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Irrigation Price Path

1 July 2025 to 30 June 2029

Pioneer River Water Supply Scheme

Overview of the price path process

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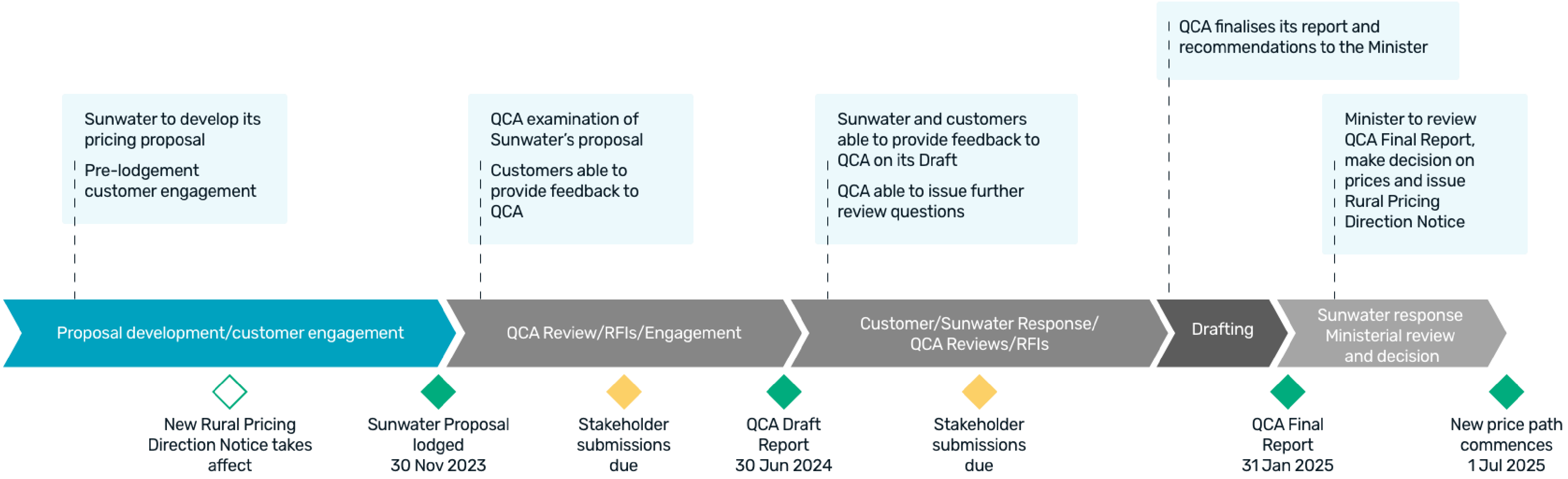
Overview of the price path process



What to expect from Sunwater

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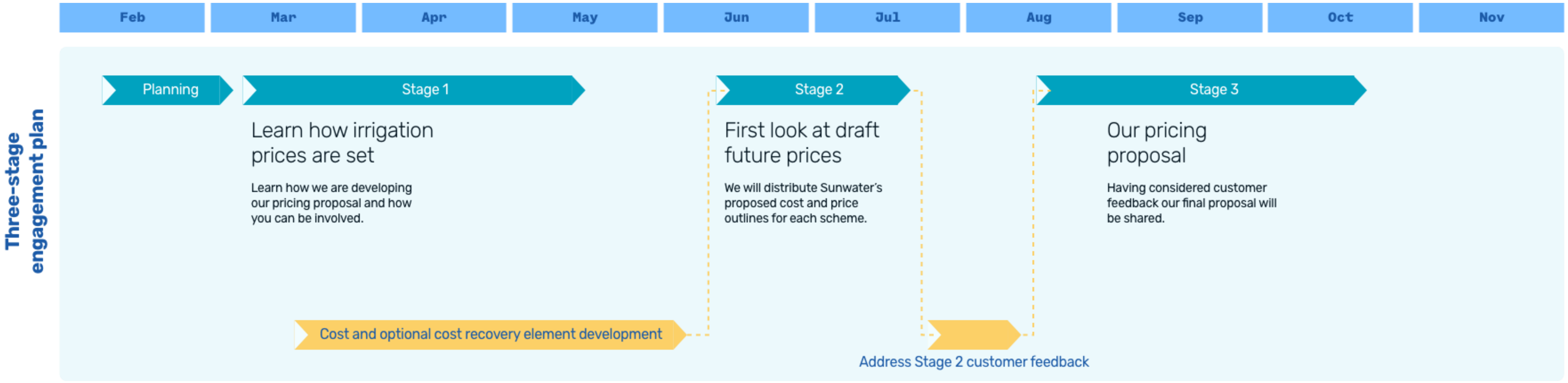

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Scheme Level Overview

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Overview of the price setting process

Step 1	Step 2	Step 3	Step 4	Step 5
Allocate revenue by charge type (Variable or fixed) Includes operating expenditure, annuity contribution and revenue offset revenue building blocks.	**Allocate fixed revenue to priority group allocation buckets** Allocation factors are relatively static, only changing when scheme operating parameters change, such as when entitlements are converted from one priority to another.	**Allocate fixed revenue to priority group** Apply the fixed revenue allocators to set the revenue requirement by Part A / Part C priority. For distribution schemes, revenue associated with customer loss entitlements are added here.	**Calculate cost reflective prices** Cost reflective prices are set first using a ssigned revenue and volumes to produce $/ML prices.	**Calculating recommended prices** Cost reflective prices are then smoothed across the four-year price path period to set target prices. Recommended prices are set with reference to current prices, target prices and the price path principles.
Fixed (Part A/C) **All schemes** ✓ 80 percent of operations and maintenance direct costs ✓ all other costs (including electricity) *Large electricity using schemes* ✓ Varies according to scheme	**Fixed (Part A/C)** **Bucket 1** *Allocation by entitlement percentage* ✓ 50 percent of operations (direct and indirect) and revenue offsets **Bucket 2** *Allocation by headworks utilization factor* ✓ All other categories	**Fixed (Part A/C)** **Bucket 1** *Allocation by entitlement percentage* ✓ Costs x percentage = priority group revenue **Bucket 2** *Allocation by headworks utilization factor* ✓ Costs x percentage = priority group revenue	**Part A/C** High Priority ($/ML) = High priority costs ($) / gross entitlements (ML WAE) **Part A/C** Medium Priority ($/ML) = Medium priority costs ($) / gross entitlements (ML WAE)	
Variable (Part B / D) **All schemes** ✓ 20 percent of operations and maintenance direct costs *Large electricity using schemes* ✓ Varies according to scheme	→	→	**Part B / D** ($/ML) = Variable costs ($) / [Entitlements (net of losses) ML WAE x usage % (ML / ML WAE)]	

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Pioneer River Water Supply Scheme

Scheme Overview

78,110 ML in entitlements, with average annual usage of 26,577 ML

1 irrigation customer – Pioneer Valley Water Co-op Ltd

Interconnected with the Eton River Water Supply Scheme via the Mirani Weir and associated diversion channel Co-op Ltd

6 total customers

Major assets

Teemburra Dam

Mirani Weir / Marian Weir / Dumbleton Weir

Palm Tree Diversion Pipeline – 1.8km long MSCL irrigation pipeline

Key operations and maintenance activities

- Comprehensive dam inspections
- Infrastructure security
- Infrastructure refurbishments e.g. weir structure and guard valves

Pricing tariffs

- Historically two tariff groups – Surface Water Callide & Kroombit Creek & Callide Benefited Groundwater Area – which are now the same price with fixed (Part A) charges and variable (Part B) charges.
- No risk or other forms of entitlement

Pioneer River
Water Supply Scheme

Entitlements overview

Entitlements		Customer losses	Irrigation
High	30,753 ML	0 ML	33 ML
Medium	47,357 ML	0 ML	47,357 ML
Total	78,110 ML	0 ML	47,390 ML

Pricing breakdown
Medium priority (MP)

*This is a breakdown of your current prices.

*A negative (or below the line) segment reflects the amount paid by customers that was above the lower bound cost reflective price.

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Price setting process (2023-24 price example)

Step 1

Allocate revenue by charge type

Step 2

Allocate fixed revenue to priority group allocation buckets

Step 3

Allocate revenue to priority group

Step 4

Calculate cost reflective prices

		Variable		Fixed		WAE Priority % (High 39.4%)		HUF % (High 62.0%)	
Revenue offsets	0.0			100%	0.0	50%	0.0	50%	0.00
Operations - D	227.3	20%	45.45	80%	181.8	50%	90.9	50%	90.91
Operations - I	220.2			100%	220.2	50%	110.1	50%	110.12
Operations - IGEM	81.5							100%	81.46
Maintenance - D	306.7	20%	61.34	80%	245.3			100%	245.35
Maintenance - I	232.4							100%	232.36
Insurance	455.7							100%	455.66
Electricity	6.55	0.00%	0.00					100%	6.55
Annuity	1,165.5							100%	1,165.48
	2,695.70		106.79				201.0		2387.88

								Revenue requirement by priority group		Losses		Revenue requirement after losses conversion				Entitlements		Usage %		
Part A - HP	39.4%	x	201.0	+	62.0%	x	2,387.88	= 1,559.6	-	0.00	=	1,559.6	x	1,000	/	30,753.00			=	$50.71
Part A - MP	60.6%	x	201.0	+	38.0%	x	2,387.88	= 1,029.27	-	0.00	=	1,029.27	x	1,000	/	47,357.00			=	$21.73
Part B								106.79	-	0.00	=	106.79	x	1,000	/ [	78,110.00	x	34.0%]	=	$4.02

Key inputs	WAE	WAE%	Usage	HUF
High priority	30,753	39.4%		62.0%
Medium priority	47,357	60.6%		38.0%
Total	78,110		34.0%	
Customer losses	0			
Sub-scheme splits	0			

Distribution losses

Calculated in bulk scheme and picked up in distribution system

High priority	x	0.00	=	0.00
Medium priority	x	0.00%	=	0.00
Variable	x	0.00%	=	0.00

Step 5

Price setting process

Water Supply Scheme (generic) worked example using 2020-21 to 2023-24 QCA recommended costs

Step 5a

Calculate smoothed target prices

Cost reflective prices are then smoothed across the four-year price path period to set target prices

Add QCA Fee

Part A HP	$50.71/ML	+	$0.47/ML	=	$51.19/ML
Part A MP	$21.73/ML	+	$0.47/ML	=	$22.21/ML
Part B	$4.02/ML	+	$0.00/ML	=	$4.02/ML

Target prices Unsmoothed

	2020/21	2021/22	2022/23	2023/24
Part A HP	$45.93	$48.18	$50.07	**$51.19**
Part A MP	$19.99	$20.92	$21.72	**$22.21**
Part B	$3.75	$3.83	$3.92	**$4.02**

Steps 1 through 4 apply to each year of the forecast pricing period

Target prices Smoothed

	2020/21	2021/22	2022/23	2023/24
Part A HP	$47.19	$48.25	$49.33	**$50.44**
Part A MP	$20.50	$20.96	$21.42	**$21.90**
Part B	$3.75	$3.84	$3.92	**$4.01**

Smoothed revenues (or prices) are set with a defined rate of escalation (e.g. the expected inflation rate) from Year 1 to Year 4. They are calculated on the basis that the present value (PV) of smoothed revenues (or revenues arising from smoothed prices) is equivalent to the PV of the building blocks revenues.

Step 1

Convert four years of revenue requirement (inclusive of QCA fees) into $2019-20

= NPV(4.37%, (946.8; 990.9; 1,028.5; 1,051.6) = 3,529.7 ($ thousands) [nominal WACC]

Step 2

Convert the denominator (WAE ML) into present value terms

= NPV(2.09%, (47,357; 47,357; 47,357; 47,357) = 179,948.98 (ML WAE) [real WACC]

Step 3

Divide step 1 result by step 2 result and multiply by 1,000

= 20.047 ($/ML WAE) – the Year 0 price (in 2019-20 dollars)

Step 4

Compound Year 0 price by forecast inflation (2.24%) for each year of the price path

Year 0	Year 1	Year 2	Year 3	Year 4
2019/20	2020/21	2021/22	2022/23	2023/24
$20.47	x $(1+2.24\%)^1$	x $(1+2.24\%)^2$	x $(1+2.24\%)^3$	x $(1+2.24\%)^4$
	=$20.50	=$20.96	=$21.42	=$21.90

Price setting process

Water Supply Scheme (generic) worked example using 2020-21 to 2023-24 QCA recommended costs

Step 5b

Calculate recommended prices

Customer prices are then set with reference to current prices, target prices and the pricing principles

Target prices
Smoothed

	2020/21	2021/22 (2.24%)	2022/23 (2.24%)	2023/24 (2.24%)
Part A HP	$47.19	$48.25	$49.33	**$50.44**
Part A MP	$20.50	$20.96	$21.42	**$21.90**
Part B	$3.75	$3.84	$3.92	**$4.01**

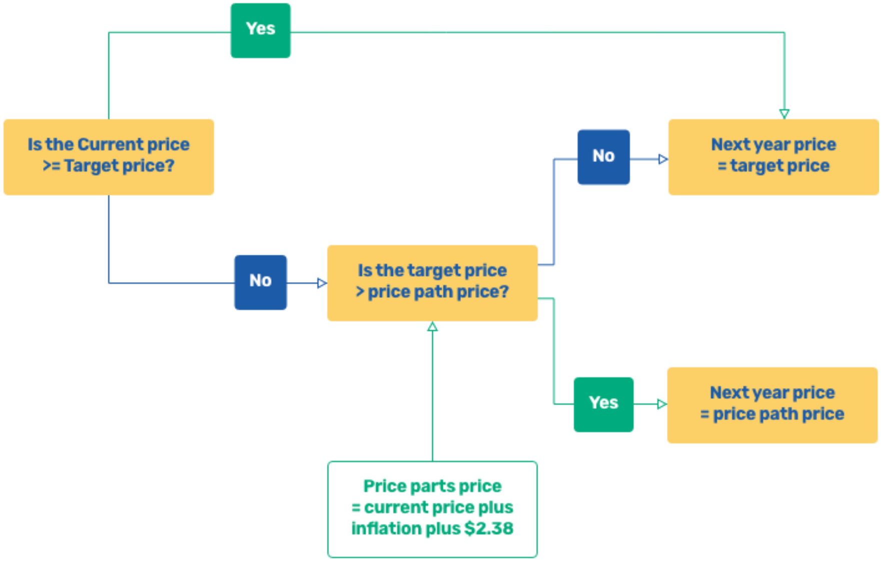
Smoothed revenues (or prices) are set with a defined rate of escalation (e.g. the expected inflation rate) from Year 1 to Year 4. They are calculated on the basis that the present value (PV) of smoothed revenues (or revenues arising from smoothed prices) is equivalent to the PV of the building blocks revenues.

Transition path prices

	Actual	Price path			
	2020/21	2020/21	2021/22	2022/23	2023/24
Part A HP	Not set	Not set	Not set	Not set	Not set
Part A MP	$14.89	$20.50	$20.96	$21.42	$21.90
Part B	$3.13	$3.75	$3.84	$3.92	$4.01

Recommended prices are set using target (smoothed) prices and applying the price path principles outlined in the referral notice.

Note the flowchart shown reflects the current (as at 21 March 2023) rural pricing direction notice where prices above lower bound immediately transition to lower bound.



Note 1 QCA (2014) *Financial Capital Maintenance and Price Smoothing – Information Paper*


Thank you.
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