

Meeting Minutes

Date:	Tuesday 12 June
Time:	8:30am
Location:	SunWater Office, Chinchilla
Attendees	John Kelly, SunWater Area Manager, Goondiwindi Lisa Welsh, SunWater, Water Pricing Manager, Brisbane John Bender, IAC Chair Ross Uebergang, IAC Member – Proxy for David Uebergang Mark Jenyns, IAC Member

Apologies: David Uebergang, Ian Wolski

Chair: John Bender Minutes: John Kelly

ltem No.	ltem	Presenter
1.	Welcome and Introductions	John Kelly
2.	Apologies	Chair
3.	Review of Previous Minutes	Chair
4.	Business arising from Previous Minutes	Chair
5.	Agenda Items	Chair
6.	Water Storage Update and Announced Allocation	John Kelly
7.	2019 QCA Price Review	Lisa Welsh
8.	Draft 2018/19 Network Service Plan	Lisa Welsh
9.	General Business	All



Agenda Item 1 – Welcome and Introductions

The Chair opened the meeting at 8:30am and welcomed the IAC members and thanked them for their time to attend the meeting.

Agenda Item 2 – Apologies

Ian Wolski and David Uebergang

Agenda Item 3 – Review of Previous Minutes

The meeting minutes from the previous meeting held on 13 February 2018 were reviewed and accepted.

Agenda Item 4 – Business arising from Previous Minutes

General discussion was had on the current storage volume in the weir and the recent rapid fall in water level. SunWater advised the IAC that it had noted a fall in the storage in the last couple of weeks and upon speaking with some customers, SunWater noted that 400-500ML had been pumped from the ponded area by customers and that this, together with a recent release of CSG/allocation to downstream customers was the key reason for the reduction in storage level.

Further discussion was had on siltation in the weir and whether the storage actually holds the volume as per the storage curve. SunWater advised that as part of an R&E project in the 2018-19 financial year looking at developing a Recreational Users Management Plan for the weir, it was intended to undertake some underwater survey to determine the location and extent of submerged obstacles and that this process may also allow for a siltation assessment and subsequent amendments to the storage curve.

Agenda Item 6 – Water Storage Update and Announced Allocations

SunWater advised that Chinchilla Weir was currently storing 5,423ML (55.5%) and that based on the predicted storage level on 1 July 2018, SunWater was predicting the announced allocation would be in the range of 0-10%.

Agenda Item 7 & 8 - 2019 QCA Price Review and Draft 2018/19 Network Service Plan

SunWater confirmed its objectives through the pricing process were to recover its efficient costs, provide transparent consultation with customers and encourage the adoption of a light handed regulatory approach. Further, SunWater confirmed its understanding of its customer objectives, gained through consultation at the last round of IAC meetings, were as follows:

- More cost effective and better value for money services;
- More transparent costs especially corporate costs;
- Continuing improvement of NSPs; and
- Simpler pricing.

SunWater advised that the Referral Notice was still not available however the working assumption is that 31 October 2018 will be the due date for SunWater's submission to the QCA. SunWater advised that it will advise customers when the referral notice is issued. SunWater also noted that the QCA will do some regional consultation sessions during the price review period.



SunWater provided a presentation to the IAC (shown as **Attachment I**) detailing SunWater's total actual and forecast expenditure in terms of direct routine, direct non-routine and indirect costs compared to the QCA allowance since 2012-13 to 2023-24. Points to note include:

- Expenditure slightly above QCA targets in each year generally as a result of increased flood repair works (unpredictable), increasing insurance costs and electricity costs.
- Forecasting a decrease in routine and non-routine direct expenditure broadly related to St George and Dawson transfer to Local Managed Entities (LME).
- Increases in non-directs including:
 - more accurate attribution of local overhead rates rather than an average rate across the state,
 - increases in indirects due to IGEM (Inspector General Emergency Management) recommendations (downstream notifications, better information, improved hydrology and modelling, community education, emergency preparedness)
 - increases in corporate overheads partly to do with corporate systems upgrades.
- In total, SunWater spent \$95m over the QCA targets, noting that \$38m of this was corrective maintenance i.e. repairing flood damage.
- Electricity and insurance costs accounted for \$29m.
- \$20m renewals contractors which is about what the QCA removed from SunWater's original forecast.

SunWater advised customers that it was seeking to change as little as possible and use as much from the recent QCA report on SEQWater to facilitate a low-cost price review.

- 1. Using 2018/19 budget for the starting point for routine costs
- 2. 0.2% annual cumulative productivity savings
- 3. Electricity based on AEMO assumptions from SEQWater's
- 4. WACC Weighted Average Cost of Capital (WACC) is used to discount the annuity payment stream and it is applied to annuity balances either as an interest cost or payment. Reduced from 7.49% to 5.9% and will be checked by QTC
- 5. Annuity SunWater have included a 30 year annuity (increased from 20 years), more in line with other long-life infrastructure businesses.
- 6. DSIP (Dam Safety Improvement Project) where relevant. 50% of the current costs if no detailed business case yet completed.
- 7. Recreation area costs excluded from 2020/21
- 8. Fixed/variable costs: we have simplified this and standardised across all service contracts.
 - a. Insurance and all non-routine costs are 100% fixed.
 - b. Electricity is allocated 100% to variable.
 - c. 10% of operations, revenue offsets and routine maintenance to variable.

SunWater noted that actual prices will be an output of the QCA review and the referral notice.

SunWater provided the IAC with further scheme specific detail in relation to forecast revenues and cost allocations from 2018-19 to 2023/24 including a graph comparing indicative medium priority prices to cost reflective prices.

SunWater provided the IAC members with a copy of the Draft NSP (Attachment II) for the scheme and encouraged members to provide any comments. SunWater advised that changes to the NSP's were made in response to feedback from customers which included:

- Keep the NSP's short
- Split out non-direct costs



- Include DSIP/cost table
- Provide 5 years of expenditure forecasts
- Provide cost/price reflectivity

SunWater advised the IAC that there may be some possible changes in the final NSP's as a result of:

- a. Review of corporate costs (review step changes down to overheads, allocation of labour to direct)
- b. Final update of renewals projects (minimal)
- c. Updated insurance costs based on market outcome
- d. Step change down in Brisbane rental costs
- e. QTC minor corrections to WACC.
- f. Potential adjustments to inefficient projects.
- g. Working with QCA to confirm entitlement and usage data for prices.

SunWater's submission may also change compared to the NSP, because of delays in the referral notice, as a result of:

- 2017/18 actuals will affect annuity balances
- WACC market rates
- Ongoing review of renewals
- QCA costs if available
- The QCA review itself will impact on SunWater allowed costs and therefore prices.

The IAC advised SunWater that the structure of the total price was an issue (Part A Vs Part B) and that a higher Part A results in significant charges at times when water is not available and the announced allocation is low. The IAC advised they don't mind paying for water if the water is there to take but don't want to pay for water they don't have access too. Discussion progressed around having a higher Part B and a lower Part A given the scheme was recovering above lower bound costs now. SunWater advised the IAC that this concept had been raised with government and that little support was received for this concept.

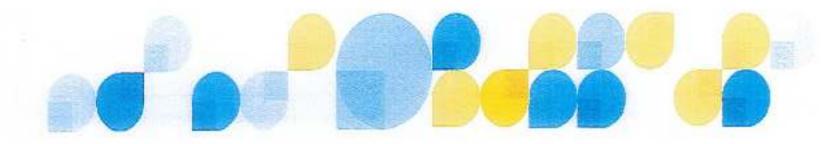
Further discussion was had on providing relief during drought years given the customers in the scheme were already paying well above lower bound cost recovery. The concept of providing relief during drought years and making up the difference in future years was discussed. SunWater advised it would take this concept back for consideration.

Post meeting note: SunWater has considered the concept of price relief in drought years and making up the difference in future years and notes that Drought policy and any associated price relief is a matter for Government's consideration.

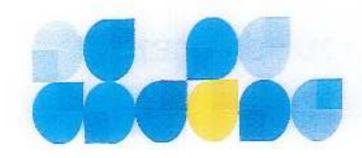
Agenda Item 9 – General Business

No items of general business were raised.

Meeting Closed: 9:30am

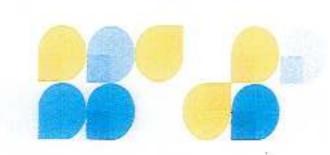


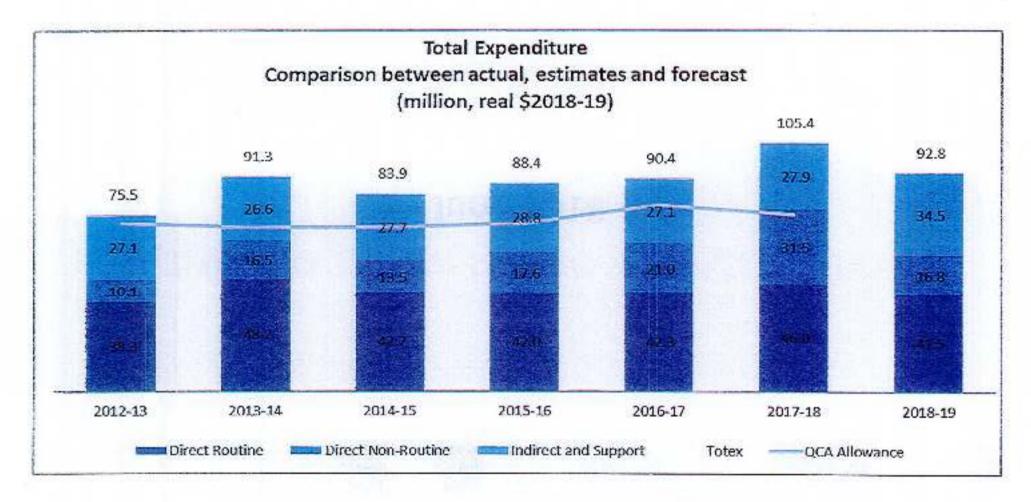
Supporting information to Draft NSPs June 2018



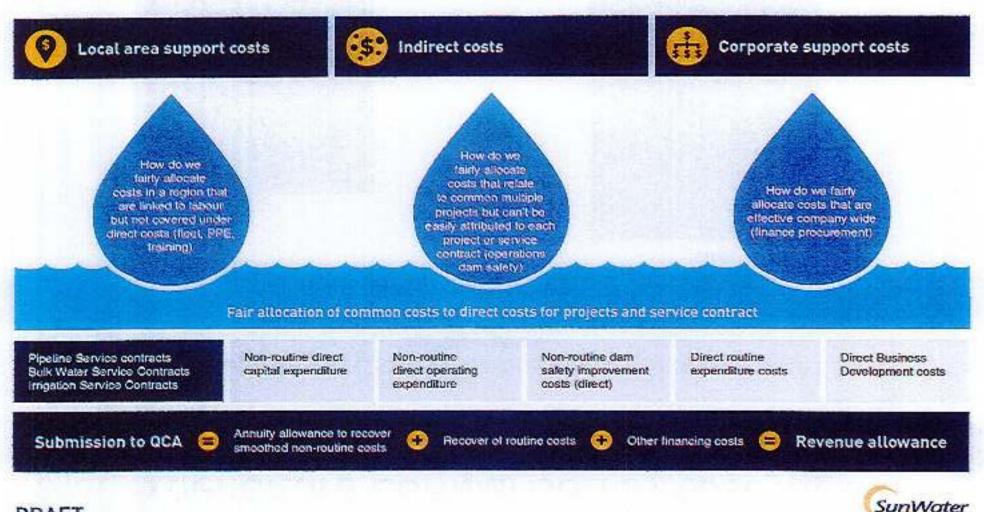
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Total Expenditure Performance





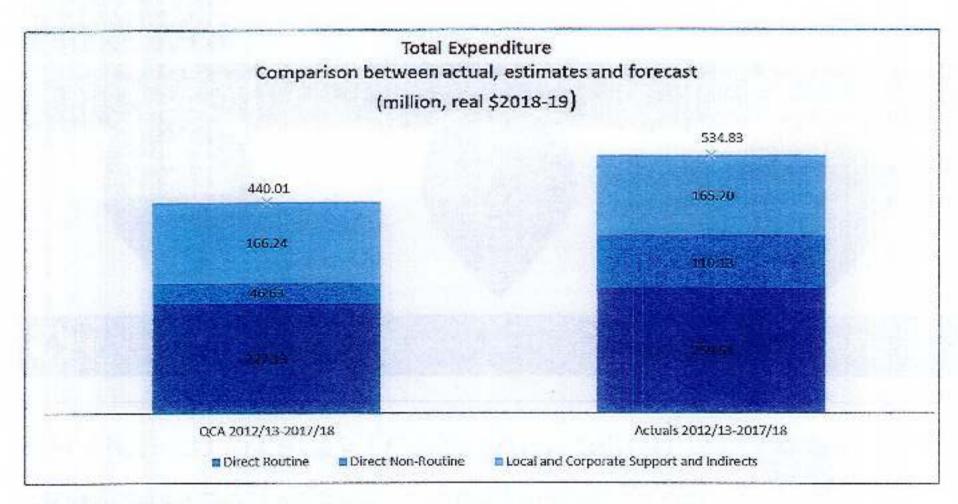
How are SunWater's costs allocated to each service contract? (Cost Allocation Methology,



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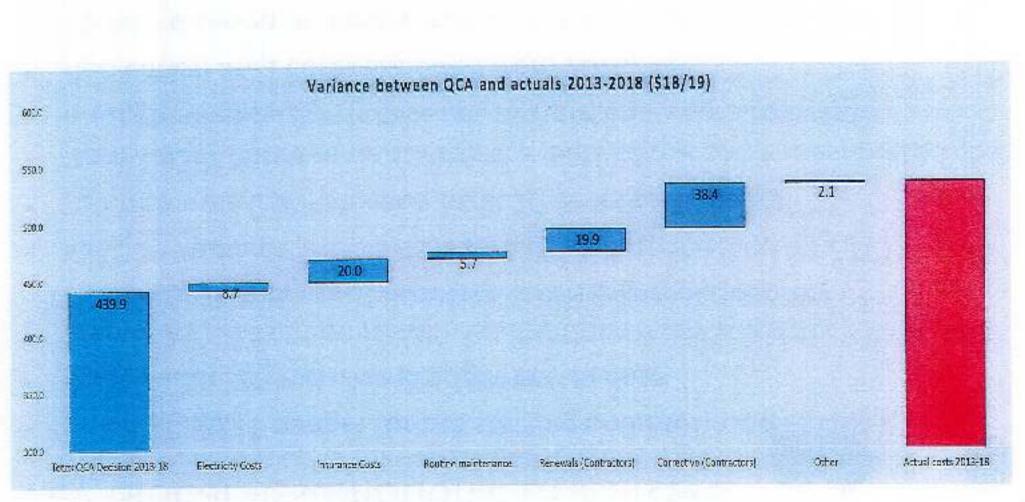
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Total Expenditure Comparison by cost type: Target/actual



* 2017/18 based on budget

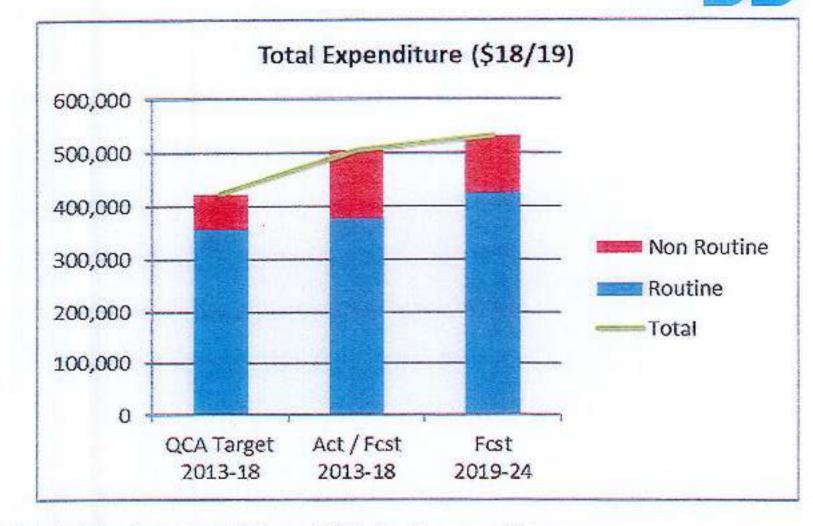
Variance from QCA targets 2013-18 by activity



Key Global Assumptions: Draft NSPs

- Using 2018/19 budget for the starting point for routine costs
- 0.2% annual cumulative productivity savings
- Electricity based on AEMO assumptions from Seqwater's QCA price review, plus impacts of obsolete tariffs (scheme specific)
- WACC reduced from 7.49% to 5.9% (being checked by QTC)
- Annuity period increased from 20 years to 30 years
- Dam Safety Improvement Project 50% of the current estimated costs if no detailed business case yet completed (where relevant)
- Recreation area costs excluded from 2020/21
- Standardisation of fixed/variable cost allocation across all schemes.
 - Insurance and all non-routine costs are 100% fixed.
 - Electricity is allocated 100% to variable
 - 10% of operations, revenue offsets and routine maintenance to variable.

Total Expenditure: target/actual/forecast



* Totals Excludes Dawson and St George Distribution for comparative purposes



2018/19 to 2023/24 Network Service Plan

Chinchilla Weir Bulk Water Service Contract

4 June 2018

Consultation Draft

www.sunwater.com.au

Contents

1.	Introduction	2
2.	Delivering services to oustomers	3
з.	Financial summary - revenue and expenditure	5
4.	Cost of dollvering services - routine expenditure	7
5.	Cost of delivering services - non-routine excenditure	و
6.	Annuity balance	11
Ap;	pendix 1 : SunWater's asset management framework	13
App	pendix 2 : Total expenditure by expense type	14
App	pendix 3 : Routine expenditure	17
App	pendix 4 : Non-routine projects for 2018/19 to 2023/24	18
App	pendix 5 : Material renewals projects	20

Disclaimer

This Notwork Service Plan (NSP) has been prepared by SunWater to provide indicative information to our outcomers for the purpose of consultation. It contains estimates and forecasts which are based upon a number of assumptions. The actual financial performance or 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 discumstances. SunWater will not be responsible or liable for any loss (including consequential loss), oblin or comage (including in fort) that is in any way connected with the up of this NSP or the information contained within it.

Our plan for Chinchilla Weir

We're focused on reliability, efficiency and safety, ensuring through ongoing consultation that the Chinchilla Weir 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 ensuring routine operations activities are implemented safely, timely and efficiently. We will be continuing to replace customer meters on an as needs basis to ensure our customers have accurate water metering in place. Works have also been scheduled to ensure the outlet valves can be isolated for maintenance, with both valves scheduled for replacement during this period. Together with continuing to implement an efficient and effective preventative maintenance program, we are focused on ensuring the Service Contract's assets continue to perform reliably.

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.



John Kelly Area Operations Manager South

1. Introduction

A Network Service Plan details a range of proposed immediate and longerterm 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:

- to consult with customers on routine and non-routine expenditure throughout the coming financial year
- to present to oustomers SunWater's projected efficient costs for the five 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
- the long-term outlook for material non-routine expenditure.

In this NSP, the focus of consultation is 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.

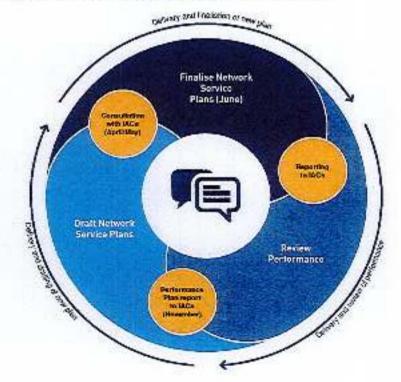
Input from customers is a valuable part of SunWater's planning processes and ensures that we invest in areas which support the services we provide to customers. Figure 1 below shows how SunWater and customers work together in relation to NSPs. SunWater has consulted with the Irrigator Advisory Committee (IAC) on the draft NSP and feedback from the Committee has been considered and incorporated where appropriate. 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 Fast Brisbane Qld 4002

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





2018/19 TO 2023/24 NETWORK SERVICE PLAN Chinchila Web Sulk Water Service Contract.

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 majority of our 43 customers in this Service Contract are irrigators who grow cereal, cotton and melons, as well as pasture and fodder crops. Water is also supplied to the town of Chinchilla.

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

Table 1: Water entitlement and usage data

Gustomer Segment	Total Water Entitlements (ML)	High Priority Water Entitlements (ML)	Medium Priority Water Entitlements (ML)	Water Deliveries 2016/17 (ML)
irrigation	2534	0	2534	2468
Urban	1160	1160	0	309
Industrial	350	0	350	4
SunWater	S	5	0	5
Total	4049	1165	2854	2786

The 2018/19 charges and cost per megalitre are shown in Table 2. Overall, the Chinchilla Weir Bulk Water Service Contract does not need additional subsidies to recover irrigation's share of future renewals, maintenance and operating costs.

Table 2: irrigation charges for 2018/19

Product		2018/19 (\$/ML)	Cost (\$/ML) ¹	Subsidy (\$/ML)
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon entitlement)	29.43	10.93	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon usage)	3.37	3.59	0,22

 Costs reflect lower bound cost recovery to recovery of future replacement, and ongoing maintenance and operations. Charges do not allow for any returns on existing assets.

2.2 Service targets

SunWater and customers have agreed Water Supply Arrangements and Service Targets for the Chinchilla Weir 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	D
	For shutdowns planned to exceed 3 days	2 weeks	0
	For shutdowns planned to be less than 3 days	5 days	Û
Unplanned shutdowns –	Unplanned shutdowns during Peak Demand Poriod	48 hours	c
duration ¹	Unplanned shutdowns outside Peak Demand Period	5 working days	
Maximum number of interruptions	Planned or unplanned interruptions per water year	6)	D

 This is the number of times that the unplanned shutdown has exceeded the shortest of the peak/off peak periods.

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 Chinchilla Weir Bulk Water Service Contract is presented in Table 4.

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 changes in revenue for the Chinchilla Weir Bulk. Water Service Contract in 2018/19.

In 2018/19, SunWater plans to increase routine and non-routine expenditure for the Chinchilla Weir 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 annulty revenue is outlined on subsequent pages of this NSP and a further breakdown of expenditure by type can be found in *Appendix 2*.

Chinchilla Weir Service Contract	2014/15 Actual \$'000	2015/16 Actual \$'000	2016/17 Actual \$'000	2017/18 Estimate \$'000	2018/19 ² Forecast \$'000
Revenue					
Indigation	73.5	102.8	90.9	83.7	94.1
Community Service Colligation		-	-	-	
Industrial ^a	47.3	47.9	50.8	49.6	50.9
Urban ³	74.4	78.1	83.4	89.2	91.4
Drainage	lense -	- 1	-	-	
Other	2.1		0.5	1.0	1.0
Insurance proceeds - flood				-	
Revenue Total	197.3	228.6	225.5	223.6	237.4
Less - Routine expenditure	94.3	(98.1)	(72.6)	(88.1)	(100.0)
tess - Non-routine expenditore					
Annuity funded		[1.9]	(28.7)	(54.0)	(126.1)
Non annuity funded		-	-		
Surplus (deficit)	102.9	128.6	124.2	81.5	11.2

Table 4: Service contract financial summary¹

1. Totals may not add due to rounding.

 SunWater's 2018/19 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.

 Forecast revenues for industrial and urban customers are based on current contractual arrangements. 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

55%

Cperations
Insurance
Liectricity
Preventative Maintenance
Corrective Maintenance
Accurry Contribution
ESIP Contribution
Working Capital

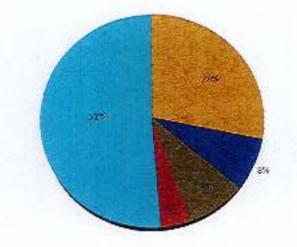


Figure 3: Breakdown of total service contract costs - 2019/20 to 2023/24 forecasts

Coverations
Insurance
Electricity
Proventative Maintenance
Corrective Maintenance
Annuity Contribution
DSIP Contribution
Working Capital

2018/19 TO 2023/24 NETWORK SERVICE PLAN Chinchila Weir Bulk Water Service Contract

90

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 Chinchilla Weir Bulk Water Service Contract's routine operating expenditure in 2018/19 (refer to Table 5)- 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).

The data presented in Table 5 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 5: Routine operating expenditure^{1,2}

Chinchilla Welr Service Contract	and the second second	2016/17		2017/183		2018/193		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 S'000	
Electricity	-			-	-	-		-	-		-		
Insurance	13.8	6.3	7.0	13.8	6.9	16.5	7.1	16.9	17.3	17.7	18.1	18.5	
Coerations	41.6	49.0	(7.5)	50.8	50.3	58.0	\$1.5	59.4	61.0	62.6	64.2	65.8	
Operations Total	55.4	55.8	(0.4)	64.6	57.2	74.5	58.6	76.3	78.3	80.2	82.3	84.3	
Preventative maintenance	11.3	12.9	(1.5)	19.4	13.2	17.4	13.6	17.8	18.3	18.5	19.3	19.8	
Corrective maintenance	5.9	8.8	[2.7]	4.0	8.8	8.2	Q.9	8.4	8.6	8.8	9.1	9.3	
Routine Total	72.6	77.3	(4.7)	88.1	79.2	100.0	81.2	102.6	105.2	107.9	110.5	113.4	

1. Totals may not add due to rounding.

2. SunWater's 2018/19 to 2023/24 budget figures are draft as at the time of consultation. These figures will not be locked down until loss in the financial year prior.

For 2017/18 and 2018/19 SunWater has included and reported against the 2016/17 OCA recommended costs adjusted for inflation which was assumed to be 2.5.8.

4.1 Operations

Chinchilla Weir Bulk Water Service Contract's total operations budget in 2018/19 is 27.02 per cent above the QCA's recommended costs (adjusted for inflation). This variance is largely driven by insurance costs. For further detail on what is included in operations expenditure, refer to *Appendix 3*.

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, global insurable events impacting premiums and the need to obtain coverage for new risks, such as cyber. 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 reduction in our insurance costs in 2018/19 as a result of the review of our insurance coverage. The reductions are higher in distribution service contracts as these are less likely to be impacted by future flood events than bulk water service contracts. SunWater's revised insurance coverage is currently being tested with the insurance market and will be revised based on the outcome of this process before the 2018/19 NSPs are finalised.

4.2 Preventative maintenance

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

Preventative maintenance is cyclical in nature with a typical interval of 17 months or less, however, the intervals can be longer. Chinchilla Weir Bulk Water Service Contract's preventative maintenance for 2018/19 is budgeted to be 27.94 per cent above the QCA's recommended costs (adjusted for inflation).

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.

Chinchilla Weir 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*.

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 longterm 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 6 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 6 sets out our non-routine annuity and non-annuity funded expenditure. The QCA did not recommend an allowance for renewals expenditure for the 2016/17 to 2018/19 period. This is not reflective of our asset management program.

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

Table 6: Non-routine expenditure¹

	Post May	2016/17	21	2017/18 ² 2018/19 ²			2019/20	2020/21	2021/22	2022/23	2023/24	
Chinchilla Weir Service Contract	SunWater Actual S'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	No. Serie	Carlon 1							6 8894 3			
Operations	3.4	-	3.4	1.1	-		÷	-				
Preventative maintenance	-	-	-	-		-			4		-	-
Corrective maintenance (flood)		T -	-		2	-	2					
Renewals	25.3	-	25.3	53.0		126.1		357.1	16,1	65.8	28.5	22.9
Non-routine total	28.7		28.7	54.0		126.1	-	357.1	16.1	65.8	28.5	22.9
Non annuity funded											る理想	
Non annuity funded				-				-			-	-

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 infigation pricing review.

Annuity balance 6.

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 7 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.

Chinchilla Weir Service Contract	2016/17 Actual \$'000	2017/18 Estimate S'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	0.5. Tak							
Opening balance	99.1	82.2	38.7	(80.0)	(436.4)	(346.6)	(300.3)	(199.7)
Spend	[28.7]	(54.0)	(125.1)	(357.1)	(16.1)	(65.8)	(28.5)	(22.9)
nsurance proceeds receipts (if applicable)	120							
Frior year	-	-	-	-	-	-	-	
Current year	-	-	-	-		-	-	
Annuity contribution	4.3	4.4	4.5	4.7	131.6	132.6	146.9	148.2
Interest/financing costs	7.4	6.2	2.9	(6.0)	(25.7)	(20.4)	(17.7)	(11.8)
SunWater - Closing Balance	82.2	38.7	(80.0)	(438.4)	(346.6)	{300.3}	(199.7)	{86.2}
QCA - Closing Balance	74.0	83.9	94.8					
Difference	8.2	(45.2)	(174.8)	-				

Table 7: Annuity balance¹

Totals may not add due to rounding. 1

The difference in the closing balance for 2019/20 and the opening balance for 2020/21 relates orimarily to expenditure incurred prior to the start of the 2012 price path. For example, flood repairs associated with 2. an insurance claim that were still outstancing 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 review.

2. The anopity contribution is included in the prices paid by customers. It was set by the QCA for 2012-2017 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.

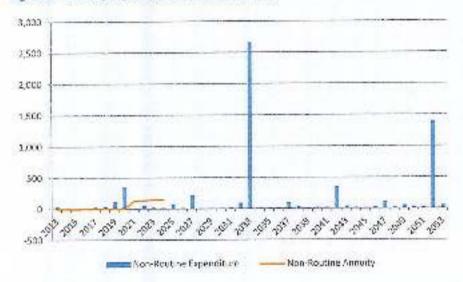


Figure 4: Annuity expenditure to 2052/S3 (\$'000)

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.

To be transparent and to ensure that customers have input into projects likely to impact the renewals annuity, SunWater identifies material renewals projects in the NSPs.

A project is currently considered 'material' when its value is greater than 10 per cent of the value of the Service Contract over the five year price path period.

Material renewals projects are listed in Appendix 5.

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 2017, 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:

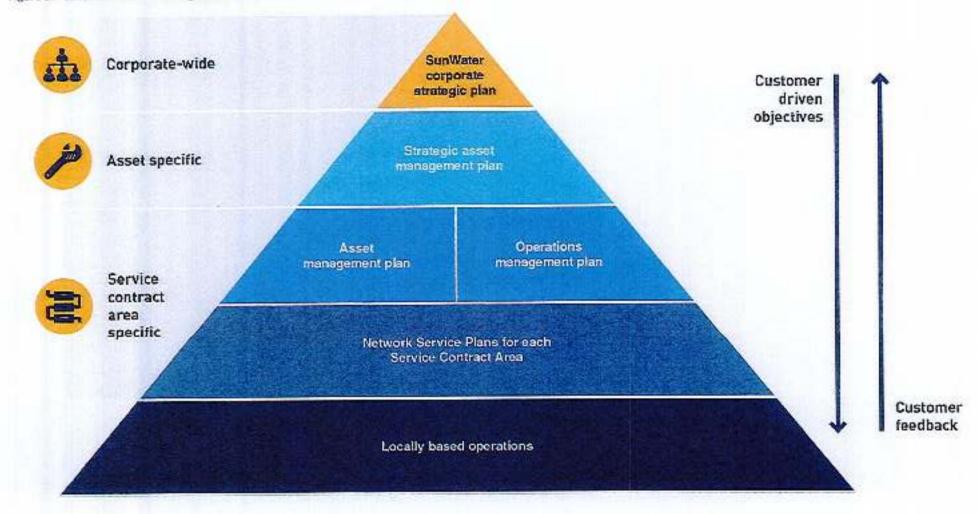
- there is no obvious solution
- the current maintenance strategy is changing
- technology has changed significantly, or
- there is a high risk in the project execution.

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.

Appendix 1: SunWater's asset management framework

Figure 5: SunWater's asset management framework



Appendix 2: Total expenditure by expense type

Table 8: Expenditure for activity by type¹

and a subsection of the second	1000	2014/05	1000		2015/16	1000	Sector Provent	2016/17	1000	201		2013	and a second second	2019/20	2020/21	2021/22	2022/23	2023/24
chareballer weist Service Contract	Survivator Actual Sicco	OCA Reservine inded \$100	variance \$1000	SulfWater Actual Storp	OCA Pesentine need 5000	Vitrolance S1000	SurWater Actual Scoo	OCA Recomme noted 5000	Variasce \$1000	Sunevasor Estimator S1050	2016/17 DCA Remotine noted (Acjusted) \$100	SurrAtaber Forecast \$1002	2015/17 QCA Recomme ndec (Adjusted) \$1000	SunWeber Foresast SV00	SunWater Forecast 5000		Summater Forecast S100	Sunwater Konscat Socio
Popitinespend	1		21.5	Sec. 1 and				Sec. 8	1.	1.12		Same 1		10000		1		
Operations		1. Contraction (1. Contraction)	Superior a start	100000			and the	in chiant		Sec. and	arte aller	N. C. C. C.						
tabour	19.1	11.8	(7.3)	17.2	122	15.2	1011	12.6	2.5	149	12.9	11.5	13.2	123	12.6	.3.0	34	13.7
Contractors	1.7	55	5.8	14	5.6	6.2	11	5,7	4.5	21	5.9	2.0	6.0	20	21	2.1	3.2	13
ktwier ab	1.	1.4	15	0.0	1.2	1.7		1.7	1.2	10	8.1	10	1.6	10		1.1	1.1	3.1
Destricity		1.	+1	-					2 - 1 - K			-		1.00				
tisura foc	140	6.5	(7.6)	145	5.6	(7.9)	1.1.8	5.8	,7.0	138	1.5	16.5	/1	169	173	27.7	18,1	28.5
Othe:	127	5.3	10.55	11.3	5.3	15.10	11.6	5,4	(5.1)	9.0	5.0	13.0	57	183	19.6	13.9	16.2	34.0
tors are supportionly	14.0		(14.0)	14.8		(14.0)	8.7	0	27	17.6	+	152		15.6	0.82	16.5	36.5	323
Corporate support colts	81	52.4	45	6.2	12.1	62	2.4	12.7	0.5	2.6	12,9	77	133	79	1.2	6.4	11.5	6.5
Indirections	:46	12.8	23	152	12.8	2.6	5.0	10.0	50	4.7	31.2	70	11.5	72	74	1.2	Х.5	8.0
Presentative						In the second				1000		100-253	1			1.1.1.1		
Labour	2,4		.0	3.3	4.5	. 26	29	6.7)	1.8	7.2	4,5	46	49	4.1	4.9	51	5.2	5.4
Contractors	12 A 12 A 12 A	1.60	C	1.5	2 - C - C - C - C - C - C - C - C - C -	(0.5)	0.4		0.2		-	1 2.0	1.40	1.0	1.0	11	1.1	11
Writeda's				0.2	1	[52]	5.5	1.1	(2,5)	-1		1		E	1.7			
Ctrer	0.3	62	12.21		112	0.2		0.2	62	the second	0.1	1	0.2	And and the	1.			
Local area sup cort tosts	25	1.50	12.51	2.7		0.21	25	1	[2.5]	64		5.9		6.1	61	60	4.6	48
Comparate support costs	11	43	3.1	1.0	42	3.2	1.5.	45	2,3	5.2	166	3.0	45	1.1	5.2	33	33	34
Incitent costs	25		1.1	2.5	40	1.1	1.7	3.8	25	2,4	39	3.7	4,0	2.5	2.0	30	3.0	31
Conscious maintenance			1		in the second se	1	1			and the second			1 allocation of	1	10000			
Labour	115	2.7	2.3	2.7	2.8	2.5	0.9	29	2.0	0.8	3.0	1.5	3.1	15	1.6	16	17	3.7
Camprica	0	1			1	50.9	0.8		(0.3)	1		1.0		2.0	and the second second		2.2	2.3
Main' ah	01	0.5	3.4	0.0	9.6	A5	27	0.6	22	2.0	0.0	1.5	8.5	2.0	1.0	4.2	1.1	2.5
Other	1	202	-	0.5	-	(0.3)	01	÷.	(0.1)		10000		12101-04			-	2.0	1.1
ichal area support usab.	0.3	· · · · · · · · ·	江北	1.9		2 R	d II	1	JU.S.	0.6	1	1.9		:9	2.6	2.0	2.0	3.3
the ponale support codes	02	1.7	25	0.7	2.0	2.0	0.4	2.7	23	04	1.0	1.0	2.6		1.0	1.0	1.1	1.3
Indiract costs	Q.A.	2.6	23	1 1	2.5	14	0.6	2.4	1.6	42	2.4	0.9	25	60	0.09	0.9	10	1.0
Boucheetings	943	77.2	(17.5)	961	78	(20.1)	72.6	27.3	4.7	381	78.2	100.0	812	167.6	105.2	107.5	130.5	112,4
Non-routinespend	1000	-	Part of	1000	Contraction of the	State of		11.057.04	11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		10-10-10-10-10-10-10-10-10-10-10-10-10-1	De la Marchi	1.0		1000	and a second		
Labour		4.8	4.8	0.0	+)0.0/-	17		¥57)	14.1	-	111	1	4].A	1.0	11.3	1.4	2.0
Contraction	-	15	1.9	18		17 10	1.1	5	23	48		718		\$3.4	5.5	23,0	0	6.0
Materials	10 10	15.5	15.9		•	-	0.0	12	(0.0)	12.6	-	20.3	37.	45.1	3.9	7.1	19.4	5,3
Other			0.9		(i i i i i i i i i i i i i i i i i i i		1.7		(1.7)	0.4		1-		20A	1.0	0.8	1. C	3.5
Localares supportunals		+	1.	0.1		(2.0)	22		(2.2)	5.8		.72	+	42.0	2.5	.9.3	12	15
Corporate support costs	-	6.5	66	0.0	35.8	35.0	5.2	10 C C C C C C C C C C C C C C C C C C C	(5.9)	:16	-	\$2		56.5	1.7	9.0	1.7	
11d rect posts	1	5.4	50	0.0	17.4	174	4.0		MOD.	4.4		6.6	A COST AND	21.3	2.5	4.8	0.6	0.5
Non-confilmentobal	10000	1754	55.4	1.9	53.5	5.6	76.2		28.0	54.0	1	125.4		357.1	361	65.5	285	22.9
Total agend	\$1.1	112.8	18.3	103.5	11.6	31.3	101.3	77.3	(24.1)	142.1	79.2	225.2	31.2	410.7	121.3	175.7	159.2	136.3

1. Totals may not and 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 of 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 Chinchilla Weir Bulk Water Service Contract is allocated 0.069 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 Inspector-General Emergency Management emergency management program, water planning, hydrographic services, and environmental support costs. Indirect costs are based on a user pays approach og service contracts without a dam or weir are not apportioned dam safety costs.

In 2018/19 the Chinchilla Weir Bulk Water Service Contract is allocated 0.076 per cent of the forecast total indirect costs.

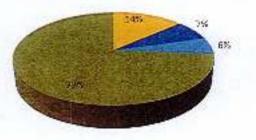
Corporate support costs

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 Chinchilla Weir Bulk Water Service Contract is allocated 0.066 per cent of the forecast total corporate support costs.

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



Local Ares Support \$33.4m
 Corporate Support \$17.7m
 Indurect Costs \$14.1m
 Direct Costs \$190.2m

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 and monitoring customer deliveries
- emergency responses for emergency events
- 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.

Preventative maintenance

Preventative maintenance for the Chinchilla Weir 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.

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

Scheduled corrective maintenance

Scheduled corrective maintenance varies by asset type and typically includes:

- * Storages (balancing storages and reservoirs):
 - repairing control gates, valves and concrete structures
 - repairing walls, embankments and spillways.
- Meters:
 - repairing customer meters.

Emergency corrective maintenance

Emergency corrective maintenance typically includes 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 9: Non-routine projects (or planning items) 2018/19 to 2023/24

Year	Project title	Project scope	Budget (\$'000)
2018/19	Meter replacements	This is an allowance to replace customer meters if they fail during the year. If none are replaced, the funds will remain in the annuity balance.	12
	Chinchilla Weir – Construct bulkhead gote	A buildhead gate is required to isolate the outlet condult and valves in preparation for the guard valve replacement in 2019/2020, it has been designed already.	38
	Chinchilla Weir – Public safety storage survey	Conduct a public safety storage survey for Chinchilla Weir.	74
	Other works	There is 1 other non-routine project for 2018/19.	2
	2018/19 Total		126
2019/20	Meter replacements	This is an allowance to replace customer meters if they fail during the year. If none are replaced, the funds will remain in the annuity balance.	12
	Chinchilla Weir - Valvo roplocements	The right-hand gate valve is in poor condition and needs to be replaced. While the bulkhead is installed, the two 6-inch fill and drain valves will also be replaced as it is more efficient to do that now rather than install the bulkhead again at a later date.	345
	Other works	There are no other non-routine projects for 2019/20.	
	2019/20 Total		357
2020/21	Meter replacements	This is an allowance to replace customer meters if they fail during the year. If none are replaced, the funds will remain in the annuity balance.	12
	Asset revaluation	Revalue the assets for insurance purposes; update asset replacement costs and Bill of Materials; and identify gaps in asset hierarchy data	4
	Other works	There are no other non-routing projects for 2020/21.	
	2020/21 Total		16
2021/22	Meter replacements	This is an allowance to replace customer meters if they fail during the year, if none are replaced, the funds will remain in the annuity balance.	13

Year	Project title	Project scope	Budget (\$'000)
	Chinchilla Weir – Comprehensive inspection	SunWater conducts comprehensive inspections on all dams and weirs every five years to maintain its asset condition knowledge that will help to optimise the non-routine maintenance program.	53
	Other works	There are no other non-routine projects for 2021/22,	-
	2021/22 Total		66
2022/23	Meter replacements	This is an allowance to replace customer meters if they fail during the year. If none are replaced, the funds will remain in the annuity balance.	13
	Chinchilla Weir – Concrete refurbishment	The downstream face of Chinchilla Weir requires patching every five years or so based on past performance. There are soft spots towards the bottom right corner near a long-term seepage path that need repairs and/or replacement.	18
	Other works	There are no other non-routine projects for 2022/23.	-
	2022/23 Total		29
2023/24	Meter replacements	This is an allowance to replace customer meters if they fail during the year. If none are replaced, the funds will remain in the annulty balance.	13
	Chinchilla Weir – Fence replacement	The boundary fencing at the woir is now close to 50 years old so may need replacement in the near future. The comprehensive welr inspection in 2021/22 will confirm the need for this project. If it does not proceed, the funds will remain in the annuity balance.	10
	Other works	There are no other non-routine projects for 2023/24.	
	2023/24 Total		23

Appendix 5: Material renewals projects

Table 10: Material renewals projects by year

Year	Project title	Project estimate \$'000
2020	Chinchilla Weir – Valve replacements (right-hand gate valve)	345

2018/19 TO 2023/24 NETWORK SERVICE PLAN Chinchilla Wein Bull: Water Service Contract



Contact us

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

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