unplanned events, and responding to theft or vandalism associated with Service Contract assets.

Appendix 4: Non-routine projects for 2018/19 to 2023/24

Non-routine projects are asset-related projects required to support service delivery which are undertaken less frequently than annually.

Table 10: Non-routine projects (or planning items) 2018/19 to 2023/24

Year	Project Title	Project Scope	Budget (\$'000)
2018/19	Eungella Dam – Intake tower plugging	The base of the unconstructed intake tower at Eungella Dam is leaking to the extent that the conduit cannot be pumped out fast enough to allow for guard valve refurbishments or internal conduit inspections. This is a continuation of the 2017/18 project to plug the base of the tower.	662
	Gattonvale Off-stream Storage – Embankment refurbishment	The inner embankment of the off-stream storage was badly damaged by Cyclone Debbie. Earthworks and reinstatement of the rock protection will occur to prevent further scour.	584
	Gattonvale pump station – Pump No. 1 refurbishment	Condition assessments indicate that pump No. 1 needs refurbishment to ensure normal operation. The pump will be removed and sent for a full refurbishment.	70
	Bowen River Weir – Comprehensive inspection	SunWater conducts comprehensive inspections on its dams and weirs every five years. This allows us to maintain a current knowledge of the asset condition and risks so projects can be brought in and deferred as needed in order to maintain the asset in serviceable condition.	52
	Gattonvale pump station – Transformer oil replacement	The oil in both transformers has deteriorated to the extent that it needs replacing. The mineral oil will be replaced with an environmentally friendly and fire retarding oil.	76
	Eungella Dam – Public safety storage survey	Conduct a public safety storage survey for Eungella Dam, in light of public safety risks identified at Tinaroo Falls Dam when the storage level was low. This is a public safety initiative.	63
	Other works	There are 6 other non-routine projects for 2018/19.	374
	2018/19 Total		1881
2019/20	Eungella Dam – 20 year dam safety review	This is the commencement of the 20 year safety review of Eungella Dam. The safety review assesses the condition of the dam against current standards and design guidelines before the recommendations are risk assessed for action.	357

Year	Project Title	Project Scope	Budget (\$'000)
	Eungella Dam – Comprehensive inspection	SunWater is required to conduct a 20 year safety review and comprehensive inspection as part of the dam safety condition schedule for the dam. The scope of the safety review and comprehensive inspection will be combined to minimise expenditure. Recommendations from the inspection will be scheduled based on condition and risk.	143
	Eungella Dam – Bulkhead handling	Operators have advised that handling the bulkhead gate in the winch house is a safety hazard as it requires heavy lifting possibly causing a back injury. This project will rectify this hazard.	43
	Eungella Dam – Regulating valve access	There is currently no safe means of accessing the regulating valves at Eungella Dam for periodic inspections and maintenance. Options and designs for overcoming this will be made prior to installation.	106
	Gattonvale Off-stream Storage – Comprehensive inspection	SunWater conducts comprehensive inspections on its dams and storages every five years. This allows us to maintain a current knowledge of the asset condition and risks so projects can be brought in and deferred as needed in order to maintain the asset in serviceable condition.	38
	Other works	There are 8 other non-routine projects for 2019/20.	120
	2019/20 Total		807
2020/21	Eungella Dam – Comprehensive risk assessment	Recommendations from a safety review are risk assessed to determine their priority of completion, scope and costs. The works are then planned to be completed within the nominated timeframe.	164
	Bowen River Weir – Trash screen refurbishment	The trash screens at the weir are corroded and misshapen. They need to be removed and refurbished by repainting and straightening them.	25
	Asset revaluation	SunWater re-values its assets every five years for insurance purposes and to assist with cost estimates for non-routine maintenance projects.	31
	Meter replacements	This is an allowance to replace failed customer meters. If no meters fail the money will remain in the annuity.	5
	Other works	There are no other non-routine projects for 2020/21.	-
	2020/21 Total		225

Year	Project Title	Project Scope	Budget (\$'000)
2021/22	Meter replacements	This an allowance to replace failed customer meters. If no meters fail the money will remain in the annuity.	5
	Eungella Dam – Water treatment plant component replacement	This is an allowance to replace failing components of the treatment plant at the dam.	163
	Eungella Dam – Water treatment plant air conditioner replacement	This is an allowance to replace the air conditioner in the control room at the plant. The controls will overheat and fail if not kept at a safe operating temperature.	4
	Eungella Dam – Failure impact assessment review	The Dam Safety Regulator requires a review of the failure impact assessment of Eungella Dam to determine the population at risk (PAR) if the dam fails. Currently it is a category 1 dam; however, an increase in PAR could move it to a category 2 dam which has greater risks and responsibilities for SunWater.	10
	Other works	There is 1 other non-routine project for 2021/22.	2
	2021/22 Total		184
2022/23	Eungella Dam – Guard valve refurbishment x2	It is likely that both guard valves will be in need of some refurbishment as they have not had any work done for over 10 years due to the inability to plug the conduit. The extent and need will be known once the conduit is plugged and inspected.	120
	Eungella Dam – Staff house air conditioner replacement	The air conditioner in one of the staff houses should be in need of replacement in or around 2022/23, so an allowance has been made for that to be done.	4
	Meter replacements	This an allowance to replace failed customer meters. If no meters fail the money will remain in the annuity.	5
	Other works	There is 1 other non-routine project for 2022/23.	7
	2022/23 Total		136
2023/24	Gattonvale pump station – Pump 2 and 3 refurbishments	This is an allowance to refurbish pumps 2 and 3 at Gattonvale pump station. A condition assessment in 2022/23 will determine if this needs to proceed. It is likely it will occur based on historical maintenance requirements.	155
	Bowen River Weir – Bypass gates 1 and 2 refurbishment	This is an allowance to refurbish bypass gates 1 and 2 at Bowen River Weir. A condition assessment in 2022/23 will determine if this needs to proceed.	97

Year	Project Title	Project Scope	Budget (\$'000)
	River gauging station building replacement	This is an allowance to replace one of the gauging station huts along the river. A condition assessment in 2022/23 will determine if this needs to proceed.	54
	Eungella Dam – Town water supply building refurbishment	This is an allowance to refurbish the town water supply building at Eungella Dam. A condition assessment in 2022/23 will determine if this needs to proceed.	14
	Other works	There is 1 other non-routine project for 2023/24.	5
	2023/24 Total		325



Contact us

To have your say and shape future NSPs, please contact us via email or post:

Email: nspfeedback@sunwater.com.au

Post: NSP Feedback
PO Box 15536 City East
Brisbane Qld 4002

We consider and respond to all submissions, publishing all responses on our website.

Addendum to the 2018/19 to 2023/24 Network Service Plan

**Bowen Broken Rivers Bulk Water
Service Contract**

6 November 2018

Final

Contents

How to read this addendum	1
Table 1: Irrigation charges for 2018/19 – Restatement of Table 2 from the 2019 Network Service Plan	2
Table 2: Routine operating expenditure ¹ – Restatement of Table 6 from the 2019 Network Service Plan	2
Table 3: Dam improvement program	3
Table 4: Annuity balance – Restatement of Table 8 from the 2019 Network Service Plan	4
Table 5: Adjustments to 2020/21 opening annuity balance	4
Table 6: Cost building blocks and notional cost allocations	5
Table 7: Historical actual water usage	6

How to read this addendum

Several changes have been made to our forecast costs since we published our 2019 Network Service Plan for the Bowen Broken Rivers Bulk Water Service Contract in July 2018. We have therefore prepared this addendum to aid our customers' understanding of the changes and to assist the Queensland Competition Authority (QCA) in their review.

We have:

- updated for 2017/18 actual expenditure. This has positively impacted the annuity balances for this service contract going forward, when compared to the 2019 Network Service Plan.
- revised market parameters, such as escalators and the Weighted Average Cost of Capital, for the latest available information
- used the scheme's 15-year average water usage over the 2002/03 to 2016/17 period to determine the Part B cost per megalitre
- added a table showing forecast dam improvement program (DIP) expenditure for this service contract.

Note:

- All financial figures contained in this addendum are nominal dollars.
- Totals may not add due to rounding.

Table 1: Irrigation charges for 2018/19 – Restatement of Table 2 from the 2019 Network Service Plan

Product		2018/19 (\$/ML)	Cost (\$/ML) ^{1,2}	Subsidy (\$/ML)
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon entitlement)	12.20	10.37	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon usage)	6.78	21.13	14.35

1. Costs reflect lower bound cost recovery, ie recovery of future replacement and ongoing maintenance and operations. Charges do not allow for any returns on existing assets.
2. The notional High Priority Allocation Charge cost per megalitre is \$53.05.

Table 2: Routine operating expenditure¹ – Restatement of Table 6 from the 2019 Network Service Plan

	2016/17			2017/18 ²		2018/19 ²		2019/20	2020/21	2021/22	2022/23	2023/24
	SunWater Actual \$'000	QCA Recommended \$'000	Variance \$'000	SunWater Actual \$'000	2016/17 QCA Recommended (adjusted) \$'000	SunWater Forecast \$'000	2016/17 QCA Recommended (adjusted) \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000	SunWater Forecast \$'000
Electricity	159.9	154.1	5.8	107.7	157.9	182.3	161.9	193.9	189.5	196.1	213.5	212.1
Insurance	147.0	51.1	95.9	136.6	52.4	143.1	53.7	146.0	149.4	152.8	156.4	159.9
Operations	559.3	480.4	79.0	743.7	492.4	737.8	504.7	601.2	616.6	632.4	648.3	664.7
Operations Total	866.2	685.6	180.6	988.0	702.7	1063.3	720.3	941.2	955.5	981.4	1018.2	1036.7
Preventative maintenance	317.5	205.9	111.6	276.4	211.0	349.5	216.3	286.2	293.4	300.7	308.1	315.7
Corrective maintenance	133.9	230.9	(96.9)	154.2	236.6	265.8	242.5	218.9	224.2	229.8	235.3	241.1
Routine Total	1317.6	1122.3	195.4	1418.6	1150.3	1678.6	1179.1	1446.3	1473.1	1511.9	1561.6	1593.5

1. SunWater's 2019/20 to 2023/24 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.
2. For 2017/18 and 2018/19 SunWater has included and reported against the 2016/17 QCA recommended costs adjusted for inflation which was assumed to be 2.5%.

Table 3: Dam improvement program

	2019/20 Forecast \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000
DIP Expenditure ¹	-	-	107.4	275.3	677.2
DIP Contribution ²	-	-	2.2	10.0	29.5
DIP Contribution - % of Total Costs	0.0%	0.0%	0.1%	0.4%	1.2%

1. DIP expenditure reflects 50 per cent of the current cost estimate, as a detailed business case has not yet been completed.
2. The DIP contribution is based on an “as incurred” approach for transparency of potential cost impacts on customers to 2023/24.

Table 4: Annuity balance – Restatement of Table 8 from the 2019 Network Service Plan

	2016/17 Actual \$'000	2017/18 Actual \$'000	2018/19 Forecast \$'000	2019/20 Forecast \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000
Annuity								
Opening balance ¹	(2799.3)	(2843.5)	(3324.3)	(4993.9)	(5127.0)	(4748.8)	(4301.1)	(3771.3)
Spend	(273.3)	(717.4)	(1881.5)	(806.8)	(224.9)	(183.7)	(135.5)	(324.6)
Insurance proceeds receipts (if applicable)								
Prior year	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-
Annuity contribution ²	438.7	449.7	460.9	471.3	902.9	909.0	916.8	921.3
Interest/financing costs	(209.7)	(213.0)	(249.0)	(374.0)	(299.8)	(277.7)	(251.5)	(220.5)
SunWater – Closing balance	(2843.5)	(3324.3)	(4993.9)	(5703.6)	(4748.8)	(4301.1)	(3771.3)	(3395.1)
QCA – Closing balance	(1770.3)	(1494.3)	(1203.6)					
Difference	(1073.3)	(1830.0)	(3790.4)					

1. The difference in the closing balance for 2019/20 and the opening balance for 2020/21 relates primarily to expenditure incurred prior to the start of the 2012 price path. Table 5 provides further details.
2. The annuity contribution is included in the prices paid by customers. It was set by the QCA for 2012/13 to 2016/17 and is rolled forward with the Consumer Price Index (CPI) for 2017/18, 2018/19 and 2019/20. Thereafter the annuity contribution is based on SunWater's forecast.

Table 5: Adjustments to 2020/21 opening annuity balance

Adjustment	\$'000
Actual spend adjustment	(23)
Annuity income difference	378
Intersafe project spend adjustment	0
Interest difference	(45)
Alignment to previously reported data	4
Interest	263
Total	577

Table 6: Cost building blocks and notional cost allocations

	2018/19 Forecast \$'000	2019/20 Forecast \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000
Cost building blocks						
Routine costs	1678.6	1446.3	1473.1	1511.9	1561.6	1593.5
Non-routine costs (Annuity contribution)	460.9	471.3	902.9	909.0	916.8	921.3
Dam improvement program ¹	-	-	-	-	-	-
Working capital	1.4	1.3	-	-	-	-
Revenue offsets	-	-	-	-	-	-
Transfers (Distribution losses)	(30.2)	(27.1)	(33.9)	(34.5)	(35.3)	(35.8)
Total costs	2110.7	1891.7	2342.2	2386.4	2443.2	2479.0
Notional cost allocations						
Irrigation customers	105.2	94.6	95.5	98.2	102.4	104.0
Urban/Industrial customers	1964.7	1760.6	2201.0	2241.7	2293.1	2326.7
SunWater	40.8	36.5	45.7	46.5	47.6	48.3
Total costs	2110.7	1891.7	2342.2	2386.4	2443.2	2479.0

1. For the purposes of this table, DIP costs have been excluded.

Table 7: Historical actual water usage

Year	Usage (ML)
2002/03	16,235
2003/04	15,052
2004/05	13,402
2005/06	14,774
2006/07	17,751
2007/08	14,618
2008/09	16,894
2009/10	17,914
2010/11	11,085
2011/12	13,753
2012/13	15,453
2013/14	13,254
2014/15	16,894
2015/16	17,251
2016/17	11,362
15-year average	15,046