Meeting Minutes

Date: Tuesday 13 February 2018

Time: 8:30am

Location: SunWater's Chinchilla Office

Attendees: John Kelly, SunWater Service Manager, Chinchilla
Lisa Welsh, SunWater, Water Pricing Manager
Ross Mewett, SunWater, Regional Planning Manager, South
John Bender, IAC Chair
Ian Wolski, IAC Member

Apologies: David Uebergang, IAC Member
Mark Jenyns, IAC Member

Chair: John Bender **Minutes:** John Kelly

Item No.	Item	Action Point	Presenter
1	Welcome and Introductions	N/A	John Kelly
2	Apologies	N/A	John Bender
3	Review of Previous Minutes	N/A	John Bender
4	Business Arising from Previous Minutes	N/A	John Bender
5	Agenda Items		
5.1	SunWater Changes	N/A	John Kelly
5.2	2019 QCA Price Review and SunWater proposed approach	N/A	Lisa Welsh
5.3	SunWater Asset Planning Framework	N/A	Ross Mewett
5.4	Draft 2018/19 Network Service Plan Template	N/A	Lisa Welsh
6	General Business	N/A	All

Next Meeting: Customers will be notified once a date has been determined.

Agenda Item 1 – Welcome and Introductions

John Kelly, Area Operations Manager, SunWater welcomed everyone to the meeting and thanked the members for being able to attend.

Agenda Item 2 – Apologies

Mark Jenyns and David Uebergang.

Agenda Item 3 – Review of Previous Minutes

The meeting minutes from the previous meeting held on 20 November 2017 were reviewed and accepted.

Agenda Item 4 –Business arising from previous minutes

Calibration of Chinchilla weir tail water gauge

The committee raised concerns about the measurement of releases from the weir, particularly at low flows. SunWater provided information at the previous meeting regarding the calibration of the crump weir tail water gauge which is owned by DNRM, detailing that there had been 243 gaugings at this site since 1955 with the latest being November 2016. SunWater's hydrographers had also advised that they had no reason to question the accuracy of the gauge. The committee questioned whether there was an issue with loss calculations as the weir appears to drop faster now than it had done previous to the introduction of CSG water. The committee suggested that water, meter accurately from a pump, could be pumped over the crump weir to determine its accuracy. SunWater advised it would look into the practicality of doing this test.

Agenda Item 5.1 – SunWater Changes

John advised the committee that there were a number of recent changes to SunWater's organisational structure. Importantly the re-structure was driven to ensure SunWater remains cost effective and efficient in the delivery of its services to customers. The restructure has resulted in a much flatter structure which puts the workers on the ground much closer to the decision makers within the business which SunWater believes is a good outcome. The state is now split up into 4 regions based on catchment boundaries (previously 2 regions) and John Kelly is the Area Operations Manager for Southern Region looking after SunWater's operations in Chinchilla, Goondiwindi and St. George. John is currently based in Chinchilla but will be relocating to Goondiwindi in the coming months.

See attachment "Operational Regions from January 30th 2018".

Agenda Item 5.2 – 2019 QCA Price Review and SunWater Proposed Approach

SunWater provided an overview of the upcoming water pricing process. Lisa Welsh, SunWater's Water Pricing Manager, provided a number of handouts explaining the water pricing process which are provided in the following attachments:

See attachment "What is the Process for Setting Irrigation Prices"

See attachment "What we have heard so far from customers"

SunWater has identified a number of areas to be targeted for cost savings including insurance and as such SunWater is undertaking a review of its entire insurance portfolio including a review of risk management and associated insurance premiums. It is expected that significant savings can be generated through this insurance review.

Electricity is also a big cost driver particularly in schemes where water is pumped multiple times to supply customers.

SunWater provided some information on the allocation of overheads and how this is determined for each of the service contracts. See attachment explaining "Overhead Cost Allocation"

SunWater provided information on how $/ML is determined and also the concept of the headworks utilisation factor.

See attachment "How do revenue requirements become costs/ML" and "Headworks Utilisation Factor"

The Irrigator Advisory Committee (IAC) noted that the scheme was very simple to operate and that costs should reflect this. The committee would also like to understand what portion of the proposed charges are overheads. SunWater advised it would be able to inform the committee of this once the costs are populated into the Network Service Plan (NSP) for the next meeting.

The committee was also interested in benchmarking their scheme against others. SunWater advised it would look into the opportunity for benchmarking.

Agenda Item 5.3 – SunWater Asset Planning Framework

Ross Mewett, SunWater's Regional Planning Manager, provided the committee with information on SunWater's Asset Management Planning process. SunWater is now developing Strategic Asset Management Plans (SAMP's) which feed into Asset Management Plans (AMP's) for each water supply scheme. The AMPS's provide detail on the routine and non-routine maintenance planned for the scheme.

See attachment "SAMP and AMP Discussion".

SunWater advised the committee that requirements for Options Studies and Business cases had been rationalised and will only be done where absolutely necessary. SunWater has also engaged some experienced estimators to review the cost estimates for the non-routine program with a view to getting a more accurate and realistic cost estimates in the forward looking non-routine program.

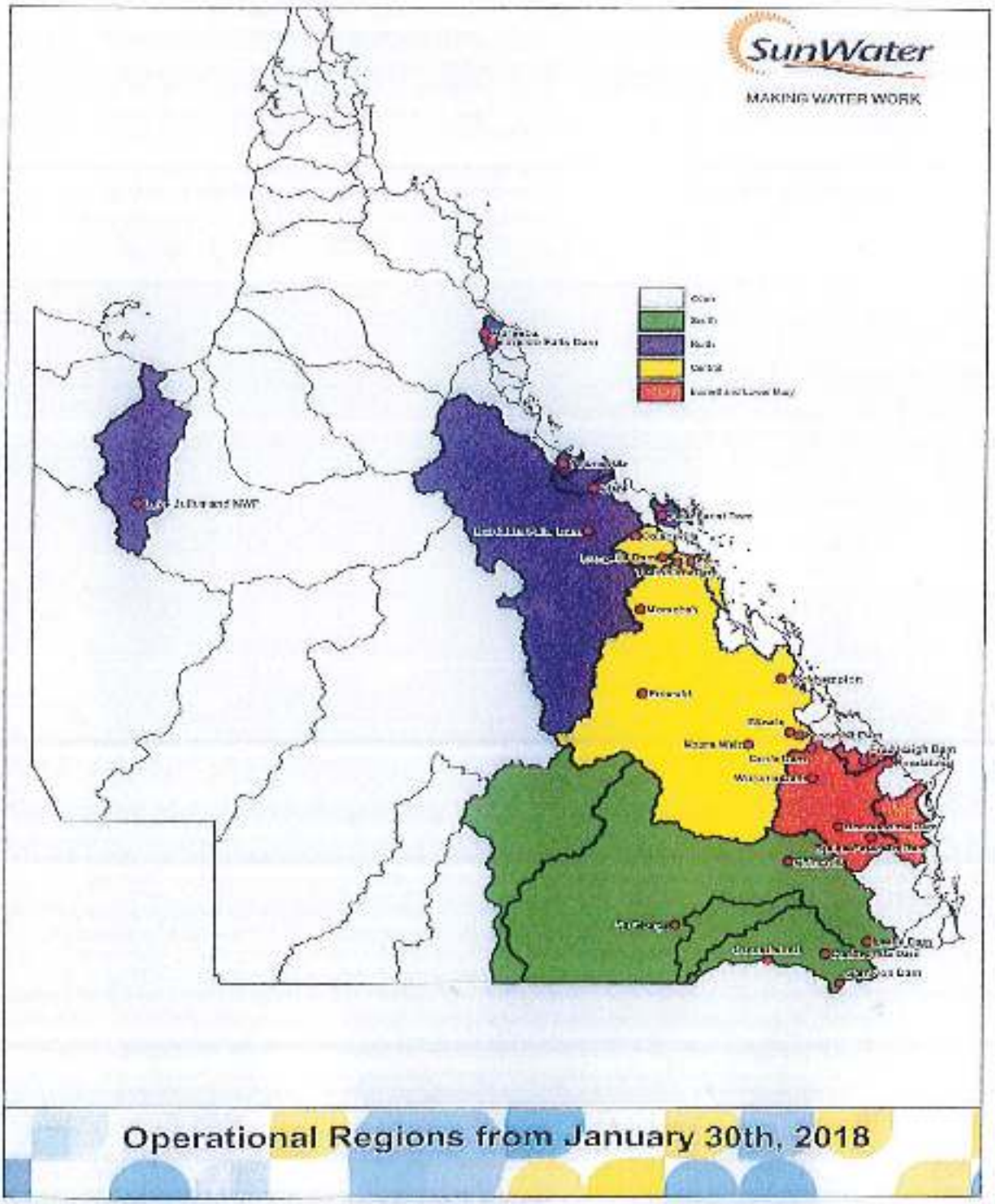
SunWater provided the committee with detail on the asset planning process and the risk and condition based assessment criteria that are used to develop the non-routine program. See attachment detailing the process.

SunWater also provided the committee with a first cut draft non-routine program for the next 6 years for review. See untitled attachment.

Agenda Item 5.4 – Draft 2018/19 Network Service Plan Template

SunWater advised the committee that it had changed the template for the Network Service Plan (NSP). A draft template is attached. Any feedback on the draft template is welcome.

Meeting closed 10:30am



Operational Regions from January 30th, 2018

SunWater at a glance

SunWater delivers more than 1500 gigalitres of bulk water each year.

1500 gigalitres
= 1.5 trillion litres
= 1,500,000 megalitres
= 1,500,000,000,000 litres

We own and operate more than 3000km of pipelines & water channels.

2271km of pipelines
+ 885km water channels
= 3156km

We service more than:

5000 customers

Across these sectors:

SunWater has a workforce of more than:

400 employees

We have a capacity of 6370 gigalitres of water storage in dams, weirs & barrages.

6370 gigalitres
= 6.37 trillion litres
= 6,370,000 megalitres
= 6,370,000,000,000 litres

With assets valued at $13 billion, including:

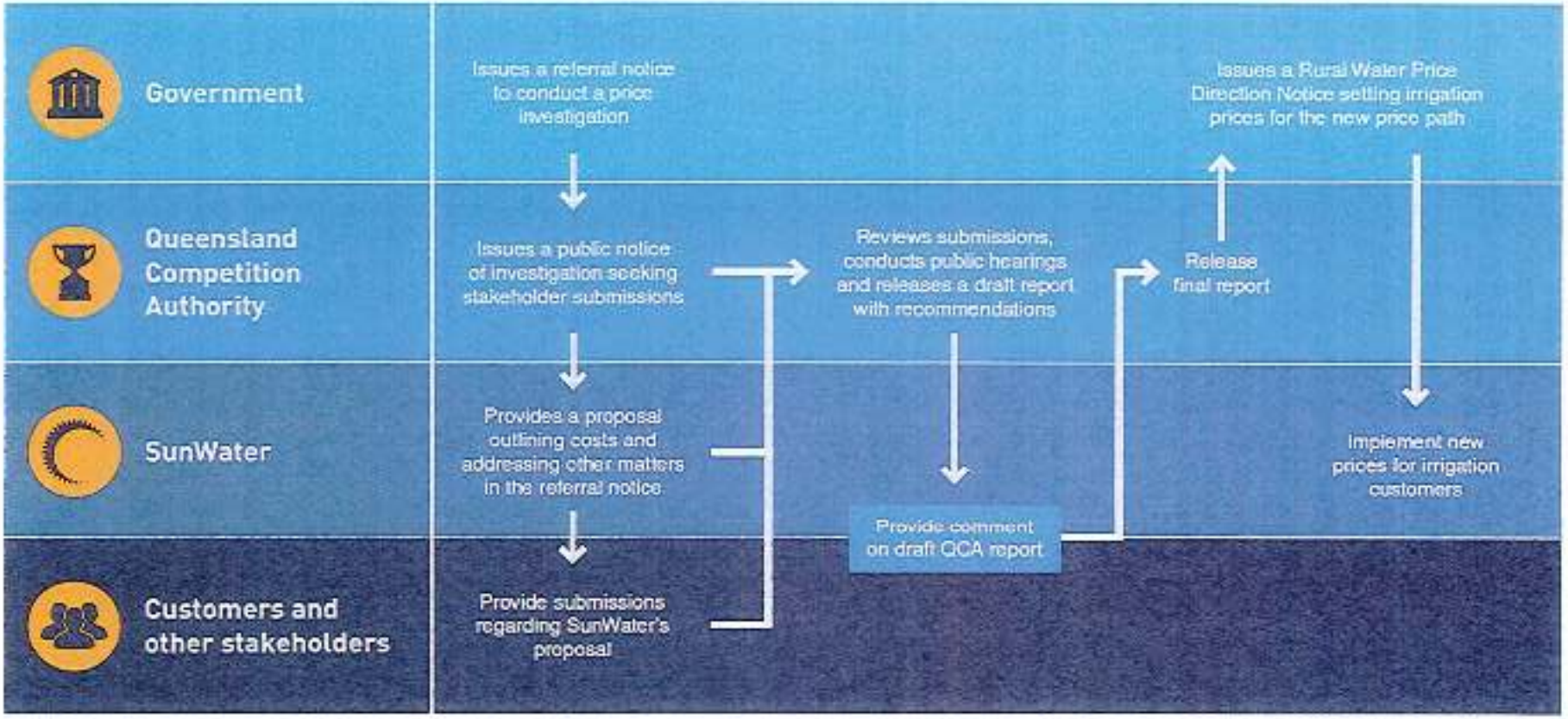
22 dams
19 owned
3 managed

2271km of pipelines

62 weirs

885km of water channels

What is the process for setting irrigation prices?



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What we have heard so far from customers

- Better value for money
- More cost effective services
- Make things simpler
- Keep improving NSPs:
  - More consultation on upcoming renewals
  - More information on corporate overheads
  - Shorter NSPs, no pictures without purpose
  - But don't change everything – we like the consistency, particularly the historical data and how the costs are broken up.
- .....???

How are SunWater's costs allocated to each service contract? (Cost Allocation Methodology)

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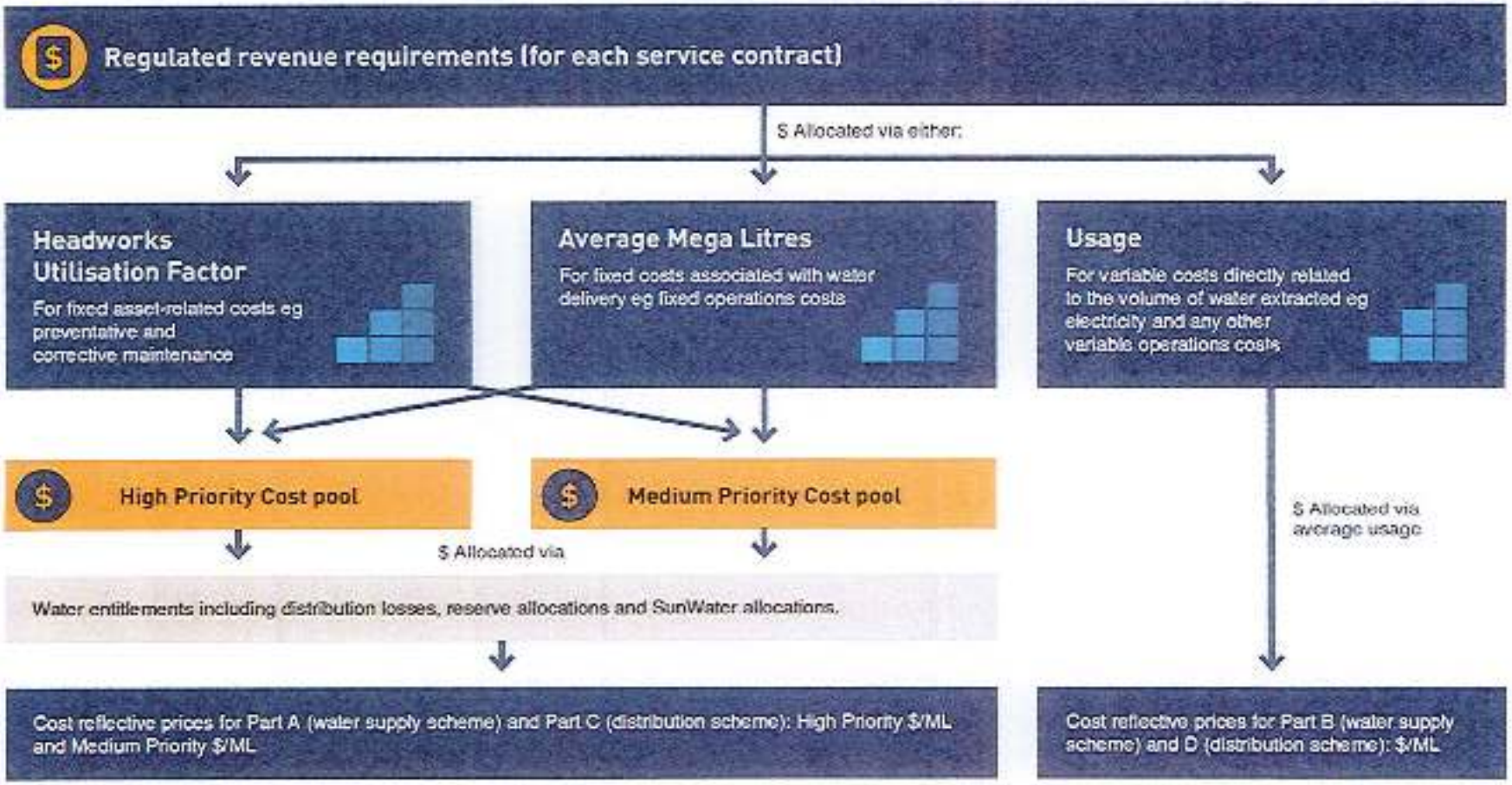
For every $1 of Bruce's salary directly charged to a service contract:

We allocate an additional amount for local support costs

We allocate an additional amount in indirect costs

We allocate an additional amount for corporate support

How do revenue requirements become costs/ML?



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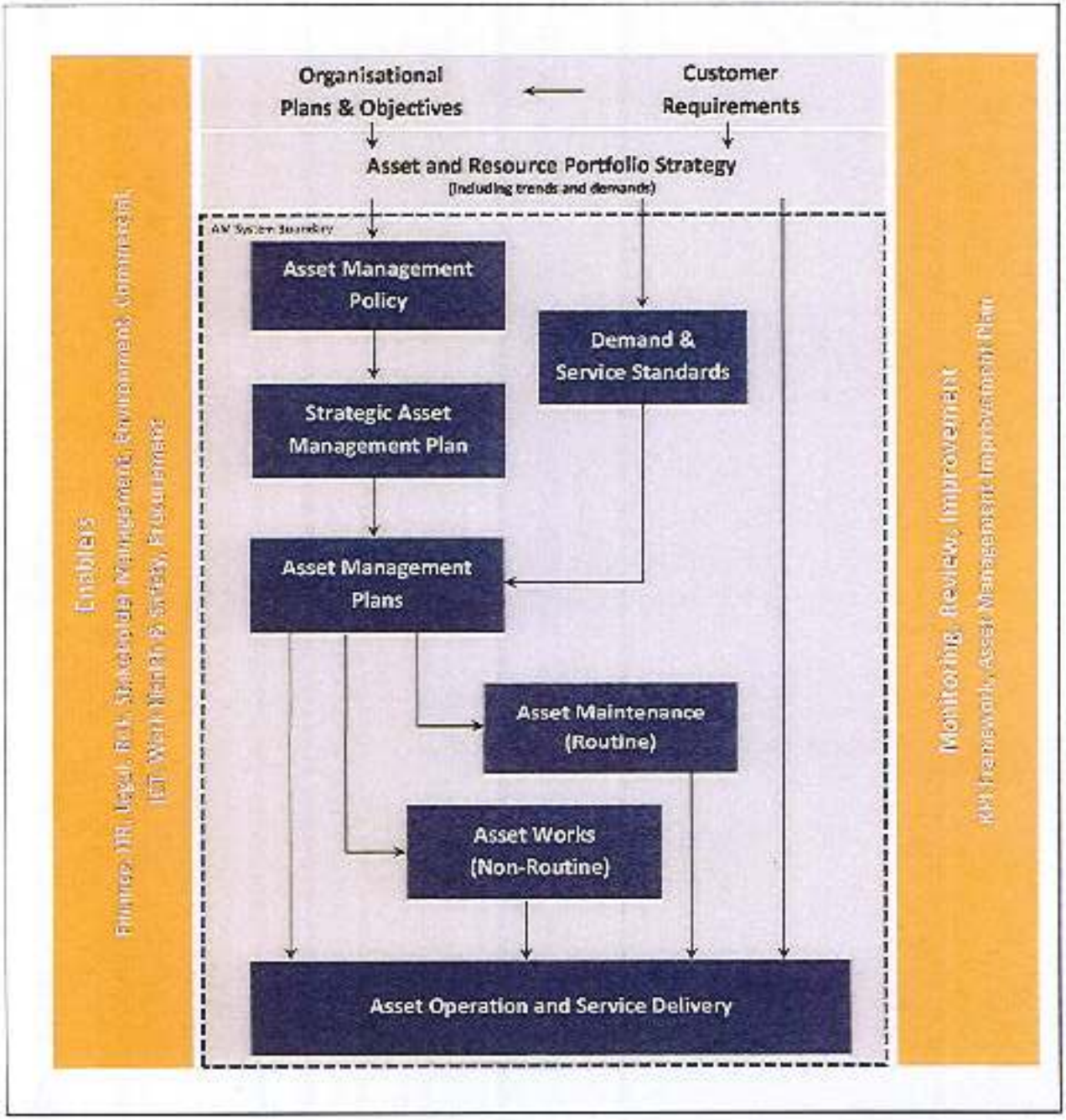
SAMP and AMP Discussion



Strategic Context

- Corporate objectives flow to SAMP
- SAMP defines AM objectives
- SAMP shapes the AMPS

Strategic Asset Management Plan

- Context on SW's regulatory/commercial environment
- AM objectives from SW strategic objectives
- Lists the initiatives to achieve our AM objectives
- Describes our groups of assets
- Describes the principles for the management of assets
- Summarises the asset management system
- Provides framework for the generation of AMPs

Asset Management Plans

- AMPs provide a six year plan for work on SW's assets
  - One AMP for each Service Contract (42 in all)
- Considers current and future customer service levels
- Consolidated technical and financial information
- Discusses the issues that drive the expenditure
  - strategic initiatives
  - present and future demands
  - risk mitigation
  - asset performance

SunWater assets

- SunWater maintains approx. 55,000 assets totalling $13B (2015 valuation)
- Mixed across a range of civil, mechanical, electrical and other asset types
- Three planning tiers:

a) Base level: this process
b) Facility and scheme: 30yr LMA plan; DSIP
c) Specific Programs/strategies: based on studies, investigations

Asset Types: Typical Examples

Code	Description
WE	
WEIR	Weir
WEIRB	Barrage
WEIRM	Measuring /Control Weirs
WEMC	W-Mass Concrete
WEMINE	W-Minimum Energy
WERCC	W-Roller Compact Concrete
WERFC	W-Reinforced Concrete
WEROCKF	W-Rock Fill
WESP	W-Sheet Piling
WETIMBP	W-Timber/T-Piling

Cecil Plains Weir

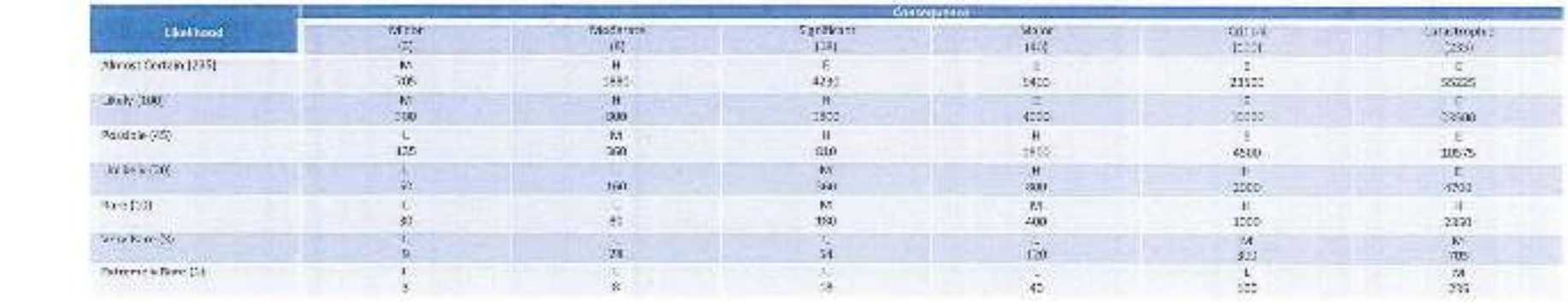
Standard 'Run to Failure' asset lives

Code	Description	Life in Yrs.
WE		0
WEIR	Weir	100
WEIRB	Barrage	100
WEIRM	Measuring /Control Weirs	125
WEMC	W-Mass Concrete	125
WEMINE	W-Minimum Energy	100
WERCC	W-Roller Compact Concrete	125
WERFC	W-Reinforced Concrete	125
WEROCKF	W-Rock Fill	100
WESP	W-Sheet Piling	75
WETIMBP	W-Timber/T-Piling	50

Standard replacement and refurbishment life

Asset/Business Risk	Replacement Life (% of Standard Low risk life)	Refurbishment Life (% of Standard Low risk life)
Extreme	38%	21%
High	63%	29%
Low to Medium (Consequence >8)	88%	33%
Low to Medium (Consequence <=8)	100%	Replaced

Risk Assessment Matrix



Low risk 0-160; Medium 161 – 705; High 706 – 2350; Extreme 2351+

Condition assessments 1

Aspect	Assessment Parameter	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Rating 6
Embankment crest including road	Cracking, potholes, depressions.	No cracks, potholes or depressions.	Minor cracking of crest and [illegible] track.	Significant cracking, frequent minor depressions, few minor potholes.	Significant wide cracking to a depth of > 1m, regular depressions that pond water, regular minor potholes.	General wide cracking to a depth of > 1m, regular, significant potholes and depressions making access difficult.	Heavy cracking, depressions and potholes have compromised crest.
Embankment crest including road	Erosion	Complete grass coverage. Slope stable.	Near complete grass coverage. Edge of crest shows some signs of instability.	Grass coverage < 75%. Some minor erosion.	Grass coverage < 50%. Significant erosion threatening access.	Grass coverage < 25%. Heavy erosion cutting into crest, access limited.	No grass coverage. Heavy erosion, little or no access, crest collapsed.
Embankment crest including road	Vegetation	No vegetation present.	Some minor saplings of no more than 600mm in height, with immediate removal being a minor task.	Moderate trees on crest which will penetrate and weaken embankment within 5 years.	Significant trees on crest which will penetrate and threaten embankment within 2 years.	Trees on crest with roots threatening to penetrate embankment. Major removal and repair task.	Trees on crest, roots have penetrated embankment, compromising crest.
Embankment crest including road	Alignment	Total embankment profile remains as constructed.	Some minor embankment movement within design tolerances. Crest expected to remain stable for > 10 years.	Some minor embankment movement within design tolerances. Crest expected to remain stable for < 5 years.	Significant embankment movement approaching design tolerances. Crest not [illegible].	Significant embankment movement beyond design tolerances. Crest not stable.	Embankment unstable.

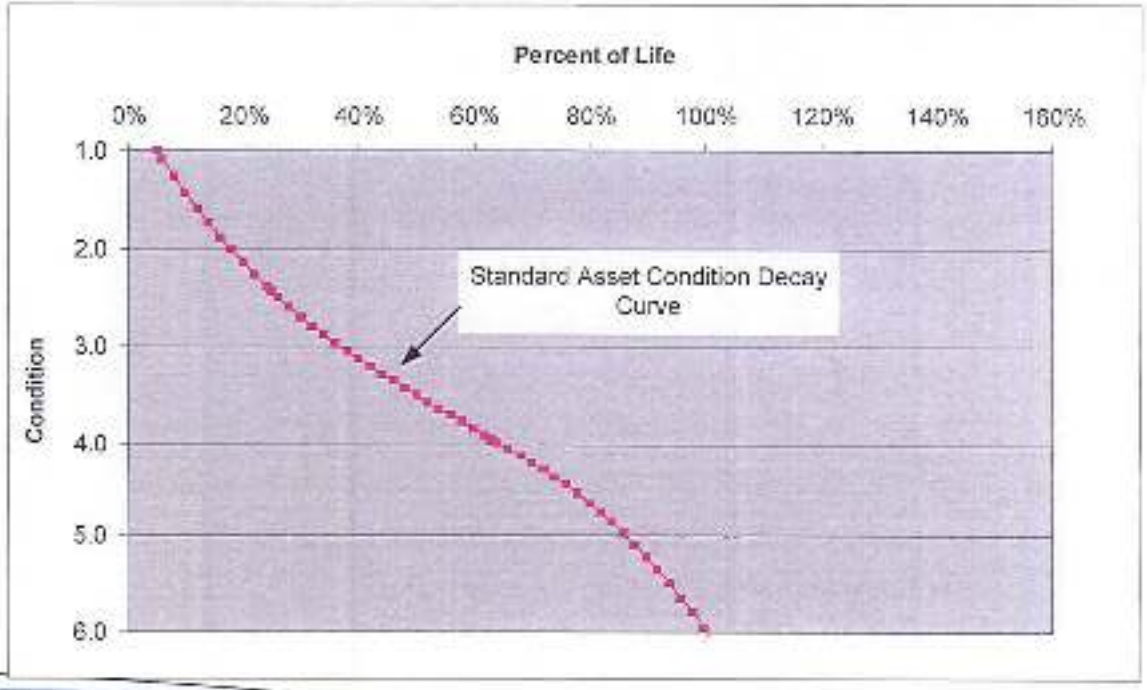
Condition assessments 2

Rating	Description of Condition
1	Perfect, as-new condition
2	Minor defects only
3	Moderate deterioration with minor refurbishment required to ensure ongoing reliable operation.
4	Significant deterioration with substantial refurbishment required to ensure ongoing reliable operation.
5	Major deterioration such that asset is virtually inoperable.
6	Asset has failed and is not operable.

Multi criteria decision table

Priority	Condition Based			Risk Based (Safety & Environment)		
	Condition Score	Asset Risk Rating	Consequence Score	Risk Rating	Consequence Score	Rectification Cost
A	>2	Extreme	NA	Extreme	NA	NA
B	>3	High	NA	High	NA	NA
C	>4	Low to Medium	>8	Medium	>8	<$100K*
D	5	Low to Medium	<=8			

Standard Asset Decay Curve



Life adjustment tool

Job Name	Replace Widget at Gadgettown					
	Std Refurb Life (Risk Based)		Last Refurb Year or year of commission (later)	2006	Asset Risk	Low
			Year of last Condition Assessment	2017	Maximum Condition Score Last Assessment	5
				New Replace Year	2019	

FY	Functional Location	FL Description	Description	Notes
2019	CHW-MO	METER OUTLETS-CHINCHILLA	Replacement of Chinchilla Meter Outlets - 2015 IBHStrategy	Meter strategy
2019	CHW-CDM-CHI-OWS	OUTLET WORKS	Construct Bulkhead Gate	Needed to isolate the intake structure
2020	CHW	CHINCHILLA WEIR SUPPLY	Update Materials with Drawings and Specifications for IBH Chinchilla Weir Supply	asset hierarchy improvements
2020	CHW	CHINCHILLA WEIR SUPPLY	Update Concrete, Zone, Excavation & Protection Works Materials for IBH Chinchilla Weir Supply	asset hierarchy improvements
2020	CHW-MO	METER OUTLETS-CHINCHILLA	Replacement of Chinchilla Meter Outlets - 2015 IBHStrategy	Meter strategy
2020	CHW-CDM-CHI-OWS-GLS-VLV-VLI-002	840mm RH GATE VALVE	Remove/Assess - Refurb/Replace 840mm Gate Valve Right Conduit (includes install of Bulkhead Gate by Divers)	May only be one of the two valves
2020	CHW-CDM-CHI-OWS-GLS-VLV-VLI-003	150mm U/S GATE VALVE	Procure and replace 150mm Gate Valve U/S	they are the original so take the chance to replace them when the intake is isolated
2020	CHW-CDM-CHI-OWS-GLS-VLV-VLI-004	150mm D/S GATE VALVE	Procure and replace 150mm Gate Valve D/S	they are the original so take the chance to replace them when the intake is isolated
2021	CHW	CHINCHILLA WEIR SUPPLY	Asset Revaluation - IDH - Chinchilla Weir Supply	Insurance requirement
2021	CHW-MO	METER OUTLETS-CHINCHILLA	Replacement of Chinchilla Meter Outlets - 2015 IBHStrategy	Meter strategy
2021	CHW-CDM-CHI-OWS-GLS-VLV-VLI-001	840mm LH GATE VALVE	Remove/Assess - Refurb/Replace 840mm Gate Valve Left Conduit (includes install of Bulkhead Gate by Divers)	may only be one of the two valves
2022	CHW-MO	METER OUTLETS-CHINCHILLA	Replacement of Chinchilla Meter Outlets - 2015 IBHStrategy	Meter strategy
2022	CHW-CDM-CHI	CHINCHILLA WEIR 587.3KM	Study WEIR PROGRAM - 5yr Comprehensive Inspection; Also refer to HR # 41393275 for conduit inspection	Comprehensive inspection to maintain asset condition knowledge
2023	CHW-MO	METER OUTLETS-CHINCHILLA	Replacement of Chinchilla Meter Outlets - 2015 IBHStrategy	Meter strategy
2023	CHW-CDM-CHI-WAW	WALL	Refurbishment: Repairs to the concrete face of the weir	the concrete face needs regular work to maintain it
2024	CHW-MO	METER OUTLETS-CHINCHILLA	Replacement of Chinchilla Meter Outlets - 2015 IBHStrategy	Meter strategy
2024	CHW-CDM-CHI-SFC-FNC-001	LEFT ABUTMENT FENCE	Replacement: fencing after 30 years of maintenance. Dividing fencing act should apply with FML leased land	Only if needed

CONSULTATION DRAFT

CONTENTS

2019-2024 NETWORK SERVICE PLAN

CHOOSE AN ITEM.

BULK WATER SERVICE CONTRACT

[PUBLISH DATE]

We're focused on reliability, efficiency and safety, ensuring through ongoing consultation that the [Choose An Item.] 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 revenue and costs for review.

Our focus during the 2019-2024 NSP period will be on maintaining an efficient and reliable water supply and continuing safe dam operations. Customers will also see improved transparency, openness to working together, a focus on efficiency gains and reduced insurance costs.

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.

[Insert Name], Operations Manager

INTRODUCTION

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

For our 5,000-plus customers, this means building and sustaining positive and supportive relationships while operating an efficient, sustainable business. We are committed to keeping our customers and partners informed, and working closely with them to identify and work towards solutions that deliver value.

A diagram showing SunWater's Asset Management Framework (which includes the development of NSPs) is included in Appendix 1.

The purpose of this years' NSP is twofold:

(1) to consult with customers on routine expenditure and non-routine expenditure throughout the coming financial year; and

(2) to present to customers SunWater's projected efficient costs for the 5 year period from 2019 – 2024, prior to these cost being considered by the Queensland Competition Authority in the upcoming irrigation price review.

In particular, the NSP covers:

- past performance for routine and non-routine expenditure;
- forecast routine and non-routine expenditure for the approaching year (2018/19) and the next regulated price path from 2019/20 – 2023/24; and
- the long-term outlook for material non-routine expenditure.

In this NSP, the focus of consultation is the draft budget figures for 2019 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 shows how SunWater and customers work together in relation to NSPs. SunWater has consulted with the [Irrigation Advisory Committee] 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 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

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

Our Customers

The water entitlements for each customer segment are shown in Table 1 with 2018/19 charges and cost per megalitre shown in Table 2 below.

The majority of our customers in this Service Contract are [insert].

TABLE 1: WATER ENTITLEMENT AND USAGE DATA

[insert table]

TABLE 2: IRRIGATION CHARGES FOR 2018/19*

Product		2018/19 (ML)	Cost (ML)**
MP Allocation Charge	Bulk water Charge – Part A (fixed charge based upon entitlement)		
MP Allocation Water	Bulk Water Charge Part B (variable charge based upon usage)		
HP Allocation Charge	Bulk water Charge – Part A (fixed charge based upon entitlement)		
HP Allocation Water	Bulk Water Charge Part B (variable charge based upon usage)		

* This table includes bulk charges only. For distribution charges (Part C and Part D) please refer to the Distribution Service Contract NSP.

** Lower bound costs.

Service Targets

SunWater and customers have agreed Water Supply Arrangements and Service Targets for the Choose An Item. Service Contract.

Table 3 below sets out the number of exceptions occurring in 2016/17 in relation to 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		
Unplanned Shutdowns – Duration*		
Maximum number of interruptions**		

* For those service contracts where a different target is prescribed during peak/off-peak periods, this is the number of times that the unplanned shutdown has exceeded the shortest of these periods.

** This is the total number of bulk and distribution customers in the scheme that have been interrupted in excess of the target.

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 Choose An Item. Bulk Water Service Contract is presented in Table 4. In 2017, the cost per megalitre for water in the Service Contract was [$#].

In 2018/19, SunWater plans to [increase/decrease] routine and non-routine expenditure for the Choose An Item. 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.

The revenue SunWater receives from urban and industrial customers is agreed by contract. The revenue we receive from irrigation customers is considered by the QCA as part of its review of irrigation charges and is determined based upon Queensland Government Pricing Policies which allow SunWater to recover its prudent and efficient costs of operating the Service Contract.

As at 30 June 2017 the Choose An Item. Bulk Water Service Contract [did/did not] fully recover irrigation's share of costs. [The shortfall has historically been met by the Queensland Government via community service obligation (CSO) payments.]

SunWater anticipates an [increase/decrease] in revenue for Choose An Item. Bulk Water Service Contract in 2019-2024 (refer to Table 4 below).

TABLE 4: SERVICE CONTRACT FINANCIAL SUMMARY

Choose An Item. IS	2015 Actual $000	2016 Actual $000	2017 Actual $000	2018 Forecast $000	2019 Budget $000	2020 Budget $000	2021 Budget $000	2022 Budget $000	2023 Budget $000	2024 Budget $000
REVENUE										
Irrigation										
CSO										
Industrial										
Urban										
Revenue Transfers										
Drainage										
Other										
• Insurance Proceeds – Flood										
Revenue Total										
Less – Routine Expenditure										
Less – Non-Routine Expenditure										
• Annuity Funded										
• Non Annuity Funded****										
Surplus (Deficit)										

* SunWater's 2019-2024 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.

** The split between Irrigation and CSO is a decision for the Queensland Government and will be dependent upon the outcome of the QCA process.

*** Revenue Transfers represent the cost of bulk water supplies delivered through the distribution system(s). The revenue accrues to the distribution system before it is transferred to the Bulk Service Contract as a contribution to the cost of the bulk water service. The QCA established the transfer cost for irrigation supplies at the cost reflective bulk water tariff.

**** This is expenditure which has not been funded by irrigation customers. An example of this in the Choose An Item. Bulk Water Service Contract is [insert].

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

As part of our commitment to transparency, Figures 2 and 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 – 2019 BUDGET

[Paste chart here]

FIGURE 3: BREAKDOWN OF TOTAL SERVICE CONTRACT COSTS – 2020-2024 BUDGET

[Paste chart here]

Notwithstanding the variance of assets, would Customers find benchmarking against another service contract (or the SunWater average) useful?

Would Customers like to see their Service Contract as a percentage of SunWater's total revenue?

COST OF DELIVERING SERVICES – ROUTINE EXPENDITURE

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

SunWater has budgeted an [increase/decrease] in Choose An Item. Bulk Water Service Contract routine operating expenditure in 2019 (refer to Table 5). SunWater's proposed budgets for routine operating expenditure for 2020 – 2024 are also presented in Table 5.

The data presented in Table 5 includes direct expenses which are allocated a share of local area support costs, direct and corporate support costs. For a more detailed breakdown and explanation of these costs please refer to Appendix 2.

TABLE 5: ROUTINE OPERATING EXPENDITURE^

Choose An Item. WS	2017			2018**		2019**		2020	2021	2022	2023	2024
	SW Actual $000	QCA Rec $000	Variance $000	SW Forecast $000	2017 QCA Rec adjusted for inflation $000	SW budget $000	2018 adjusted for inflation $000	SW budget $000	SW budget $000	SW budget $000	SW budget $000	SW budget $000
Electricity												
Insurance												
Operations Other												
Operations Total												
Preventative Maintenance												
Corrective Maintenance												
Routine Total												

^ SunWater's 2019-2024 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.

** For 2018 and 2019 SunWater has included and reported against the 2017 QCA recommended costs adjusted for inflation which was assumed to be 2.5%.

Operations

For further detail on what is included in operations expenditure, refer to Appendix 3.

Choose An Item. Bulk Water Service Contract's total operations budget in 2019 is #% [above/below] the budget adjusted by 2.5% for inflation.

[Include Service Contract specific explanation of changes/drivers of material expenditure, any challenges faced in the Service Contract e.g. infrastructure age/condition].

Electricity

One of the key challenges for SunWater is managing the cost of electricity.

[Include detail of the activities taken by SunWater to manage electricity costs].

Insurance

Another of the key challenges for SunWater in managing routine expenditure is reigning in the cost of insurance premiums, which have increased significantly in recent years due to flood events.

[Include details of what SunWater has done to reduce insurance costs and what is involved in obtaining insurance].

Preventive maintenance

Preventive maintenance underpins the ongoing operational performance and service capacity of Choose An Item. Bulk Water Service Contract's physical assets.

Preventive maintenance is cyclical in nature with a typical interval of 12 months or less, however, the intervals can be longer. For more information on what is included as preventative maintenance, refer to Appendix 3.

Corrective maintenance

Corrective maintenance is identified in several ways including through the performance of preventative maintenance, operation of assets and equipment and operational inspections where defects are identified or 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.

Choose An Item. Bulk Water Service Contract corrective maintenance for 2019 is budgeted [above/below] the QCA recommendation adjusted in line with the inflation assumption of 2.5%.

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. This is maintenance that has to be carried out immediately to restore normal operation or supply to customers or to meet regulatory obligations (e.g. 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 which is currently based on a 20 year expenditure profile. This expenditure could be capex or opex. The annuity approach acknowledges that a long-term view of renewals spend is required to ensure adequate funding and for future generations of water users.

While the immediate program for the 2019 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 with the minimum spend. 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.

Details of the major non-routine projects planned for the period from 2019 – 2024 are set out in Appendix 4.

TABLE 6: NON-ROUTINE EXPENDITURE

Choose An Item. WS	2017			2018*		2019*		2020	2021	2022	2023	2024
	SW Actual $000	QCA Rec $000	Variance $000	SW Forecast $000	QCA forecast $000	SW Budget $000	QCA forecast $000	SW Budget $000	SW Budget $000	SW Budget $000	SW Budget $000	SW Budget $000
Annuity Funded												
Operations												
Preventative Maintenance												
Corrective Maintenance (Flood)												
Renewals												
Non-routine Total												
Non Annuity Funded												

* The QCA Forecast for 2018 and 2019 is based upon the modelling undertaken by the QCA as part of the 2012 pricing review.

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 as measured over a relatively long period of time (currently 20 years). The forecast annuity balances, and the impacts of budgeted non-routine spend, are shown in Table 7 below.

TABLE 7: ANNUITY BALANCE

Choose An Item. WS	2017 Actual $000	2018 Forecast $000	2019 Budget $000	2020 Forecast $000	2021 Forecast $000	2022 Forecast $000	2023 Forecast $000	2024 Forecast $000
Annuity								
Opening Balance								
Spend								
Insurance Proceeds Receipts (if applicable)								
• Prior Year								
• Current Year								
Annuity Contribution*								
Interest/financing costs								
SunWater – Closing Balance								
QCA – Closing Balance								
Difference								

* The annuity contribution is included in the prices paid by customers. It was set by the QCA for 2012-2017 and rolled forward with CPI for 2018 and 2019. 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.

Overview of annuity-funded, non-routine projects to 2044

The estimated renewals expenditure out to 2044 is shown in Figure 4 below.

FIGURE 4: ANNUITY EXPENDITURE TO 2044

[Insert graph]

The renewals annuity is currently calculated over a 20-year planning period and therefore, projects forecast to occur up to 2044 affect the renewals annuity. The greater the value of the project means the more significant impact upon the renewals annuity.

Do customers have a preference about the length of term of the 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 NSPs.

In recent years, a project was considered 'material' when its value was greater than 10% of the value of the Service Contract over the 5 year price path period.

What do customers think about the materiality threshold? Should this be changed?

Material Projects are listed in Appendix 5.

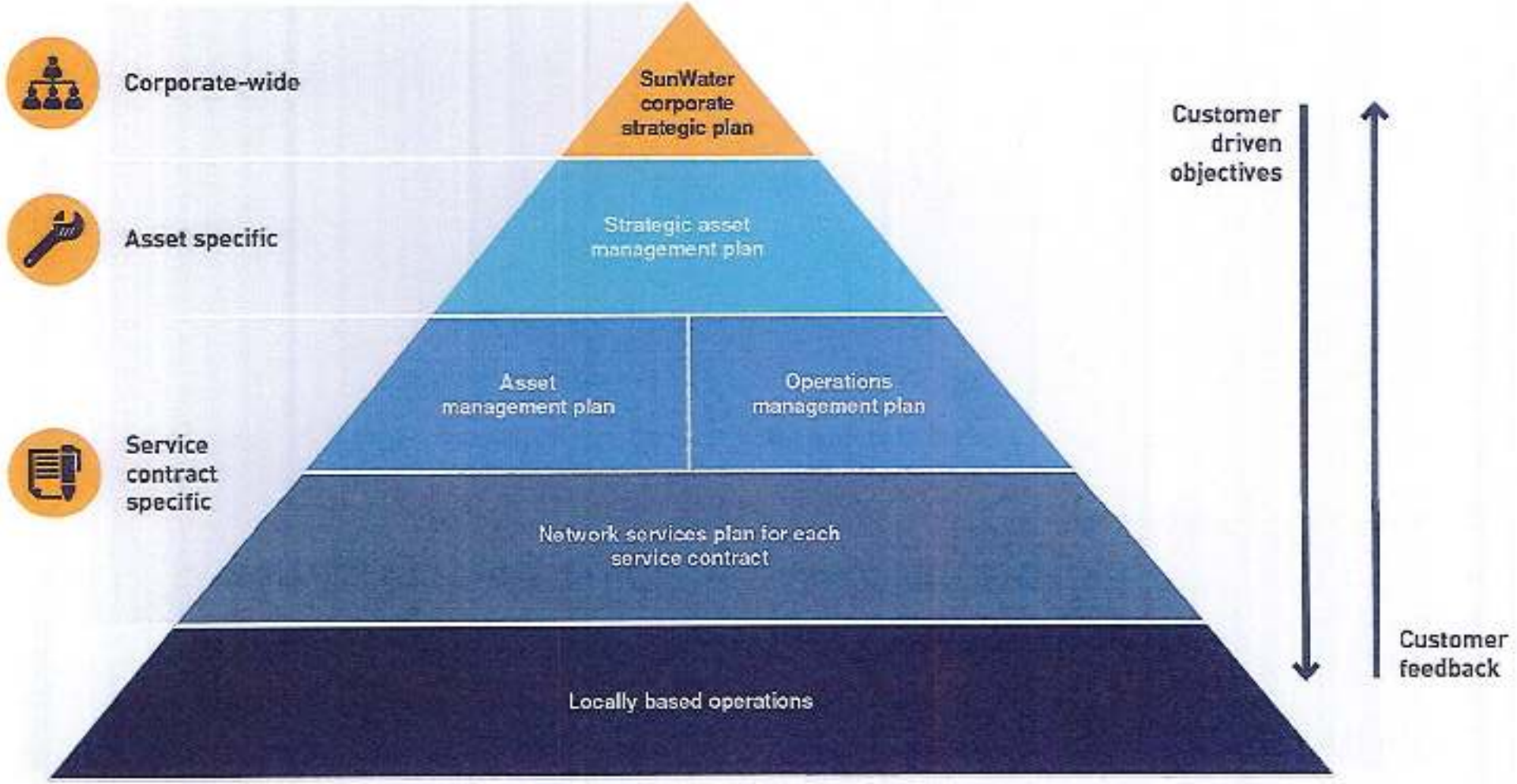
Options assessment

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

We currently develop options analyses for all material projects in the annuity calculation planning period. These reports are tailored to suit project complexity and budget, with efforts focused where needed. This ensures that the solution is prudent and justified.

What do customers think about the need for an options analysis for all Material Projects? Should this be changed?

APPENDIX 1: SUNWATER'S ASSET MANAGEMENT FRAMEWORK



APPENDIX 2: TOTAL EXPENDITURE BY EXPENSE TYPE

TABLE 8: EXPENDITURE FOR ACTIVITY BY TYPE

Choose An Item. WS	2015			2016			2017			2018		2019		2020	2021	2022	2023	2024
	SW Actual $000	QCA Rec $000	Variance $000	SW Actual $000	QCA Rec $000	Variance $000	SW Actual $000	QCA Rec $000	Variance $000	SW Forecast $000	Adjusted by 2.5% $000	SW Budget $000	Adjusted by 2.5% $000	SW Budget $000	SW Budget $000	SW Budget $000	SW Budget $000	SW Budget $000
Revenue																		
Routine Spend																		
Operations																		
Labour																		
Contractors																		
Materials																		
Electricity																		
Insurance																		
Other																		
Local area support costs																		
Corporate support costs																		
Indirect costs																		
Preventative Maintenance																		
Labour																		
Contractors																		
Materials																		
Other																		
Local area support costs																		
Corporate support costs																		
Indirect costs																		
Corrective Maintenance																		
Labour																		
Contractors																		
Materials																		
Other																		
Local area support costs																		
Corporate support costs																		
Indirect costs																		
Routine Total																		
Non-Routine Spend																		
Labour																		
Contractors																		
Materials																		
Other																		
Local area support costs																		
Corporate support costs																		
Indirect costs																		
Non-Routine Total																		
Total Spend																		

Direct Costs

Direct costs are those costs which are able to be directly attributable to either an asset or a Service Contract e.g. 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 the costs which support local people doing their jobs e.g. regional accommodation costs, local administration support and training.

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 user pays e.g. service contracts without a dam are not apportioned dam safety costs.

Corporate support costs

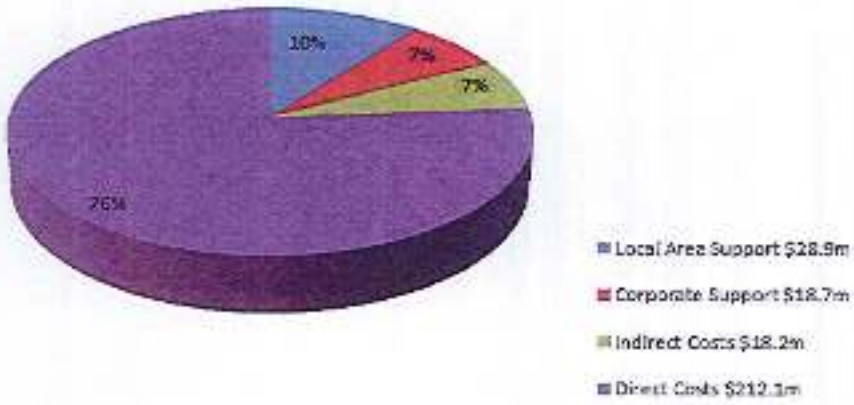
Corporate support costs are more generic than indirect costs and local area support costs, and are spread across all service contacts based on direct labour. They include the cost of HR and payroll, ICT, corporate communications, legal, property, finance, and internal audit, plus the costs of the CEO, Chief Financial Officer and the SunWater Board, where these costs are not directly charged to activities within service contracts.

The Choose An Item. Bulk Water Service Contract's portion of corporate support costs is [insert %].

Would Customers prefer to have the text, the infographic or both?

Would a pie chart be of any use, showing the total amount of each type of cost and the share of those costs allocated to the Service Contract (example included in opposite column)?

Total Cost Pools (2018 SCI)



SunWater's methodology for recovering local area and corporate support costs and indirect costs was reviewed and accepted by the QCA during the 2012 pricing review. [Include comment on current methodology].

Figure 5 below shows graphically the allocation of costs associated with providing services.

Figure 5 How are SunWater's costs allocated to each Service Contract?

APPENDIX 3: ROUTINE EXPENDITURE

[This is a master list. This annexure will be reviewed by Operations Managers to ensure that the listed activities in the NSP are undertaken in the Service Contract]

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 cost of:

- scheduling and delivering water, including processing water orders, releasing water, operating pump stations, regulating and monitoring channel flows, and monitoring customer deliveries
- emergency responses for channel overflows and other 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 public relations 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.

Preventive maintenance

Preventive maintenance 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), channels (regulator gates, civil works, signs, structures, etc.), drains (civil works, structures etc.), pipelines (valves, air valves, scours easements etc.) and other infrastructure.
- Servicing — planned maintenance activities carried out routinely on physical assets including valves, cranes, sump pumps and associated equipment.
- Weed control — management of weeds, including:
  - slashing channels and drains
  - Acrolein treatment of channels
  - Copper Sulphate treatment
  - spraying and other activities to control operational and noxious weeds.

Scheduled Corrective maintenance

Scheduled Corrective Maintenance varies by asset type and typically includes:

- Channels:
  - de-silting channels and catch drains
  - erosion control and repairing rock protection works
  - repairing fencing, concrete structures and regulator gates, control valves.
- Drains:
  - de-silting drains
  - erosion control and repairing rock protection works
  - repairing fencing and concrete structures.
- 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 the repair or correction of faults in pump stations, channels or pipelines. It also includes responding to theft or vandalism associated with Service Contract assets.

Figure 6 What costs does SunWater incur in providing services?

[insert infographic]

Would Customers prefer to have the text, the infographic or both?

APPENDIX 4: NON-ROUTINE PROJECTS FOR 2019 - 2024

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

TABLE 9: NON-ROUTINE PROJECTS 2019 - 2024

Year	Project title	Project scope	Budget ($'000)
2019			
	Other works	There are # other non-routine projects for 2019 ranging from $#,000 to $20,000. Further detail will be tabled at the IAC meeting.	
	2019 Total		
2020			
	Other works	There are # other non-routine projects for 2020 ranging from $#,000 to $20,000. Further detail will be tabled at the IAC meeting.	
	2020 Total		
2021			

Year	Project title	Project scope	Budget ($'000)
	Other works	There are # other non-routine projects for 2021 ranging from $#,000 to $20,000. Further detail will be tabled at the IAC meeting.	
	2021 Total		
2022			
	Other works	There are # other non-routine projects for 2022 ranging from $#,000 to $20,000. Further detail will be tabled at the IAC meeting.	
	2022 Total		
2023			
	Other works	There are # other non-routine projects for 2023 ranging from $#,000 to $20,000. Further detail will be tabled at the IAC meeting.	
	2023 Total		
2024			
	Other works	There are # other non-routine projects for 2024 ranging from $#,000 to $20,000. Further detail will be tabled at the IAC meeting.	
	2024 Total		

APPENDIX 5: MATERIAL RENEWALS PROJECTS

TABLE 10: MATERIAL RENEWALS PROJECTS BY YEAR

Year	Project Title	Project Estimate $'000