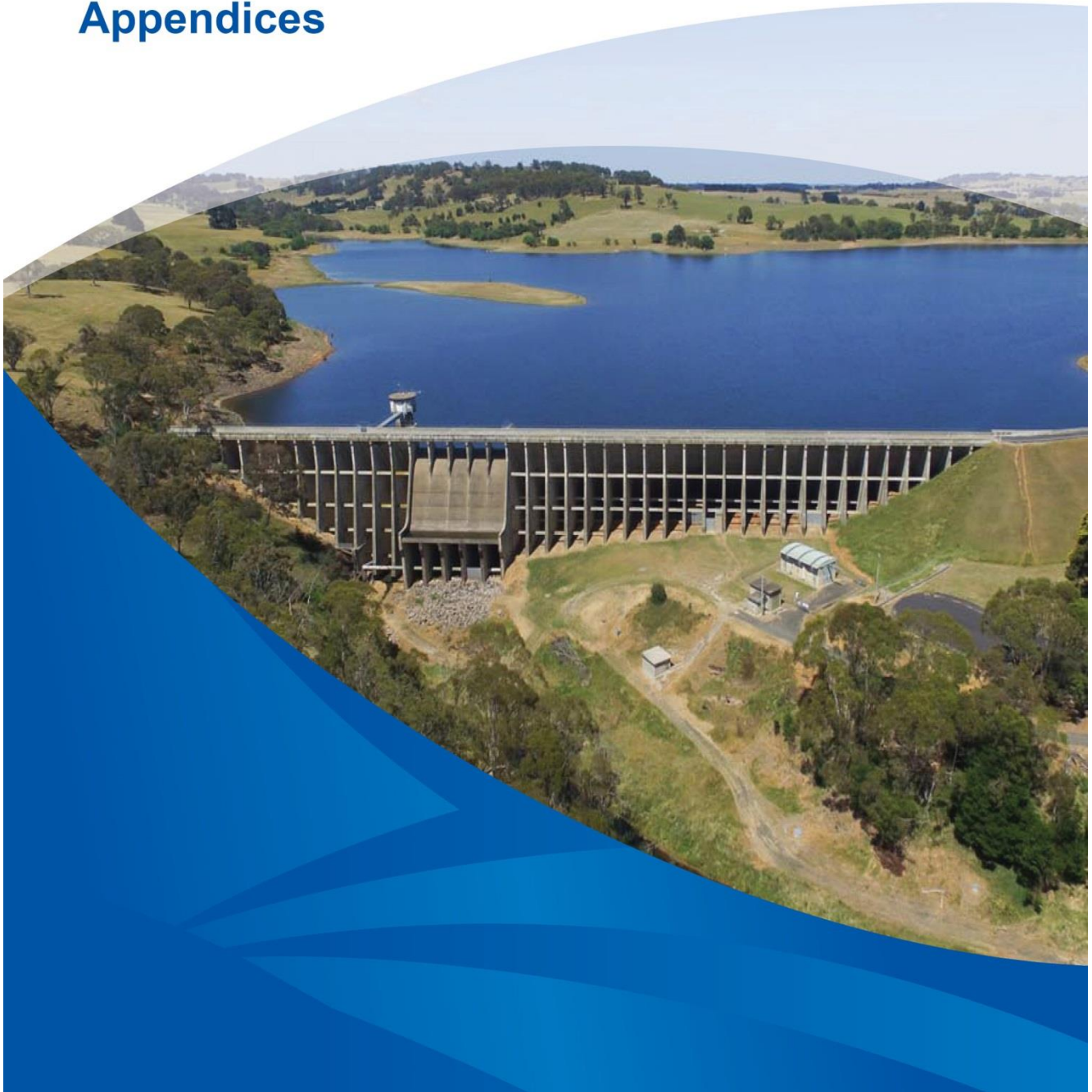




Pricing Proposal to the Independent Pricing and Regulatory Tribunal

Regulated prices for NSW Rural Bulk Water Services from
1 July 2017 to 30 June 2021

Appendices



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Appendix A.

2017-2021 MDB, Coastal and Fish River Valleys Pricing Submission

DRAFT PRICING

18 April 2016



1

Today's Agenda



- **Background – Water Market reform**
- **“Headline” Outcomes:**
 - What WaterNSW has been able to achieve in terms of reduced costs; and
 - What this means for our Rural and Coastal customers
- **Parameters upon which WaterNSW's 2017 Pricing Submission will be based**
- **A recap on the customer consultation process to date**
- **Our customer consultation process to date:**
 - items that have been discussed and agreed with customers; and
 - items that require customer response
- **Key matters for discussion today:**
 - Confirmation by each valley customer group that they want to retain the Unders and Overs Mechanism (UOM) in relation to the variable tariff component; and
 - Selection by each valley customer group of tariff structure.
- **Detailed State-wide Analysis:**
 - Opex; and
 - Capex.
- **Example of the Valley specific analysis available:**
 - Prices
- **WaterNSW Draft Pricing Terms and Conditions**
- **Summary**
- **Next steps**



What We Are Presenting Today

- Whole of State analysis and one Valley specific example.
- Information packs will be available 4.30pm 18/4/16 to each Valley as per previous advice.
- **Draft pricing:** the prices quoted in this presentation are draft and are subject to change as WaterNSW completes its Budget process.
- WaterNSW costs and charges only, the analysis presented today does not include:
 - **MDBA pass through costs;**
 - **Border Rivers Commission pass through charges;**
 - **Costs for WAMC functions carried out by DPI Water; or**
 - **Costs for WAMC functions that may in the future be carried out by WaterNSW vs. DPI Water.**
- With respect to valleys where there are current subsidies that require an adjustment calculation (North Coast and South Coast), adjustments to those existing subsidies is subject to final NSW Treasury approval.
- At the request of the CSC Reference Group WaterNSW has included in this presentation analysis of tariff structures where the variable component exceeds the current 60%.
- Given the financial risks to WaterNSW that would result from variable tariffs higher than 60%, these tariffs will only be available to customers if WaterNSW is able to pass on the resulting risk of volatility of its revenues to a third party. WaterNSW is currently researching the availability and seeking a price from third parties for this type of 'insurance' product.



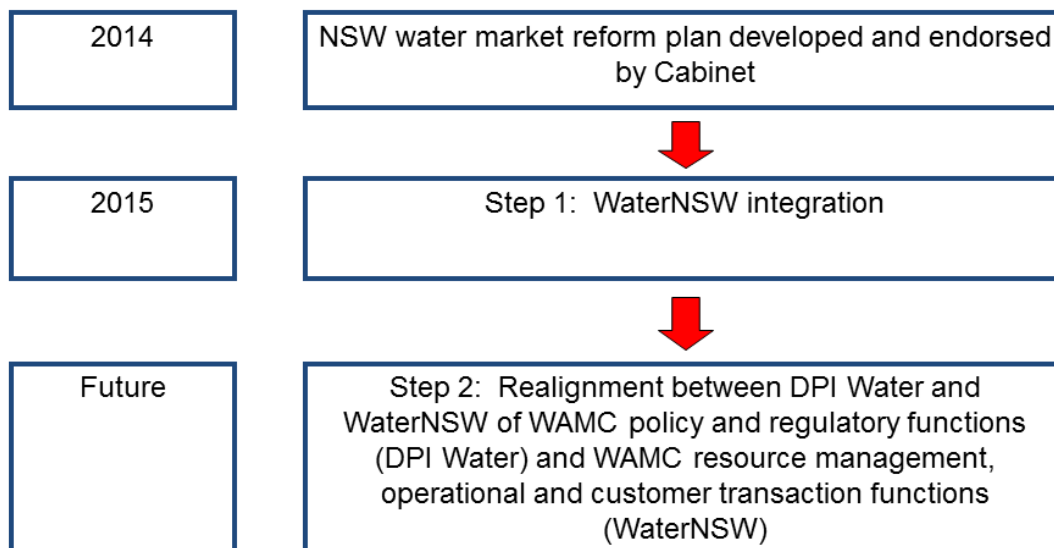
BACKGROUND

WaterNSW is...

- WaterNSW is Australia's biggest water supplier and is the major supplier of raw water in NSW.
 - delivers raw water from 42 large dams, pipelines and the State's rivers;
 - develops water infrastructure solutions to water supply and reliability issues and then plans, develops and maintains that infrastructure; and
 - promotes improvements in achievable water quality standards and contributes to the protection of public health and the environment through enhanced catchment protection practices in declared catchments.



The Establishment of WaterNSW was a Key Step in the NSW Government's Water Market Reform Programme



The Government's Key Drivers for These Steps in Water Market Reform



- Desire to move away from monopolistic, asset driven market
- Determination to separate:
 - market regulation and water policy (DPI Water); from
 - water management, system and asset operation and rural customer relationship (WaterNSW).
- Increase customer focus, responsiveness and commercial thinking:
 - eliminate “monopoly” attitude;
 - Customer value add; and
 - Prioritisation of spend.
- For each Government instrumentality in the water market:
 - to be more efficient through narrower, clearer scope, “do it well” and “do more with less”;
 - Deepen talent and expertise in core functional areas.
- Remove duplication/ waste and capture efficiencies of scale so that end use customer cost decreases:
 - Like for like functions;
 - Shared Services concept.
- **Today you will see very clearly the benefits that customers will receive from these reforms...**



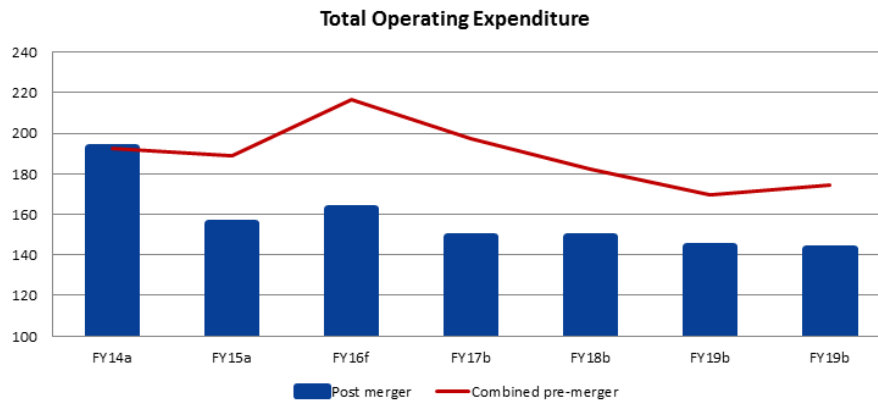
WHAT WATERNSW HAS BEEN ABLE TO ACHIEVE IN TERMS OF REDUCED COST TO CUSTOMERS



FY2017 Total WaterNSW OpEx

22% lower than FY14 actuals

24% lower than combined pre-merger forecasts;

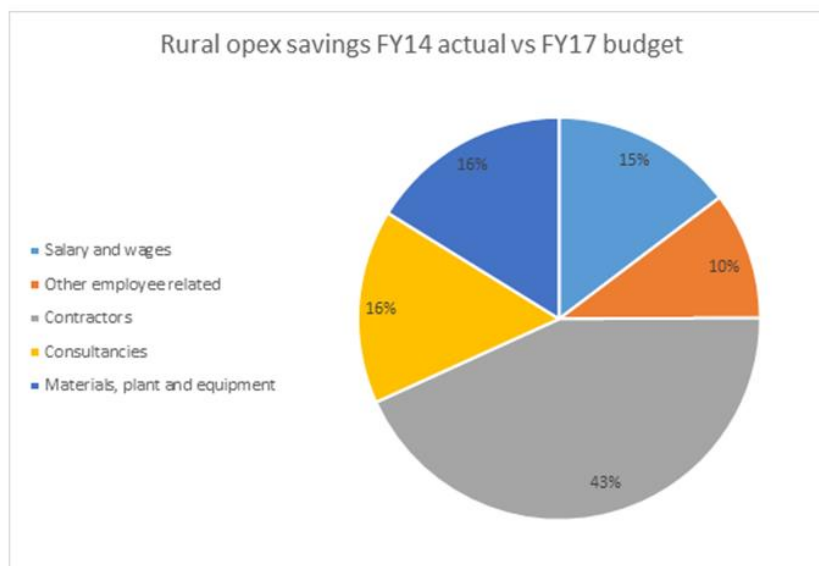


OpEx beyond FY17 is forecast to continue to decline

NB: IPART determines final WaterNSW OpEx split between Greater Sydney and Rural customers

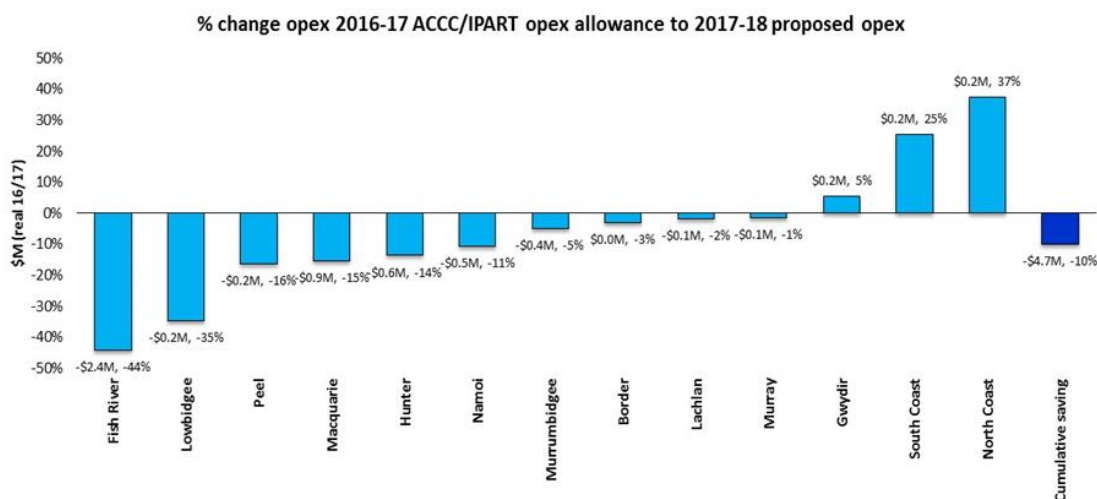


What Are The OpEx Savings?





10% Total OpEx Savings by Valley (%) vs. 2016/17



11

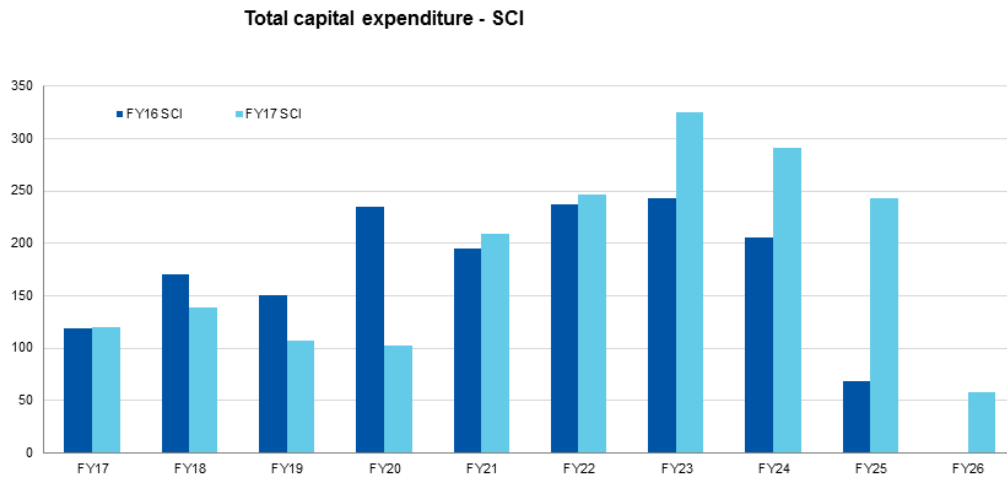
What Share of The OpEx Savings Do Our Rural and Coastal Customers Get?



- In terms of allocating WaterNSW costs and savings, IPART determined during this year's greater Sydney Pricing Determination that WaterNSW OpEx costs (and therefore savings) are to be allocated:
 - 55% to the Greater Sydney area; and
 - 45% to the Rural and Coastal area
- This presentation contains draft prices that reflect:
 - "Rural share" of cost reductions included in our 30 June 2015 Greater Sydney Pricing Submission; and Addendum October 2015; and cost reductions since.



Some CAPEX has been deferred to later financial years



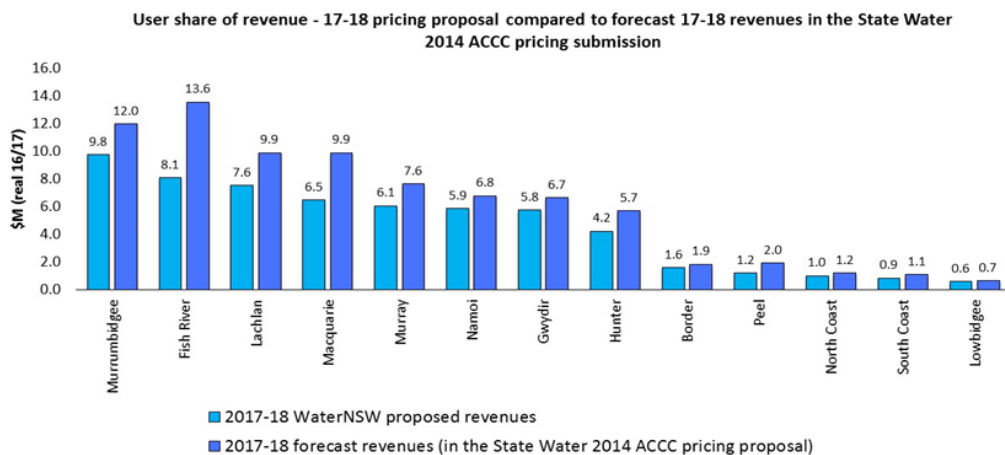
NB: Total capex across both Greater Sydney and Rural areas



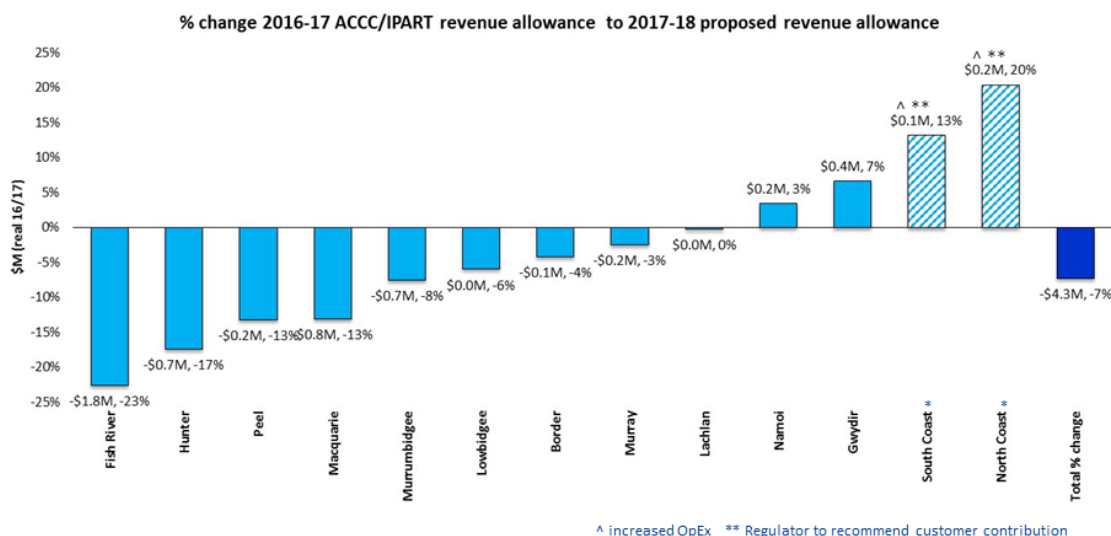
WHAT ALL THIS MEANS FOR OUR RURAL AND COASTAL CUSTOMERS



WaterNSW's Revenue Requirement is **lower** in every MDB and Coastal Valley (vs. 2014 State Water Pricing Submission)



WaterNSW Revenue Requirement for Rural and Coastal Valleys is **7% Lower** overall (2017/18 vs. 2016/17)

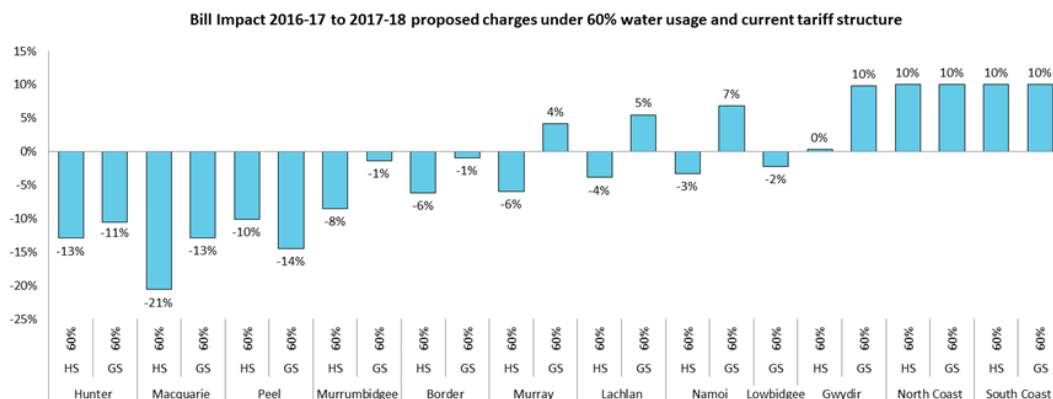




5% AVERAGE BILL REDUCTIONS FOR RURAL CUSTOMERS



5% Average Bill Reductions



Note: The average bill reduction is calculated based on a 500ML entitlement (medium user) per customer, for customers in all valleys using 60% of their water allocation. Note: Assumed tariff structure 40:60 Fixed to Variable for all valleys, except Lowbidgee (100% Fixed), Hunter (60% Fixed) and Peel (55% fixed)



PARAMETERS UPON WHICH WATERNSW'S 2017 PRICING SUBMISSION WILL BE BASED



Determination Period and Applicable Rules

- 4 year determination period (2017-2021)
- Coastal Valleys:
 - submit to IPART;
 - Determined under IPART rules
- MDB Valleys:
 - submit to IPART;
 - Determined under ACCC rules
- Fish River: submit to IPART and:
 - Energy Australia and minor customers: ACCC rules as per MDB Valleys; and
 - Oberon and Lithgow Council: IPART rules as per Coastal Valleys.

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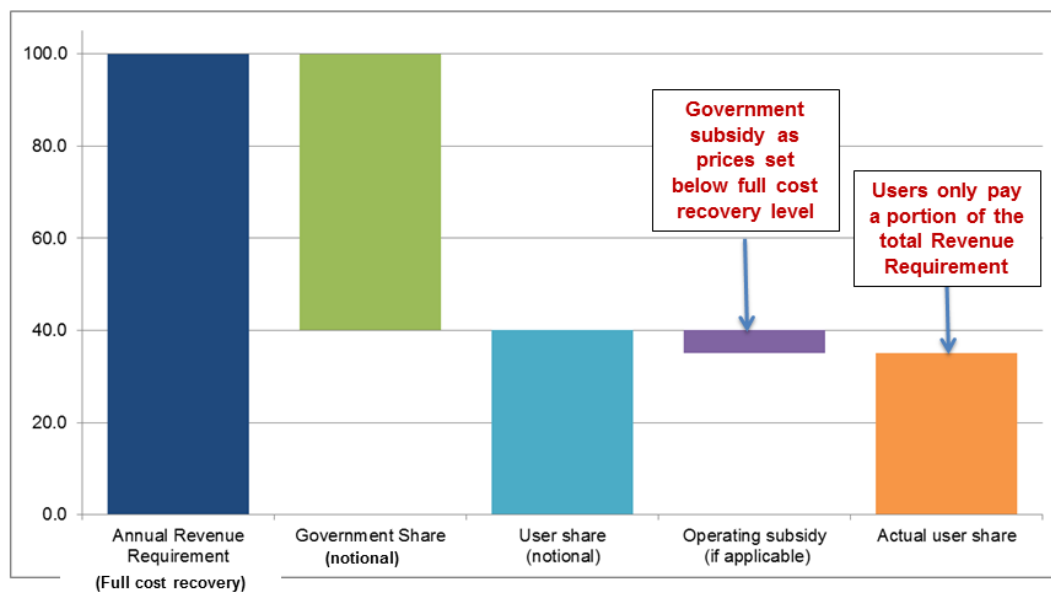


Government/ User Cost Shares

- WaterNSW will propose that pre-1997 Government/ user cost sharing arrangements remain in place during the whole of the next pricing determination period (2017-2021).

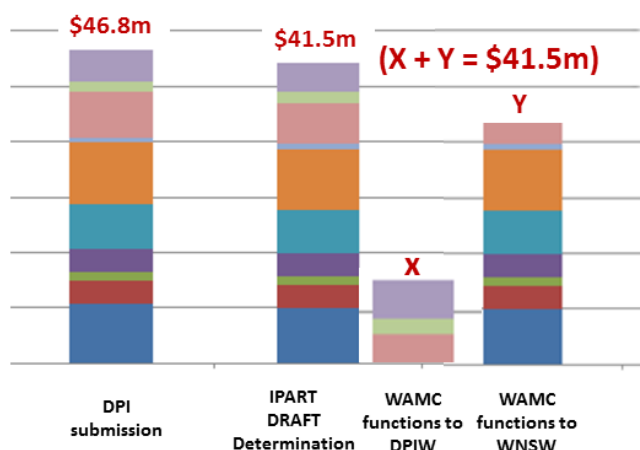
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Recap on Cost Sharing approach between Government and Users





WAMC Functions (Cost Pass Through) - No “Double Dipping”



- WaterNSW’s 2017 Pricing Submission will not include any additional WAMC functions that may be allocated to WaterNSW under Step 2 water reforms.
- All WAMC charges are currently being determined by IPART in its review of WAMC charges.



A RECAP ON THE CUSTOMER CONSULTATION PROCESS TO DATE



What's occurred to date

- **November 2015** - Established a Pricing Reference Group comprising nominated leads from Customer Service Committees
- **December 2015** - Outlined pricing submission timings, principles and consultation process to Customer Service Committees, Key volume customers and peak industry body, NSW Irrigators Council
- **December 2015 to February 2016** - In response to and consultation with Pricing Reference Group agreed a number of key pricing parameters and modelled a range of different tariff structure options
- **March 2016** - Presented modelling results for a range of different tariff structure options to Pricing Reference Groups, Key volume customers and NSW Irrigators Council

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OUR CUSTOMER CONSULTATION PROCESS TO DATE:

ITEMS THAT HAVE BEEN DISCUSSED AND AGREED WITH CUSTOMERS



We have agreed with the CSC Reference Group to address a few Complex Issues Prior to our 2021 Submission

- Legacy Asset issues
- Government/ User Share split
- Levels of Service
- Capital underspend “holding costs”

For these issues, detailed analysis and review will be undertaken during 2017-2021 period with outcomes included in our 2021 submission.



OUR CUSTOMER CONSULTATION PROCESS TO DATE:

ITEMS THAT REQUIRE CUSTOMER RESPONSE



Items That Require Customer Response

- Confirmation by each valley CSC that they want to retain the Unders and Overs Mechanism in relation to the variable tariff component.
- Indicate tariff structure preference for each valley at the Valley Level (Customer Level for 2021).



KEY MATTERS FOR DISCUSSION TODAY:

THE UOM AND FIXED / VARIABLE TARIFF STRUCTURE

Current Tariff Structure



- **Pricing Regulations require:**
 - cost recovery, including an appropriate return; and
 - user pays.
- **Broadly 40:60 fixed:variable structure:**
 - provides some alignment for customers between higher/ lower costs and resource availability/ revenue.
- **“Unders and Overs Mechanism” (“UOM”):**
 - Under recovery (UOM adjustment) increases future prices
 - Over recovery (UOM adjustment) decreases future prices
- **Total tariffs a function of:**
 - Revenue requirement, inclusive of UOM adjustment;
 - Usage forecasts based on historic 20 year rolling average.³¹

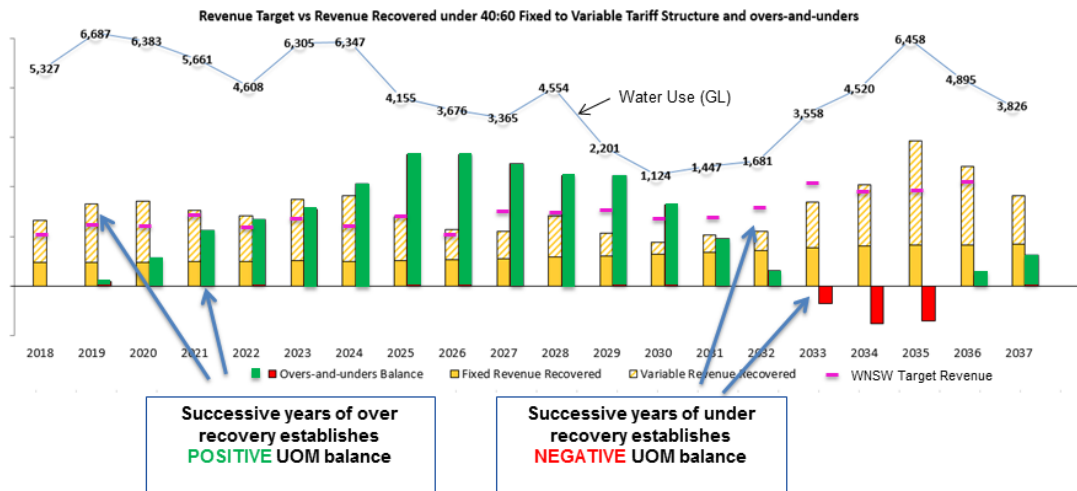


Tariff Structure Issues Raised and Discussed During Consultation

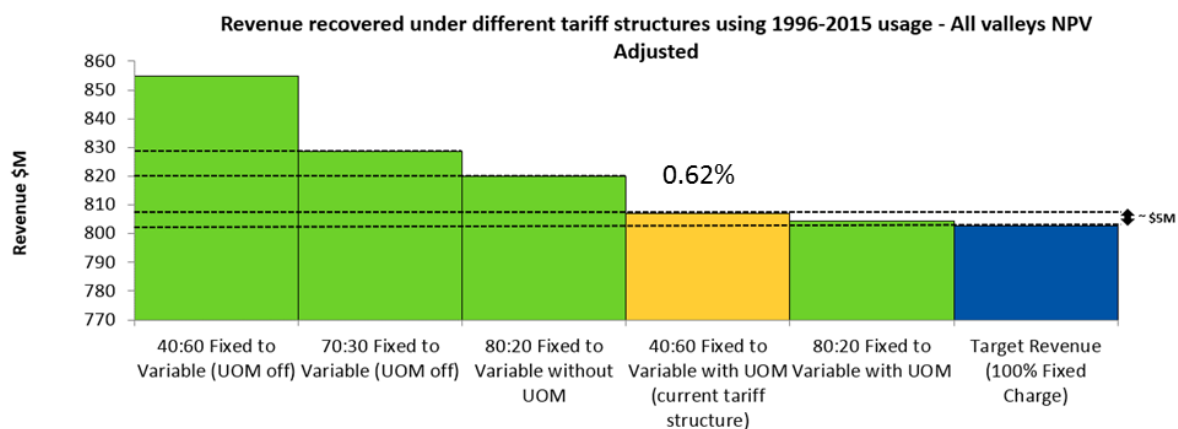
- Cost impacts of UOM due to 40:60 tariff structure:
 - More significant price adjustments year-to-year to account for under or over-recovery of revenue (**akin to paying interest on a loan**)
- WaterNSW revenue volatility due to 40:60 fixed:variable structure:
 - resultant revenue volatility increases WaterNSW risk;
 - higher risk increases WaterNSW costs;
 - additional revenue allowance was previously included by IPART in 2010 State Water Pricing Determination³²



UOM does provide some alignment for Customer's between their Costs and Revenue - but it's not perfect



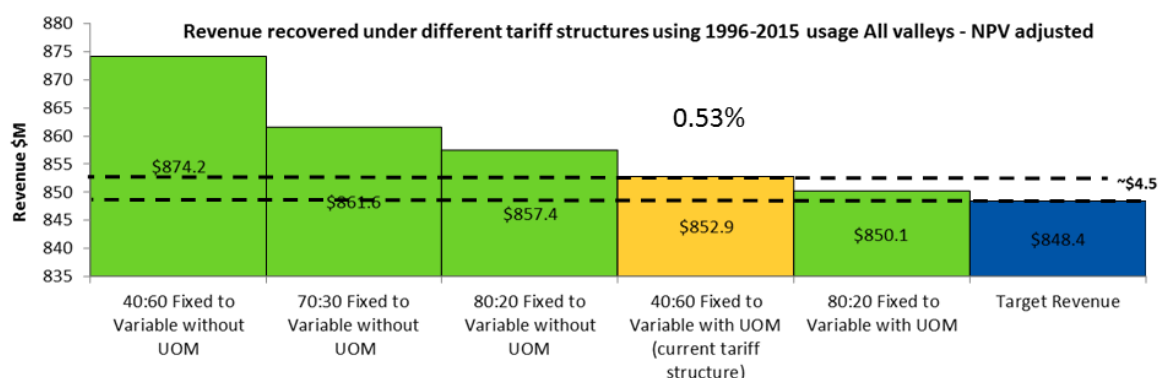
The Higher the Variable Component, the More Customers Pay – in Excess of WaterNSW's Revenue Requirement



CSC presentations in March showed under 40:60 (fixed: variable split) all customers will pay ~\$5m over our revenue requirement



UPDATED: analysis confirms under 40:60 (fixed: variable split) all customers will pay more than WaterNSW revenue requirement



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The UOM and Fixed/Variable Tariff Structure: The Choices



PARAMETER	ISSUE(S)	SOLUTIONS
Unders & Over Mechanism (UOM)	More significant price adjustments year-to-year to account for under or over-recovery of revenue (akin to paying interest on a loan)	Customers select higher fixed tariff, which reduces price adjustments.
WaterNSW revenue volatility due to 40:60 fixed:variable structure	Resultant revenue volatility increases WaterNSW financial risk and increases WaterNSW costs.	<p>Customers select higher fixed tariff, which diminishes volatility.</p> <p>WaterNSW continues to pursue 'insurance' options to cover cost of volatility risk.</p>

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Key Matters for Discussion: UOM and Fixed/Variable Tariff Structure

- To enable informed customer decision making on the fixed: variable tariff the CSC Reference Group asked WaterNSW to model the full spectrum of fixed: variable tariffs (0:100 to 100:0) for each Valley.
- Overall analysis is shown as part of this presentation whereas Valley specific analysis is included in the information to be released this afternoon.

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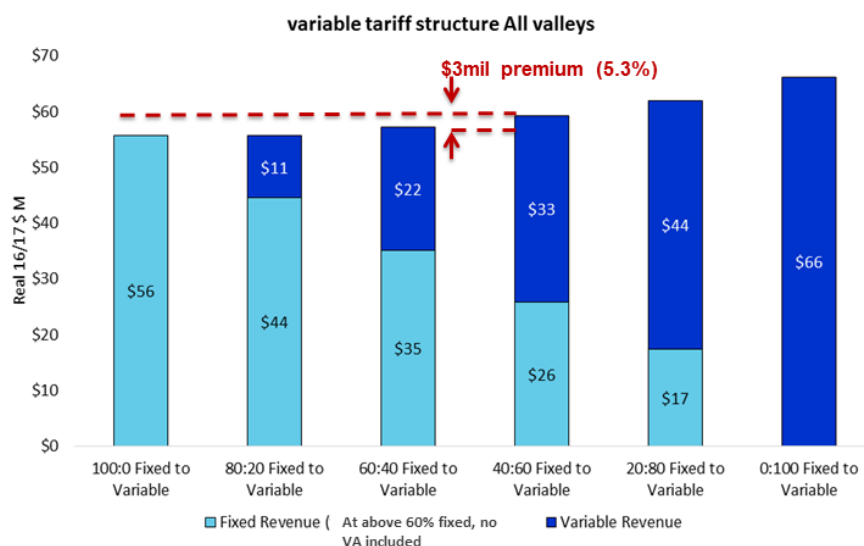
Calculation of the Volatility Allowance (VA)



- WaterNSW has calculated the Volatility Allowance (VA) consistent with the previously applied IPART methodology (2010).
- At this point in time WaterNSW is unable to identify any other utility offering tariff structures at less than 40% fixed (refer papers by IPART in 2012 and PWC in 2010 which show most in the range of 75-90% fixed component of tariffs).
- WaterNSW's VA costs are indicative only until a firm price is received from a third party to provide WaterNSW with this revenue insurance product. WaterNSW is continuing to engage with the market to solidify these 'insurance' costs.



CSC Reference Group Requested Analysis, shows Cost Impacts of Increased variable component FY17/18 (Real Dollars) to User Share (all Valleys)



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Customer Choices: UOM and Fixed / Variable Tariff Split

KEY CUSTOMER DECISION by 29th APRIL 2016

CSC to confirm customer preference to retain Unders & Overs Mechanism in its current form

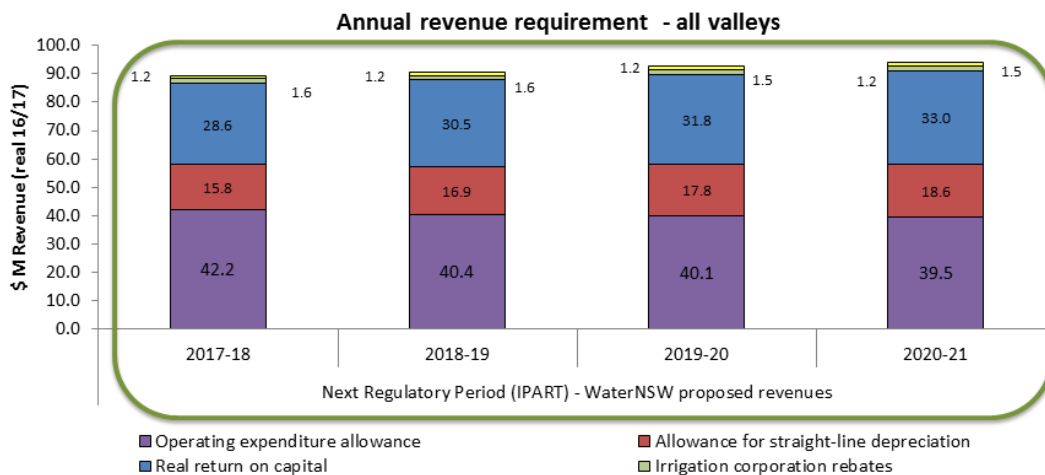
CSC to nominate Valley preference for fixed: variable split for the period 2017-2021 (at the Valley level)



DETAILED STATE- WIDE ANALYSIS



WaterNSW Total Revenue Requirement - All Valleys

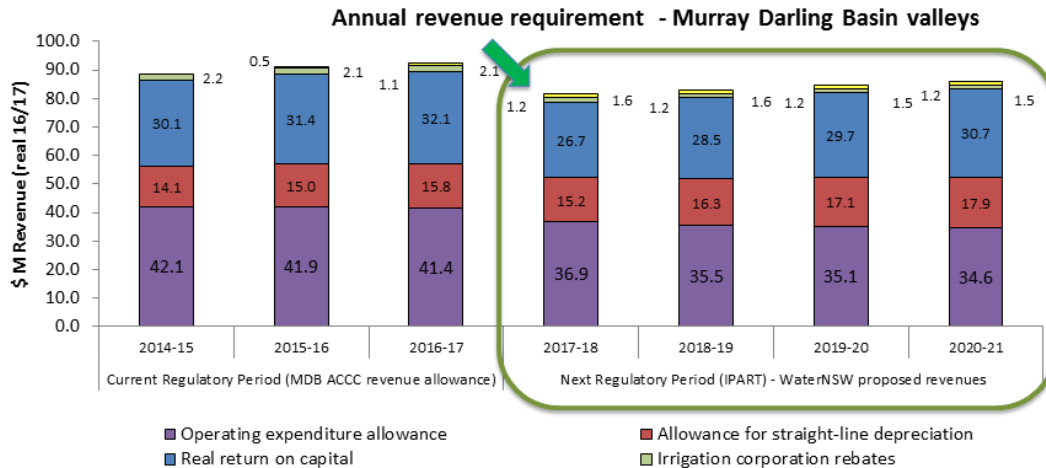




WaterNSW Total Revenue Requirement - MDB Valleys

Customer return on capital revenue requirement of \$32.1m reduces to \$26.7m (17/18)

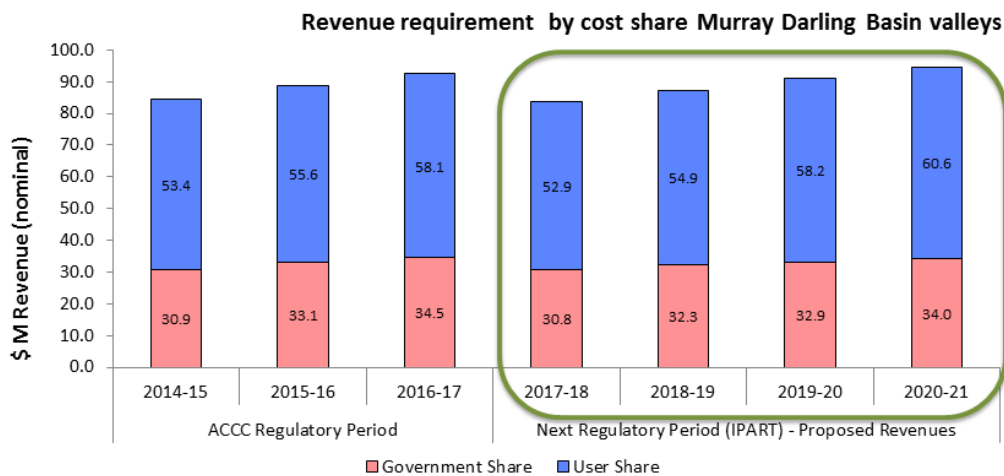
\$10.9m saving (17/18 vs 16/17)



All analysis is like-for-like, for example excludes any pass through costs such as MDBA.



Total Government & User Shares 2017-21 Reflecting No Change to Cost Sharing arrangements

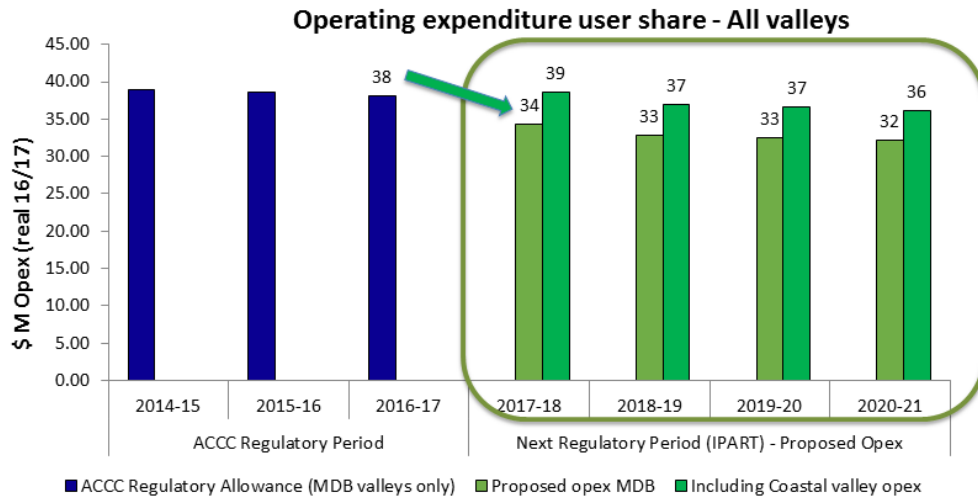


Total Government Share = \$130m Total User Share = \$226.6m

WaterNSW Total OpEx - User Share

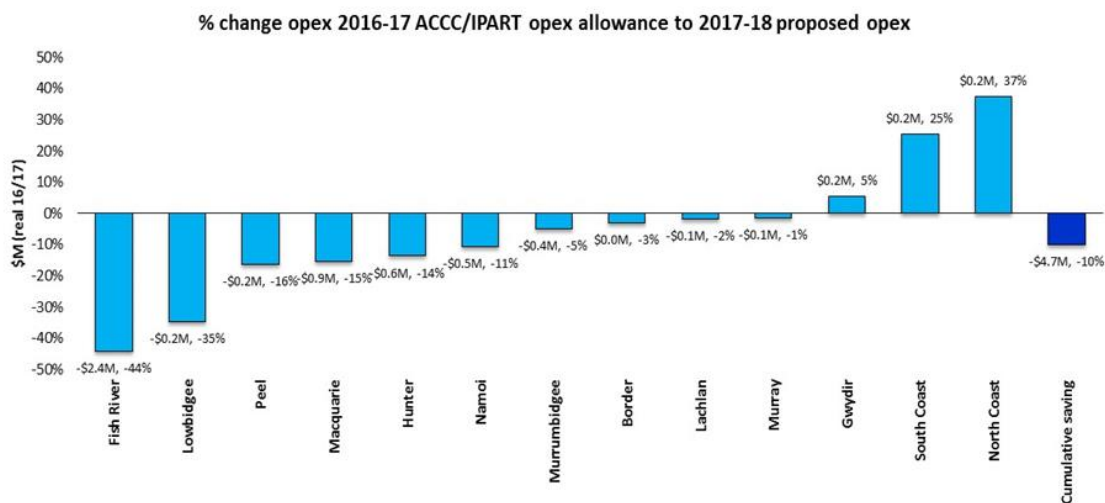


~\$4m saving (17/18 vs 16/17) MDB Valleys



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WaterNSW Total OpEx % Savings by Valley

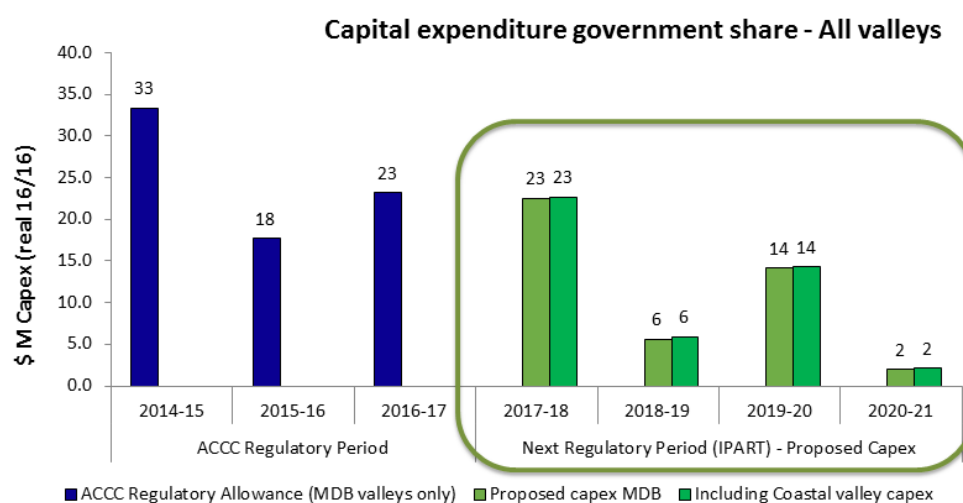


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Basis of Our Capital Investment Plan

- **4 broad Capital programs;**
 - Regulatory Compliance
 - Maintaining Capability
 - Augmenting Capability (existing assets)
 - New Capability/Solutions (new assets)
- Historically large 'compliance' programs have been completed, or deferred (i.e. dam safety and fishways).
- Largest investment proposed relates to *maintaining capability*.
- Our *maintaining capability* program ensures our assets continue to deliver required Levels of Service, at the cheapest life-cycle cost, whilst addressing issues related to asset over consumption.
- Government funded programs to maintain capability have now largely ended, resulting in a perceived increase in customer funded capex.

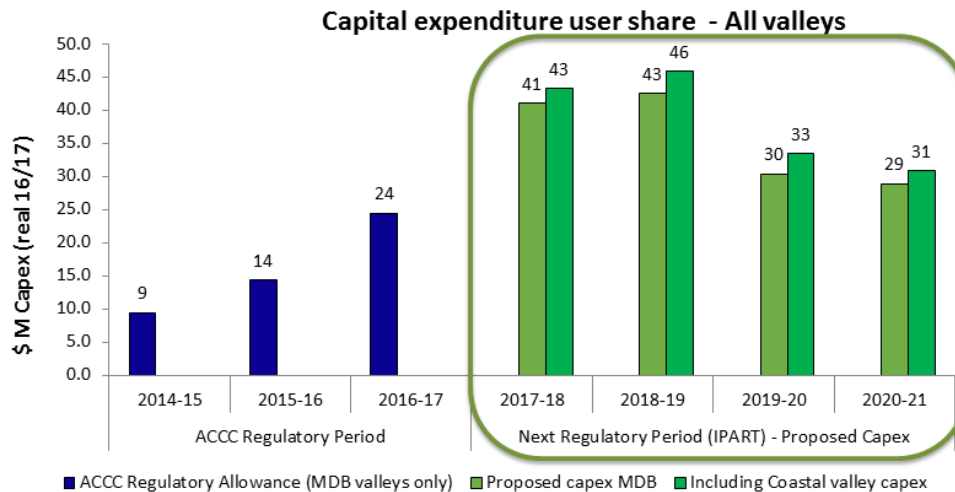
Total Capex – All Valleys - Government Share





Total Capex – All Valleys - User Share

Despite increased Capital investment, Customer return on capital revenue requirement of \$32.1m (16/17) reduces to \$26.7m (17/18)

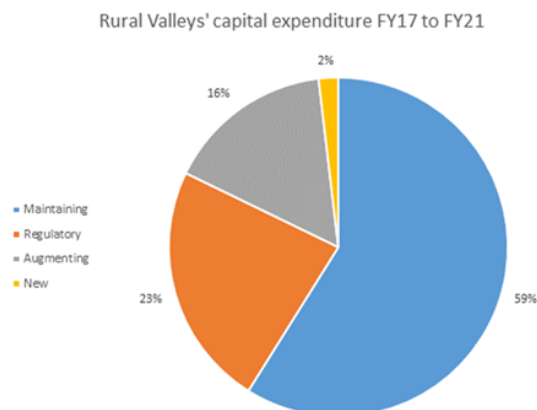


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2017-2021 Capital Expenditure Plan:

We are not planning to build new assets, we are aiming to properly maintain existing assets.



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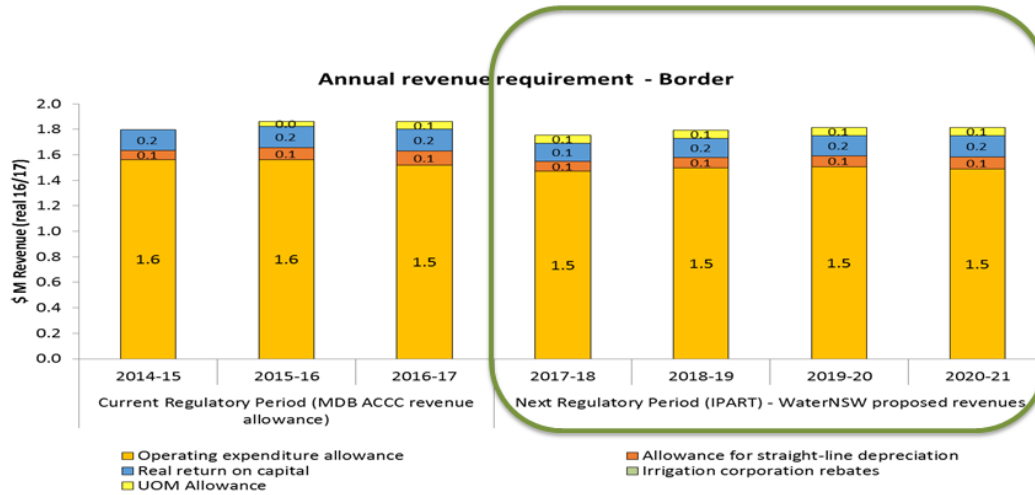
VALLEY SPECIFIC SECTION



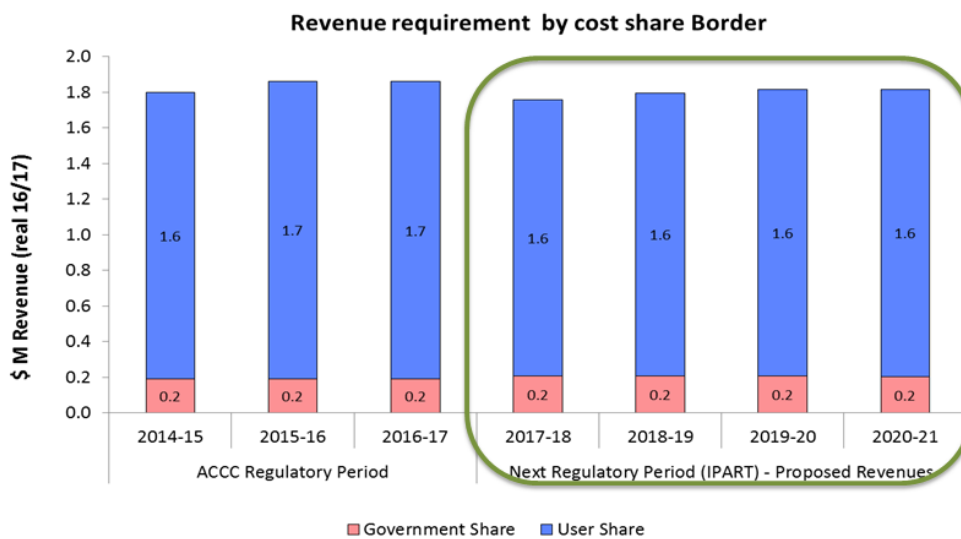
DETAILED VALLEY ANALYSIS

– BORDER VALLEY

Border Valley - Total Annual Revenue Requirement



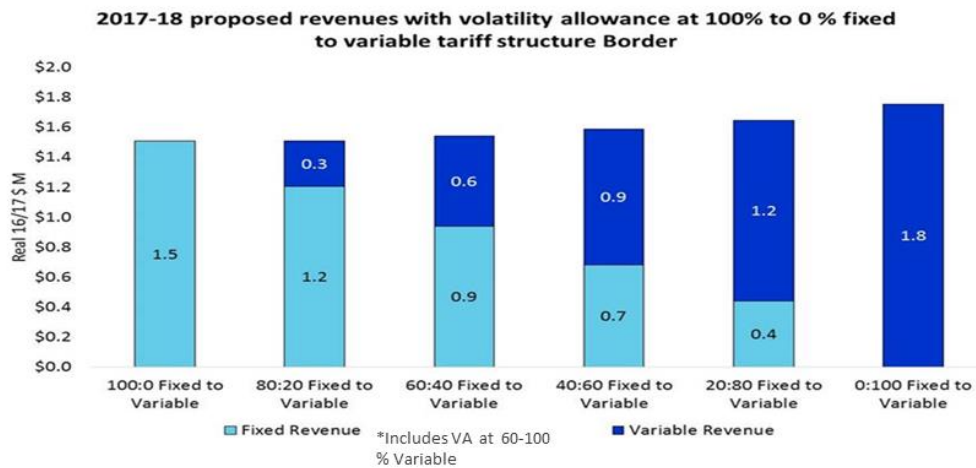
Border Valley - Total Government : User share





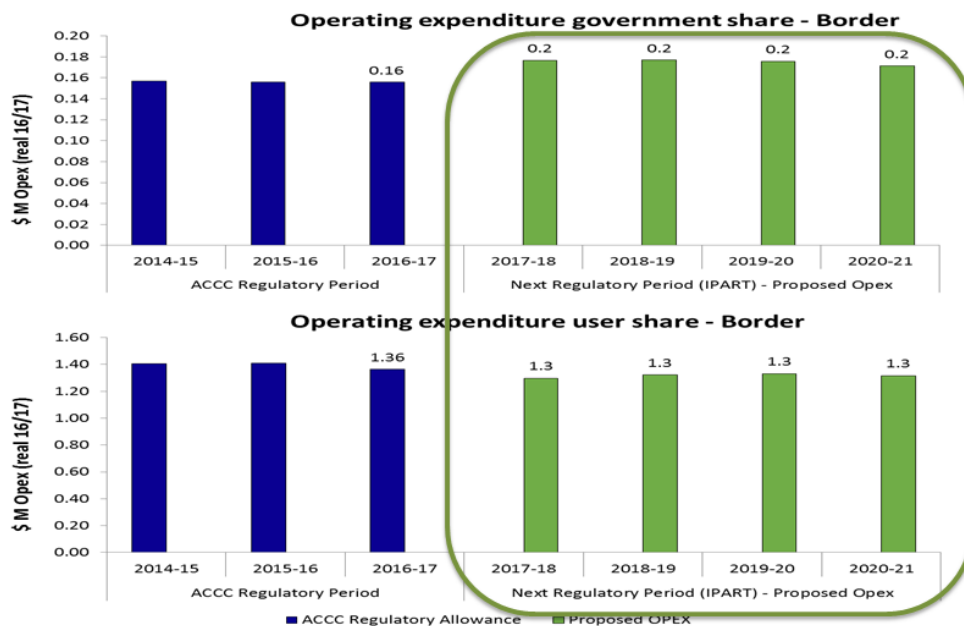
Border Valley

- Impact of various fixed: variable splits



Border Valley

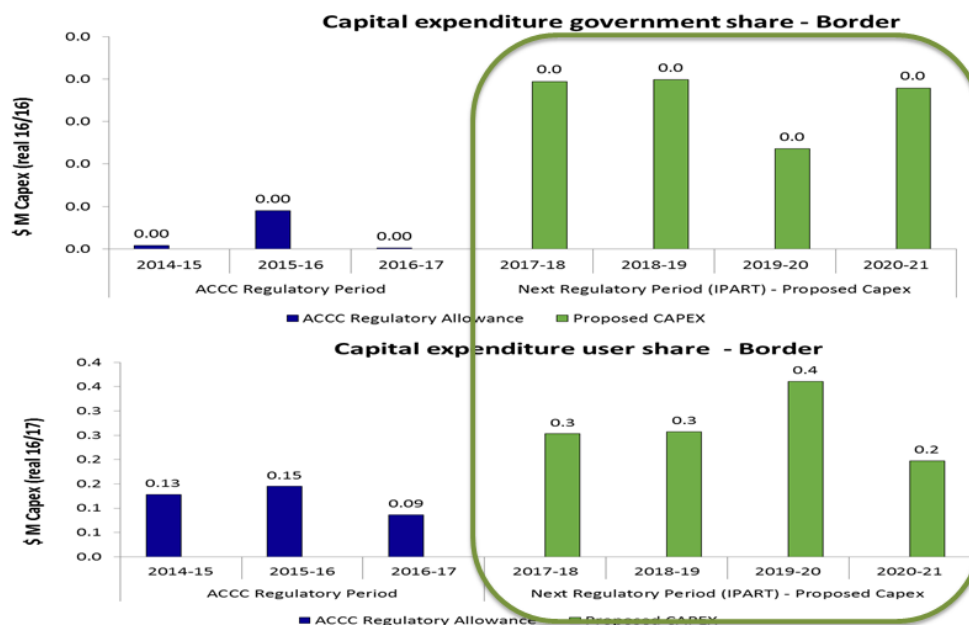
- Operational Expense



Border Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



BORDER VALLEY 2017-2021 DRAFT PRICING

All Pricing is subject to WaterNSW 2017-2021 Draft Pricing Terms & Conditions



WATERNSW DRAFT PRICING TERMS AND CONDITIONS

WaterNSW 2017-2021 Draft Pricing Terms & Conditions

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Border Valley

- Draft Pricing 2017-2021 per ML

Border 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$6.94	\$8.58	\$8.79	\$9.01	\$9.24	23.6%
GS Fixed Charge including	\$2.44	\$5.79	\$5.93	\$6.08	\$6.23	137.0%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$6.64	n.a	n.a	n.a	n.a	-100.0%

Border 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$6.94	\$7.88	\$8.08	\$8.28	\$8.48	13.5%
GS Fixed Charge including	\$2.44	\$4.62	\$4.73	\$4.85	\$4.97	89.1%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$6.64	\$2.10	\$2.15	\$2.20	\$2.26	-68.4%

Border 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$6.94	\$7.18	\$7.36	\$7.54	\$7.73	3.4%
GS Fixed Charge including	\$2.44	\$3.59	\$3.68	\$3.78	\$3.88	47.0%
Volatility Allowance	-	\$0.14	\$0.14	\$0.15	\$0.16	0.0%
Variable Usage Charge	\$6.64	\$4.20	\$4.30	\$4.41	\$4.52	-36.8%

Border 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$6.94	\$6.48	\$6.64	\$6.81	\$6.98	-6.7%
GS Fixed Charge including	\$2.44	\$2.59	\$2.65	\$2.73	\$2.81	6.0%
Volatility Allowance	-	\$0.31	\$0.32	\$0.33	\$0.36	0.0%
Variable Usage Charge	\$6.64	\$6.29	\$6.45	\$6.61	\$6.78	-5.2%

Border 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$6.94	\$3.24	\$3.32	\$3.40	\$3.49	-53.3%
GS Fixed Charge including	\$2.44	\$1.68	\$1.72	\$1.78	\$1.85	-31.3%
Volatility Allowance	-	\$0.54	\$0.55	\$0.58	\$0.62	n.a
Variable Usage Charge	\$6.64	\$8.39	\$8.60	\$8.82	\$9.04	26.5%

Border 0% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$6.94	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$2.44	\$0.97	\$0.99	\$1.04	\$1.12	-60.3%
Volatility Allowance	-	\$0.97	\$0.99	\$1.04	\$1.12	n.a
Variable Usage Charge	\$6.64	\$10.49	\$10.75	\$11.02	\$11.30	58.1%

Current 40:60

* All Pricing is subject to WaterNSW 2017-2021 Draft Pricing Terms & Conditions

* All 2016/17 prices draft prices as per ACCC annual review released April 2016



DETAILED VALLEY

ANALYSIS

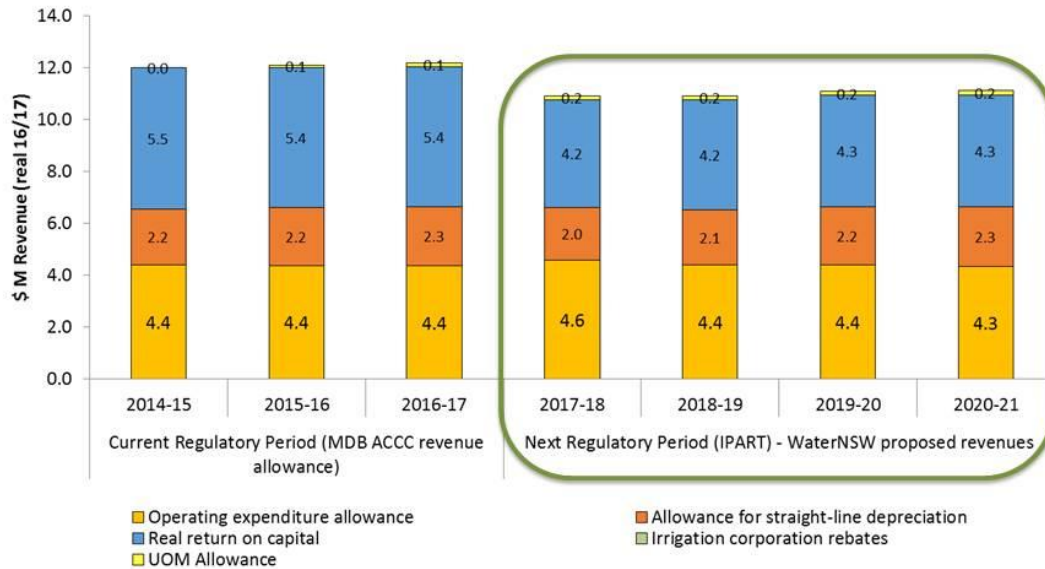
– GWYDIR VALLEY

Gwydir Valley

- Total Annual Revenue Requirement



Annual revenue requirement - Gwydir

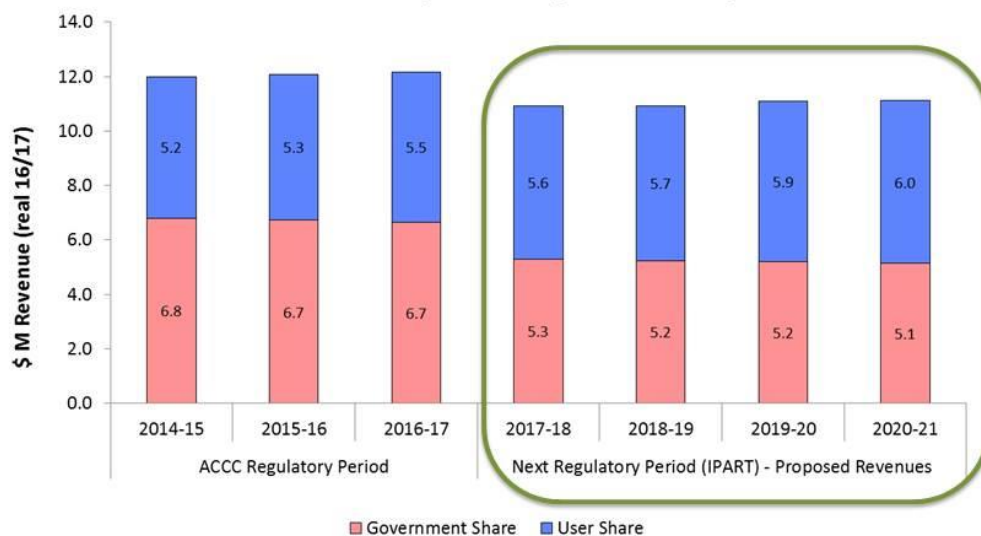


Gwydir Valley

- Total Government : User share



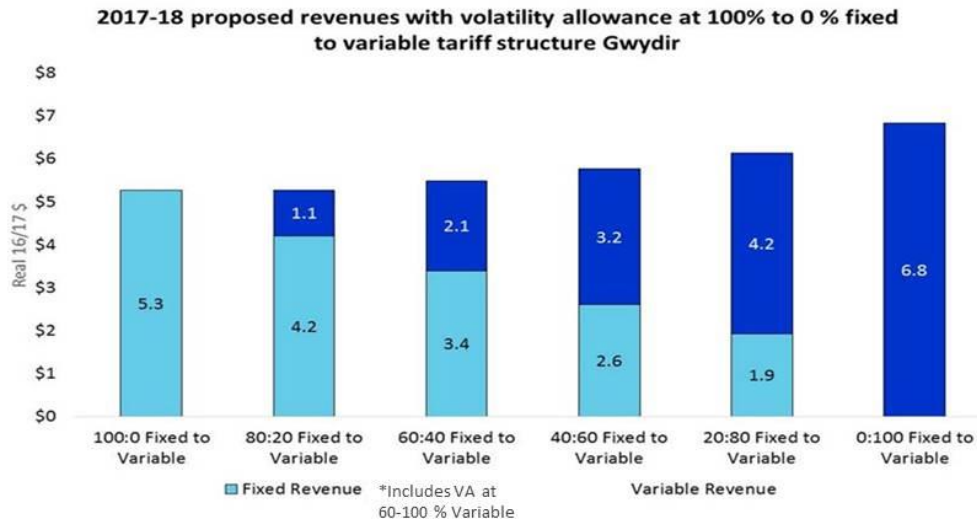
Revenue requirement by cost share Gwydir





Gwydir Valley

- Impact of various fixed: variable splits

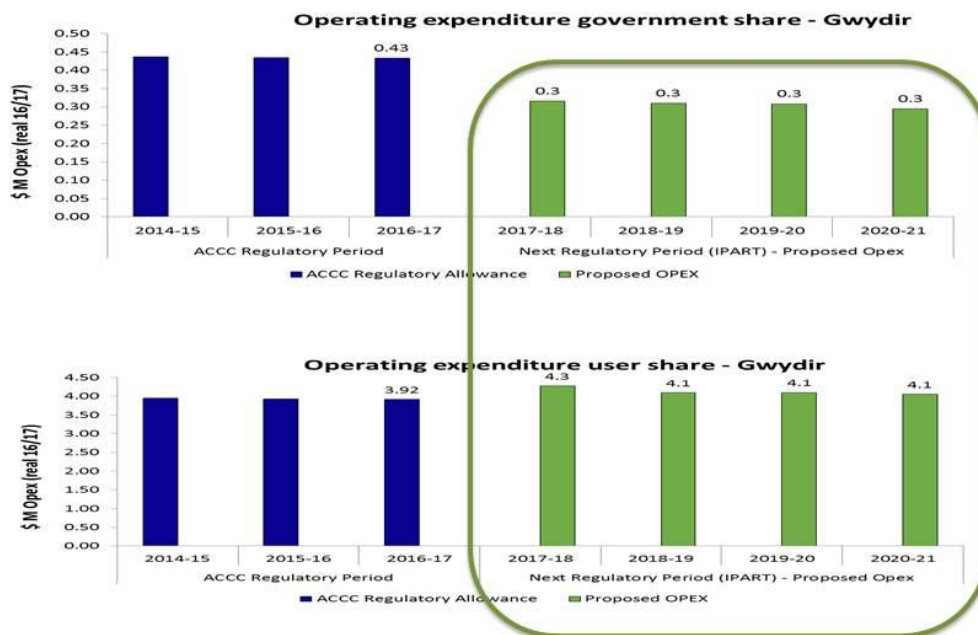


At above 60% fixed, no VA included



Gwydir Valley

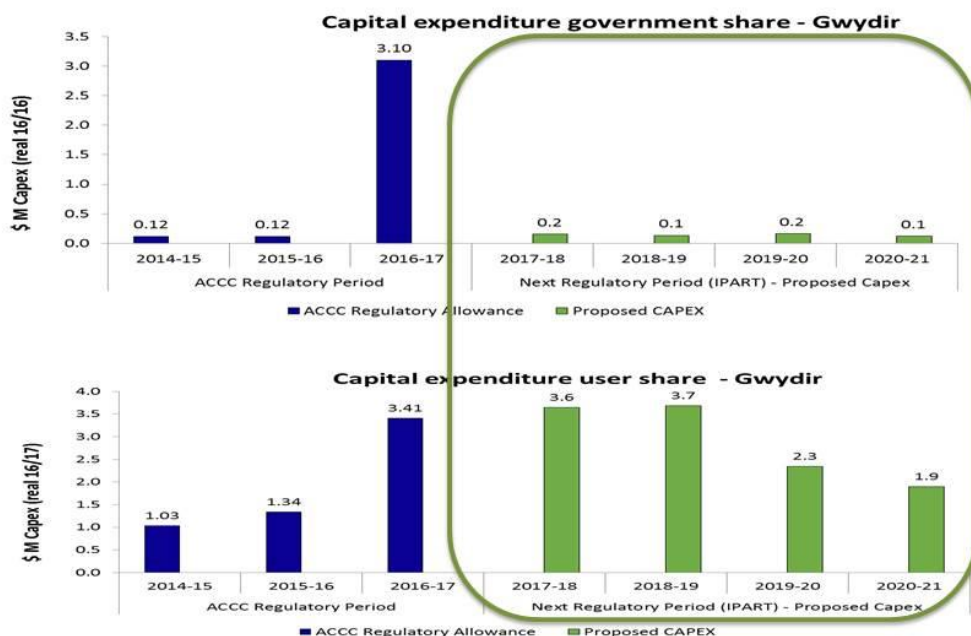
- Operational Expense



Gwydir Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



GWYDIR VALLEY 2017-2021 DRAFT PRICING

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WATERNSW DRAFT PRICING TERMS AND CONDITIONS

WaterNSW 2017-2021 Draft Pricing Terms & Conditions

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Gwydir Valley

- Draft Pricing 2017-2021 per ML

Gwydir 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$14.20	\$19.36	\$19.85	\$20.35	\$20.85	36.3%
GS Fixed Charge including	\$3.49	\$9.59	\$9.83	\$10.07	\$10.32	174.4%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage	\$12.20	n.a	n.a	n.a	n.a	-100.0%

Gwydir 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$14.20	\$17.65	\$18.09	\$18.54	\$19.00	24.2%
GS Fixed Charge including	\$3.49	\$7.56	\$7.74	\$7.94	\$8.14	116.3%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage	\$12.20	\$4.10	\$4.20	\$4.30	\$4.41	-66.4%

Gwydir 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$14.20	\$15.93	\$16.33	\$16.74	\$17.15	12.1%
GS Fixed Charge including	\$3.49	\$5.98	\$6.13	\$6.30	\$6.48	71.2%
Volatility Allowance	n.a	\$0.46	\$0.47	\$0.49	\$0.53	0.0%
Variable Usage	\$12.20	\$8.19	\$8.40	\$8.61	\$8.82	-32.8%

Gwydir 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$14.20	\$14.21	\$14.57	\$14.93	\$15.30	0.1%
GS Fixed Charge including	n.a	\$4.60	\$4.61	\$4.75	\$4.93	28.8%
Volatility Allowance	-	\$1.00	\$1.03	\$1.08	\$1.16	0.0%
Variable Usage	\$12.20	\$12.29	\$12.60	\$12.91	\$13.24	0.8%

Gwydir 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$14.20	\$7.11	\$7.28	\$7.47	\$7.65	-50.0%
GS Fixed Charge including	\$3.49	\$3.49	\$3.58	\$3.71	\$3.90	0.0%
Volatility Allowance	-	\$1.75	\$1.79	\$1.88	\$2.02	0.0%
Variable Usage	\$12.20	\$16.39	\$16.80	\$17.22	\$17.65	34.4%

Gwydir 0% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$14.20	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$3.49	\$3.14	\$3.22	\$3.38	\$3.63	-10.2%
Volatility Allowance	-	\$3.14	\$3.22	\$3.38	\$3.63	0.0%
Variable Usage	\$12.20	\$20.48	\$21.00	\$21.52	\$22.06	67.9%

Current 40:60

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DETAILED VALLEY ANALYSIS

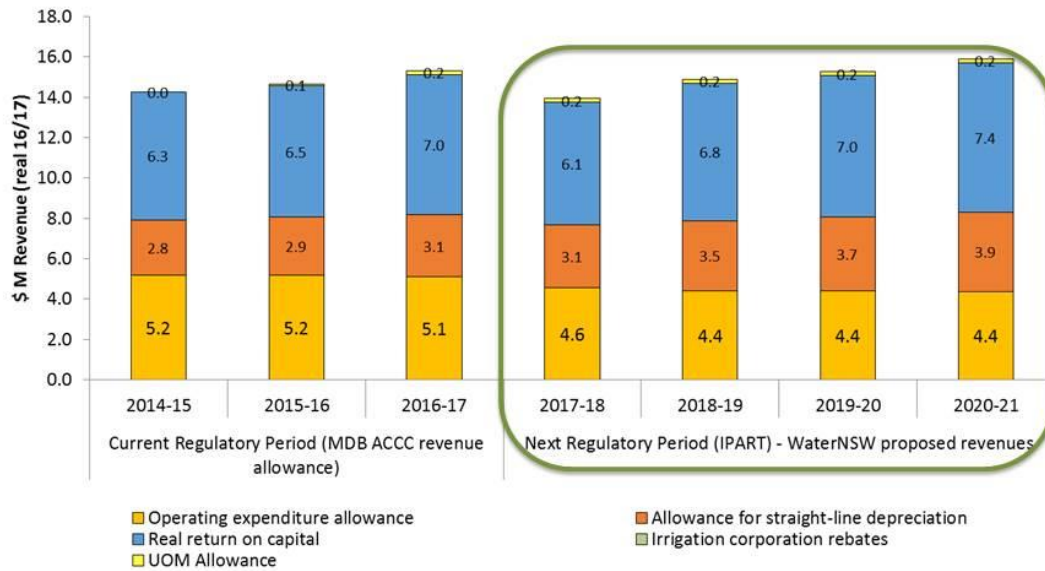
– NAMOI VALLEY

Namoi Valley

- Total Annual Revenue Requirement



Annual revenue requirement - Namoi

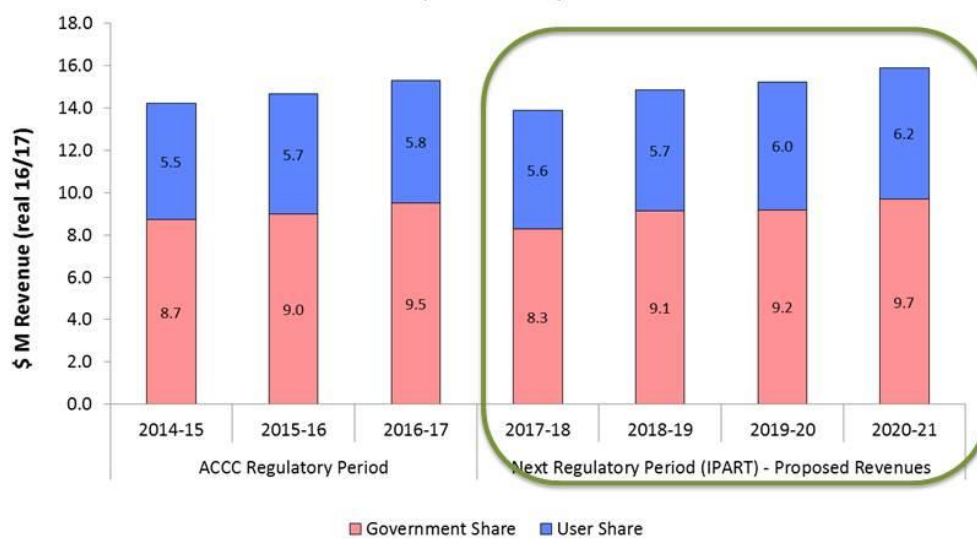


Namoi Valley

- Total Government : User share



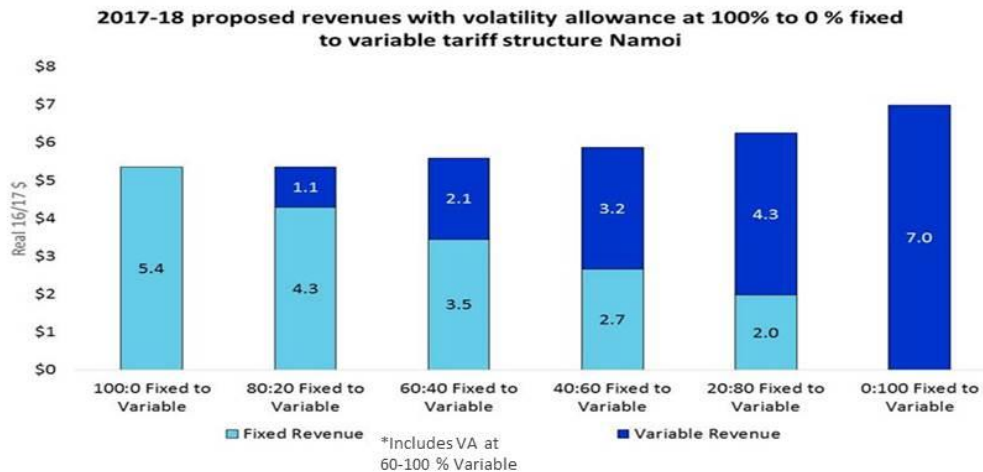
Revenue requirement by cost share Namoi





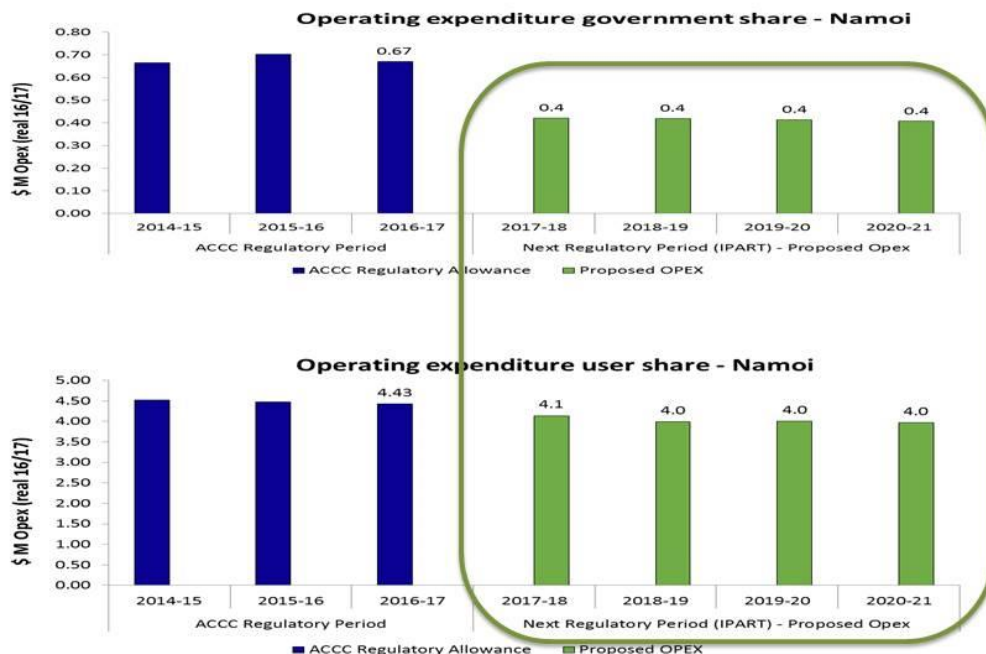
Namoi Valley

- Impact of various fixed: variable splits



Namoi Valley

- Operational Expense

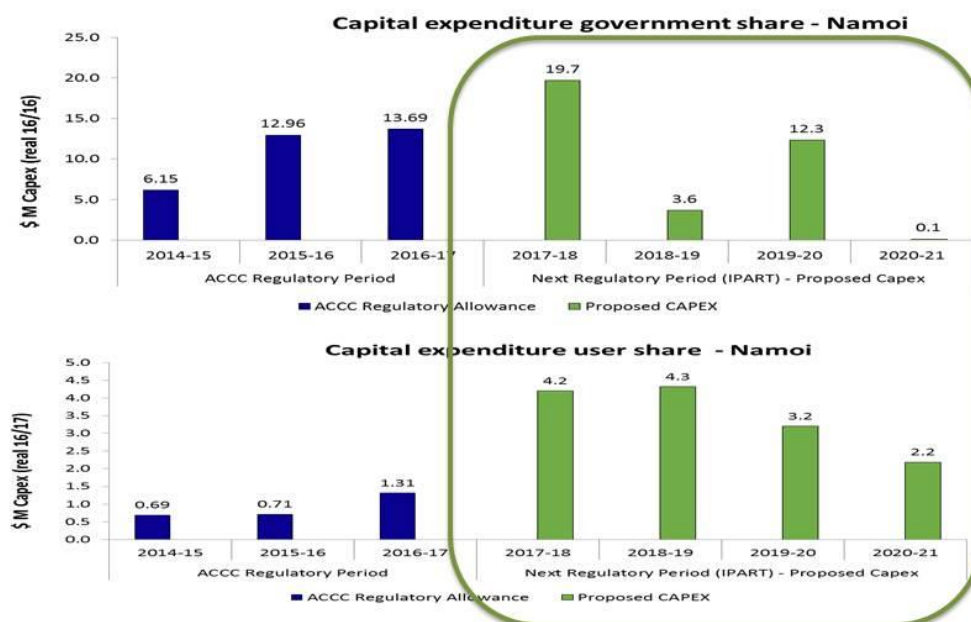


Namoi Valley

- Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



NAMOI VALLEY

2017-2021 DRAFT PRICING

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Namoi Valley

- Draft Pricing 2017-2021 per ML

Namoi 100%						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$17.39	\$22.33	\$22.89	\$23.47	\$24.05	28.5%
GS Fixed Charge including	\$8.29	\$20.76	\$21.28	\$21.82	\$22.36	150.3%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$20.38	n.a	n.a	n.a	n.a	-100.0%

Namoi 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$17.39	\$20.50	\$21.01	\$21.54	\$22.08	17.9%
GS Fixed Charge including	\$8.29	\$16.52	\$16.93	\$17.36	\$17.79	99.2%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$20.38	\$6.56	\$6.73	\$6.90	\$7.07	-67.8%

Namoi 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$17.39	\$18.67	\$19.14	\$19.61	\$20.11	7.4%
GS Fixed Charge including	\$8.29	\$13.22	\$13.55	\$13.91	\$14.31	59.4%
Volatility Allowance	-	\$0.95	\$0.97	\$1.02	\$1.09	0.0%
Variable Usage Charge	\$20.38	\$13.13	\$13.46	\$13.79	\$14.14	-35.6%

Namoi 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$17.39	\$16.84	\$17.26	\$17.69	\$18.13	-3.2%
GS Fixed Charge including	\$8.29	\$10.11	\$10.36	\$10.68	\$11.05	21.9%
Volatility Allowance	-	\$2.08	\$2.13	\$2.24	\$2.41	0.0%
Variable Usage Charge	\$20.38	\$19.69	\$20.18	\$20.69	\$21.21	-3.4%

Namoi 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$17.39	\$8.42	\$8.63	\$8.84	\$9.07	-51.6%
GS Fixed Charge including	\$8.29	\$7.63	\$7.82	\$8.11	\$8.51	-8.0%
Volatility Allowance	-	\$3.61	\$3.71	\$3.89	\$4.18	0.0%
Variable Usage Charge	\$20.38	\$26.26	\$26.91	\$27.59	\$28.28	28.8%

Namoi 0% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$17.39	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$8.29	\$6.50	\$6.66	\$6.99	\$7.52	-21.7%
Volatility Allowance	-	\$6.50	\$6.66	\$6.99	\$7.52	0.0%
Variable Usage Charge	\$20.38	\$32.82	\$33.64	\$34.48	\$35.34	61.0%

Current 40:60

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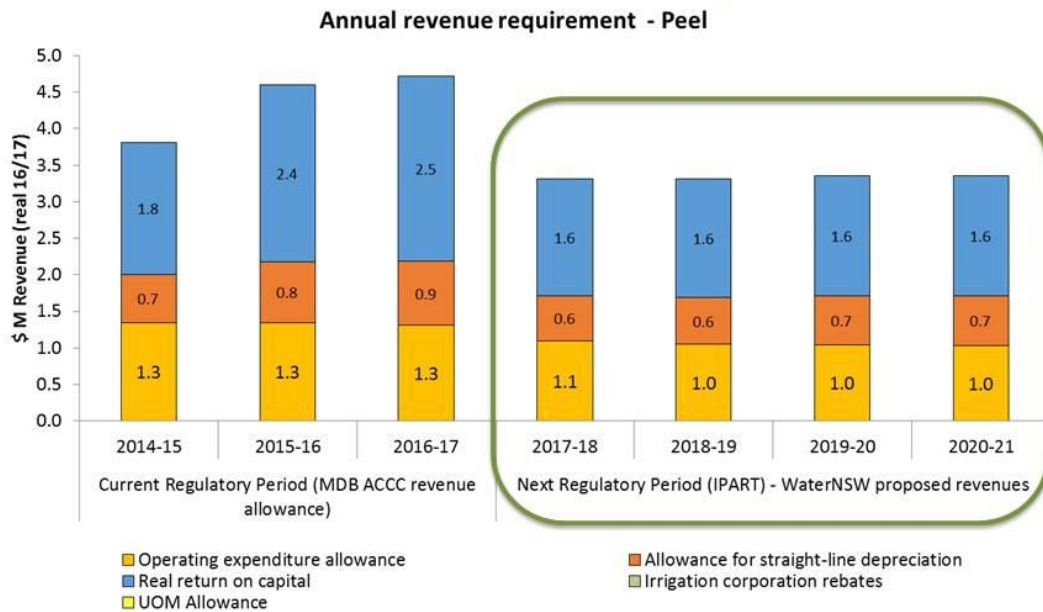


DETAILED VALLEY ANALYSIS

– PEEL VALLEY

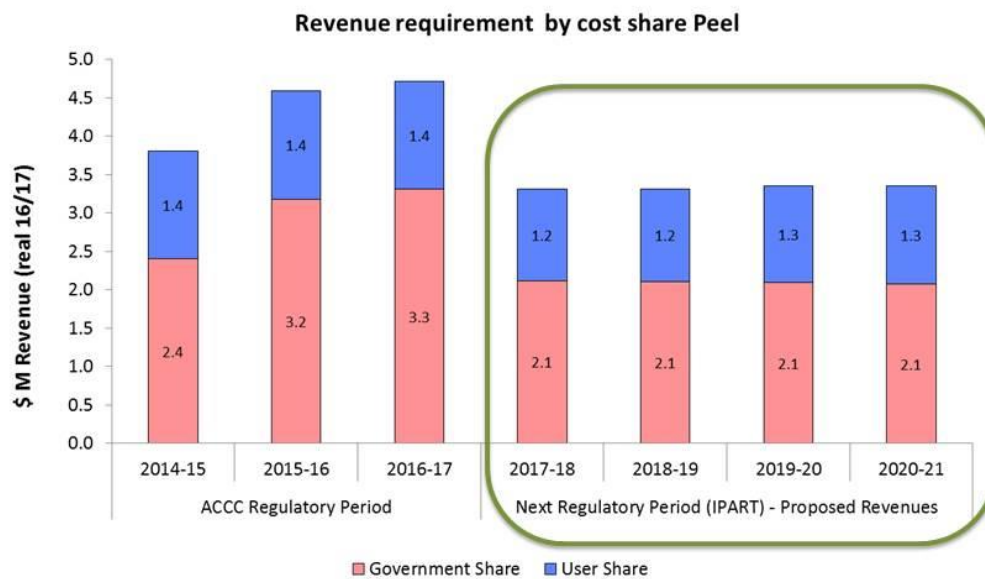
Peel Valley

- Total Annual Revenue Requirement



Peel Valley

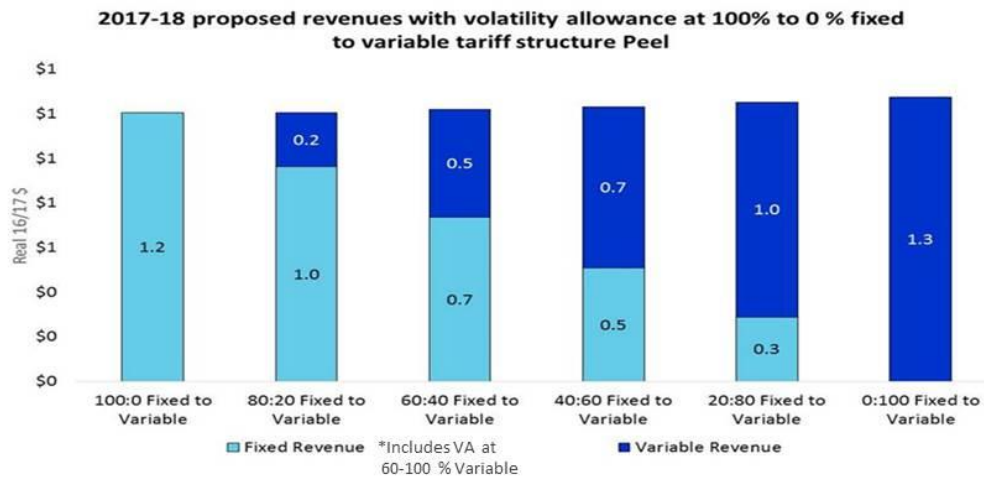
- Total Government : User share





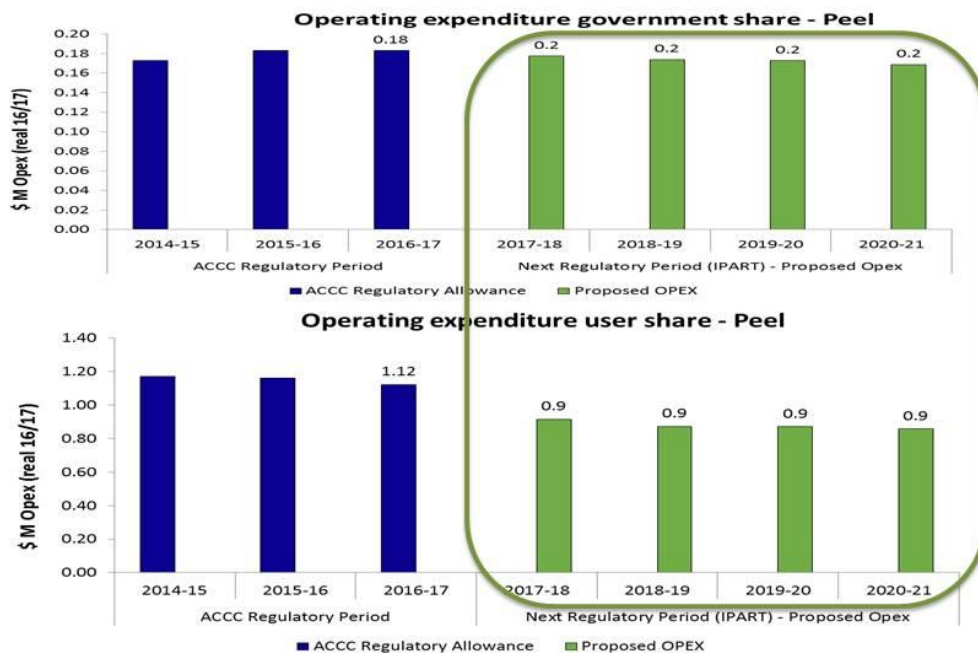
Peel Valley

- Impact of various fixed: variable splits



Peel Valley

- Operational Expense

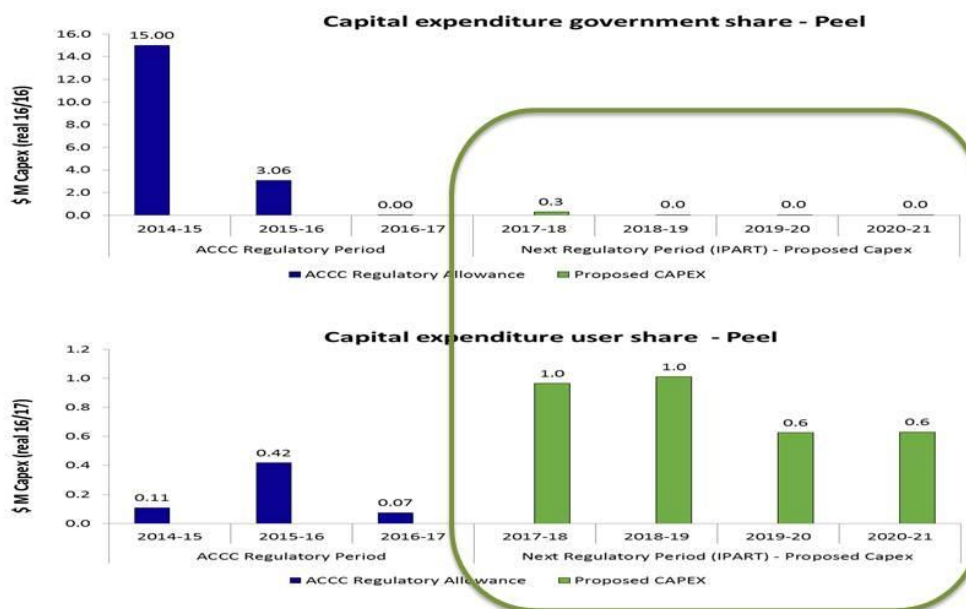


Peel Valley

- Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



PEEL VALLEY

2017-2021 DRAFT PRICING

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Peel Valley

- Draft Pricing 2017-2021 per ML

Peel 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$35.40	\$41.29	\$42.32	\$43.38	\$44.46	16.6%
GS Fixed Charge including	\$3.89	\$17.23	\$17.66	\$18.10	\$18.55	342.6%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$58.47	n.a	n.a	n.a	n.a	-100.0%

Peel 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$35.40	\$35.69	\$36.59	\$37.50	\$38.44	0.8%
GS Fixed Charge including	\$3.89	\$12.26	\$12.57	\$12.88	\$13.20	215.0%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$58.47	\$21.99	\$22.54	\$23.10	\$23.68	-62.4%

Peel 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$35.40	\$30.10	\$30.86	\$31.63	\$32.42	-15.0%
GS Fixed Charge including	\$3.89	\$7.76	\$7.95	\$8.16	\$8.39	99.3%
Volatility Allowance	-	\$0.47	\$0.48	\$0.50	\$0.54	0.0%
Variable Usage Charge	\$58.47	\$43.97	\$45.07	\$46.20	\$47.35	-24.8%

Peel 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$35.40	\$24.51	\$25.12	\$25.75	\$26.40	-30.8%
GS Fixed Charge including	\$3.89	\$3.26	\$3.34	\$3.45	\$3.58	-16.3%
Volatility Allowance	-	\$0.93	\$0.95	\$1.00	\$1.08	0.0%
Variable Usage Charge	\$58.47	\$65.96	\$67.61	\$69.30	\$71.03	12.8%

Peel 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$35.40	\$12.26	\$12.56	\$12.88	\$13.20	-65.4%
GS Fixed Charge including	\$3.89	\$2.79	\$2.86	\$2.98	\$3.14	-28.3%
Volatility Allowance	-	\$1.63	\$1.67	\$1.75	\$1.88	0.0%
Variable Usage Charge	\$58.47	\$87.95	\$90.15	\$92.40	\$94.71	50.4%

Peel 0% fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$35.40	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$3.89	\$2.33	\$2.39	\$2.50	\$2.69	-40.2%
Volatility Allowance	-	\$2.33	\$2.39	\$2.50	\$2.69	0.0%
Variable Usage Charge	\$58.47	\$109.93	\$112.68	\$115.50	\$118.39	88.0%

Current 40:60

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DETAILED VALLEY ANALYSIS

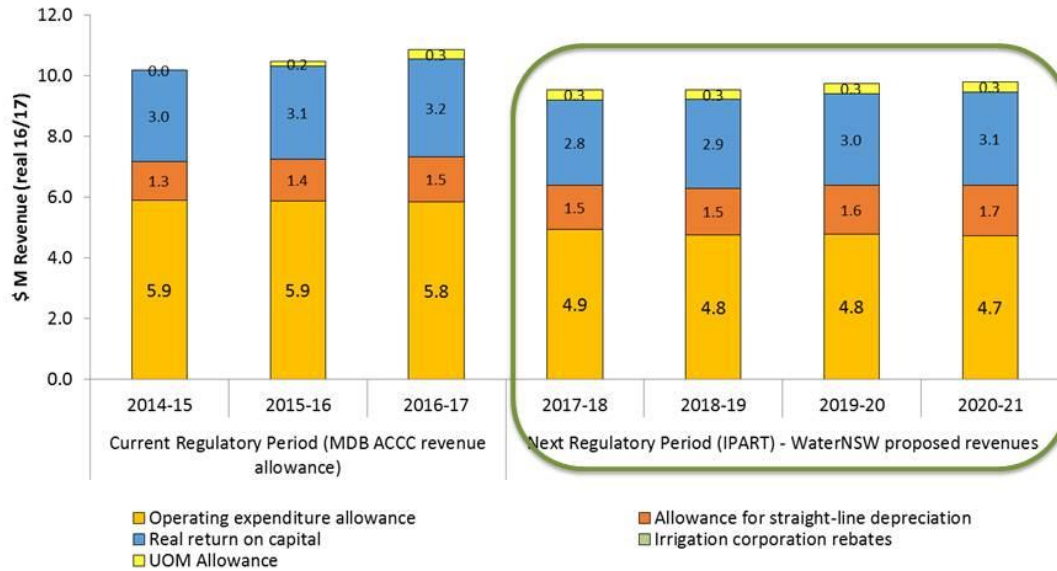
– MACQUARIE VALLEY

Macquarie Valley

- Total Annual Revenue Requirement



Annual revenue requirement - Macquarie

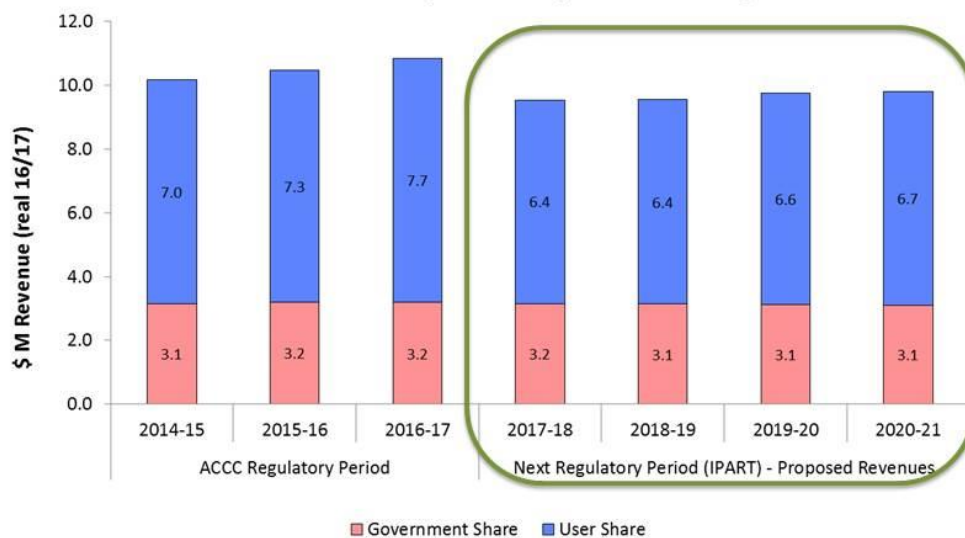


Macquarie Valley

- Total Government : User share



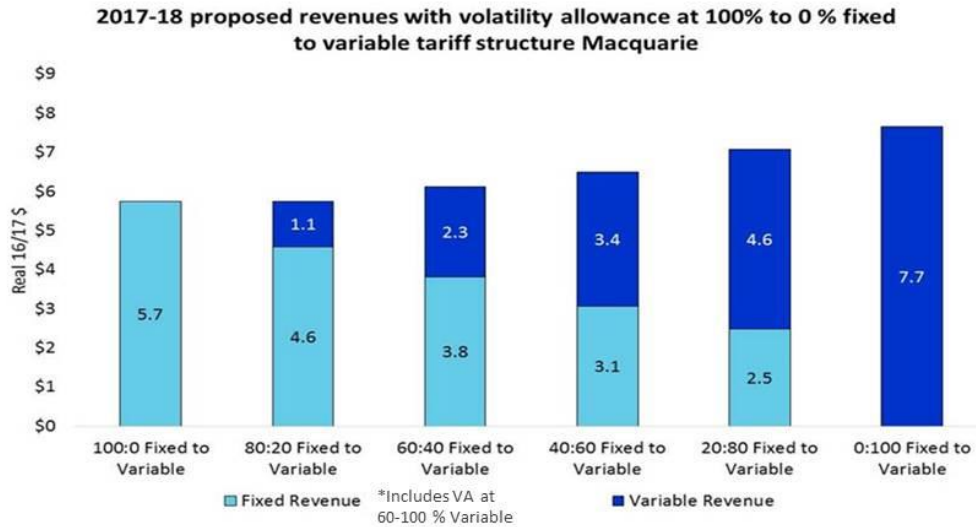
Revenue requirement by cost share Macquarie





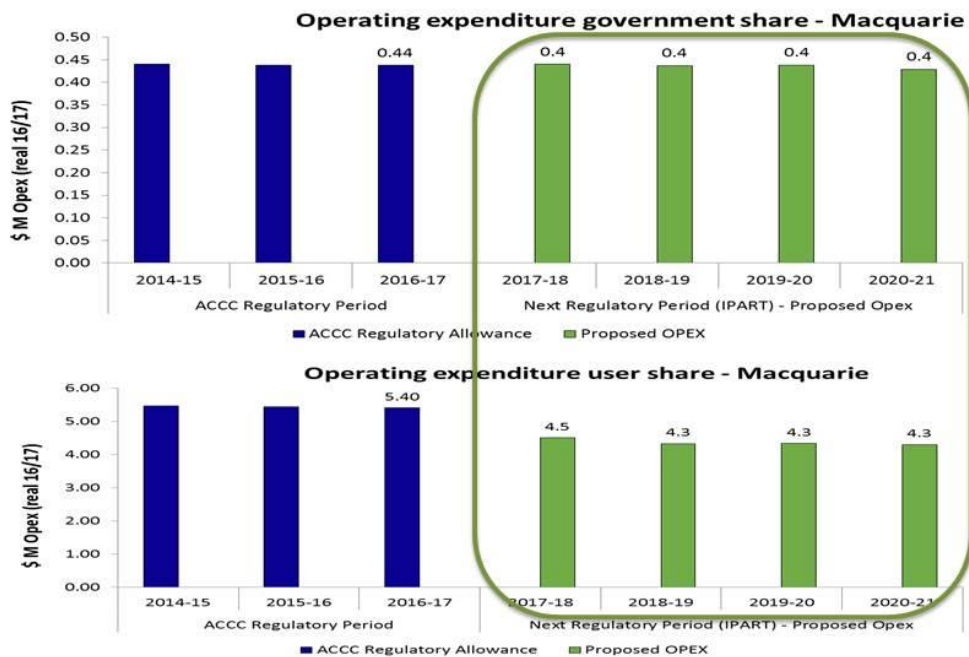
Macquarie Valley

- Impact of various fixed: variable splits



Macquarie Valley

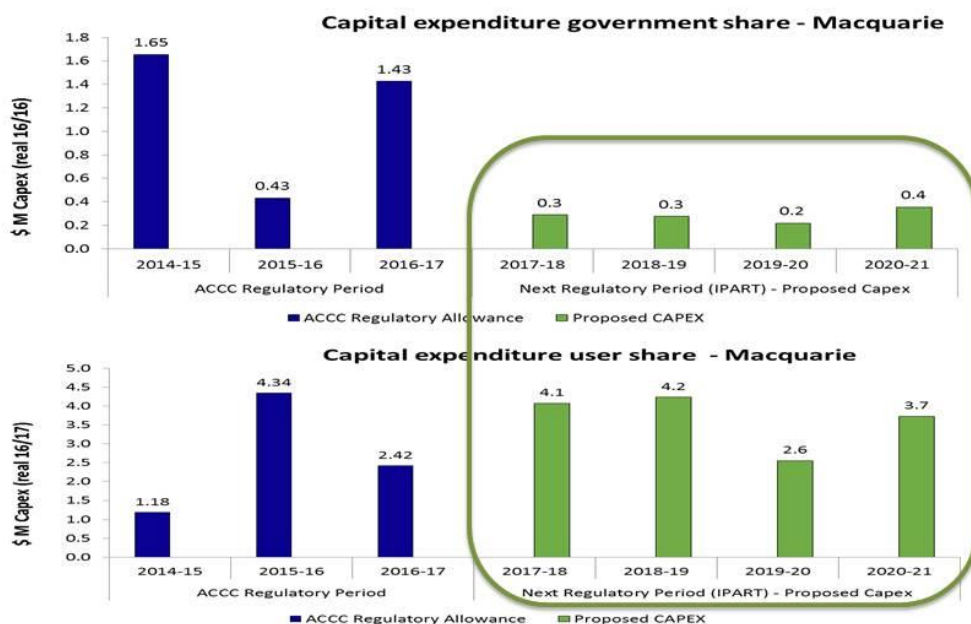
- Operational Expense



Macquarie Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



MACQUARIE VALLEY 2017-2021 DRAFT PRICING

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Macquarie Valley - Draft Pricing 2017-2021 per ML

Macquarie 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.28	\$19.57	\$20.06	\$20.56	\$21.07	20.2%
GS Fixed Charge including	\$3.65	\$8.03	\$8.23	\$8.44	\$8.65	120.3%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$17.08	n.a	n.a	n.a	n.a	-100.0%

Macquarie 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.28	\$17.32	\$17.76	\$18.20	\$18.66	6.4%
GS Fixed Charge including	\$3.65	\$6.31	\$6.47	\$6.63	\$6.80	73.1%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$17.08	\$4.57	\$4.69	\$4.81	\$4.93	-73.2%

Macquarie 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.28	\$15.08	\$15.46	\$15.84	\$16.24	-7.4%
GS Fixed Charge including	\$3.65	\$5.05	\$5.17	\$5.31	\$5.47	38.4%
Volatility Allowance	-	\$0.45	\$0.47	\$0.49	\$0.53	0.0%
Variable Usage Charge	\$17.08	\$9.15	\$9.38	\$9.61	\$9.85	-46.4%

Macquarie 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.28	\$12.83	\$13.15	\$13.48	\$13.82	-21.2%
GS Fixed Charge including	\$3.65	\$3.87	\$3.97	\$4.09	\$4.25	6.2%
Volatility Allowance	-	\$1.00	\$1.02	\$1.07	\$1.15	0.0%
Variable Usage Charge	\$17.08	\$13.72	\$14.07	\$14.42	\$14.78	-19.7%

Macquarie 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.28	\$6.42	\$6.58	\$6.74	\$6.91	-60.6%
GS Fixed Charge including	\$3.65	\$3.17	\$3.25	\$3.38	\$3.56	-13.0%
Volatility Allowance	-	\$1.74	\$1.78	\$1.87	\$2.01	0.0%
Variable Usage Charge	\$17.08	\$18.30	\$18.75	\$19.22	\$19.70	7.1%

Macquarie 0% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.28	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$3.65	\$2.87	\$2.95	\$3.09	\$3.33	-21.2%
Volatility Allowance	-	\$2.87	\$2.95	\$3.09	\$3.33	0.0%
Variable Usage Charge	\$17.08	\$22.87	\$23.44	\$24.03	\$24.63	33.9%

Current 40:60

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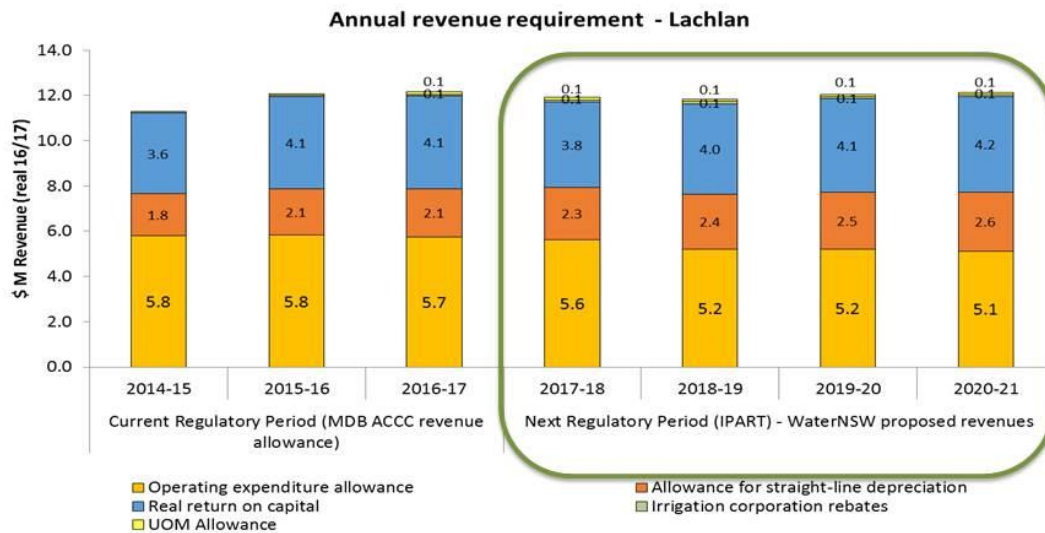
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DETAILED VALLEY ANALYSIS – LACHLAN VALLEY

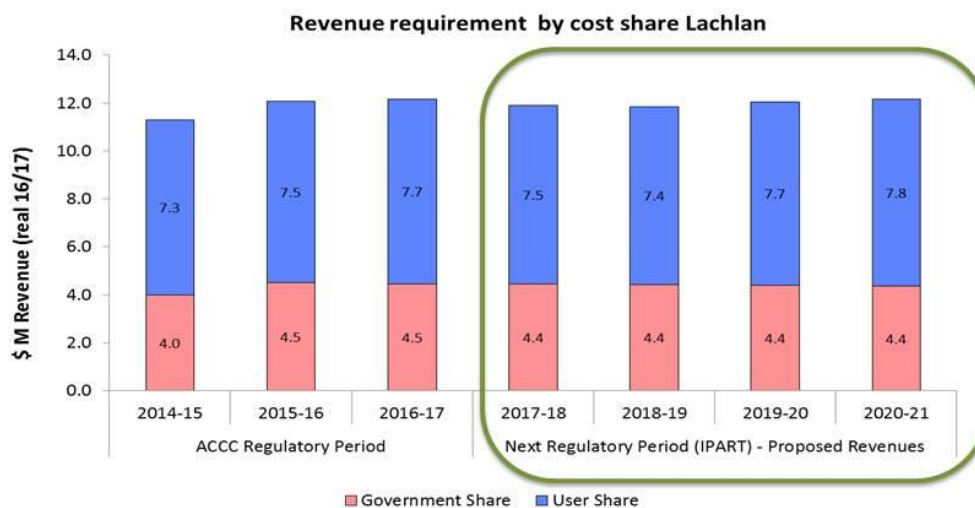
Lachlan Valley

- Total Annual Revenue Requirement



Lachlan Valley

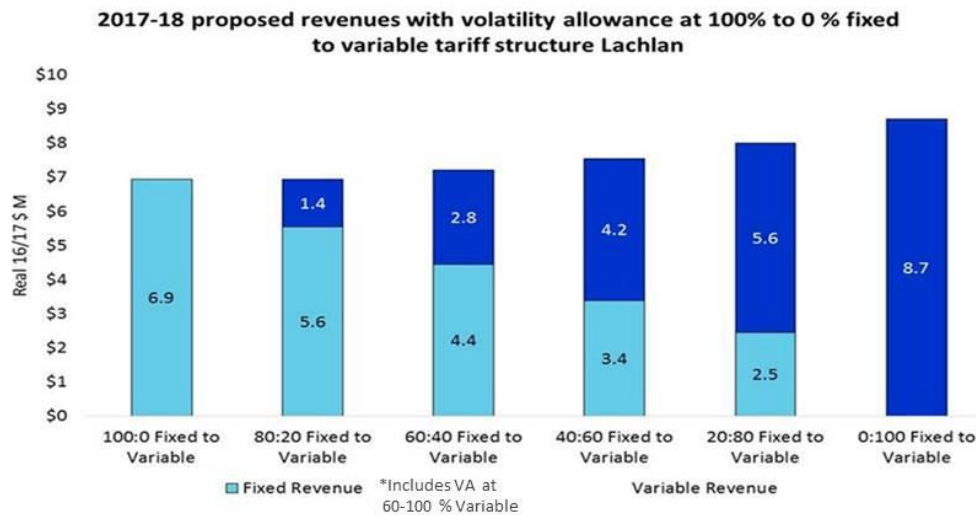
- Total Government : User share





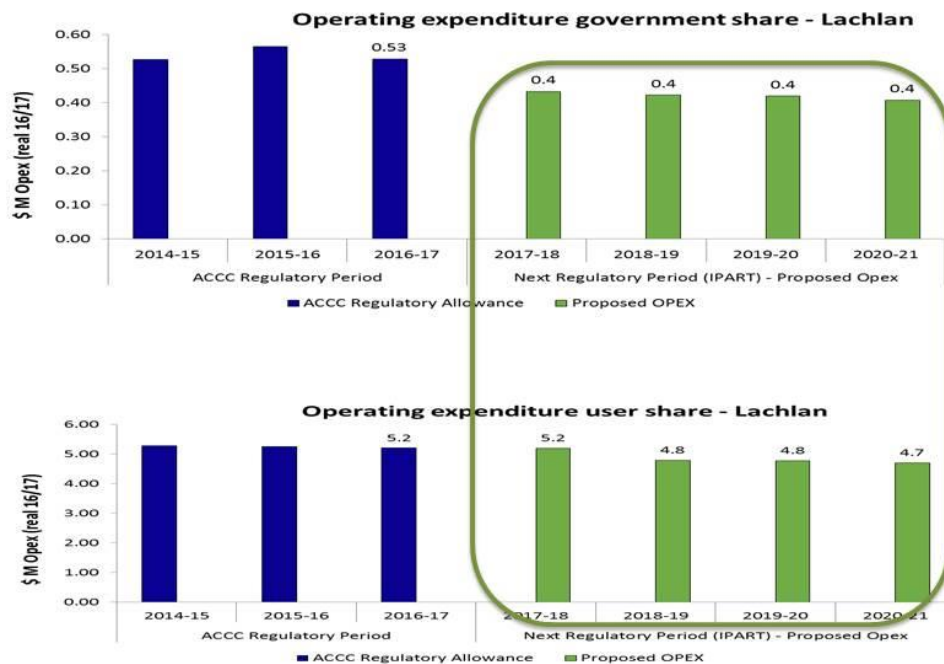
Lachlan Valley

- Impact of various fixed: variable splits



Lachlan Valley

- Operational Expense

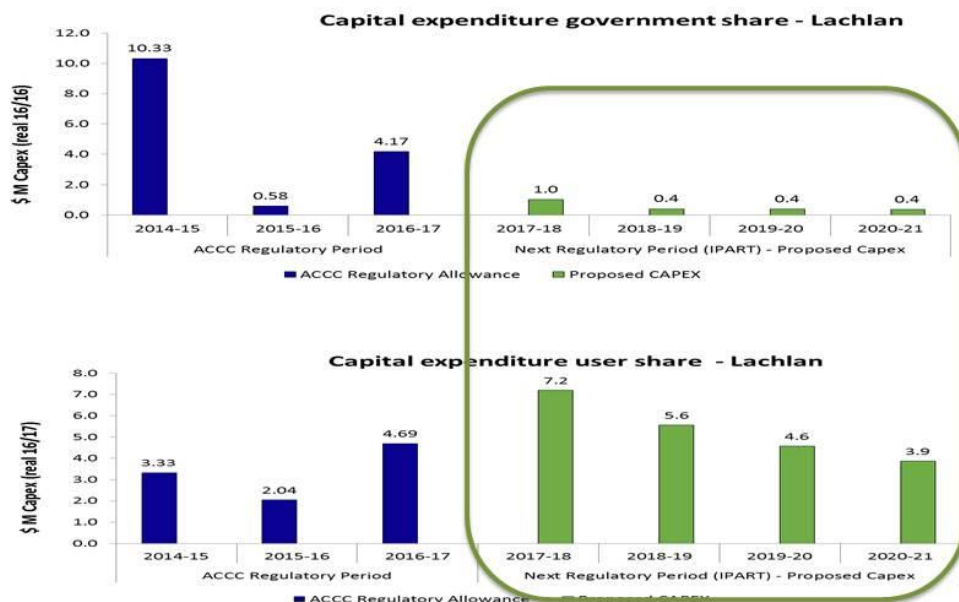


Lachlan Valley

- Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



LACHLAN VALLEY

2017-2021 DRAFT PRICING

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Lachlan Valley

- Draft Pricing 2017-2021 per ML

Lachlan 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.55	\$29.12	\$29.85	\$30.59	\$31.36	75.9%
GS Fixed Charge including	\$3.30	\$8.65	\$8.87	\$9.09	\$9.32	162.6%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$21.22	n.a	n.a	n.a	n.a	-100.0%

Lachlan 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.55	\$20.10	\$20.60	\$21.12	\$21.64	21.4%
GS Fixed Charge including	\$3.30	\$5.58	\$5.71	\$5.87	\$6.05	69.2%
Volatility Allowance	-	\$0.62	\$0.64	\$0.67	\$0.72	0.0%
Variable Usage Charge	\$21.22	\$13.96	\$14.31	\$14.66	\$15.03	-34.2%

Lachlan 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.55	\$15.59	\$15.98	\$16.39	\$16.79	-5.8%
GS Fixed Charge including	\$3.30	\$4.36	\$4.45	\$4.60	\$4.78	31.9%
Volatility Allowance	-	\$1.24	\$1.27	\$1.34	\$1.44	0.0%
Variable Usage Charge	\$21.22	\$20.94	\$21.46	\$21.99	\$22.54	-1.3%

Lachlan 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.55	\$7.79	\$7.99	\$8.19	\$8.39	-52.9%
GS Fixed Charge including	\$3.30	\$3.72	\$3.82	\$3.97	\$4.19	13.0%
Volatility Allowance	-	\$2.17	\$2.23	\$2.34	\$2.51	0.0%
Variable Usage Charge	\$21.22	\$27.91	\$28.61	\$29.33	\$30.06	31.5%

Lachlan 0% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$16.55	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$3.30	\$3.10	\$3.18	\$3.34	\$3.59	-5.8%
Volatility Allowance	-	\$3.10	\$3.18	\$3.34	\$3.59	0.0%
Variable Usage Charge	\$21.22	\$34.89	\$35.76	\$36.66	\$37.57	64.4%

Current 40:60

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- * All 2016/17 prices draft prices as per ACCC annual review released April 2016

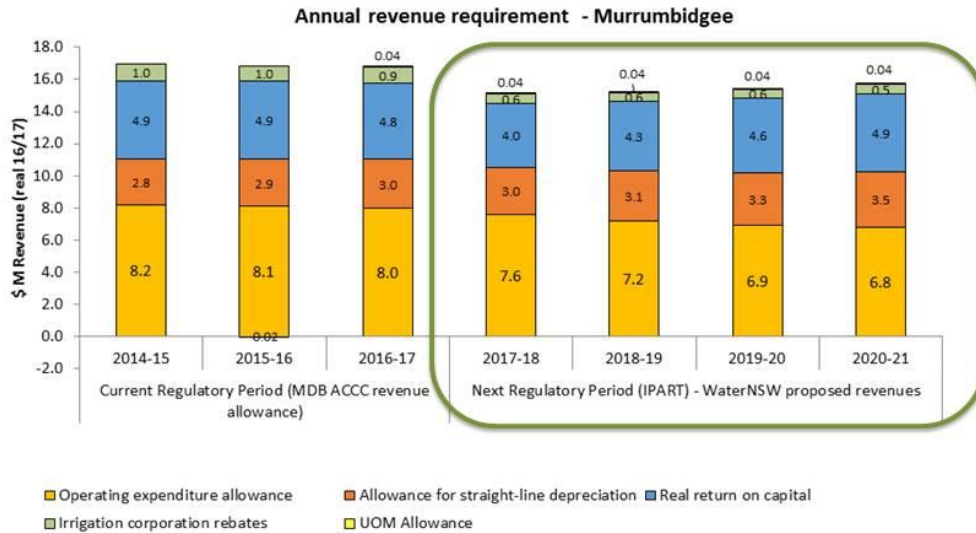


DETAILED VALLEY ANALYSIS

– MURRUMBIDGEE VALLEY

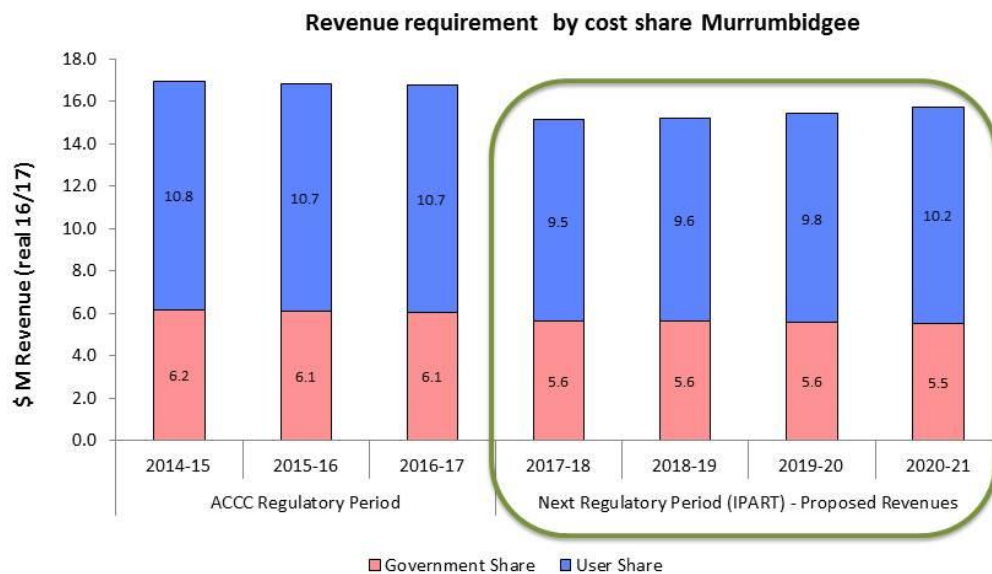
Murrumbidgee Valley

- Total Annual Revenue Requirement



Murrumbidgee Valley

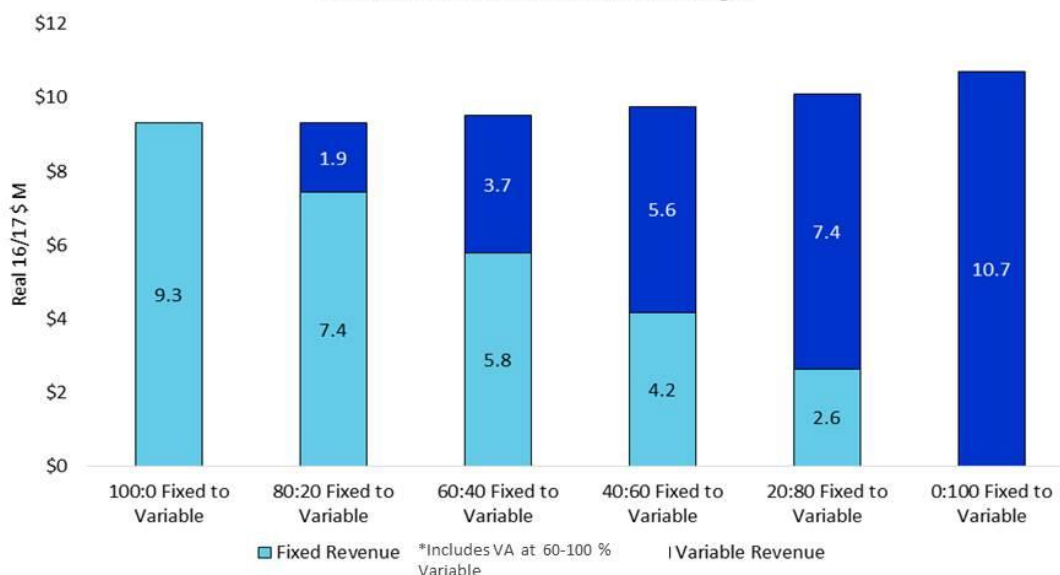
- Total Government : User share





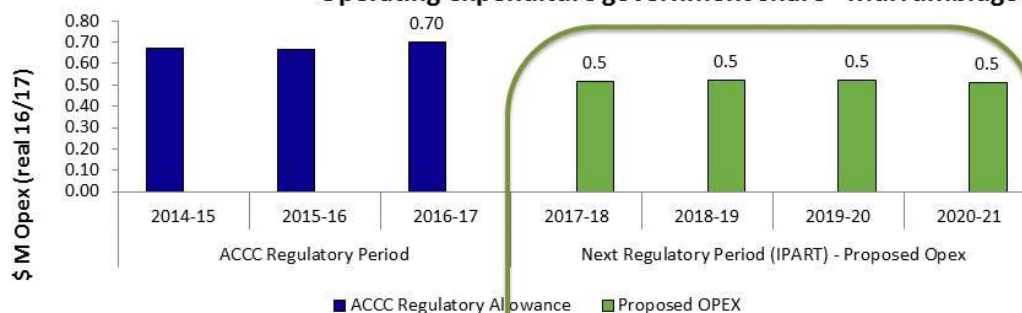
Murrumbidgee Valley - Impact of various fixed: variable splits

2017-18 proposed revenues with volatility allowance at 100% to 0 % fixed to variable tariff structure Murrumbidgee

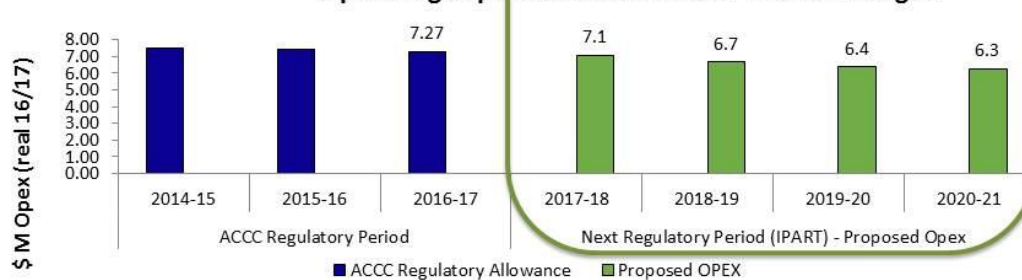


Murrumbidgee Valley - Operational Expense

Operating expenditure government share - Murrumbidgee



Operating expenditure user share - Murrumbidgee

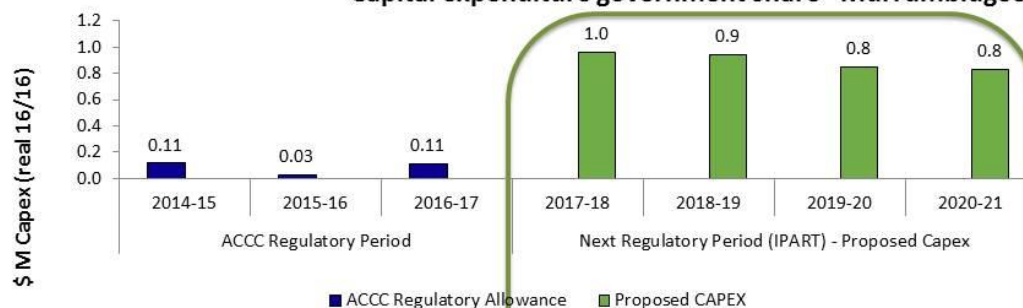


Murrumbidgee Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.

Capital expenditure government share - Murrumbidgee



Capital expenditure user share - Murrumbidgee



MURRUMBIDGEE VALLEY 2017-2021 DRAFT PRICING

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WATERNSW DRAFT PRICING TERMS AND CONDITIONS

WaterNSW 2017-2021 Draft Pricing Terms & Conditions

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Murrumbidgee Valley - Draft Pricing 2017-2021 per ML

Murrumbidgee 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$3.09	\$4.62	\$4.74	\$4.85	\$4.98	49.6%
GS Fixed Charge including	\$1.27	\$3.33	\$3.41	\$3.50	\$3.58	162.6%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$3.55	n.a	n.a	n.a	n.a	-100.0%

Murrumbidgee 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$3.09	\$4.01	\$4.11	\$4.22	\$4.32	30.0%
GS Fixed Charge including	\$1.27	\$2.60	\$2.67	\$2.73	\$2.80	105.3%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$3.55	\$1.10	\$1.13	\$1.15	\$1.18	-69.0%

Murrumbidgee 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$3.09	\$3.41	\$3.49	\$3.58	\$3.67	10.3%
GS Fixed Charge including	\$1.27	\$1.98	\$2.03	\$2.08	\$2.14	56.0%
Volatility Allowance	n.a	\$0.10	\$0.10	\$0.11	\$0.12	n.a
Variable Usage Charge	\$3.55	\$2.20	\$2.25	\$2.31	\$2.36	-38.1%

Murrumbidgee 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$3.09	\$2.80	\$2.87	\$2.94	\$3.01	-9.4%
GS Fixed Charge including	\$1.27	\$1.37	\$1.41	\$1.45	\$1.50	8.4%
Volatility Allowance	n.a	\$0.23	\$0.23	\$0.24	\$0.26	n.a
Variable Usage Charge	\$3.55	\$3.29	\$3.38	\$3.46	\$3.55	-7.1%

Murrumbidgee 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$3.09	\$1.40	\$1.43	\$1.47	\$1.51	-54.7%
GS Fixed Charge including	\$1.27	\$0.97	\$0.99	\$1.02	\$1.07	-23.8%
Volatility Allowance	n.a	\$0.39	\$0.40	\$0.42	\$0.45	0.0%
Variable Usage Charge	\$3.55	\$4.39	\$4.50	\$4.61	\$4.73	23.9%

Murrumbidgee 0 % Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$3.09	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$1.27	\$0.70	\$0.72	\$0.76	\$0.81	-44.5%
Volatility Allowance	n.a	\$0.70	\$0.72	\$0.76	\$0.81	0.0%
Variable Usage Charge	\$3.55	\$5.49	\$5.63	\$5.77	\$5.91	54.8%

Current 40:60

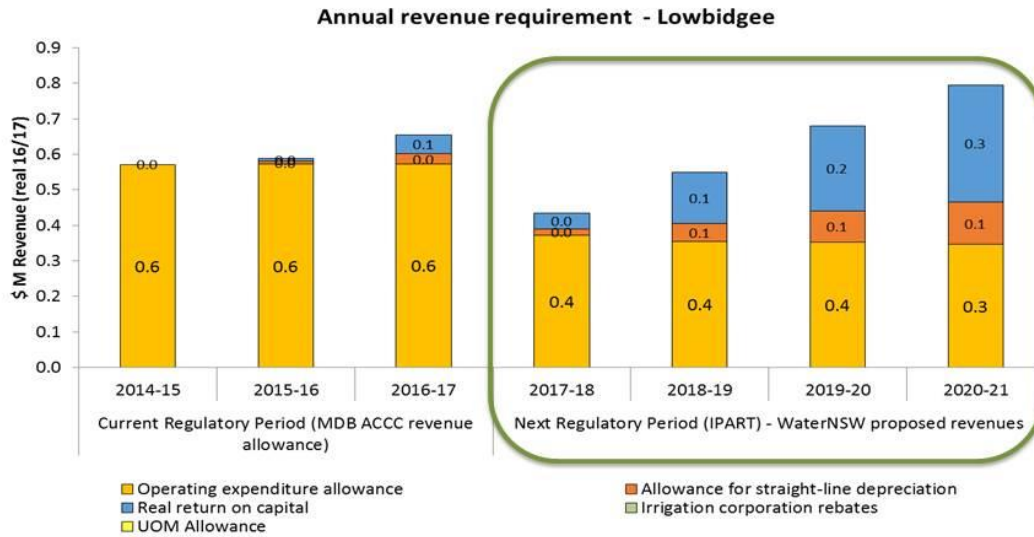
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DETAILED VALLEY ANALYSIS – LOWBIDGEE VALLEY

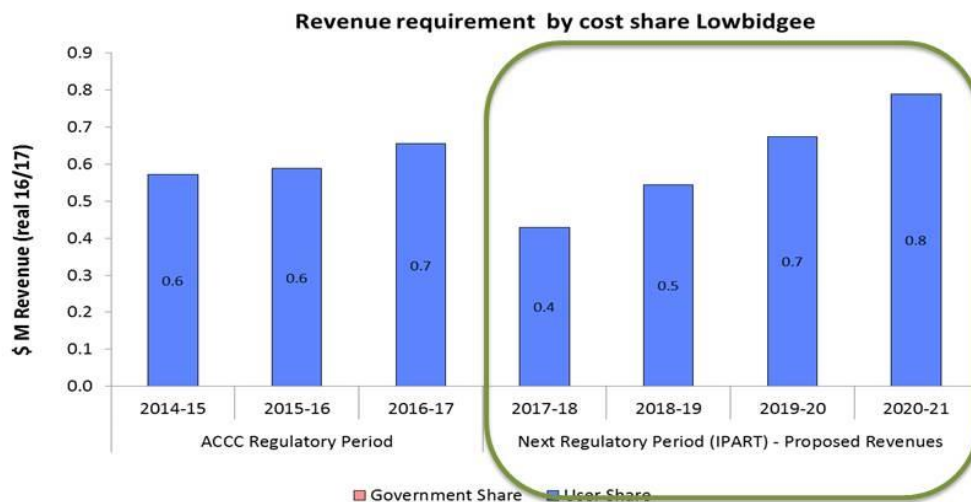
Lowbidgee Valley

- Total Annual Revenue Requirement



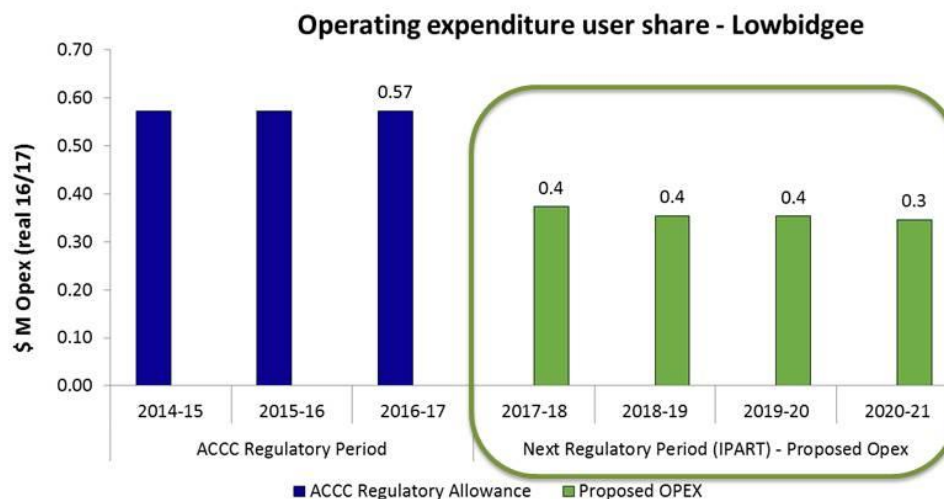
Lowbidgee Valley

- Total Government : User share





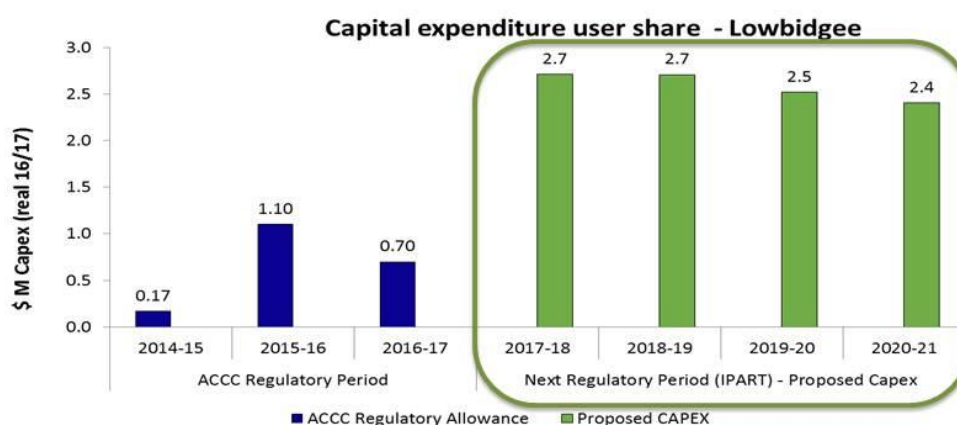
Lowbidgee Valley - Operational Expense



Lowbidgee Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.





LOWBIDGEE VALLEY 2017-2021 DRAFT PRICING

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WATERNSW DRAFT PRICING TERMS AND CONDITIONS



WaterNSW 2017-2021 Draft Pricing Terms & Conditions

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Lowbidgee Valley - Draft Pricing 2017-2021 per ML

Lowbidgee 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	n.a	n.a	n.a	n.a	n.a	n.a
GS Fixed Charge	\$0.84	\$0.83	\$0.85	\$0.87	\$0.89	-1.7%
Variable Usage Charge	n.a	n.a	n.a	n.a	n.a	n.a

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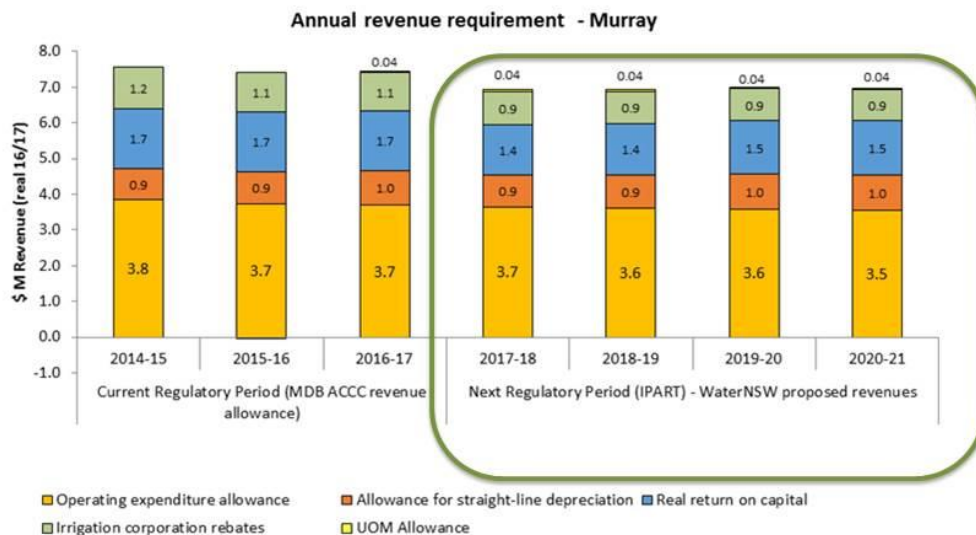
* All 2016/17 prices draft prices as per ACCC annual review released April 2016



DETAILED VALLEY ANALYSIS

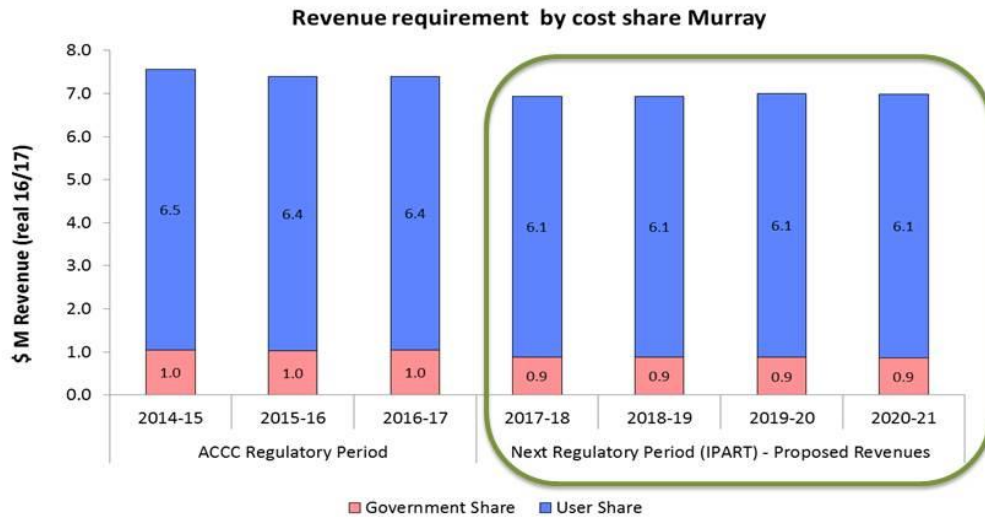
– MURRAY VALLEY

Murray Valley - Total Annual Revenue Requirement



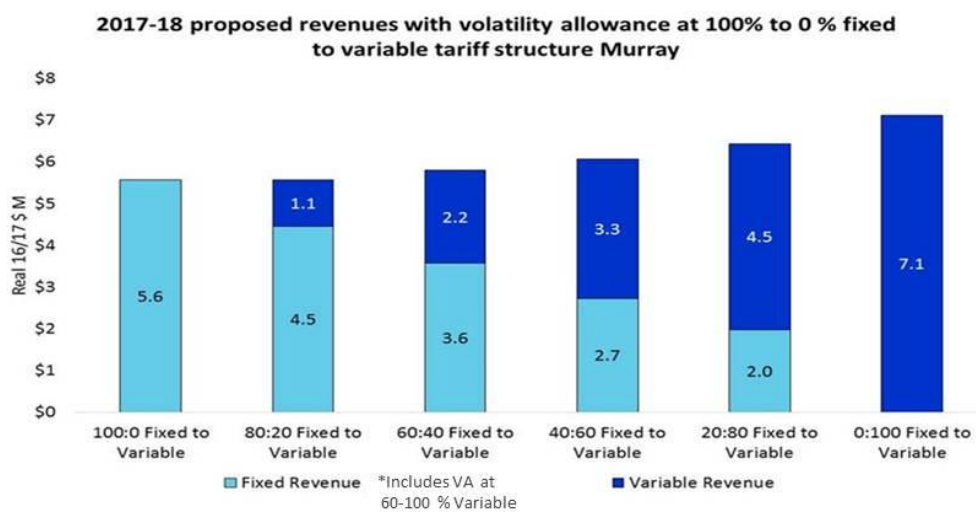
Murray Valley

- Total Government : User share



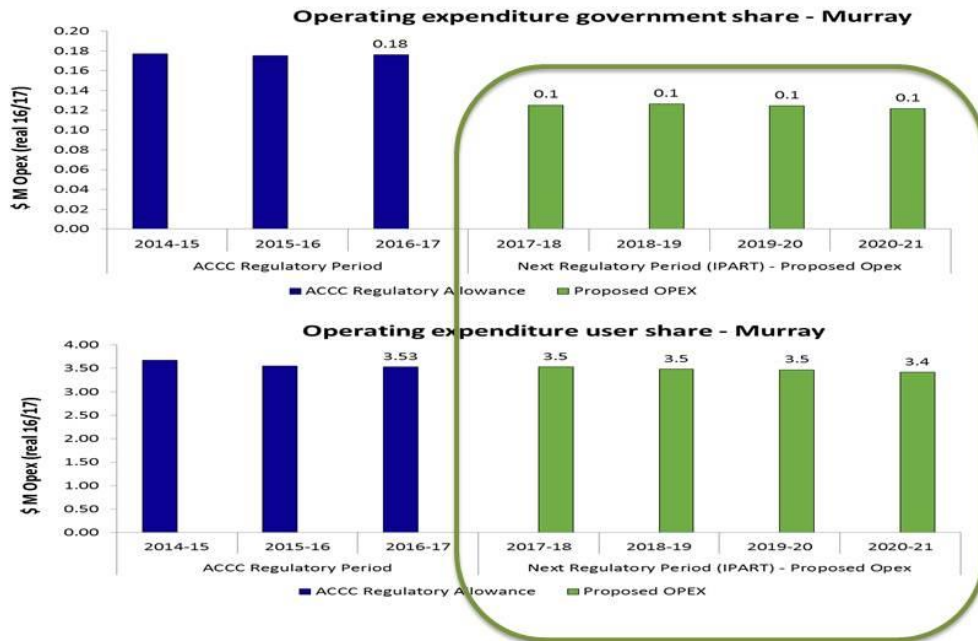
Murray Valley

- Impact of various fixed: variable splits





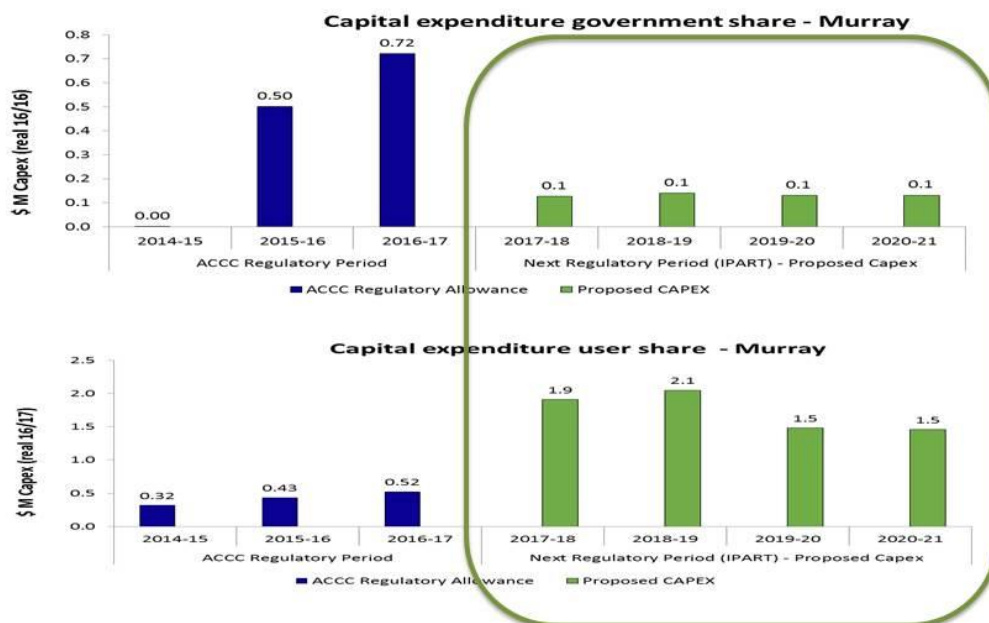
Murray Valley - Operational Expense



Murray Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.





MURRAY VALLEY 2017-2021 DRAFT PRICING

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WATERNSW DRAFT PRICING TERMS AND CONDITIONS



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Murray Valley - Draft Pricing 2017-2021 per ML

Murray 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$1.79	\$3.37	\$3.46	\$3.55	\$3.63	88.0%
GS Fixed Charge including	\$0.97	\$2.34	\$2.40	\$2.46	\$2.52	140.2%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$2.32	n.a	n.a	n.a	n.a	-100.0%

Murray 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$1.79	\$2.80	\$2.87	\$2.94	\$3.02	56.1%
GS Fixed Charge including	\$0.97	\$1.96	\$1.90	\$1.95	\$2.00	90.8%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$2.32	\$0.75	\$0.77	\$0.79	\$0.81	-67.8%

Murray 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$1.79	\$2.23	\$2.28	\$2.34	\$2.40	24.1%
GS Fixed Charge including	\$0.97	\$1.48	\$1.51	\$1.56	\$1.60	51.9%
Volatility Allowance	-	\$0.10	\$0.10	\$0.11	\$0.12	0.0%
Variable Usage Charge	\$2.32	\$1.50	\$1.53	\$1.57	\$1.61	-35.6%

Murray 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$1.79	\$1.65	\$1.70	\$1.74	\$1.78	-7.9%
GS Fixed Charge including	\$0.97	\$1.12	\$1.15	\$1.18	\$1.22	15.0%
Volatility Allowance	-	\$0.22	\$0.23	\$0.24	\$0.26	0.0%
Variable Usage Charge	\$2.32	\$2.24	\$2.30	\$2.36	\$2.42	-3.4%

Murray 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$1.79	\$0.83	\$0.85	\$0.87	\$0.89	-53.9%
GS Fixed Charge including	\$0.97	\$0.83	\$0.86	\$0.89	\$0.93	-14.3%
Volatility Allowance	-	\$0.39	\$0.40	\$0.42	\$0.45	0.0%
Variable Usage Charge	\$2.32	\$2.99	\$3.07	\$3.14	\$3.22	28.8%

Murray 0% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$1.79	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$0.97	\$0.69	\$0.71	\$0.75	\$0.80	-28.7%
Volatility Allowance	-	\$0.69	\$0.71	\$0.75	\$0.80	0.0%
Variable Usage Charge	\$2.32	\$3.74	\$3.83	\$3.93	\$4.03	61.0%

Current 40:60

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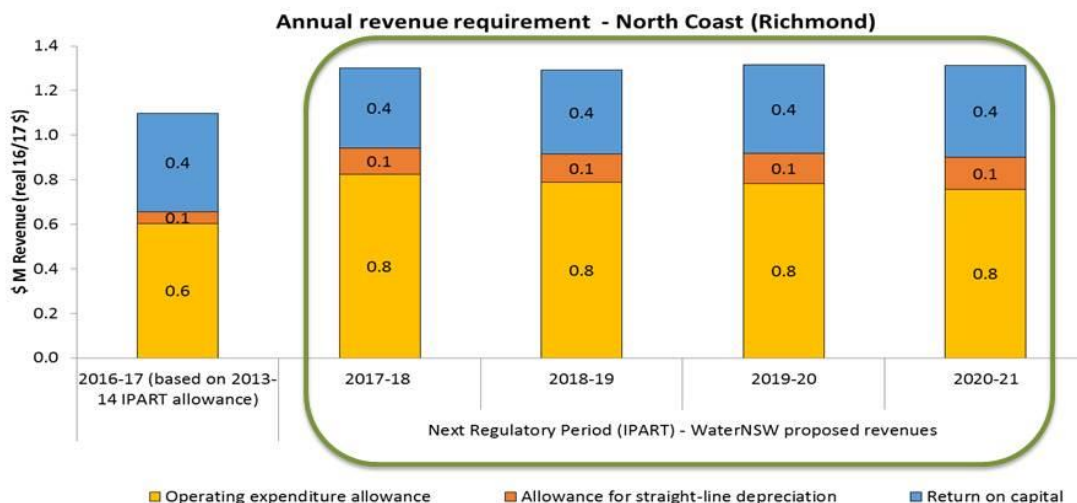
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DETAILED VALLEY ANALYSIS

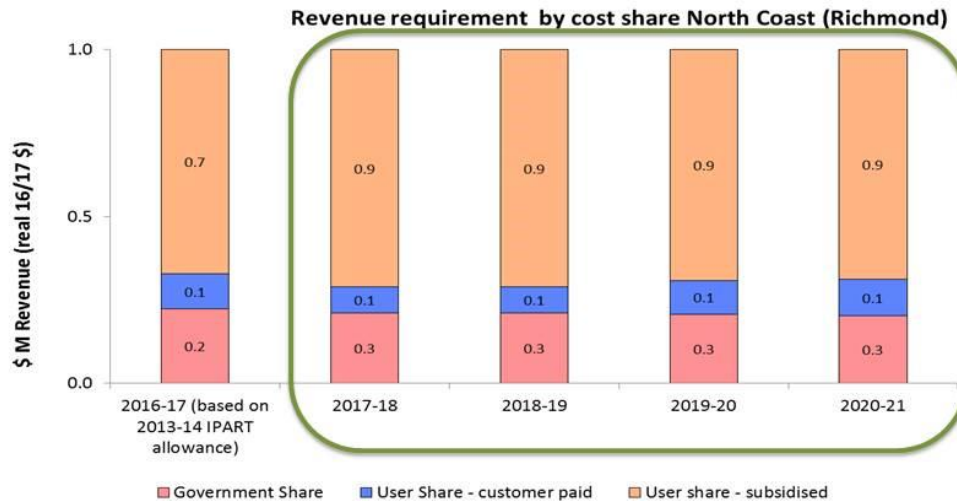
– NORTH COAST VALLEY

North Coast Valley - Total Annual Revenue Requirement

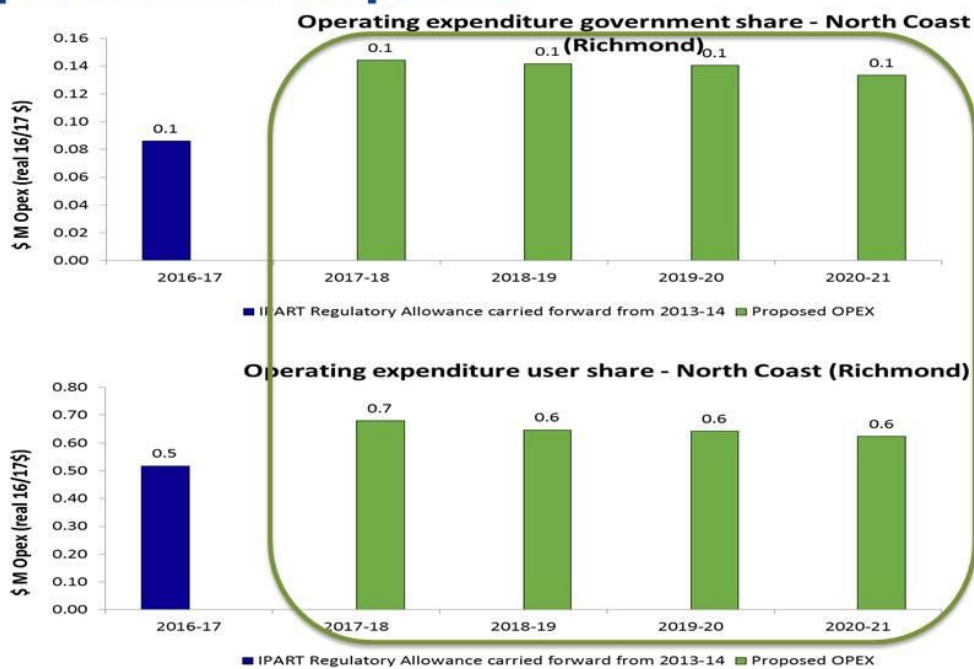




North Coast Valley - Total Government : User share



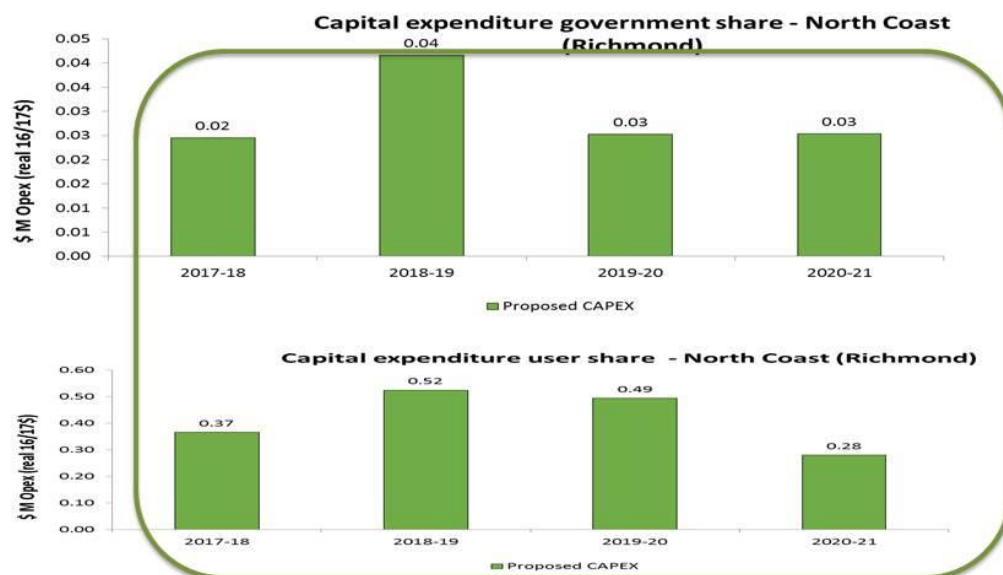
North Coast Valley - Operational Expense



North Coast Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



NORTH COAST VALLEY 2017-2021 DRAFT PRICING

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North Coast Valley - Draft Pricing 2017-2021 per ML

North Coast 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$9.54	\$10.49	\$11.54	\$12.70	\$13.97	10.0%
GS Fixed Charge	\$7.25	\$7.98	\$8.77	\$9.65	\$10.61	10.0%
Variable Usage Charge	\$45.04	\$49.54	\$54.50	\$59.95	\$65.94	10.0%

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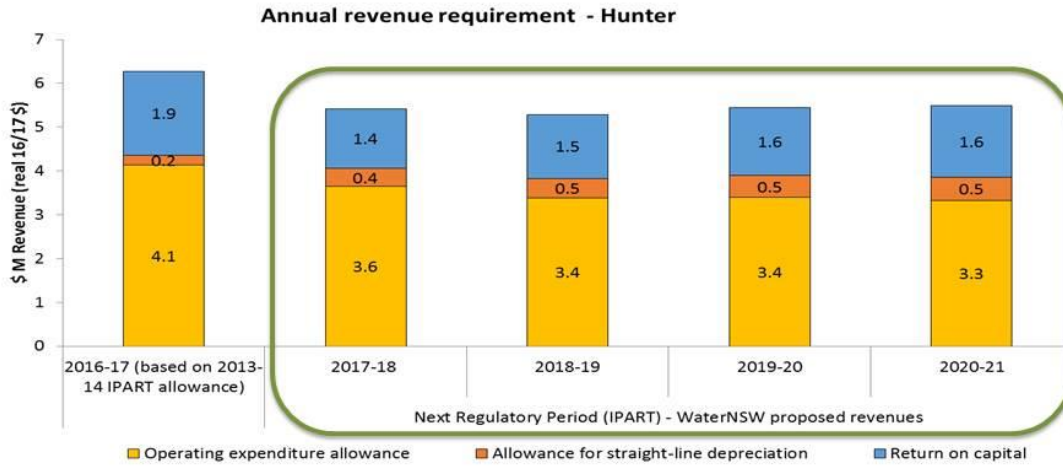


DETAILED VALLEY ANALYSIS

– HUNTER VALLEY

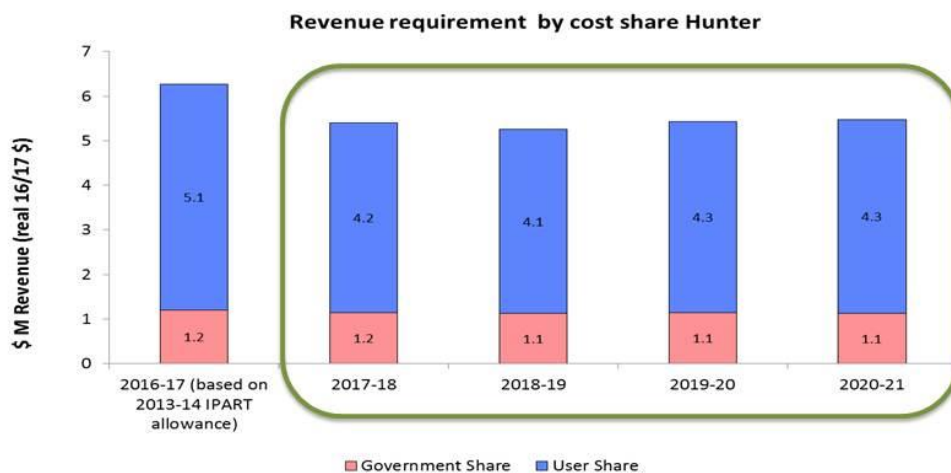
Hunter Valley

- Total Annual Revenue Requirement



Hunter Valley

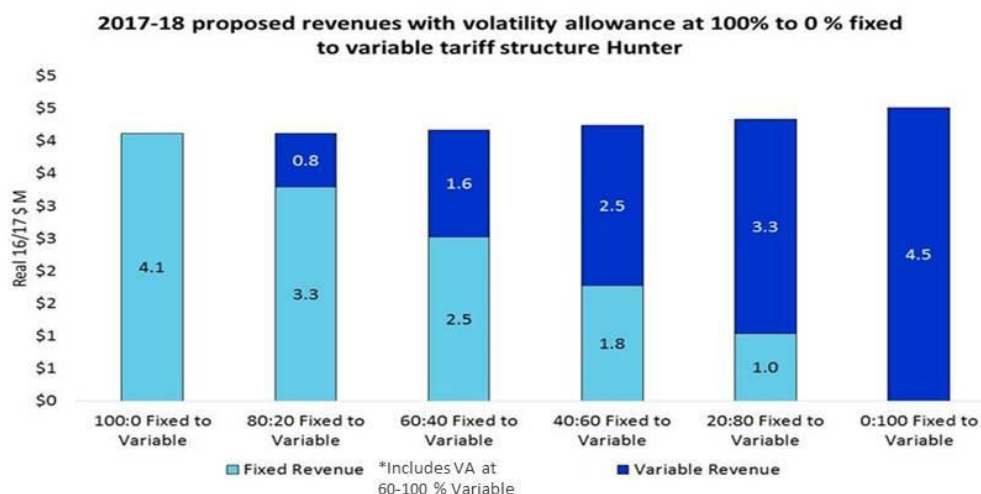
- Total Government : User share





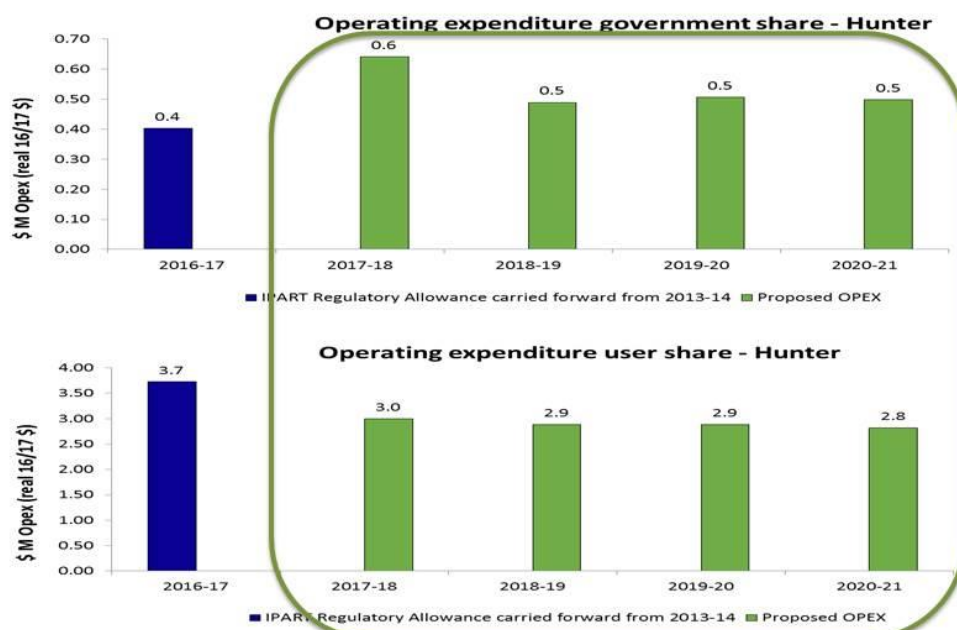
Hunter Valley

- Impact of various fixed: variable splits



Hunter Valley

- Operational Expense

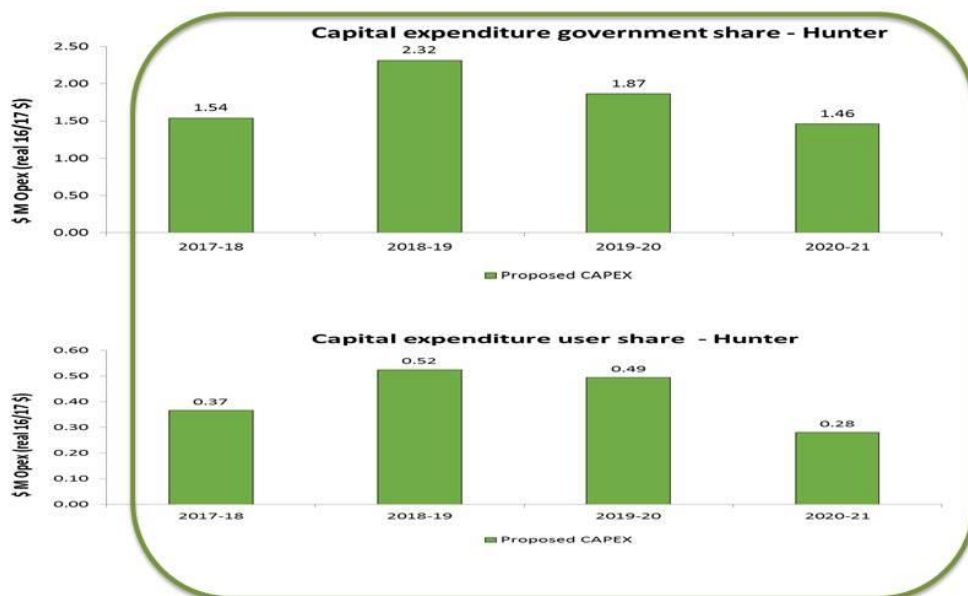


Hunter Valley

- Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.



HUNTER VALLEY

2017-2021 DRAFT PRICING

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WATERNSW DRAFT PRICING TERMS AND CONDITIONS

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Hunter Valley

- Draft Pricing 2017-2021 per ML

Hunter 100% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$26.03	\$25.68	\$26.32	\$26.97	\$27.65	-1.4%
GS Fixed Charge including	\$8.86	\$17.64	\$18.08	\$18.54	\$19.00	99.1%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$14.77	n.a	n.a	n.a	n.a	-100.0%

Hunter 80% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$26.03	\$23.52	\$24.11	\$24.72	\$25.33	-9.6%
GS Fixed Charge including	\$8.86	\$12.59	\$12.91	\$13.23	\$13.56	42.1%
Volatility Allowance	n.a	n.a	n.a	n.a	n.a	n.a
Variable Usage Charge	\$14.77	\$6.89	\$7.06	\$7.24	\$7.42	-53.4%

Hunter 60% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$26.03	\$22.12	\$22.67	\$23.24	\$23.82	-15.0%
GS Fixed Charge including	\$8.86	\$7.59	\$7.78	\$7.99	\$8.21	-14.3%
Volatility Allowance	-	\$0.43	\$0.44	\$0.46	\$0.50	0.0%
Variable Usage Charge	\$14.77	\$13.78	\$14.12	\$14.48	\$14.84	-6.7%

Hunter 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$26.03	\$14.75	\$15.12	\$15.49	\$15.88	-43.3%
GS Fixed Charge including	\$8.86	\$5.72	\$5.86	\$6.03	\$6.23	-35.5%
Volatility Allowance	-	\$0.94	\$0.97	\$1.01	\$1.09	0.0%
Variable Usage Charge	\$14.77	\$20.67	\$21.19	\$21.71	\$22.26	39.9%

Hunter 20% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$26.03	\$7.37	\$7.56	\$7.75	\$7.94	-71.7%
GS Fixed Charge including	\$8.86	\$4.03	\$4.13	\$4.27	\$4.47	-54.6%
Volatility Allowance	-	\$1.64	\$1.68	\$1.76	\$1.90	0.0%
Variable Usage Charge	\$14.77	\$27.55	\$28.25	\$28.95	\$29.68	86.6%

Hunter 0% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$26.03	n.a	n.a	n.a	n.a	-100.0%
GS Fixed Charge including	\$8.86	\$2.95	\$3.02	\$3.17	\$3.41	-66.8%
Volatility Allowance	-	\$2.95	\$3.02	\$3.17	\$3.41	0.0%
Variable Usage Charge	\$14.77	\$34.45	\$35.31	\$36.19	\$37.10	133.2%

Current 60:40

- * All Pricing is subject to WaterNSW 2017-2021 Draft Pricing Terms & Conditions
- * All 2016/17 prices draft prices as per ACCC annual review released April 2016

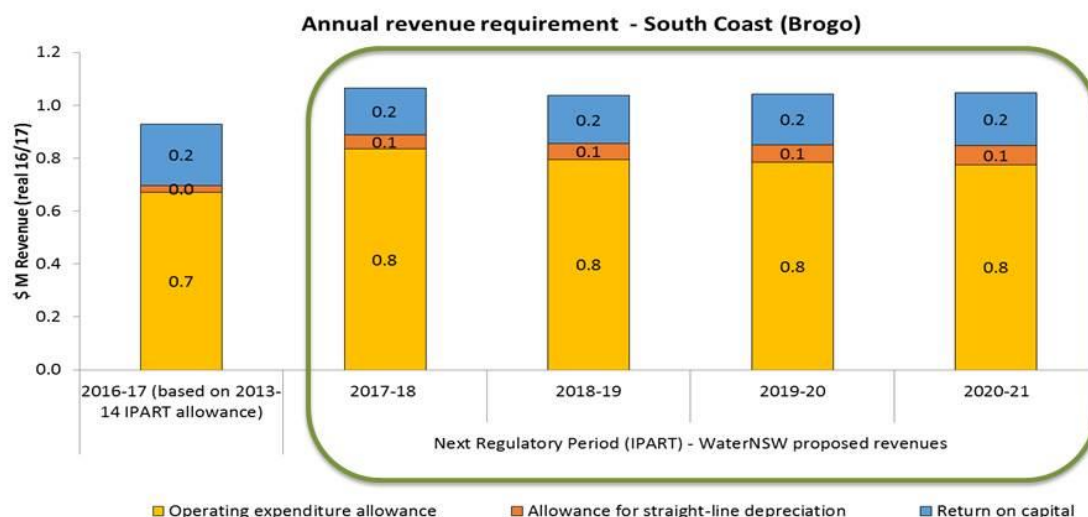


DETAILED VALLEY ANALYSIS

– SOUTH COAST VALLEY

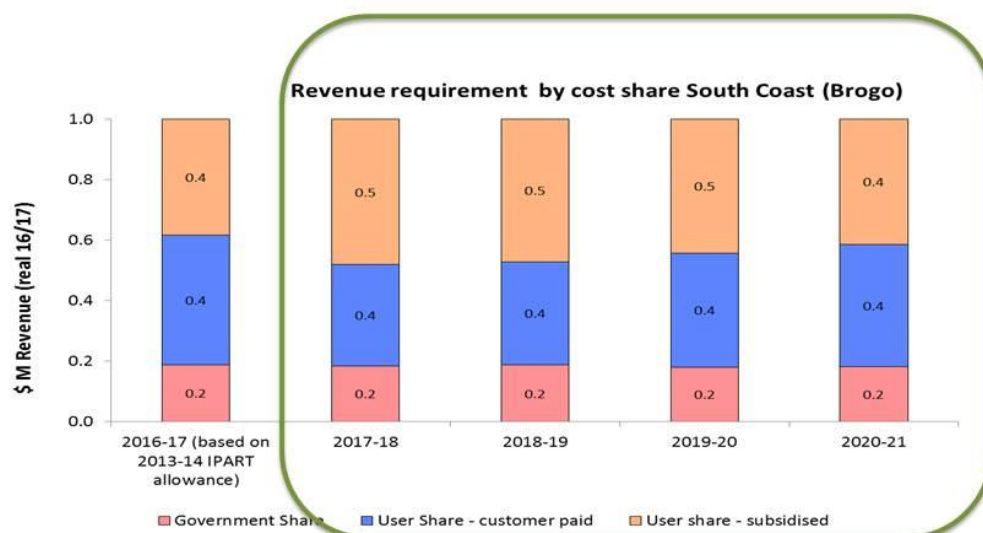
South Coast Valley

- Total Annual Revenue Requirement



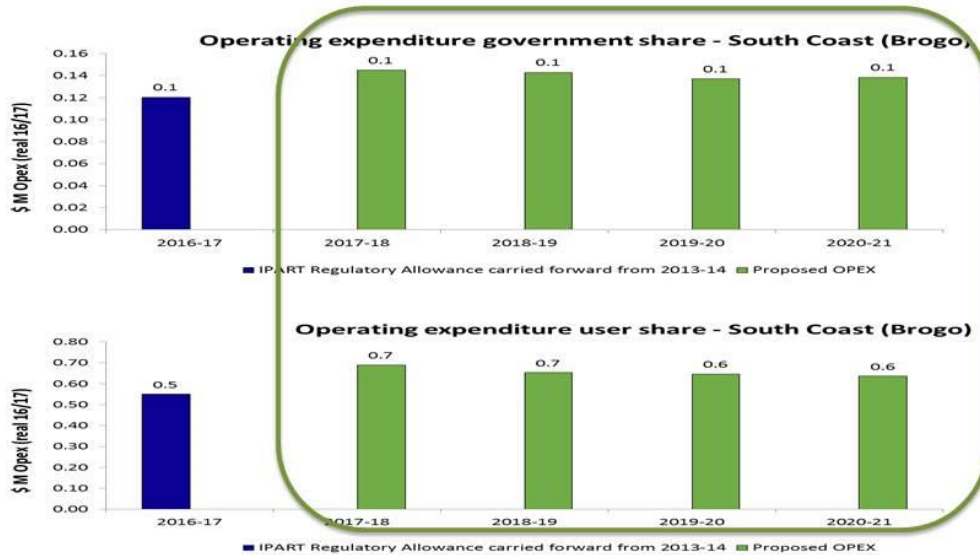
South Coast Valley

- Total Government : User share





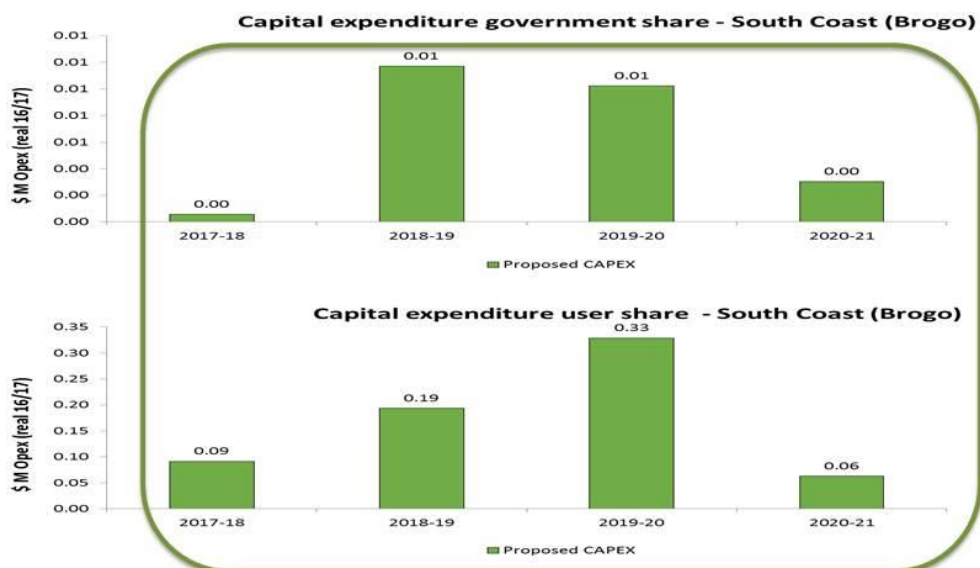
South Coast Valley - Operational Expense



South Coast Valley - Capital Expenditure



Despite increased Capital investment, the return on capital, revenue requirement has decreased in all Valleys for 2017/18.





SOUTH COAST VALLEY 2017-2021 DRAFT PRICING

All Pricing is subject to WaterNSW 2017-2021 Draft Pricing Terms & Conditions



WATERNSW DRAFT PRICING TERMS AND CONDITIONS



WaterNSW 2017-2021 Draft Pricing Terms & Conditions

- **Draft pricing:** the prices quoted in this presentation are draft and are subject to change as WaterNSW completes its Budget process.
- WaterNSW costs and charges only, the analysis presented today does not include:
 - MDBA pass through costs;
 - Border Rivers Commission pass through charges;
 - Costs for WAMC functions carried out by DPI Water; or
 - Costs for WAMC functions that may in the future be carried out by WaterNSW vs. DPI Water.
- With respect to valleys where there are current subsidies that require an adjustment calculation (North Coast and South Coast), adjustments to those existing subsidies is subject to final NSW Treasury approval.
- At the request of the CSC Reference Group WaterNSW has included in this presentation analysis of tariff structures where the variable component exceeds the current 60%. Given the financial risks to WaterNSW that would result from variable tariffs higher than 60%, these tariffs will only be available to customers if WaterNSW is able to pass on the resulting risk of volatility of its revenues to a third party. WaterNSW is currently researching the availability and seeking a price from third parties for this type of 'insurance' product.



South Coast Valley - Draft Pricing 2017-2021 per ML

South Coast 40% Fixed						
	16-17	17-18	18-19	19-20	20-21	16-17 to 17-18 %
HS Fixed Charge	\$21.12	\$23.23	\$25.56	\$28.11	\$30.92	10.0%
GS Fixed Charge	\$10.09	\$11.10	\$12.21	\$13.43	\$14.77	10.0%
Variable Usage Charge	\$40.38	\$44.42	\$48.86	\$53.75	\$59.12	10.0%

* All Pricing is subject to WaterNSW 2017-2021 Draft Pricing Terms & Conditions

* All 2016/17 prices draft prices as per ACCC annual review released April 2016



SUMMARY

In Summary...



- **Revenue Requirement:** WaterNSW's total 2017/18 Rural and Coastals revenue requirement is:
 - 7% lower compared to 2016/17; and
 - lower in every MDB and Coastal Valley compared to the State Water 2014 Pricing Submission
- **Opex:** WaterNSW's total OpEx for FY2016/17 is:
 - 22% lower than FY14 actuals;
 - 24% lower than combined pre-merger forecasts,and total WaterNSW OpEx beyond FY17 is forecast to continue to decline.
- **Capex:** is deferred to later financial years compared with FY16 SCI, with renewals and replacement the largest category of capex over the next determination period.

All of this means WaterNSW's rural customers will receive an average bill reduction of 5%.



NEXT STEPS



Next Steps

- **18th April 2016** Draft Pricing Released to CSC representatives, key volume customers and NSW irrigators Council for distribution and consultation with broader customers.
- **18th– 29th April 2016** all questions via email 2017ruralpricing@waternsw.com.au
- **26th – 29th April** Draft Pricing feedback sessions with CSC representatives, key volume customers and NSW irrigators Council
- **29th April** CSC Pricing Reference group to provide formal valley responses.
- **May / June 2016** WaterNSW to finalise 2017-2021 submission and provide updates at CSC and key customer meetings.



THANK YOU

Appendix B. Valley information

1. Border valley summary sheet

The NSW section of the Border Rivers catchment is located south of the NSW/QLD border and has an area of approximately 24,000 square kilometres. The NSW section is approximately 400 km from east to west and 100 km from north to south. The catchment is bounded by the Queensland border to the north and west, the Gwydir Catchment to the south and the Great Dividing Range to the east. The major river systems are the regulated Dumaresq, Severn and Macintyre Rivers and the unregulated Tenterfield Creek, Mole River, Severn River, Macintyre River and Frazers Creek.¹

Pindari Dam and Glenlyon Dam are the major water storages in the Border Rivers. Pindari Dam is owned and operated by WaterNSW. Pindari Dam was built in the late 1960s, and is located downstream from the Severn River Nature Reserve. It was enlarged in the 1990s to improve secure water supplies in the Border Rivers system. Pindari Dam supplies regulated flows for irrigation, stock and domestic use, town water supplies and industrial use along the Severn and Macintyre rivers upstream of the Dumaresq River junction.

The dam provides town water for Ashford, Yetman, Boggabilla, Boomi and Mungindi, supports stock and household requirements to streams serviced by the Boomi River Trust, supplements supplies to NSW irrigators along the Border Rivers, and provides environmental flows. It has a total operating capacity of 312,000 MLs.

The current estimate of the 20 year rolling average of actual usage in the Border valley is 147,829MLs. The 20 year average GS allocation rate over is 46 per cent, while the 20 year average HS allocation rate is 100 per cent.

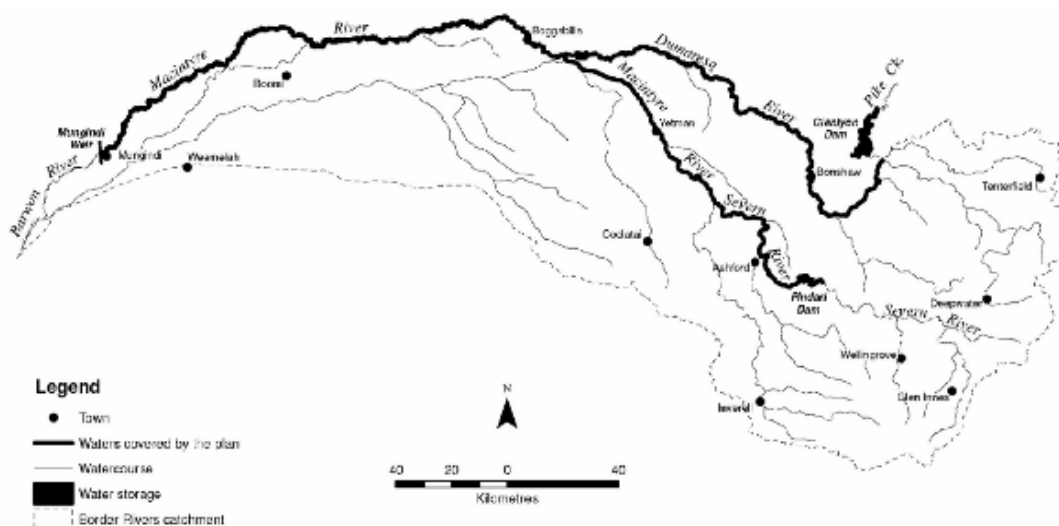


Figure 1 sourced from Border Rivers Water Sharing Plan

¹ Guide to the Border Rivers Regulated river water source water sharing plan NSW Department of Water & Energy

Revenue Requirement

A1 User revenue requirement for Border valley 2017-18 to 2020-21 (\$2016-17 '000)

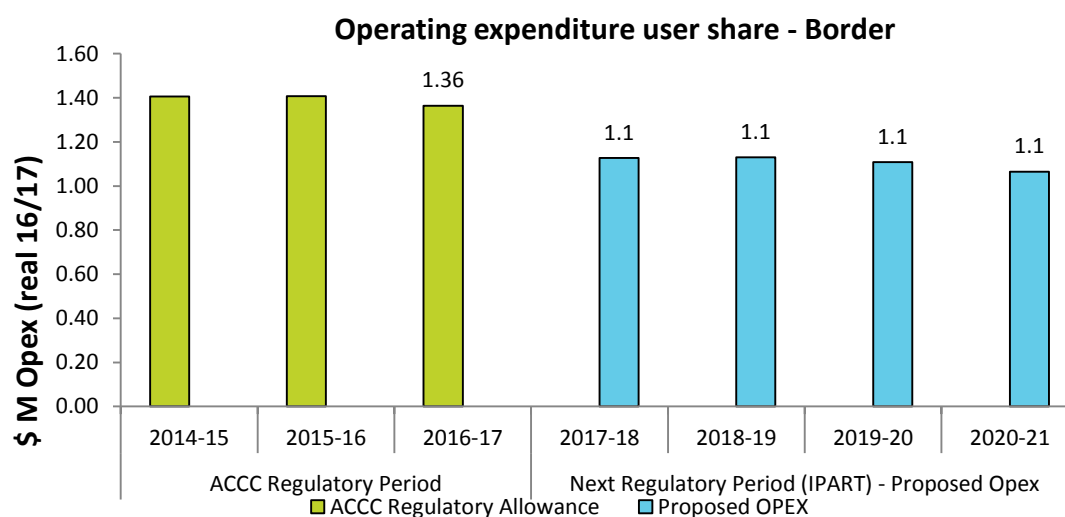
User Revenue Requirement (2016-2017 \$)				
Border	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	1,155	1,187	1,193	1,175
MDBA & BRC costs	758	782	779	779
Return of capital (depreciation)	65	70	76	81
Return on capital	121	125	132	139
Tax allowance	0	0	0	0
UOM allowance	61	61	61	61
ICD rebates	0	0	0	0
Total costs	2,159	2,224	2,240	2,235

A2 Government revenue requirement for Border valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Border	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	180	180	178	173
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	10	10	11	11
Return on capital	17	18	18	18
Tax allowance	0	0	0	0
Total costs	207	208	207	202

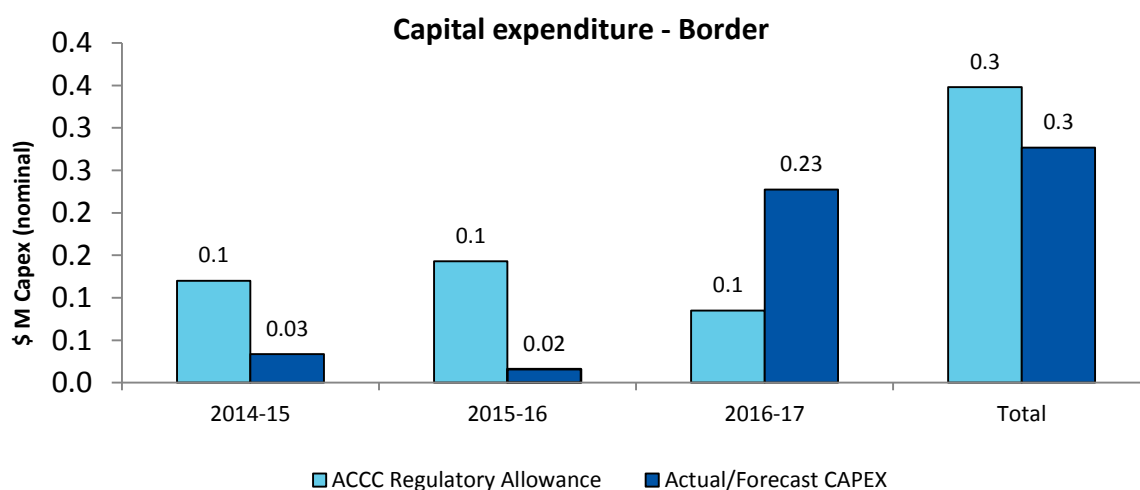
Operating Expenditure

A3 Actuals and forecast operating expenditure user share for Border valley



A4 Total operating expenditure by category for Border valley 2017-18 to 2020-21 (\$2016-17 '000)

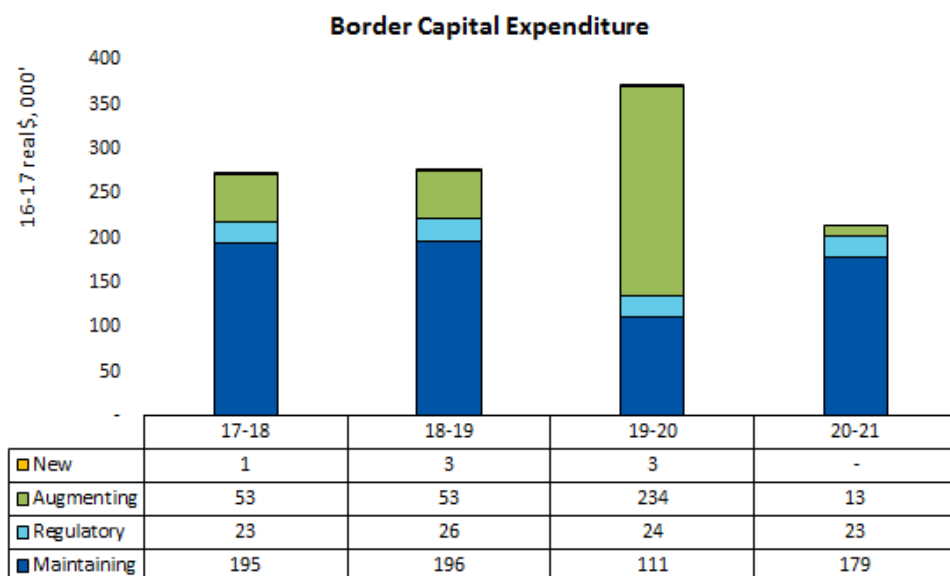
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	303	293	289	281	1,165	100%
Hydrometric Monitoring	50	50	50	50	200	90%
Water Quality Monitoring	17	16	16	16	64	50%
Corrective Maintenance	82	78	78	76	312	100%
Routine Maintenance	263	249	249	242	1,003	100%
Asset Management Planning	68	137	149	154	508	100%
Dam Safety Compliance	304	305	300	290	1,199	50%
Environmental Planning & Protection	28	28	31	31	117	50%
Corporate Systems	6	6	6	7	25	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	212	204	204	201	821	100%
Allowance for Debt Raising Costs	1	1	1	1	6	n.a
Total	1,335	1,366	1,371	1,349	5,421	

Capital Expenditure in the current determination period**A5 Capital expenditure in the current determination period for Border valley**

Actual capital expenditure in the Border valley is broadly consistent with the ACCC regulatory allowance. Capital expenditure has consisted of renewals and replacement works as well corporate systems expenditure (iSMART), which is focused on achieving operational efficiencies to meet customer service targets.

Proposed Forecast Capital Expenditure

A6 Forecast capital expenditure for Border valley



Regulated Asset Base

A7 Proposed RAB values for Border Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Border	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Opening RAB	3,201	3,755	3,776	3,794	4,006	4,198	4,391	4,671
+ Capex/Additions	471	34	16	227	273	277	372	215
- Depreciation	21	70	92	113	76	82	88	93
- Disposals	0	0	0	0	4	3	4	4
+ Indexation	104	57	95	98	0	0	0	0
Closing RAB	3,755	3,776	3,794	4,006	4,198	4,391	4,671	4,789

2. Gwydir valley summary sheet

The Gwydir River, located in north-western NSW, rises near Uralla and travels approximately 700 kilometres before it joins the Barwon River. Copeton Dam is the major water storage in the Gwydir Regulated River. There are also a number of weirs and other structures that assist in regulating and redirecting flows along the river. These regulate flows along 400 kilometres of the Gwydir River and its tributaries - the Mehi/Moomin and Carole/Gil Gil systems.²

Copeton Dam is located 60 kilometres upstream of Bingara and 35 kilometres south-west of Inverell on the North West slopes of the NSW Northern Tablelands. It is owned and operated by WaterNSW and has an operating capacity of 1,364,000 MLs.

A dam on the Gwydir River was proposed as early as the 1930s to improve town water supplies and boost agricultural production in the Gwydir Valley. World War II and subsequent shortage of funds halted further investigations. It was 1966 before a final site was chosen and construction began in 1968.

Cotton was one of the main crops to benefit from the availability of irrigation, as well as lucerne, cereals, oilseed, pecans, wheat and vegetables. The dam also provides environmental flows to the Gwydir Wetlands near Moree. In addition to irrigated agriculture and environmental flows, the dam provides water for Inverell and other town supplies, industry and domestic requirements, flood mitigation and recreation.

The current estimate of the 20 year rolling average of actual usage in the Gwydir valley is 264,774 MLs. The 20 year average GS allocation rate is 44 per cent, while the 20 year average HS allocation rate is 100 per cent.

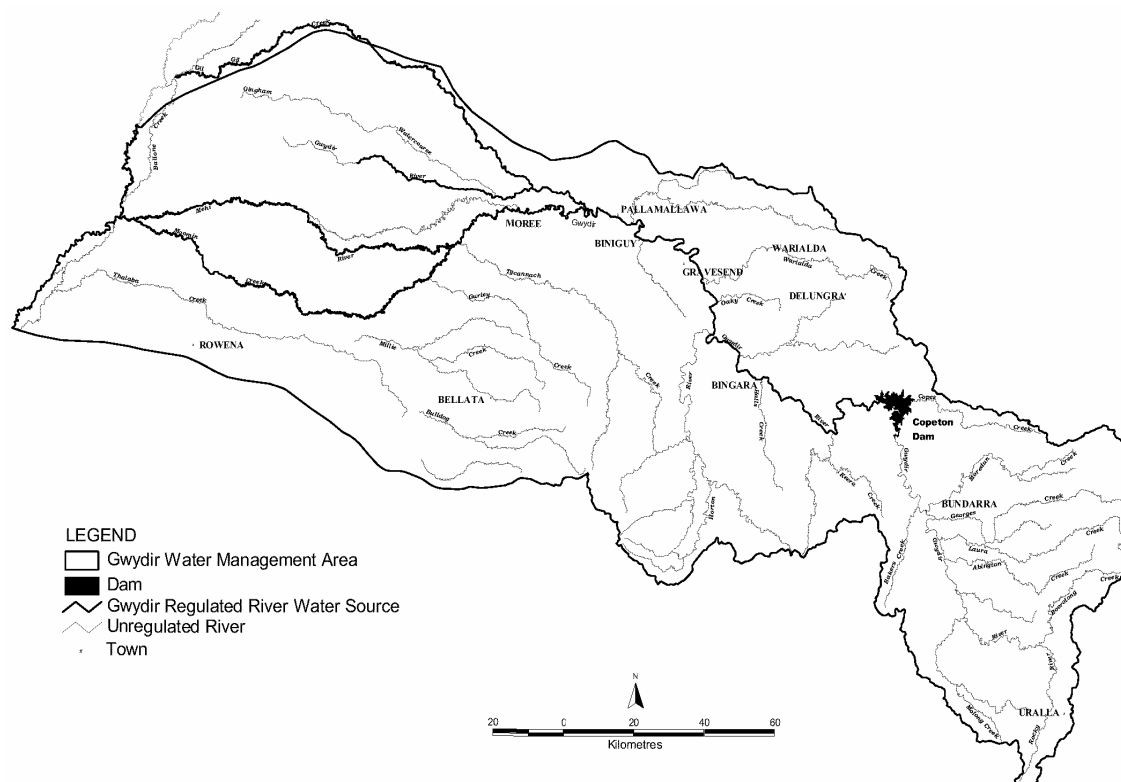


Figure 2 Sourced from the Gwydir Water Sharing Plan

² Guide to the Gwydir Regulated river water source water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

Revenue Requirement

A8 User revenue requirement for Gwydir valley 2017-18 to 2020-21 (\$2016-17 '000)

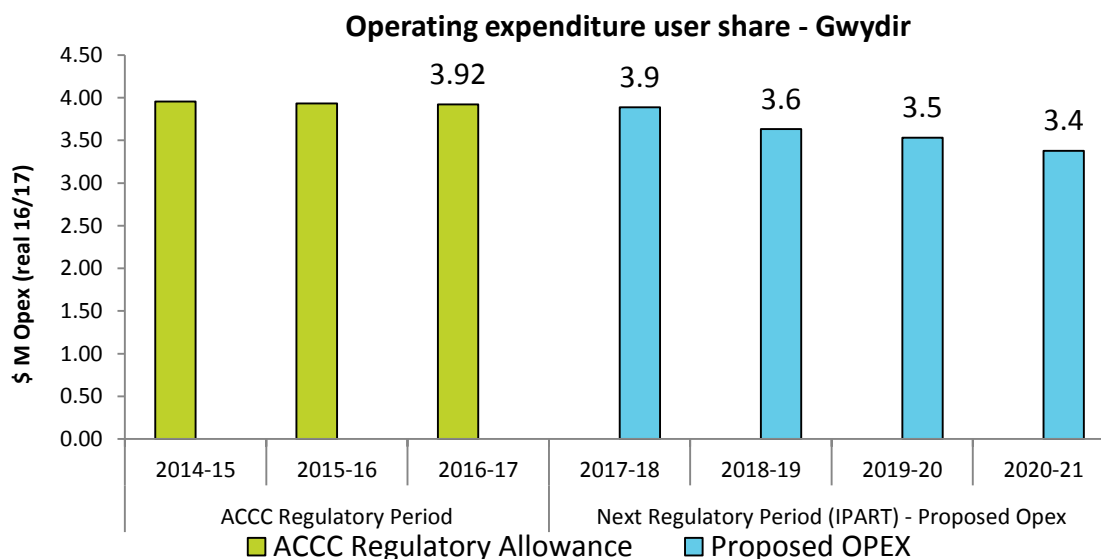
User Revenue Requirement (2016-2017 \$)				
Gwydir	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	3,986	3,818	3,804	3,728
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	421	510	582	633
Return on capital	772	871	950	995
Tax allowance	0	0	0	0
UOM allowance	143	143	143	143
ICD rebates	0	0	0	0
Total costs	5,323	5,342	5,479	5,499

A9 Government revenue requirement for Gwydir valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Gwydir	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	350	343	340	325
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	1,695	1,696	1,698	1,700
Return on capital	3,083	3,038	2,988	2,937
Tax allowance	0	0	0	0
Total costs	5,127	5,077	5,026	4,962

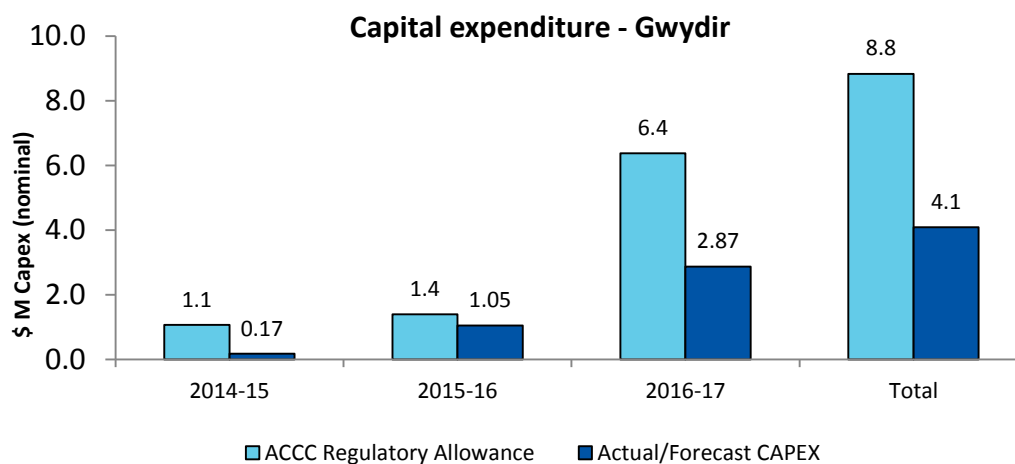
Operating Expenditure

A10 Actuals and forecast operating expenditure user share for Gwydir valley



A11 Total operating expenditure by category for Gwydir valley 2017-18 to 2020-21 (\$2016-17 '000)

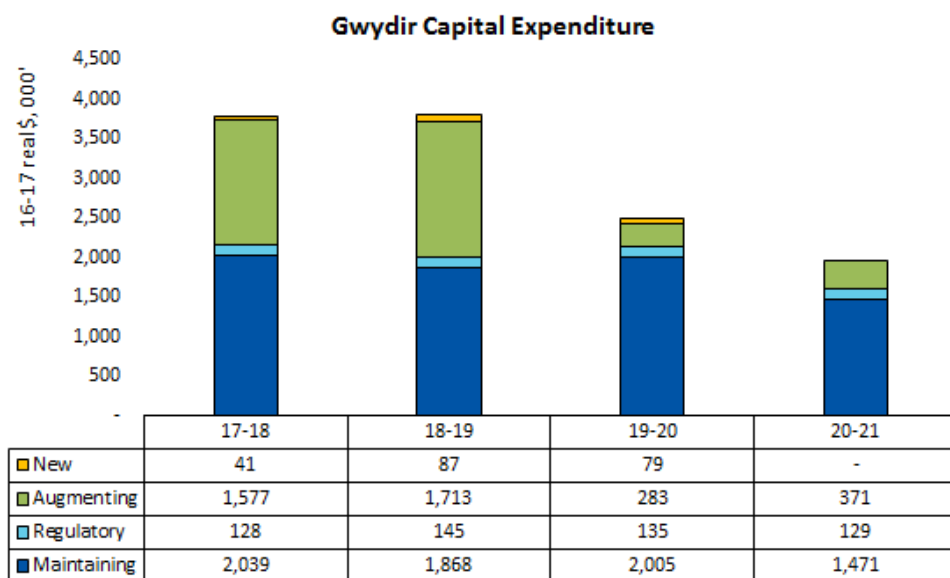
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	730	697	673	639	2,739	100%
Hydrometric Monitoring	700	700	700	700	2,800	90%
Water Quality Monitoring	26	25	25	24	100	50%
Corrective Maintenance	273	259	259	252	1,043	100%
Routine Maintenance	1,141	1,079	1,079	1,049	4,349	100%
Asset Management Planning	179	142	154	160	635	100%
Dam Safety Compliance	391	380	368	340	1,480	50%
Environmental Planning & Protection	81	81	88	88	338	50%
Corporate Systems	49	47	47	55	198	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	726	712	712	707	2,858	100%
Allowance for Debt Raising Costs	38	38	39	39	153	n.a
Total	4,336	4,161	4,144	4,053	16,694	

Capital Expenditure in the current determination period**A12 Capital expenditure in the current determination period for Gwydir valley**

The capital expenditure in Gwydir valley is largely driven by the removal of the Copeton Fish Passage Offsets proposal (\$5.6M real 13/14) from our Environmental Planning and Protection program, following discussions with NSW Government on the efficiency of the fish passage program.

Proposed Forecast Capital Expenditure

A13 Forecast capital expenditure for Gwydir valley



Regulated Asset Base

A14 Proposed RAB values for Gwydir Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Gwydir	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Opening RAB	111,633	114,290	114,089	115,788	119,250	120,761	122,232	122,288
+ Capex/Additions	516	172	1,053	2,868	3,785	3,813	2,501	1,971
- Depreciation	1,233	2,101	2,220	2,337	2,150	2,242	2,318	2,370
- Disposals	0	0	0	0	124	100	128	104
+ Indexation	3,374	1,728	2,865	2,931	0	0	0	0
Closing RAB	114,290	114,089	115,788	119,250	120,761	122,232	122,288	121,785

3. Namoi Valley summary sheet

The Namoi River is located in North West New South Wales. It extends over some 350 kilometres in an east-west direction between the Great Dividing Range and the Barwon River, which the Namoi joins at Walgett. Split Rock Dam on the Manilla River and Keepit Dam on the Namoi River are the two main water storages in the valley. Both of these dams are owned and operated by WaterNSW. These structures allow the delivery of flows to meet the needs of water users downstream.³

Keepit Dam is situated on the Namoi River about 40 kilometres upstream of Gunnedah on the North West slopes of the NSW Northern Tablelands. The dam has a capacity of 425,000 megalitres. Split Rock Dam was built in the 1980s to supplement supplies from Keepit Dam and meet increased agricultural demand for water in the Namoi Valley. Split Rock dam has a capacity of 397,370 MLs.

Cotton was one of the main crops to benefit from the availability of irrigation, as well as lucerne, cereals, oilseed, wheat and vegetables. Increased agricultural production drove the growth of downstream towns Gunnedah, Narrabri, Wee Waa and Walgett. In addition to irrigated agriculture and environmental flows, the dam provides town water for Walgett and meets other industry and domestic requirements, flood mitigation and recreation.

The current estimate of the 20 year rolling average of actual usage in the Namoi valley is 168,133MLs. The 20 year average GS allocation rate is 58 percent, while the 20 year average HS allocation rate is 100 per cent.

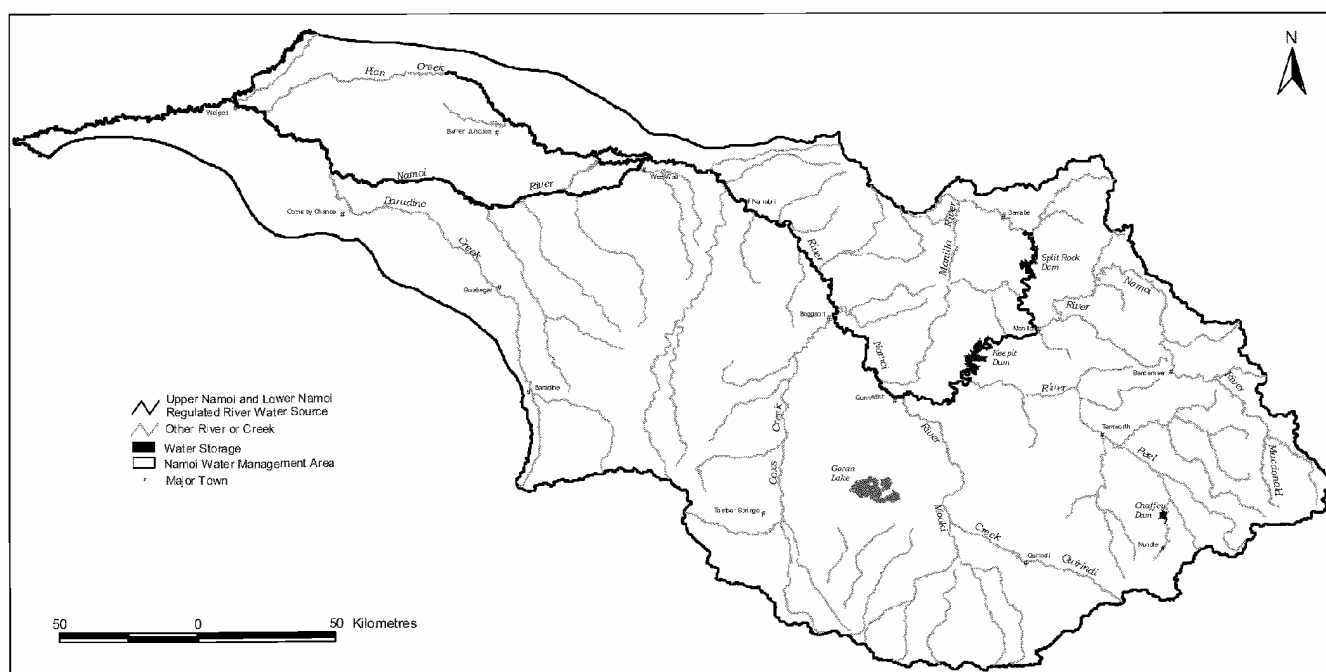


Figure 3 sourced from Namoi Water Sharing Plan

³ Guide to the Upper and Lower Namoi Regulated river water source water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

Revenue Requirement

A15 User revenue requirement for Namoi valley 2017-18 to 2020-21 (\$2016-17 '000)

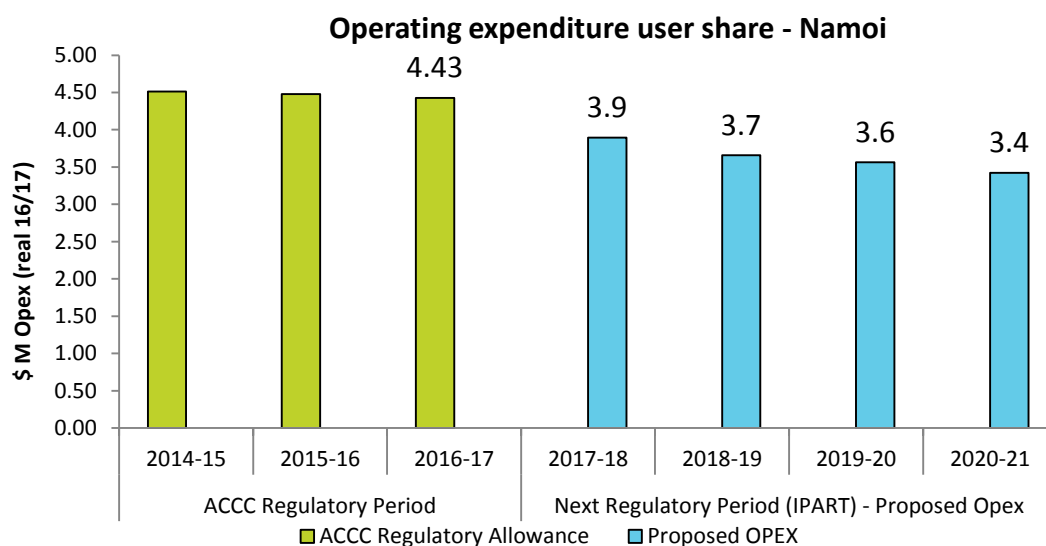
User Revenue Requirement (2016-2017 \$)				
Namoi	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	3,990	3,842	3,836	3,777
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	474	606	722	804
Return on capital	833	947	1,045	1,104
Tax allowance	0	0	0	0
UOM allowance	179	179	179	179
ICD rebates	0	0	0	0
Total costs	5,476	5,574	5,782	5,864

A16 Government revenue requirement for Naomi valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Namoi	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	478	478	473	467
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	2,750	2,865	2,944	3,005
Return on capital	5,151	5,482	5,612	5,762
Tax allowance	0	0	0	0
Total costs	8,379	8,825	9,029	9,234

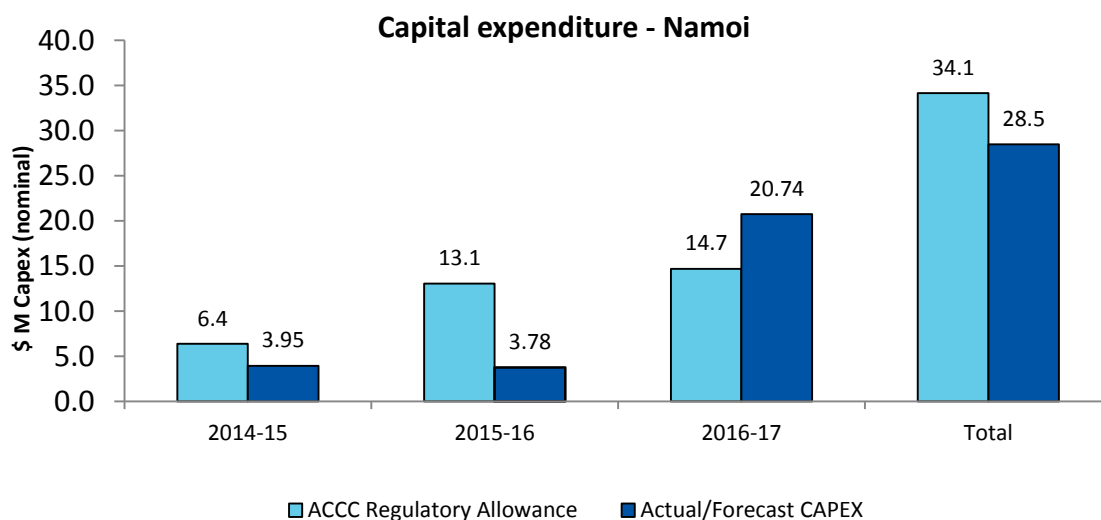
Operating Expenditure

A17 Actuals and forecast operating expenditure user share for Namoi valley



A18 Total operating expenditure by category for Namoi valley 2017-18 to 2020-21 (\$2016-17 '000)

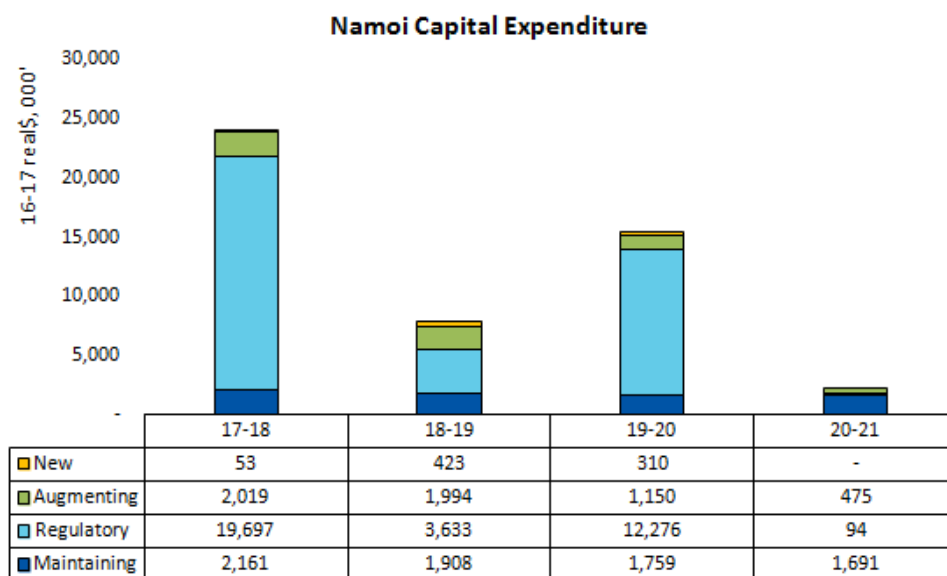
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	572	550	538	517	2,176	100%
Hydrometric Monitoring	700	700	700	700	2,800	90%
Water Quality Monitoring	36	34	34	33	136	50%
Corrective Maintenance	453	432	432	422	1,740	100%
Routine Maintenance	1,068	1,013	1,013	986	4,079	100%
Asset Management Planning	178	141	153	158	629	100%
Dam Safety Compliance	583	582	564	551	2,280	50%
Environmental Planning & Protection	94	92	98	97	381	50%
Corporate Systems	25	23	23	28	99	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	700	690	689	685	2,764	100%
Allowance for Debt Raising Costs	59	63	66	67	256	n.a
Total	4,468	4,319	4,310	4,244	17,341	

Capital Expenditure in the current determination period**A19 Capital expenditure in the current determination period for Namoi valley**

The majority of the regulatory allowance consists of the Keepit Dam Safety Upgrade Phase 1 which was delayed for one year to ensure the overall capital expenditure program fit within the ACCC regulatory envelope.

Forecast Capital Expenditure

A20 Forecast capital expenditure for Namoi valley



Regulated Asset Base

A21 Proposed RAB values for Namoi Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Namoi	Step 1 – RAB Roll Forward (nominal)				Step 2 – Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	137,652	147,761	151,297	156,038	177,806	198,302	202,605	214,210
+ Capex/Additions	8,354	3,946	3,780	20,744	23,931	7,958	15,494	2,260
- Depreciation	2,523	2,672	2,870	3,136	3,276	3,527	3,725	3,871
- Disposals	0	0	0	0	159	128	164	133
+ Indexation	4,277	2,262	3,830	4,160	0	0	0	0
Closing RAB	147,761	151,297	156,038	177,806	198,302	202,605	214,210	212,467

4. Peel valley summary sheet

The Peel Valley is a sub-catchment of the Namoi, situated in the New England – North West Region of NSW. The Peel Valley covers an area of approximately 4,669 km and comprises one regulated river water source, five unregulated surface water sources, one alluvial groundwater source and one fractured rock groundwater source. The Peel River flows from the western side of the Great Dividing Range east of Nundle to its confluence with the Namoi River at Carroll Gap.⁴

The area ranges in elevation from 1,300 m on the eastern boundary to 288 m at Carroll Gap. The major population centre in the Peel Valley is Tamworth, with a population of approximately 47,900 people.

Chaffey Dam is situated on the Peel River, 43 kilometres south-east of Tamworth in the New England region of NSW. Chaffey Dam holds a maximum of 62,830 MLs of water and is owned and operated by WaterNSW.

The dam provides regulated water flow for irrigation, stock and domestic use. More water was also needed for the rapidly growing city of Tamworth, which relied on wells and a small dam on Dungowan Creek prior to the construction of Chaffey Dam.

The dam provides water for irrigating crops including cotton, wheat, lucerne, vegetables, fruit trees, oilseeds and fodders, as well as pastures for sheep and cattle.

The current estimate of the 20 year rolling average of actual usage in the Peel valley is 11,291MLs. The 20 year average GS allocation rate is 62 percent, while the 20 year average HS allocation rate is 98 per cent.



Figure 4 sourced from Peel valley Water Sharing Plan

⁴ Guide to the Peel valley Regulated river water source water sharing plan NSW Office of Water

Revenue Requirement

A22 User revenue requirement for Peel valley 2017-18 to 2020-21 (\$2016-17 '000)

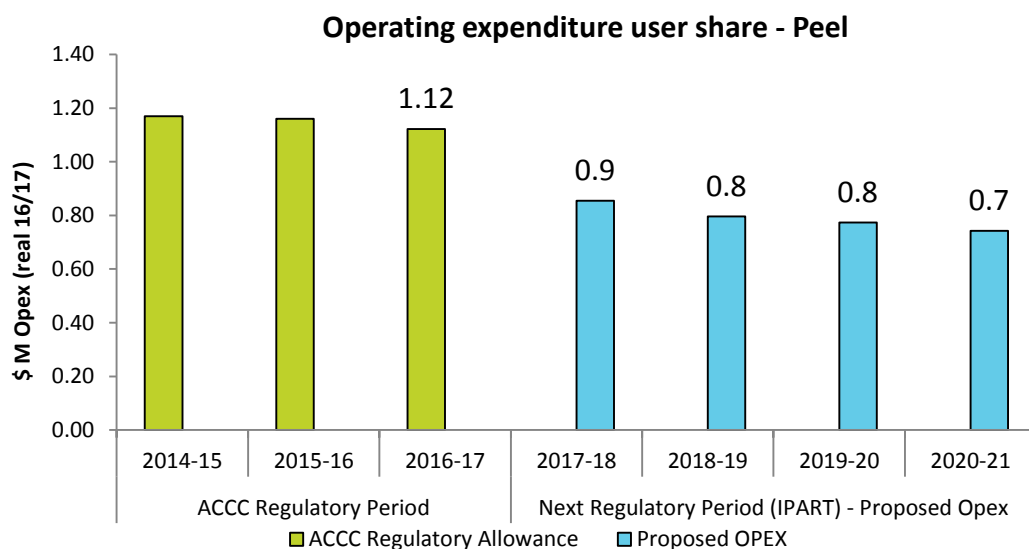
User Revenue Requirement (2016-2017 \$)				
Peel	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	876	836	834	819
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	80	101	119	131
Return on capital	157	181	201	213
Tax allowance	23	29	34	37
UOM allowance	0	0	0	0
ICD rebates	0	0	0	0
Total costs	1,135	1,147	1,186	1,201

A23 Government revenue requirement 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Peel	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	193	189	187	183
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	573	575	575	576
Return on capital	1,330	1,320	1,303	1,285
Tax allowance	160	162	162	162
Total costs	2,257	2,246	2,227	2,206

Operating Expenditure

A24 Actuals and forecast operating expenditure user share for Peel valley

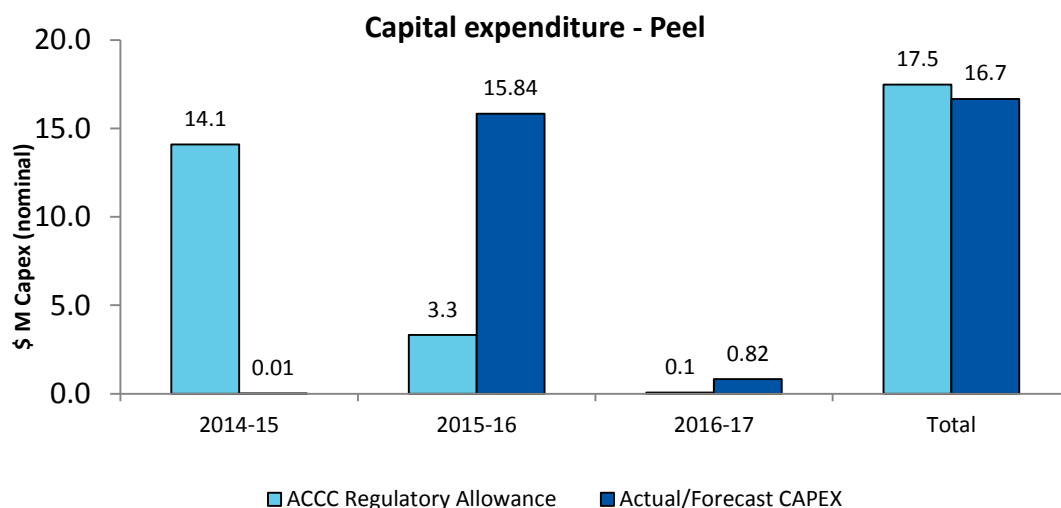


A25 Total operating expenditure by category for Peel valley 2017-18 to 2020-21 (\$2016-17 '000)

Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	133	127	124	119	502	100%
Hydrometric Monitoring	200	200	200	200	800	90%
Water Quality Monitoring	17	16	16	16	65	50%
Corrective Maintenance	28	27	27	27	109	100%
Routine Maintenance	125	119	119	116	479	100%
Asset Management Planning	60	42	44	44	191	100%
Dam Safety Compliance	282	275	270	262	1,088	50%
Environmental Planning & Protection	21	21	23	23	88	50%
Corporate Systems	6	6	6	7	25	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	182	177	177	175	710	100%
Allowance for Debt Raising Costs	15	15	15	15	59	n.a
Total	1,069	1,025	1,021	1,002	4,116	

Capital Expenditure in the current determination period

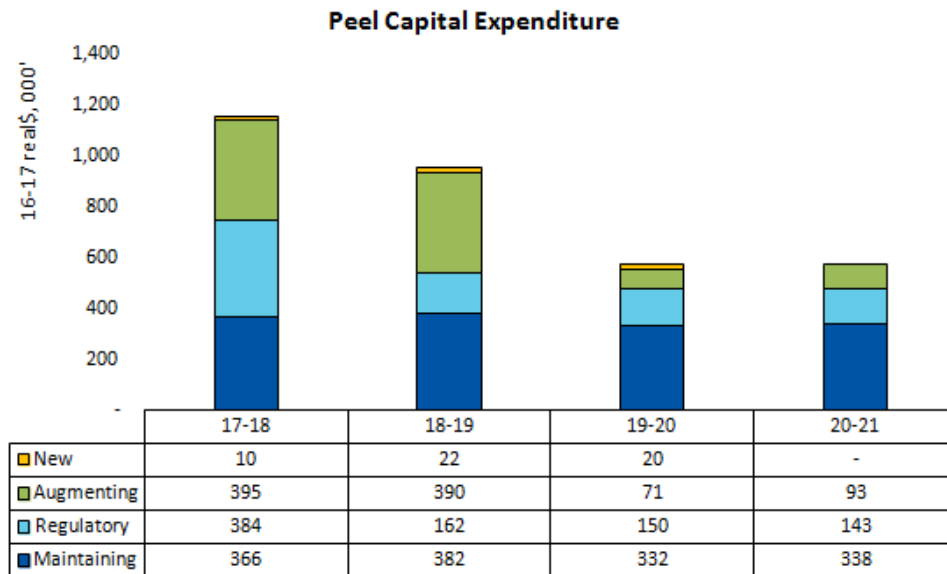
A26 Capital expenditure in the current determination period for Peel valley



The majority of the regulatory allowance relates to the Chaffey Dam Augmentation program which is funded jointly by the NSW Government, Commonwealth Government and Tamworth Regional Council. This program is scheduled to be completed in the current determination period.

Forecast Capital Expenditure

A27 Forecast capital expenditure for Peel valley



Regulated Asset base

A28 Proposed RAB values for Peel Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Peel	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	28,119	29,331	29,137	45,079	46,140	46,600	46,843	46,679
+ Capex/Additions	640	9	15,844	823	1,156	955	573	574
- Depreciation	286	645	828	899	664	687	705	718
- Disposals	0	0	0	0	31	25	32	26
+ Indexation	858	443	926	1,137	0	0	0	0
Closing RAB	29,331	29,137	45,079	46,140	46,600	46,843	46,679	46,509

5. Lachlan valley summary sheet

The Lachlan Regulated River Water Source is in the central west of NSW and drains an area of some 85,000 square kilometres. The Lachlan River rises near Goulburn and travels approximately 1,500 kms to its junction with the Murrumbidgee River. Nearly 1,300 kms of its length is regulated. Very little water from the Lachlan River catchment reaches the Murrumbidgee or contributes to flows in the Murray, except during major floods. Most is taken up by water users or provides inflows to the wetlands in the lower Lachlan, particularly the Great Cumbung Swamp.⁵

The Lachlan catchment is regulated by the two major water storages of Wyangala Dam (capacity 1,220 GL) and Carcoar Dam (capacity around 36 GL), and other regulating weirs such as Booberoi and Lake Brewster. Specifically, the Belubula River is regulated through releases from Carcoar Dam.

The plan area is located in the central west of NSW and is situated close to the towns of Carcoar and Canowindra. The regulated river stems from Lake Carcoar above Carcoar Dam, six kilometres upstream from the township of Carcoar and continues downstream to the junction with the regulated Lachlan River.

When completed in 1935, Wyangala was designed to irrigate 15,000 hectares along the upper reaches of the Lachlan River, supply water to people and stock over an area of half a million hectares, and open up a quarter of a million hectares west of Eubalong for settlement and development as wheat farms.

Today the dam provides water for a far larger area following the dam's enlargement in 1971 and fourfold increase in storage capacity. Pasture and lucerne now have the largest combined irrigated area, followed by cereals and other crops such as oilseeds and legumes. The dam also irrigates cotton around Hillston and smaller areas of wine around Cowra.

Carcoar Dam was built to provide a reliable supply of water for irrigation in the Belubula Valley and to meet downstream stock and domestic needs. Lucerne is the main crop supported by irrigation. Pastures for sheep and cattle and cereal crops such as wheat are also cultivated. Vegetables are grown along the river. The dam's small 230 square kilometre catchment is largely farming country in the Belubula River valley south of Blayney.

The current estimate of the 20 year rolling average of actual usage in the Lachlan valley is 205,079MLs. The 20 year average GS allocation is 37 per cent, while the 20 year average HS allocation rate is 83 per cent.

⁵ Guide to the Lachlan Regulated river water source water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

Revenue Requirement

A29 User revenue requirement for Lachlan valley 2017-18 to 2020-21 (\$2016-17 '000)

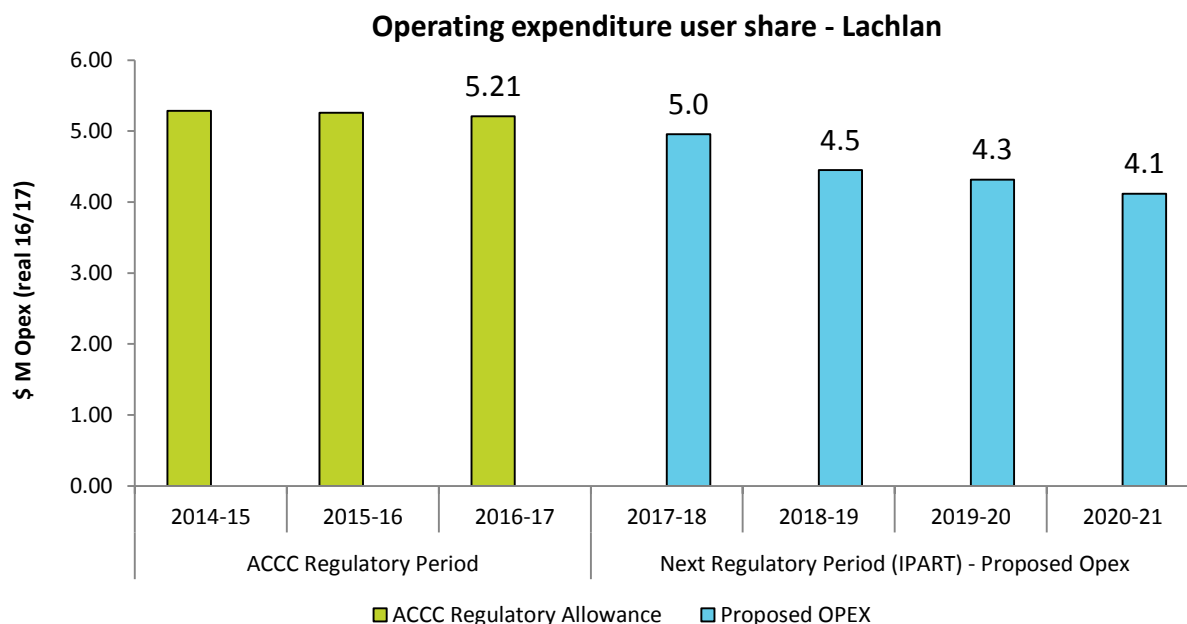
User Revenue Requirement (2016-2017 \$)				
Lachlan	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	5,082	4,679	4,649	4,545
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	772	864	946	1,013
Return on capital	1,220	1,373	1,505	1,606
Tax allowance	0	0	0	0
UOM allowance	100	100	100	100
ICD rebates	39	37	37	36
Total costs	7,213	7,053	7,236	7,301

A30 Government revenue requirement for Lachlan valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Lachlan	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	459	448	444	431
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	1,237	1,245	1,250	1,254
Return on capital	2,194	2,180	2,153	2,124
Tax allowance	0	0	0	0
Total costs	3,890	3,873	3,847	3,809

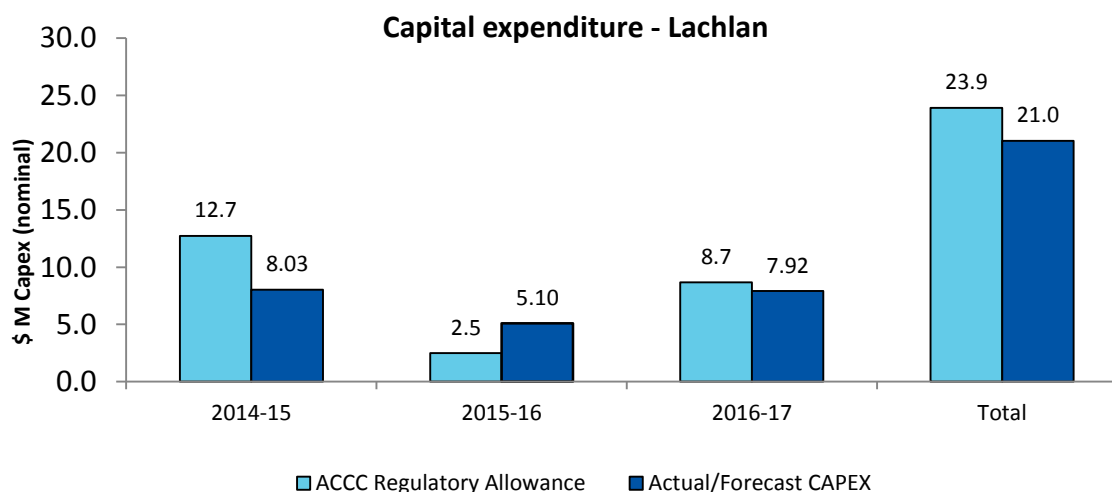
Operating Expenditure

A31 Actuals and forecast operating expenditure user share for Lachlan valley



A32 Total operating expenditure by category for Lachlan valley 2017-18 to 2020-21 (\$2016-17 '000)

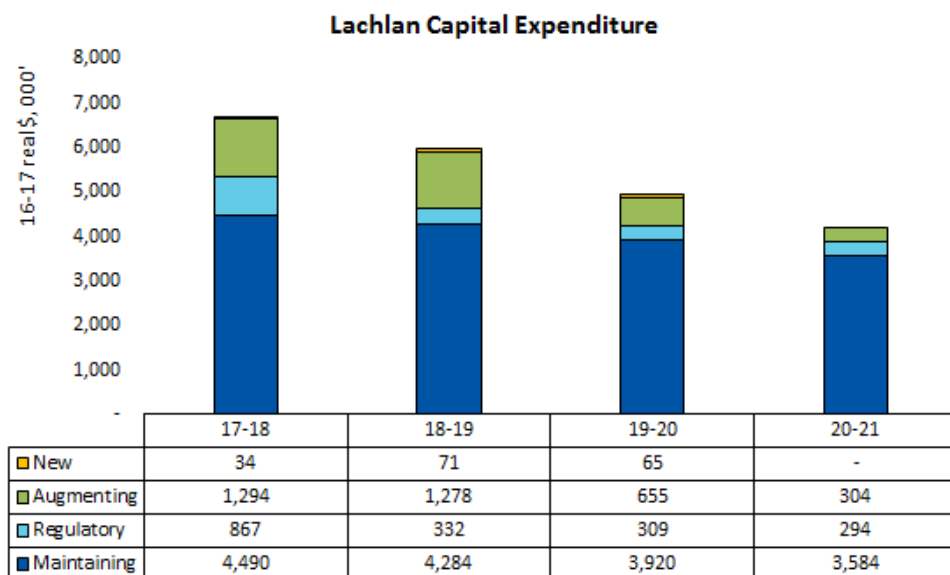
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	798	679	640	578	2,695	100%
Hydrometric Monitoring	700	700	700	700	2,800	90%
Water Quality Monitoring	95	82	82	80	340	50%
Corrective Maintenance	336	316	316	308	1,275	100%
Routine Maintenance	1,389	1,237	1,237	1,199	5,062	100%
Asset Management Planning	218	142	154	159	672	100%
Dam Safety Compliance	574	565	552	528	2,218	50%
Environmental Planning & Protection	66	66	72	72	276	50%
Corporate Systems	104	99	99	117	420	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	1,227	1,206	1,206	1,197	4,836	100%
Allowance for Debt Raising Costs	34	35	36	37	141	n.a
Total	5,541	5,127	5,093	4,976	20,737	

Capital Expenditure in the current determination period**A33 Capital expenditure in the current determination period for Lachlan valley**

The underspend in the Lachlan valley is largely driven by the removal of the Wyangala Fish Passage Offsets proposal (\$6.5M real 13/14) from our Environmental Planning and Protection program, following discussions with NSW Government on the efficiency of the fish passage program. The Wyangala Dam Safety Upgrade was rephrased following a reprioritising of the capital expenditure program.

Forecast Capital Expenditure

A34 Forecast capital expenditure for Lachlan valley



Regulated Asset Base

A35 Proposed RAB values for Lachlan Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Lachlan	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	63,960	82,942	90,497	95,881	104,118	108,659	112,399	115,011
+ Capex/Additions	17,791	8,027	5,097	7,923	6,685	5,965	4,948	4,183
- Depreciation	1,006	1,785	2,039	2,182	2,042	2,143	2,231	2,304
- Disposals	0	0	0	0	102	82	105	85
+ Indexation	2,197	1,314	2,326	2,496	0	0	0	0
Closing RAB	82,942	90,497	95,881	104,118	108,659	112,399	115,011	116,805

6. Macquarie valley summary sheet

The Cudgegong River rises in the Great Dividing Range above Rylstone and drains an area of 3,880 square kilometres. It is a major tributary of the Macquarie River and flows into Burrendong Dam. The Macquarie River is formed near Bathurst, following the joining of the Fish and Campbells Rivers, and extends north-west to the Barwon River upstream of Bourke. The major towns within the Macquarie Valley are Bathurst, Orange, Mudgee and Dubbo.⁶

The volume and pattern of flows in the water source have been significantly altered by the construction and operation of Windamere Dam on the Cudgegong River and Burrendong Dam on the Macquarie River to supply downstream water extractors. Both dams are owned and operated by WaterNSW.

Windamere Dam is situated on the Cudgegong River 30 kilometres upstream from Mudgee and 19 kilometres south-west of Rylstone on the NSW Central Tablelands. The dam is about 230 kilometres north-west of Sydney.

Burrendong Dam is situated on the Macquarie River just below its junction with the Cudgegong River, about 30 kilometres upstream from Wellington in Central West NSW. The dam is about 330 kilometres north-west of Sydney. It is one of the largest inland dams in NSW with a capacity of 1,678,000 MLs, three times Sydney Harbour. The dam's capacity includes 1,188,000 MLs of water storage and a potential 489,000 MLs of air space for flood mitigation.

Cotton was one of the main crops to benefit from the availability of irrigation, as well as lucerne, cereals, oilseed, wheat and vegetables. The water storages were later used to supply water as environmental flows to the Macquarie Marshes, one of the largest remaining inland semi-permanent wetlands in south-eastern Australia and a major waterbird breeding area. In addition to irrigated agriculture and environmental flows, the dam provides water for town supplies, industry and domestic requirements, flood mitigation and recreation, and a 19 megawatt hydroelectric power station which generates power using summer irrigation and flood mitigation.

The current estimate of the 20 year rolling average of actual usage in the Lachlan valley is 258,621 MLs. The 20 year average GS allocation is 40 percent, while the 20 year average HS allocation rate is 100 per cent.



Figure 5 sourced from Macquarie and Budgegong water sharing plan

⁶ Guide to the Macquarie and Budgegong Regulated river water source water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

Revenue Requirement

A36 User revenue requirement for Macquarie valley 2017-18 to 2020-21 (\$2016-17 '000)

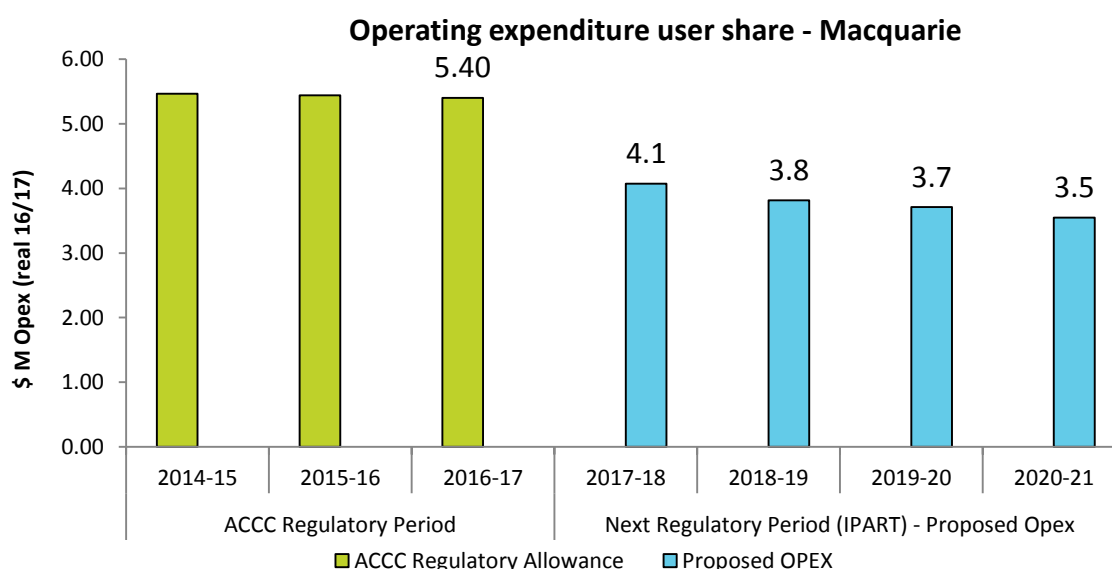
User Revenue Requirement (2016-2017 \$)				
Macquarie	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	4,178	4,011	3,997	3,916
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	557	626	681	733
Return on capital	993	1,100	1,189	1,260
Tax allowance	0	0	0	0
UOM allowance	316	316	316	316
ICD rebates	0	0	0	0
Total costs	6,044	6,052	6,183	6,226

A37 Government revenue requirement for Macquarie valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Macquarie	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	461	457	458	447
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	888	892	895	898
Return on capital	1,618	1,603	1,582	1,562
Tax allowance	0	0	0	0
Total costs	2,967	2,951	2,935	2,907

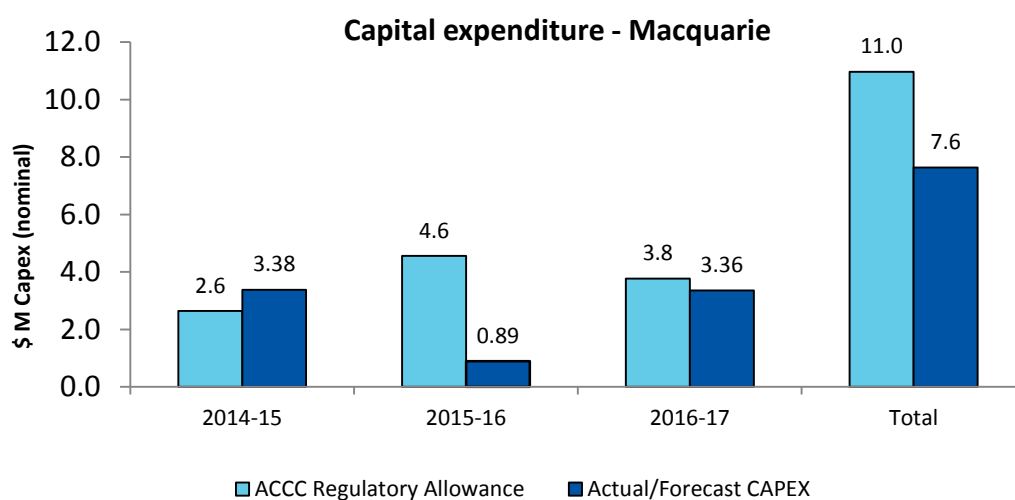
Operating Expenditure

A38 Actuals and forecast operating expenditure user share for Macquarie valley



A39 Total operating expenditure by category for Macquarie valley 2017-18 to 2020-21 (\$2016-17 '000)

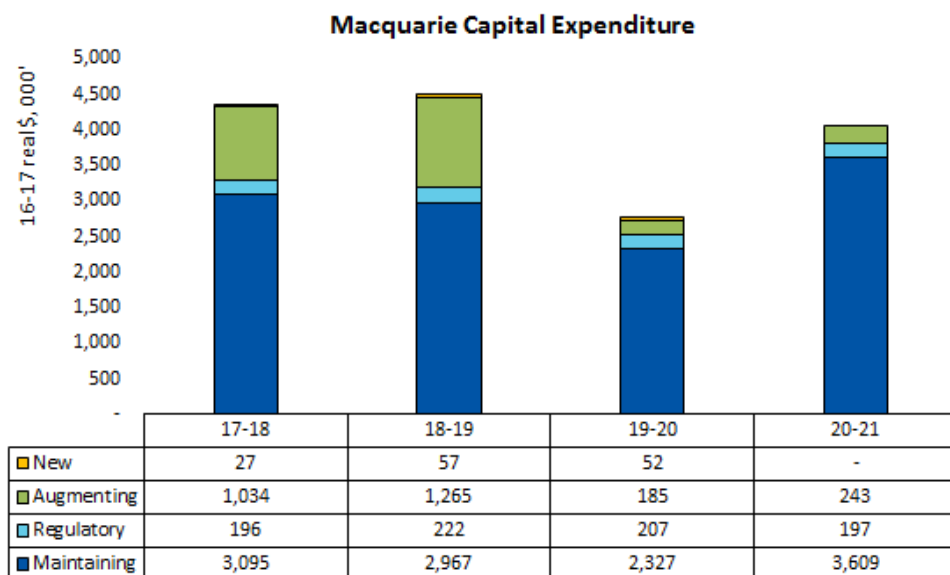
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	722	578	551	505	2,356	100%
Hydrometric Monitoring	700	700	700	700	2,800	90%
Water Quality Monitoring	41	39	39	38	156	50%
Corrective Maintenance	402	382	382	373	1,539	100%
Routine Maintenance	955	906	906	882	3,648	100%
Asset Management Planning	78	146	158	164	547	100%
Dam Safety Compliance	580	577	568	549	2,274	50%
Environmental Planning & Protection	122	121	131	131	505	50%
Corporate Systems	61	58	58	69	247	100%
Renewals and Replacement	35	33	33	32	131	90%
Other	917	901	901	895	3,614	100%
Allowance for Debt Raising Costs	26	27	27	28	107	n.a
Total	4,639	4,468	4,455	4,364	17,925	

Capital Expenditure in the current determination period**A40 Capital expenditure in the current determination period for Macquarie valley**

The underspend in the Macquarie valley is largely driven by the removal of the Burrendong Fish Passage Offsets project from our Environmental Planning and Protection program, following discussions with NSW Government on the efficiency of the fish passage program.

Forecast Capital Expenditure

A41 Forecast capital expenditure for Macquarie valley



Regulated Asset Base

A42 Proposed RAB values for Macquarie Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Macquarie	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	62,491	71,369	74,631	76,044	79,839	82,641	85,545	86,630
+ Capex/Additions	7,818	3,381	892	3,361	4,352	4,510	2,770	4,049
- Depreciation	942	1,224	1,355	1,510	1,468	1,542	1,601	1,657
- Disposals	0	0	0	0	81	65	84	68
+ Indexation	2,002	1,104	1,877	1,943	0	0	0	0
Closing RAB	71,369	74,631	76,044	79,839	82,641	85,545	86,630	88,953

7. Murray valley summary sheet

The Murray River is recognised as the border between NSW and Victoria. Water travels 2,500 kilometres from the Murray's source in the Snowy Mountains to where it drains into the Southern Ocean in South Australia. The NSW regulated portion of the river is approximately 1,700 kilometres long.

The Lower Darling is the lower portion of the Barwon-Darling River, which runs for some 2,700 kilometres and drains a catchment that includes the central and northern portions of inland NSW and much of south-western Queensland. The regulated portion of the Lower Darling, below Menindee Lakes, is some 500 kilometres long.

The volume and pattern of flows in the Murray River have been greatly altered by the construction of Hume Dam on the Murray, Dartmouth Dam on the Mitta-Mitta River and numerous weirs and diversion structures. These works facilitate the supply of water to extractors and the diversion of water from the Snowy River through the Snowy Mountains Scheme into the Murray. Lower Darling River flows have been changed by the construction and operation of Menindee Lakes and the extraction of water along the Barwon Darling River. Dams and extractions on its tributary rivers have also greatly affected inflows to the Darling River.⁷

Hume Dam is situated just below the junction of the Murray and Mitta Mitta rivers, 16 kilometres east of Albury on the NSW-Victorian border. It is operated by WaterNSW. The dam is about 550 kilometres south-west of Sydney, and about 300 kilometres downstream from where the Murray rises on the Great Dividing Range.

Hume Dam holds a maximum of 3,005,156 MLs, about six times the volume of Sydney Harbour. The dam's catchment area of 15,300 square kilometres, two thirds of which is in Victoria, includes much of the rugged Australian Alps where annual rainfall can exceed 2000mm. Flows from the Snowy River may also be diverted into the catchment by the Snowy Mountains Hydro Electric Scheme.

The Menindee Lakes system is located on the Darling River about 200 kilometres upstream of its junction with the River Murray at Wentworth. The town of Menindee is next to the lakes and Broken Hill is 110 kilometres north-west. Menindee Lakes storage comprises four main lakes – Cawndilla, Menindee, Pamamaroo and Wetherell – and several smaller lakes with a combined capacity of 1,794,000 MLs, three and half times the capacity of Sydney Harbour. The lakes are owned by the NSW Government and leased to the Murray Darling Basin Authority.

The current estimate of the 20 year rolling average of actual usage in the Lachlan valley is 1,537,145 MLs. The 20 year average GS allocation rate over the past 20 years is 61 percent, while the 20 year average HS allocation rate is 95 per cent.

⁷ Guide to the Murray and Lower Darling Regulated river water source water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

Revenue Requirement

A43 User revenue requirement for Murray valley 2017-18 to 2020-21 (\$2016-17 '000)

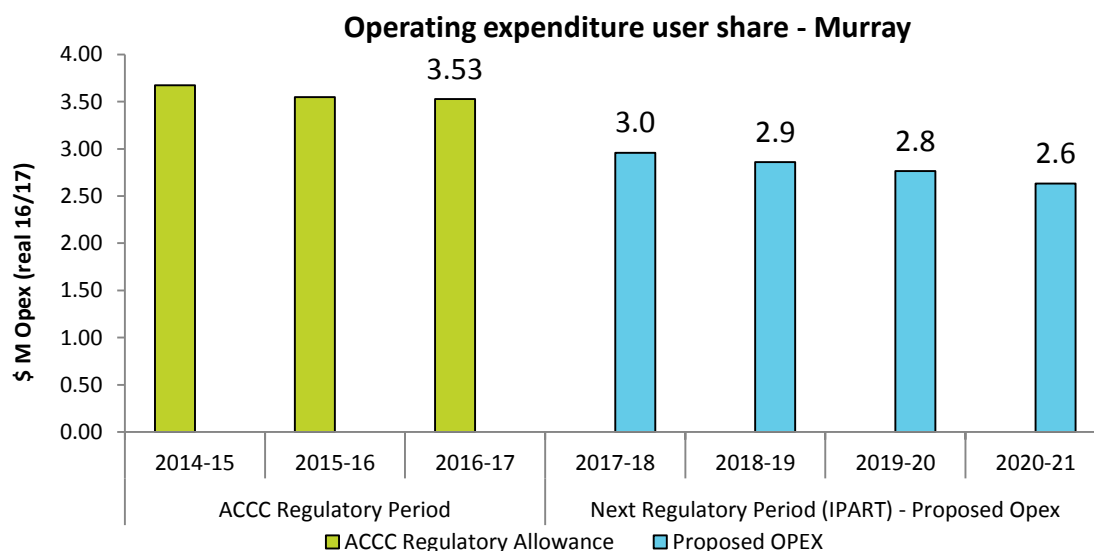
User Revenue Requirement (2016-2017 \$)				
Murray	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	3,034	3,005	2,977	2,907
MDBA & BRC costs	15,187	11,710	11,261	11,261
Return of capital (depreciation)	703	734	762	785
Return on capital	1,043	1,093	1,108	1,123
Tax allowance	0	0	0	0
UOM allowance	39	39	39	39
ICD rebates	616	596	596	588
Total costs	20,622	17,177	16,743	16,703

A44 Government revenue requirement for Murray valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Murray	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	130	131	129	125
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	324	326	327	329
Return on capital	444	439	432	425
Tax allowance	0	0	0	0
Total costs	898	895	888	879

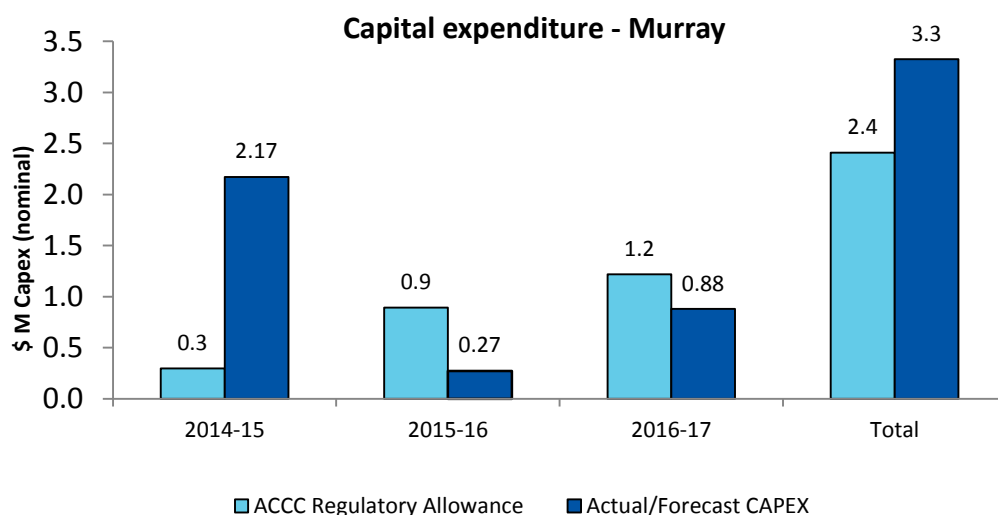
Operating Expenditure

A45 Actuals and forecast operating expenditure user share for Murray valley



A46 Total operating expenditure by category for Murray valley 2017-18 to 2020-21 (\$2016-17 '000)

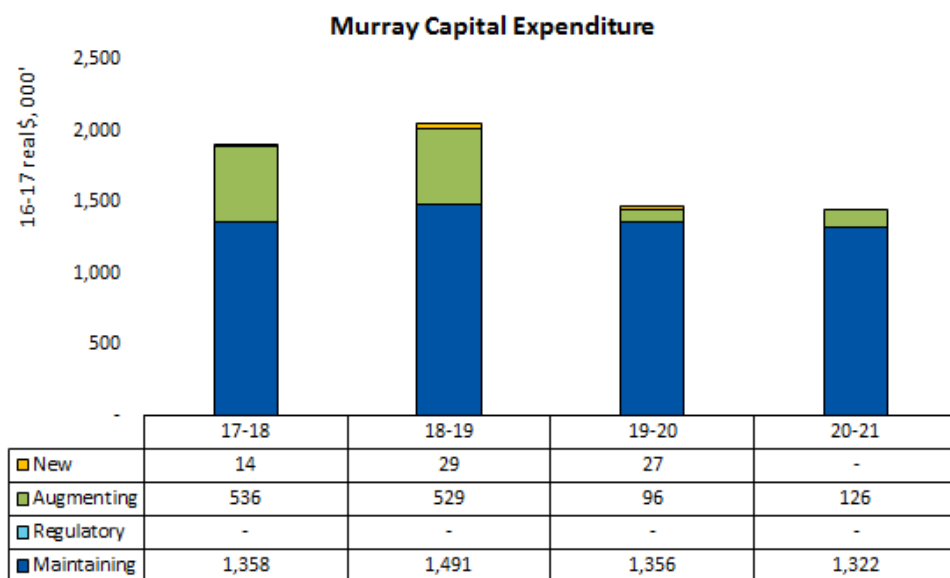
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	900	875	838	778	3,392	100%
Hydrometric Monitoring	100	100	100	100	400	90%
Water Quality Monitoring	0	0	0	0	0	50%
Corrective Maintenance	0	0	0	0	0	100%
Routine Maintenance	422	399	399	387	1,606	100%
Asset Management Planning	81	148	159	165	553	100%
Dam Safety Compliance	114	117	102	96	429	50%
Environmental Planning & Protection	116	116	127	126	486	50%
Corporate Systems	98	93	93	111	395	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	1,318	1,273	1,272	1,254	5,117	100%
Allowance for Debt Raising Costs	14	14	15	15	58	n.a
Total	3,163	3,135	3,105	3,032	12,436	

Capital Expenditure in the current determination period**A47 Capital expenditure in the current determination period for Murray valley**

The capital expenditure consists of renewals and replacement works at Lake Wetherell's Menindee' fuse plug, which has been carried forward from the 2010-2014 regulatory period. The role of the fuse plug has been to safely divert Darling River flood flows that are greater than the capacity of the main Weir (approximately 110,000 ML/day). The renewals work was required to prevent flood water breaching the Lake Wetherell East levee.

Forecast Capital Expenditure

A48 Forecast capital expenditure for Murray valley



Regulated Asset Base

A49 Proposed RAB values for Murray Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Murray	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	39,128	40,965	42,942	43,387	44,386	45,208	46,146	46,475
+ Capex/Additions	1,096	2,173	273	880	1,908	2,049	1,479	1,448
- Depreciation	455	832	905	978	1,043	1,077	1,107	1,132
- Disposals	0	0	0	0	42	34	44	35
+ Indexation	1,196	635	1,077	1,096	0	0	0	0
Closing RAB	40,965	42,942	43,387	44,386	45,208	46,146	46,475	46,756

8. Murrumbidgee valley summary sheet

The Murrumbidgee River, located in south-west NSW, is almost 1,600 kilometres in length from its source in the Snowy Mountains to its junction with the Murray River. About 1,200 kilometres of this is regulated. It drains an area of some 84,000 square kilometres and is a major tributary of the Murray-Darling River system. The major urban centres within this region include Canberra and the largest NSW inland city, Wagga Wagga.

The volume and pattern of flows in the Murrumbidgee River have been significantly altered by the construction and operation of Burrinjuck Dam on the Murrumbidgee River and Blowering Dam on the Tumut River to supply water to downstream users and the diversion of water from the Snowy River through the Snowy Mountains Scheme into the Murrumbidgee River.⁸ Both of these dams are owned and operated by WaterNSW.

Burrinjuck Dam is situated near the headwaters of the Murrumbidgee River in the Great Dividing Range. It is about 55 kilometres south-west of Yass, and about 330 kilometres south-west of Sydney. Burrinjuck Dam is the main water storage for the Murrumbidgee Irrigation Scheme, a 660,000 hectare area in the Riverina irrigated with a series of weirs, canals and holding ponds. The dam has a capacity of 1,026,000 MLs, twice the volume of Sydney Harbour.

Blowering Dam is situated on the Tumut River, about 13 kilometres upstream of Tumut on the southern slopes of NSW and 410 kilometres south-west of Sydney. It was built in the 1960s to store water released upstream for electricity generation in the Snowy Mountains Hydro-Electric Scheme and release it for agriculture in the Murrumbidgee Irrigation Area.

The Dams release water for irrigation of crops in the Murrumbidgee Irrigation Area, including cotton and fruit and vegetables, as well as pastures for sheep and cattle. In addition to irrigated agriculture, the dam provides water for town supplies, industry and domestic requirements, environmental flows, flood mitigation and recreation, and a 28 megawatt hydroelectric power station using irrigation releases, environmental flows and flood mitigation.

The current estimate of the 20 year rolling average of actual usage in the Lachlan valley is 1,743,637MLs. The 20 year average GS allocation rate over the past 20 years is 62 percent, while the 20 year average HS allocation rate is 97 per cent

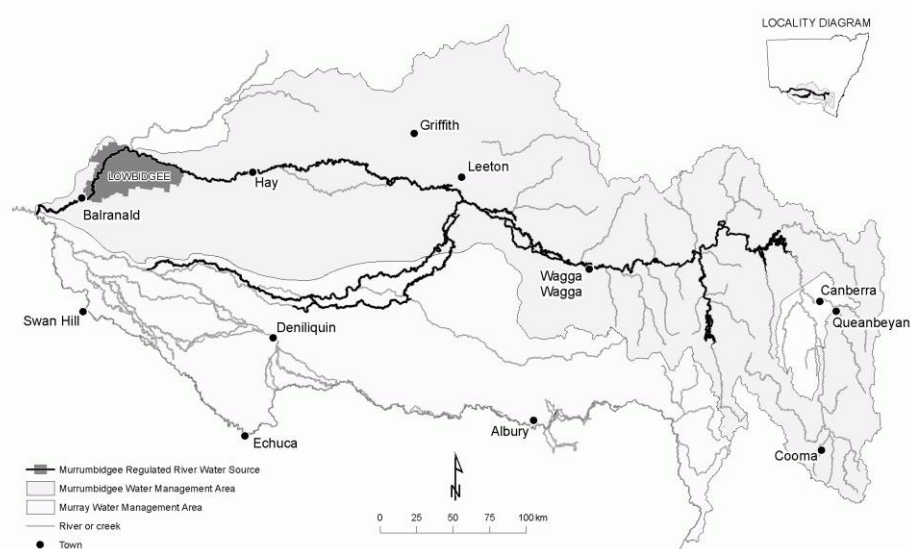


Figure 6 sourced from Murrumbidgee water sharing plan

⁸ Guide to the Murrumbidgee Regulated river water source water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

Revenue Requirement

A50 User revenue requirement for Murrumbidgee valley 2017-18 to 2020-21 (\$2016-17 '000)

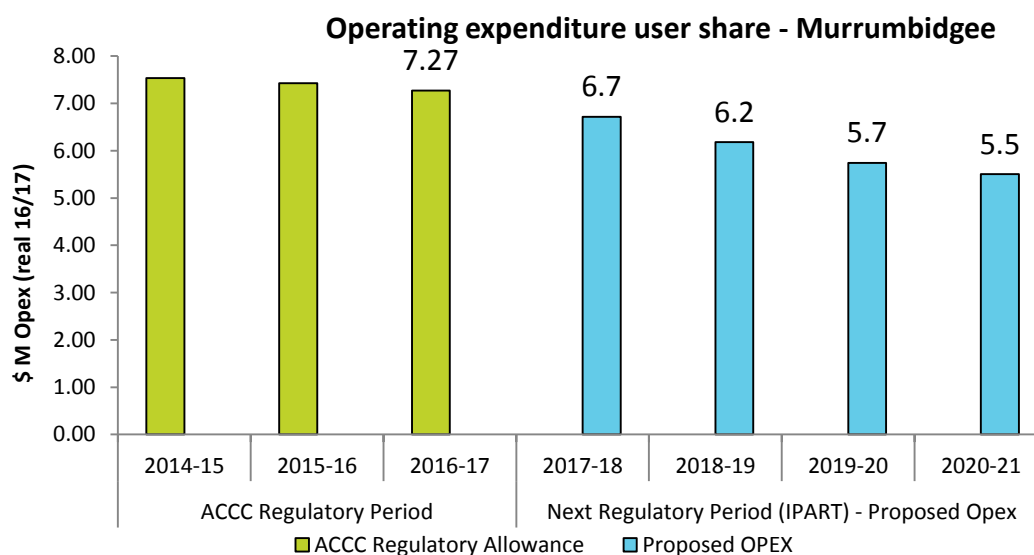
User Revenue Requirement (2016-2017 \$)				
Murrumbidgee	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	6,888	6,496	6,186	6,075
MDBA & BRC costs	3,438	2,712	2,674	2,740
Return of capital (depreciation)	989	1,144	1,286	1,415
Return on capital	1,377	1,688	1,961	2,199
Tax allowance	282	326	366	402
UOM allowance	40	40	40	40
ICD rebates	358	344	344	339
Total costs	13,372	12,750	12,857	13,210

A51 Government revenue requirement for Murrumbidgee valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
Murrumbidgee	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	540	549	545	534
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	1,839	1,851	1,862	1,872
Return on capital	2,178	2,157	2,127	2,093
Tax allowance	528	534	537	540
Total costs	5,084	5,090	5,070	5,039

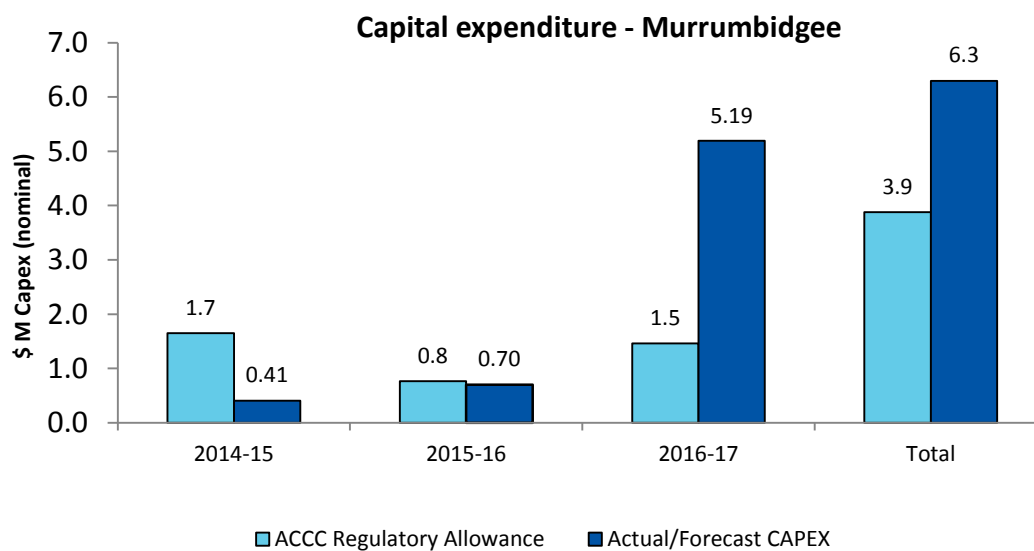
Operating Expenditure

A52 Actuals and forecast operating expenditure user share for Murrumbidgee valley



A53 Total operating expenditure by category for Murrumbidgee valley 2017-18 to 2020-21 (\$2016-17 '000)

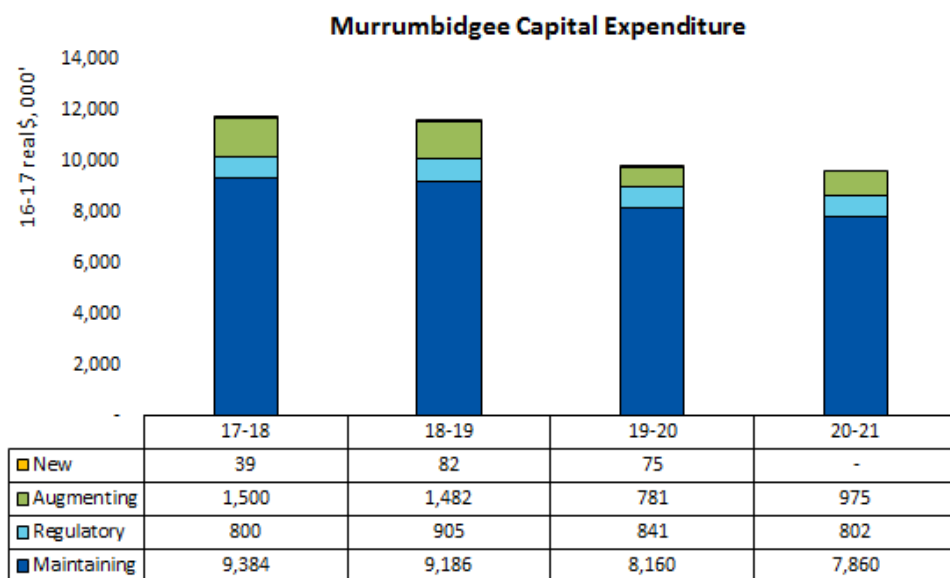
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	1,073	1,014	993	951	4,030	100%
Hydrometric Monitoring	1,200	1,200	1,200	1,200	4,800	90%
Water Quality Monitoring	44	42	42	40	168	50%
Corrective Maintenance	542	501	501	490	2,033	100%
Routine Maintenance	1,981	1,774	1,774	1,724	7,253	100%
Asset Management Planning	440	377	240	247	1,304	100%
Dam Safety Compliance	623	645	625	604	2,497	50%
Environmental Planning & Protection	130	130	142	142	544	50%
Corporate Systems	193	191	41	48	473	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	1,167	1,135	1,134	1,121	4,557	100%
Allowance for Debt Raising Costs	35	38	40	42	155	n.a
Total	7,428	7,046	6,731	6,609	27,813	

Capital Expenditure in the current determination period**A54 Capital expenditure in the current determination period for Murrumbidgee valley**

The capital expenditure in the Murrumbidgee valley is largely the result of the reprioritisation of the capital expenditure program at a corporate level following the release of the ACCC 2014 Final Decision. Catch-up renewals and replacement expenditure is expected to proceed in 2016-17.

Forecast Capital Expenditure

A55 Forecast capital expenditure for Murrumbidgee valley



Regulated Asset Base

A56 Proposed RAB values for Murrumbidgee Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Murrumbidgee	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	98,149	101,829	101,042	101,354	106,051	114,784	123,302	129,838
+ Capex/Additions	2,000	407	701	5,190	11,724	11,655	9,857	9,637
- Depreciation	1,310	2,735	2,924	3,092	2,873	3,043	3,199	3,339
- Disposals	0	0	0	0	118	95	122	99
+ Indexation	2,990	1,542	2,535	2,599	0	0	0	0
Closing RAB	101,829	101,042	101,354	106,051	114,784	123,302	129,838	136,036

9. Lowbidgee summary sheet

Lowbidgee Flood Control and Irrigation District covers an area of 100,000 hectares on the lower Murrumbidgee floodplain, in South Western NSW. It is listed as a Nationally Important Wetland and contains the second largest red gum forest in Australia and a major organic grain production area.

There are currently 747,000 MLs of supplementary licences issued in the Lowbidgee.⁹ Flows to the Lowbidgee are triggered only in the event of supplementary flows.

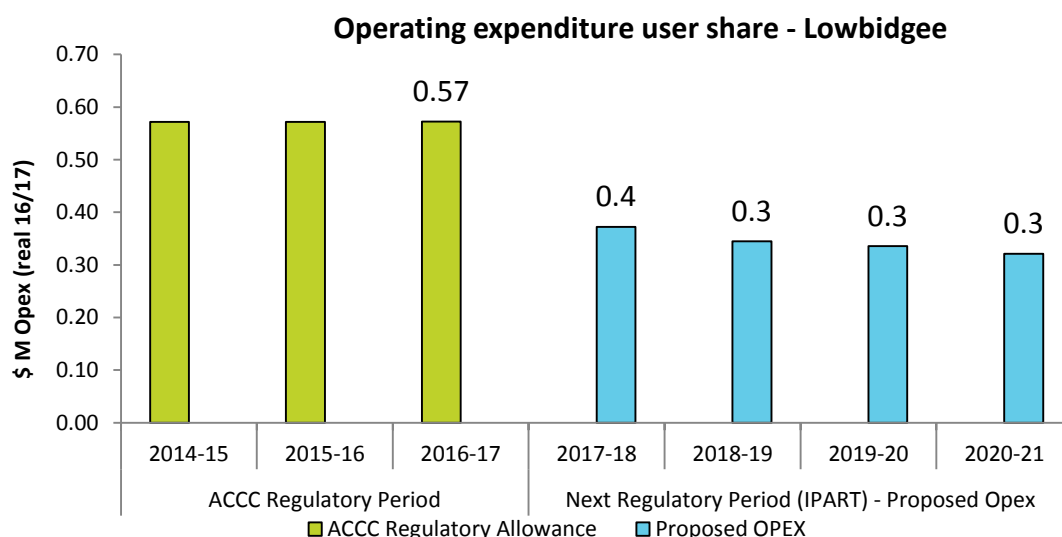
Revenue Requirement

A57 User revenue requirement for Lowbidgee valley 2017-18 to 2020-21 (\$2016-17 '000)

User Revenue Requirement (2016-2017 \$)				
Lowbidgee	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	381	362	362	354
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	30	61	93	123
Return on capital	69	148	229	304
Tax allowance	0	0	0	0
UOM allowance	0	0	0	0
ICD rebates	0	0	0	0
Total costs	480	571	684	782

Operating Expenditure

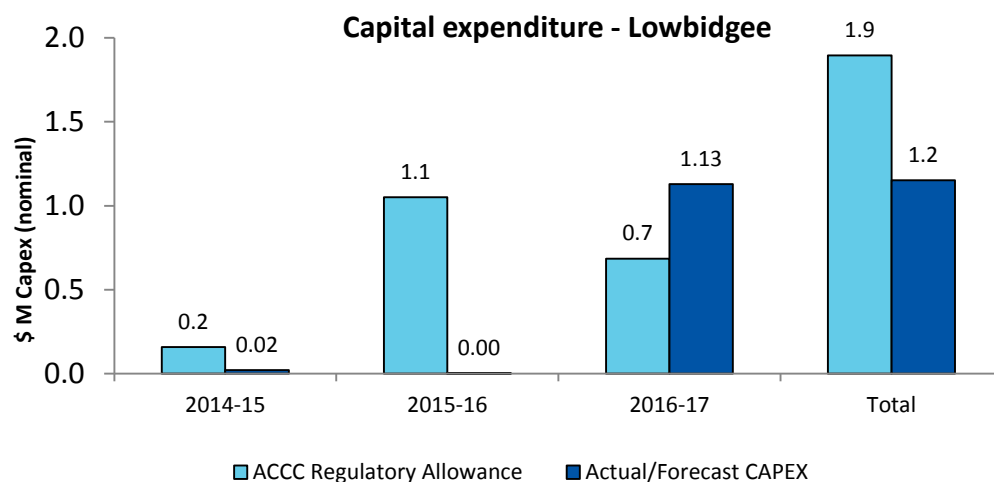
A58 Actuals and forecast operating expenditure user share for Lowbidgee valley



⁹ Regulation 28A Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2003

A59 Total operating expenditure by category for Lowbidgee 2017-18 to 2020-21 (\$2016-17 '000)

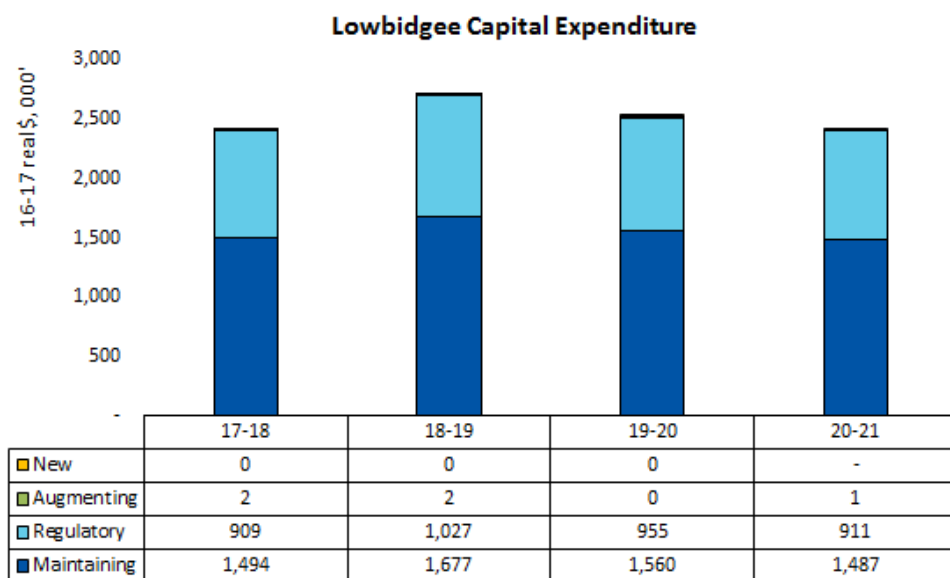
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	289	277	275	269	1,110	100%
Hydrometric Monitoring	0	0	0	0	0	90%
Water Quality Monitoring	0	0	0	0	0	50%
Corrective Maintenance	91	83	83	81	338	100%
Routine Maintenance	0	0	0	0	0	100%
Asset Management Planning	0	0	0	0	0	100%
Dam Safety Compliance	0	0	0	0	0	50%
Environmental Planning & Protection	0	0	0	0	0	50%
Corporate Systems	0	0	0	0	0	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	1	1	1	1	4	100%
Allowance for Debt Raising Costs	1	2	2	3	8	n.a
Total	381	362	362	354	1,460	

Capital Expenditure in the current determination period**A60 Capital expenditure in the current determination period for Lowbidgee valley**

The underspend in capital expenditure in the Lowbidgee is largely the result of the reprioritisation of the capital expenditure program at a corporate level following the release of the ACCC 2014 Decision. Catch-up renewals and replacement expenditure is expected to proceed 2016-17, mostly driven by the need to comply with health and safety requirements.

Forecast Expenditure

A61 Forecast capital expenditure for Lowbidgee valley



Regulated Asset Base

A62 Proposed RAB values for Lowbidgee Valley from 2014-15 to 2020-21 (\$2016-17 '000)

Lowbidgee	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	0	0	22	14	1,129	3,504	6,148	8,568
+ Capex/Additions	0	22	1	1,129	2,405	2,706	2,516	2,398
- Depreciation	0	0	9	30	30	62	95	125
- Disposals	0	0	0	0	0	0	0	0
+ Indexation	0	0	1	14	0	0	0	0
Closing RAB	0	22	14	1,129	3,504	6,148	8,568	10,840

10. North Coast summary sheet

The Richmond River catchment is a coastal catchment situated on the north coast of NSW. The plan area comprises the Richmond River catchment and the smaller coastal catchment of Evans Creek. The plan area covers unregulated water sources and one regulated water source. Major population centres in the Richmond catchment include Lismore, Ballina, Kyogle and Casino.¹⁰

WaterNSW owns and operates Toonumbar Dam is situated on Iron Pot Creek about 30 kilometres west of Kyogle on the NSW North Coast and about 750 kilometres north of Sydney. The dam was completed in 1971 to provide water for irrigation, stock and domestic requirements in the Richmond Valley.

Toonumbar Dam was built to provide a reliable supply of water for irrigation in the Richmond Valley, meet downstream stock and domestic needs, and provide flood mitigation and environmental flows. The dam's 9,800 square kilometre catchment falls largely within the Richmond Range and Toonumbar national parks featuring rugged mountain terrain of steep ridges and deep gullies. The dam has an operating capacity of 11,000 MLs.

The average water usage over the past 12 years is 619 MLs. The average GS allocation rate over the past 12 years is 90 percent, while the 12 year average HS allocation rate is 93 per cent.

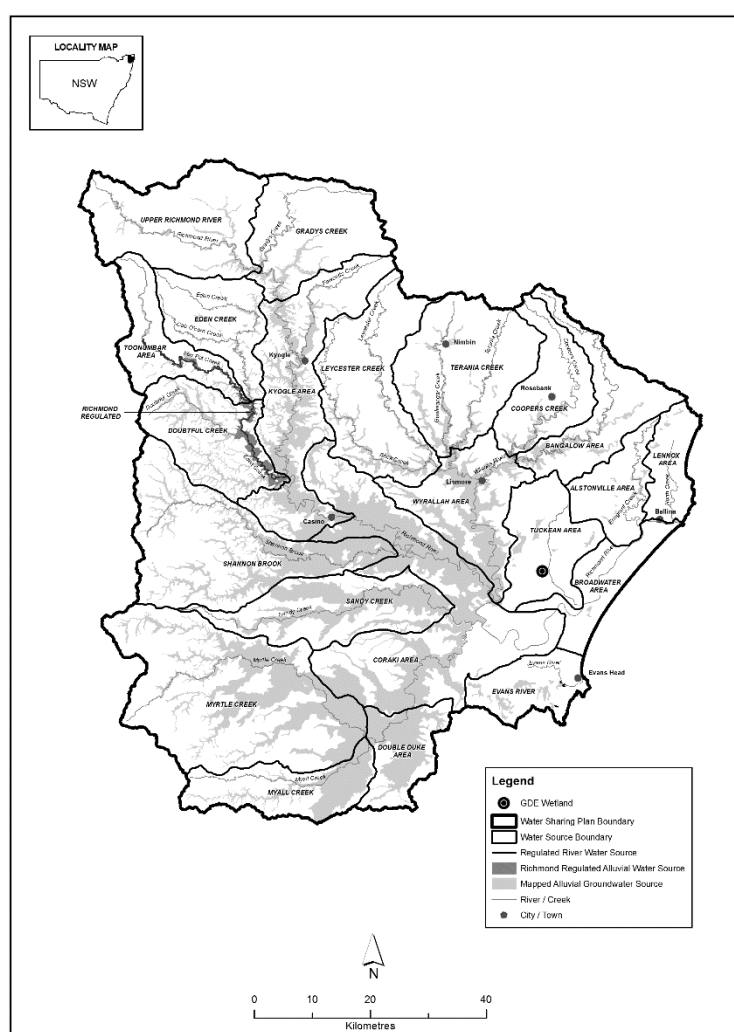


Figure 7 sourced from Richmond water sharing plan

¹⁰ Guide to the Richmond River Area water source water sharing plan NSW Office of Water

Revenue Requirement

A63 User revenue requirement for North Coast 2017-18 to 2020-21 (\$2016-17 '000)

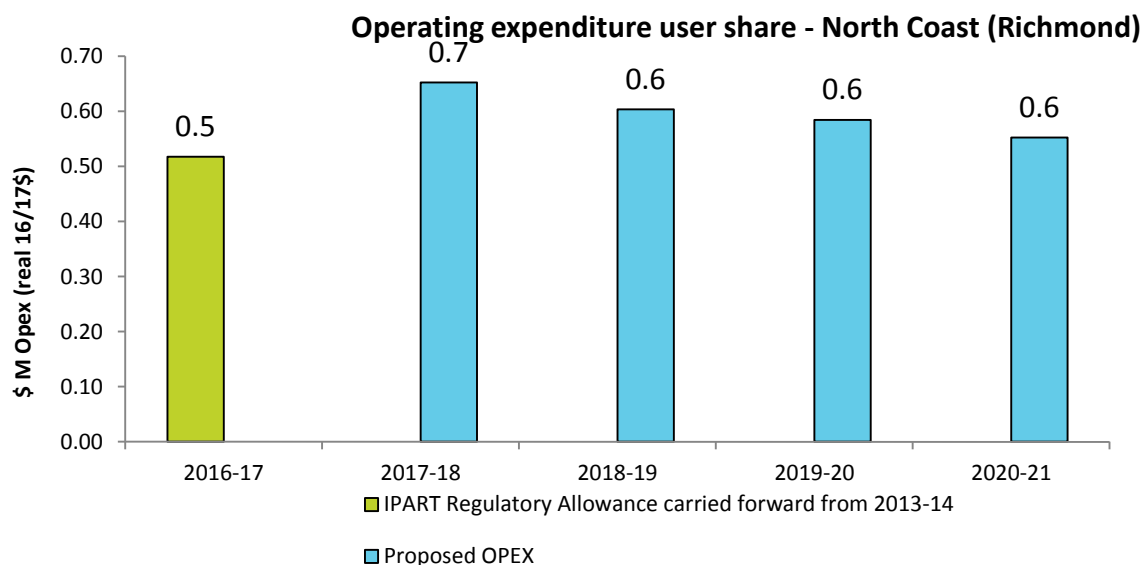
User Revenue Requirement (2016-2017 \$)				
North Coast	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	668	634	629	610
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	76	83	91	97
Return on capital	269	286	305	319
Tax allowance	0	0	0	0
UOM allowance	0	0	0	0
ICD rebates	0	0	0	0
Total costs	1,014	1,003	1,026	1,025

A64 Government revenue requirement for North Coast 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
North Coast	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	147	144	142	135
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	27	28	28	29
Return on capital	101	102	103	103
Tax allowance	0	0	0	0
Total costs	275	274	274	267

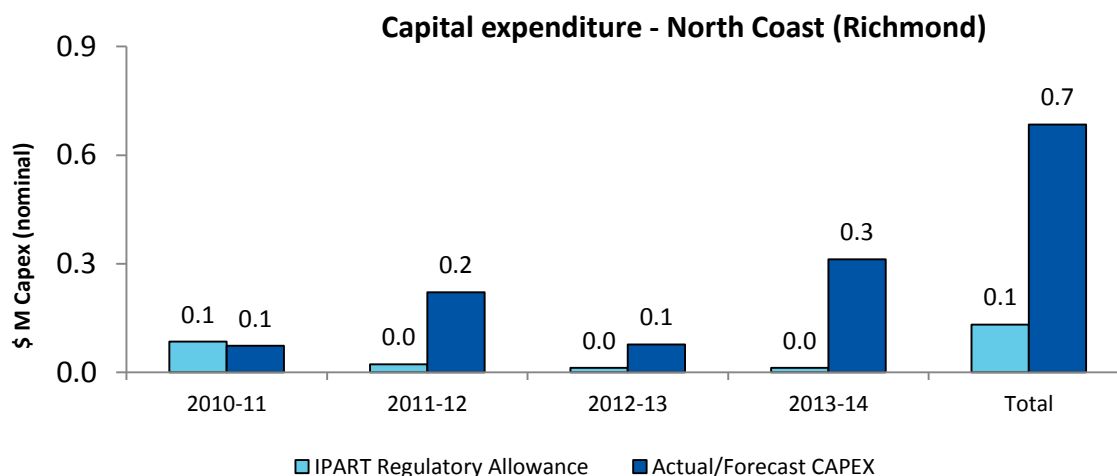
Operating Expenditure

A65 Actuals and forecast operating expenditure user share for North Coast



A66 Total operating expenditure by category for North Coast 2017-18 to 2020-21 (\$2016-17 '000)

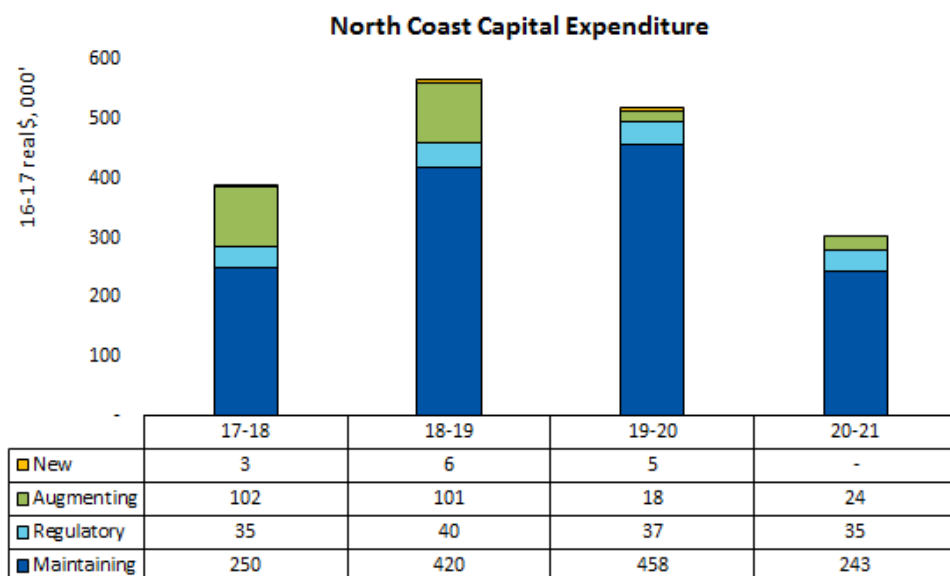
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	122	108	104	98	432	100%
Hydrometric Monitoring	50	50	50	50	200	90%
Water Quality Monitoring	13	12	12	12	50	50%
Corrective Maintenance	96	91	91	88	366	100%
Routine Maintenance	214	204	204	199	820	100%
Asset Management Planning	10	10	10	9	38	100%
Dam Safety Compliance	261	256	253	238	1,007	50%
Environmental Planning & Protection	8	8	8	8	32	50%
Corporate Systems	12	12	12	14	49	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	27	25	25	25	102	100%
Allowance for Debt Raising Costs	3	3	3	3	12	n.a
Total	815	778	772	744	3,109	

Capital Expenditure in the current determination period**A67 Capital expenditure in the current determination period for North Coast**

The capital expenditure in the North Coast was driven by asset maintenance and dam safety and compliance work. The costs of corporate wide projects such as iSMART were allocated to the North Coast. These projects were focused on achieving operational efficiencies to meet customer service targets.

Forecast Capital Expenditure

A68 Forecast capital expenditure for North Coast



Regulated Asset Base

A69 Proposed RAB values for North Coast Valley from 2014-15 to 2020-21 (\$2016-17 '000)

North Coast	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	6,306	6,684	6,781	7,355	7,720	7,996	8,442	8,830
+ Capex/Additions	268	84	492	279	390	566	519	302
- Depreciation	84	88	94	101	106	114	122	128
- Disposals	0	0	0	0	8	6	8	7
+ Indexation	194	102	176	187	0	0	0	0
Closing RAB	6,684	6,781	7,355	7,720	7,996	8,442	8,830	8,997

11. South Coast valley summary

The area covered by the plan is commonly known as the Bega River Catchment (1,940 km²), and comprises all sub-catchments of the Bega and Brogo Rivers, including Wolumegalitrea Creek, Candelo Creek, Sandy Creek, and the Bemboka River. It includes the towns of Bega, Wolumla, Candelo, and Bemboka¹¹

Brogo Dam is situated on the Brogo River upstream of Bega on the NSW South Coast and about 430 kilometres south of Sydney. It is owned and operated by WaterNSW. The dam was completed in 1976 to provide water for irrigation, stock and domestic requirements on the NSW South Coast. It has an operating capacity of 8,900 MLs.

Brogo Dam was built to provide a reliable supply of water for the dairy industry, the main agricultural industry on the NSW South Coast. It provides water for improved pastures for stock feed as well as vegetables. Water released from Brogo Dam is taken from the river downstream for the townships of Quiaama, Cobargo and Bermagui. The dam's 400 square kilometre catchment falls largely within Wadbilliga National Park with its rugged mountain terrain of steep ridges and deep gullies

The average usage over the past 8 years is 3,781 MLs. The 20 year average GS allocation rate is 65 percent, while the 20 year average HS allocation rate is 99 per cent.

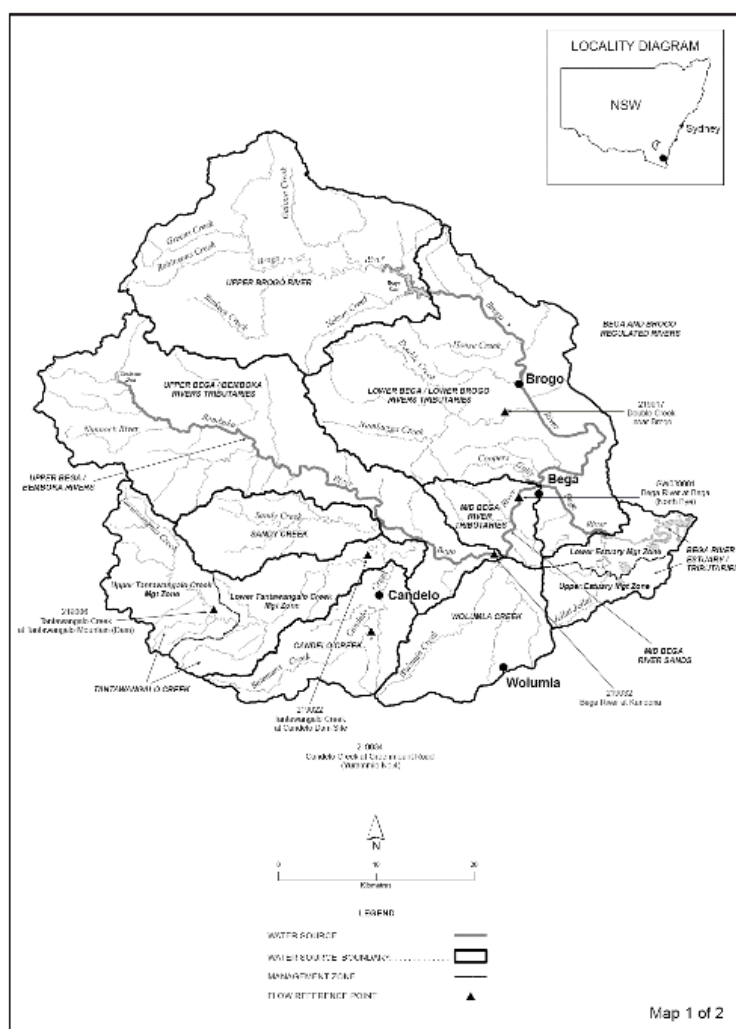


Figure 8 sourced from Bega and Brogo Water Sharing plan

¹¹ Guide to the Bega and Brogo Rivers Regulated Water Sources water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

Revenue Requirement

A70 User revenue requirement for South Coast valley 2017-18 to 2020-21 (\$2016-17 '000)

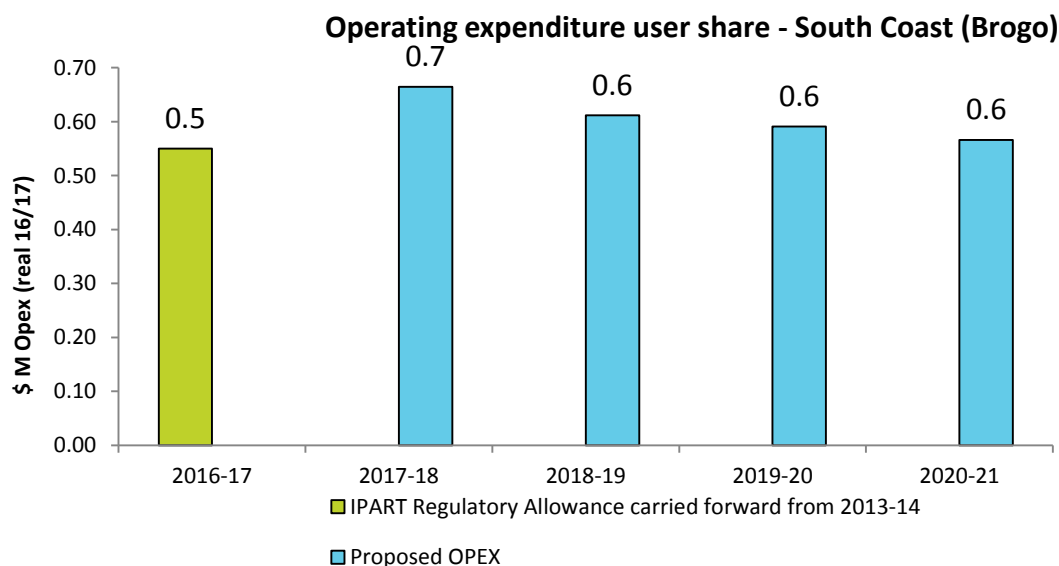
User Revenue Requirement (2016-2017 \$)				
South Coast	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	681	643	636	625
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	41	46	53	59
Return on capital	146	160	179	196
Tax allowance	0	0	0	0
UOM allowance	0	0	0	0
ICD rebates	0	0	0	0
Total costs	868	850	869	879

A71 Government revenue requirement for South Coast valley 2017-18 to 2020-21 (\$2016-17 '000)

Government Revenue Requirement (2016-2017 \$)				
South Coast	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	147	145	138	140
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	11	11	12	12
Return on capital	41	43	44	46
Tax allowance	0	0	0	0
Total costs	199	198	194	197

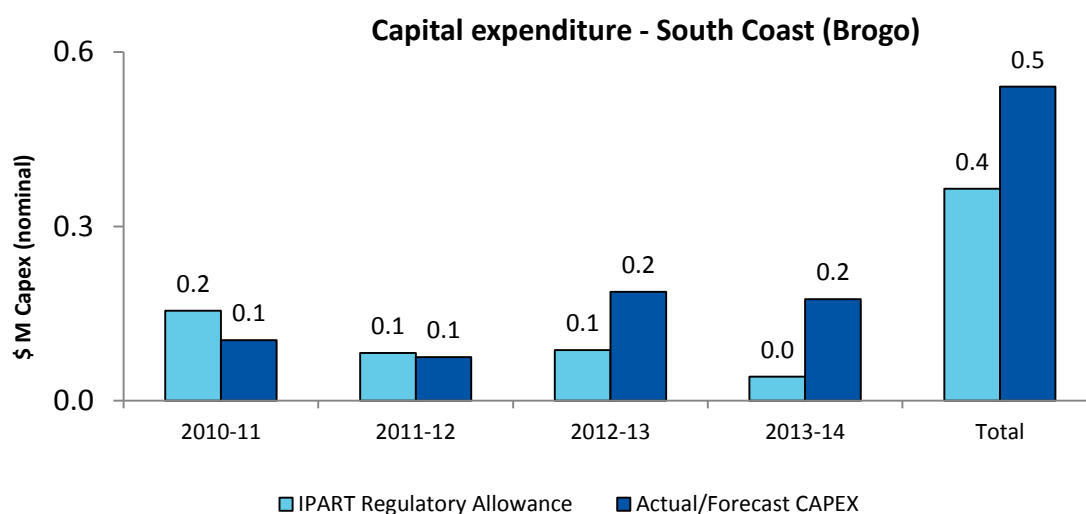
Operating Expenditure

A72 Actuals and forecast operating expenditure user share for South Coast valley



A73 Total operating expenditure by category for South Coast valley 2017-18 to 2020-21 (\$2016-17 '000)

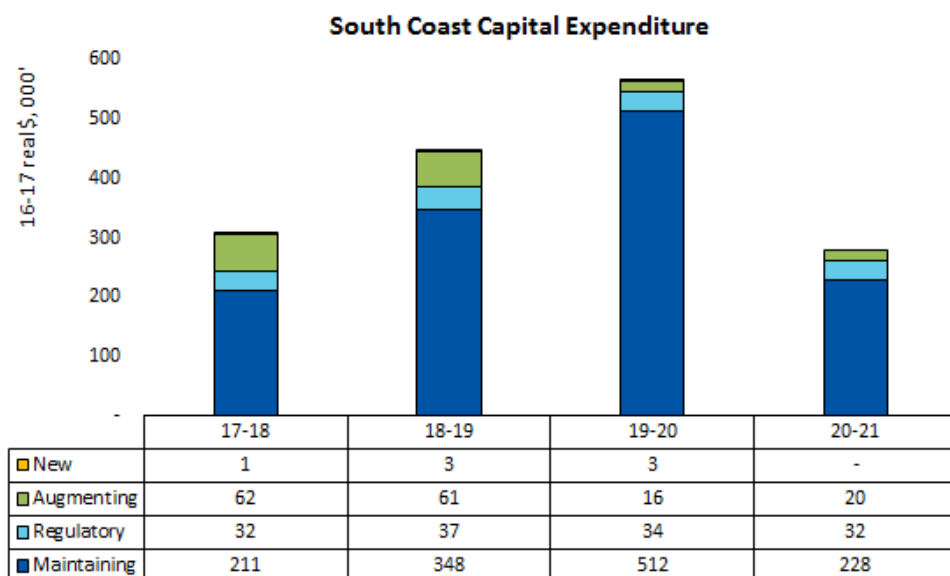
Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	User Share
Water Delivery & Other Operations	74	60	60	57	250	100%
Hydrometric Monitoring	50	50	50	50	200	90%
Water Quality Monitoring	8	8	8	8	31	50%
Corrective Maintenance	52	50	50	49	200	100%
Routine Maintenance	320	302	302	294	1,218	100%
Asset Management Planning	10	10	10	9	38	100%
Dam Safety Compliance	267	263	250	253	1,033	50%
Environmental Planning & Protection	7	7	8	8	31	50%
Corporate Systems	6	6	6	7	25	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	31	30	30	29	120	100%
Allowance for Debt Raising Costs	1	2	2	2	7	n.a
Total	828	788	775	765	3,155	

Capital Expenditure in the current determination period**A74 Capital expenditure in the current determination period for South Coast valley**

The capital expenditure in the South Coast was driven by asset maintenance and dam safety and compliance work. The costs of corporate wide projects such as iSMART were allocated to the South Coast. These projects were focused on achieving operational efficiencies to meet customer service targets.

Forecast Capital Expenditure

A75 Forecast capital expenditure for South Coast valley



Regulated Asset base

A76 Proposed RAB values for South Coast Valley from 2014-15 to 2020-21 (\$2016-17 '000)

South Coast	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	3,103	3,332	3,364	3,420	3,859	4,108	4,494	4,989
+ Capex/Additions	175	25	17	398	307	448	565	280
- Depreciation	42	44	45	49	53	59	66	72
- Disposals	0	0	0	0	4	4	5	4
+ Indexation	96	51	84	90	0	0	0	0
Closing RAB	3,332	3,364	3,420	3,859	4,108	4,494	4,989	5,193

12. Hunter valley summary sheet

The Hunter valley combines the Hunter River water source and the Paterson River waters source.

The Hunter River Water Source is in the central eastern area of NSW and drains an area of some 17,500 square kilometres. The Hunter River rises in the Mount Royal Range north east of Scone and travels approximately 450 kilometres to the sea at Newcastle. The river is regulated from Glenbawn Dam to Maitland, a distance of about 250 kilometres. GlenniesCreek is regulated by Glennies Creek Dam, which also provides water to the lower reaches of the Hunter.¹²

Glenbawn Dam is situated on the Hunter River about 20 kilometres east of Scone in the NSW Hunter Valley. The dam is about 270 kilometres north-west of Sydney. Glenbawn Dam has a capacity of 750,000 MLs, one and a half times that of Sydney Harbour. It has additional potential capacity of 120,000 MLs for flood mitigation. The dam was built in the 1950s to secure water for agriculture, industry and the surrounding townships, and to mitigate flooding.

Vineyards and pastures for dairy farming are the main agricultural industries supported by irrigation. The dam also provides water for nearby power stations and the towns of Scone and Muswellbrook. Glenbawn Dam operates in conjunction with Glennies Creek Dam to supply water requirements along 40 kilometres of the Hunter River from Glenbawn to the tidal reaches near Maitland.

The Paterson River Water Source is in the central eastern area of NSW and drains an area of some 922 square kilometres. The Paterson River rises in the Barrington Tops north west of Dungog and travels approximately 161 kilometres to its junction with the Hunter River near Morpeth. The river is regulated from Lostock Dam to the tidal limit, a distance of about 98 kilometres.¹³

Lostock Dam is situated on the Paterson River, a major tributary of the Hunter River, about 65 kilometres north of Singleton and about 65 kilometres north-west of Maitland in the NSW Hunter Valley. The dam is about 225 kilometres north-west of Sydney. Lostock Dam has a capacity of 20,200 MLs, making it one of the smaller NSW water storages. Lostock Dam was built in the early 1970s to provide a reliable supply of water for agriculture in the Paterson Valley following the drought of 1964-66. Dairying, cattle grazing and vegetables are the main agricultural industries supported by irrigation.

Lostock Dam also provides water for town supplies, industry, domestic and stock use along the Paterson River, as well as environmental flows. The dam's small 277 square kilometre catchment includes farming country in the upper reaches of the Paterson River, and areas of state forest and national park in the Mount Royal Range.

The current estimate of the 20 year rolling average of actual usage in the Lachlan valley is 123,211 MLs. The 20 year average GS allocation rate is 97 percent, while the 20 year average HS allocation rate is 100 per cent.

¹² Guide to the Hunter Regulated river water source water sharing plan NSW Department of Infrastructure, Planning and Natural Resources

¹³ Guide to the Paterson Regulated river water source water sharing plan NSW Department of Water and Energy



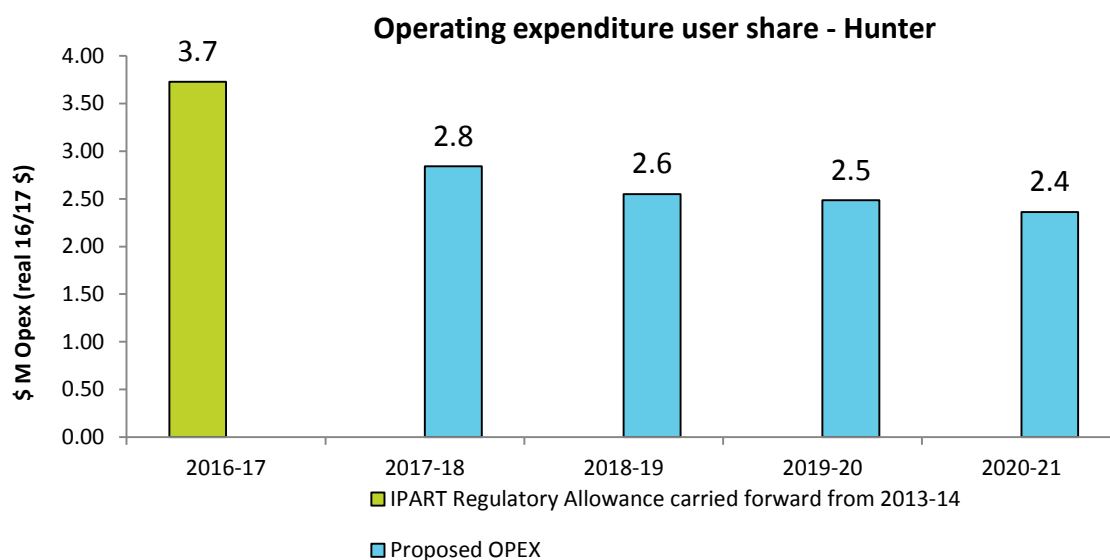
A77 User revenue requirement for Hunter valley 2017-18 to 2020-21 (\$2016-17 '000)

A78 Government revenue requirement for Hunter valley 2017-18 to 2020-21 (\$2016-17 '000)

132

Operating Expenditure

A79 Actuals and forecast operating expenditure user share for Hunter valley

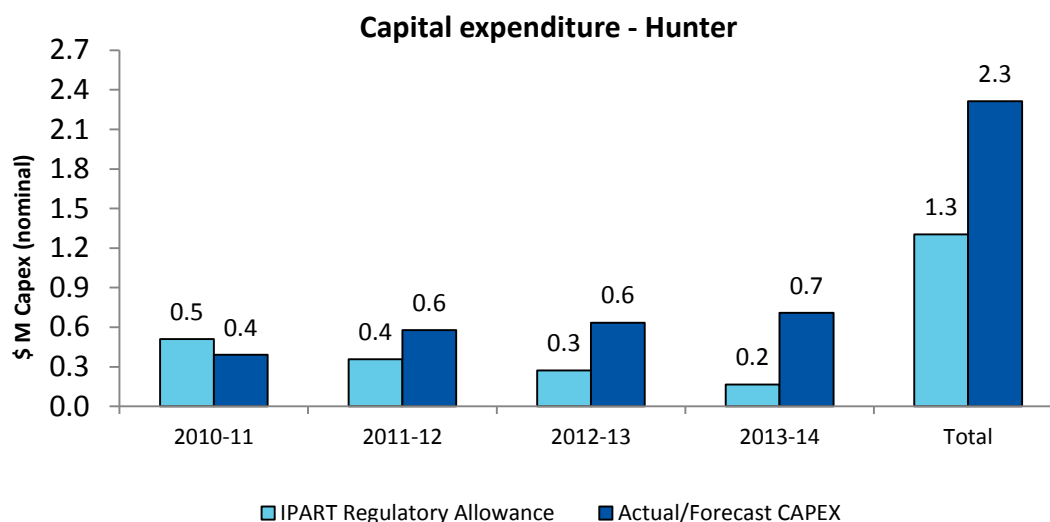


A80 Total operating expenditure by category for Hunter valley 2017-18 to 2020-21 (\$2016-17 '000)

Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	Customer Share
Water Delivery & Other Operations	584	499	474	437	1,994	100%
Hydrometric Monitoring	50	50	50	50	200	90%
Water Quality Monitoring	71	67	67	66	272	50%
Corrective Maintenance	273	261	261	255	1,050	100%
Routine Maintenance	897	853	853	832	3,434	100%
Asset Management Planning	137	92	99	102	431	100%
Dam Safety Compliance	863	806	826	800	3,295	50%
Environmental Planning & Protection	99	99	108	108	413	50%
Corporate Systems	74	70	70	83	297	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	381	366	366	359	1,472	100%
Allowance for Debt Raising Costs	11	12	12	13	48	n.a
Total	3,439	3,175	3,186	3,104	12,904	

Capital Expenditure in the current determination period

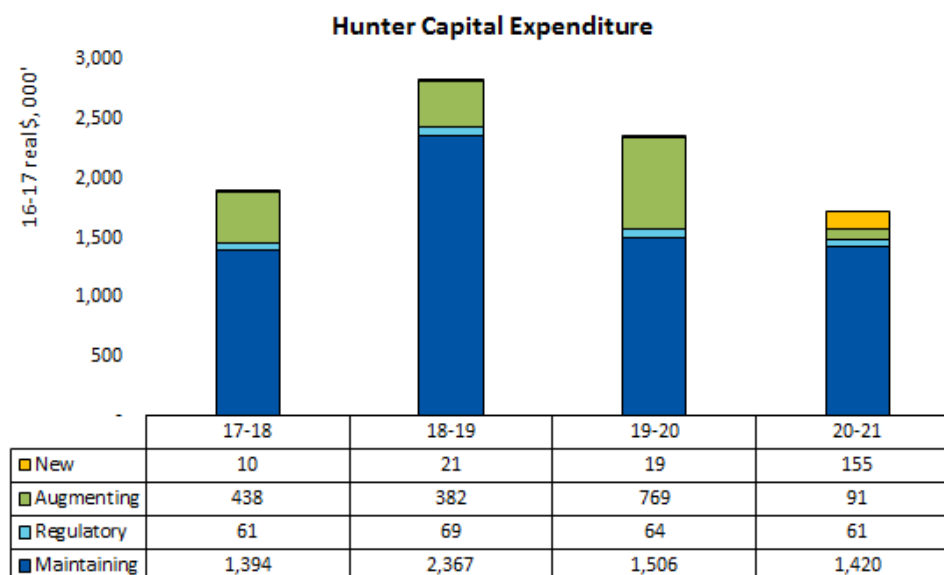
A81 Capital expenditure in the current determination period for Hunter valley



The capital expenditure in the Hunter valley was driven by asset maintenance and dam safety and compliance work. The costs of corporate wide projects such as iSMART were allocated to the Hunter. These projects were focused on achieving operational efficiencies to meet customer service targets.

Forecast Capital Expenditure

A82 Forecast capital expenditure for Hunter Valley



Regulated Asset Base**A83 Proposed RAB values for Hunter Valley from 2014-15 to 2020-21 (\$2016-17 '000)**

Hunter	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	25,531	26,353	26,548	26,971	28,595	30,092	32,487	34,356
+ Capex/Additions	384	142	114	1,307	1,903	2,838	2,358	1,728
- Depreciation	337	346	356	374	397	437	481	515
- Disposals	0	0	0	0	8	6	8	7
+ Indexation	776	399	665	691	0	0	0	0
Closing RAB	26,353	26,548	26,971	28,595	30,092	32,487	34,356	35,562

13. Fish River Scheme summary sheet

The Fish River water supply scheme has its origins in chronic water supply problems in the towns of Lithgow, Wallerawang, Portland and Oberon, which were exacerbated by the 1940s drought. Small local schemes were rejected in favour of a regional scheme but funding shortages delayed the start of work.

World War II and the need for Australian-sourced fuel secured Commonwealth Government funding to re-start the project in 1943 with an expanded scope to include water supply to the Glen Davis shale oil works. Initial construction was by the Civil Constructional Corps, established in 1942 to supply labour for wartime infrastructure projects such as airfields, roads and barracks.

The early 1950s saw the closure of the shale oil works but the creation of new power stations for electricity generation at Wallerawang. The power stations' need for cooling water, and increasing domestic demand in the upper Blue Mountains where there were frequent water restrictions, was the catalyst for the scheme's expansion in the 1950s and 1960s.

Today the scheme supplies water to Mount Piper power station, to Oberon and Lithgow councils for domestic and industry use, and to about 230 properties along its length. It also supplements town supplies in the upper Blue Mountains.

Oberon Dam is situated on the Fish River about 3 kilometres south of Oberon on the NSW Central Tablelands. The dam is about 190 kilometres west of Sydney.

Oberon Dam has a capacity of 45,000 MLs, making it a medium size but important water storage because of its role in the Fish River water supply scheme. This unique regional water supply scheme is the only one in eastern Australia to transfer western flowing water east of the Great Dividing Range.

Rydal Dam is about 2 kilometres north of Rydal and about 20 kilometres west of Lithgow on the NSW Central Tablelands. The dam is about 170 kilometres west of Sydney. Rydal Dam has a capacity of 14,000 MLs. Water is transferred to the dam by pipeline from the Fish River water supply scheme at Oberon for supply to nearby power stations.

The current estimate of the 20 year rolling average of actual usage in the Fish River Scheme is 9,680MLs. There are 15,076MLs of MAQs held in the Fish River Scheme.

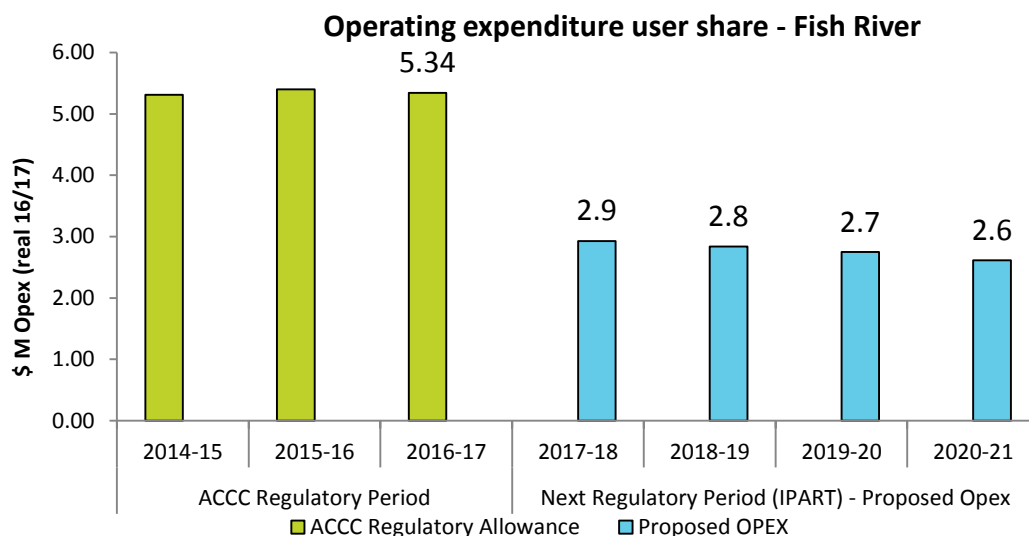
Revenue Requirement

A84 User revenue requirement for Fish River Scheme 2017-18 to 2020-21 (\$2016-17 '000)

User Revenue Requirement (2016-2017 \$)				
Fish River	2017-18	2018-19	2019-20	2020-21
Operating and maintenance	3,001	2,981	2,958	2,885
MDBA & BRC costs	0	0	0	0
Return of capital (depreciation)	1,190	1,272	1,344	1,398
Return on capital	2,600	2,727	2,842	2,912
Tax allowance	333	356	377	392
UOM allowance	269	269	269	269
ICD rebates	0	0	0	0
Total costs	7,393	7,605	7,790	7,857

Operating Expenditure

A85 Actuals and forecast operating expenditure user share for Fish River Scheme

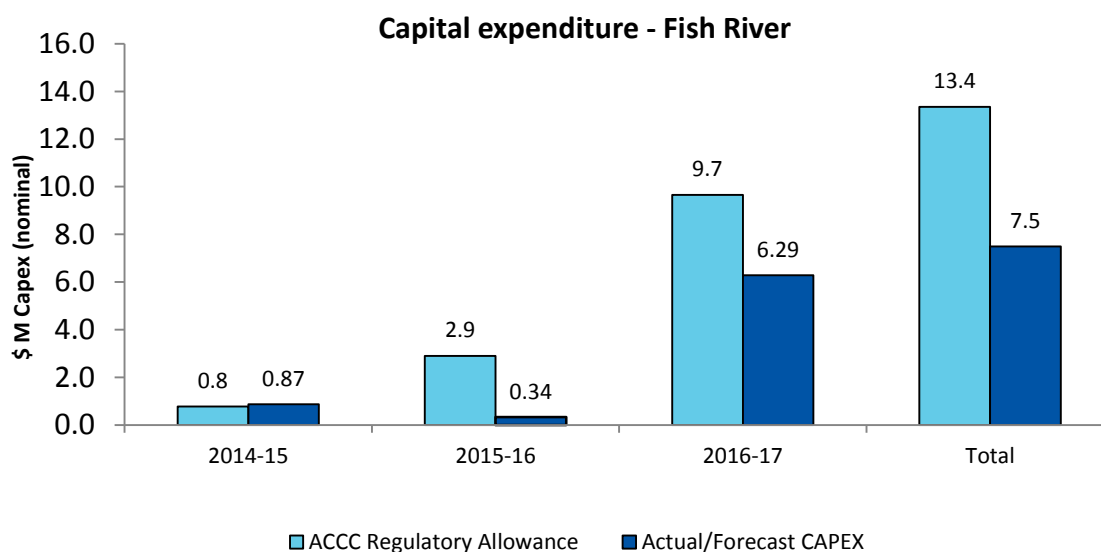


A86 Total operating expenditure by category for Fish River Scheme 2017-18 to 2020-21 (\$2016-17 '000)

Total Operating Expenditure by expenditure category (2016-2017 \$)						
	2017-18	2018-19	2019-20	2020-21	Total	Customer Share
Water Delivery & Other Operations	801	807	779	742	3,129	100%
Hydrometric Monitoring	50	50	50	50	200	90%
Water Quality Monitoring	158	149	149	144	600	50%
Corrective Maintenance	316	297	297	288	1,198	100%
Routine Maintenance	983	924	924	895	3,725	100%
Asset Management Planning	76	142	154	160	532	100%
Dam Safety Compliance	314	315	294	283	1,206	50%
Environmental Planning & Protection	142	142	155	155	594	50%
Corporate Systems	74	70	70	83	297	100%
Renewals and Replacement	0	0	0	0	0	90%
Other	62	59	59	58	237	100%
Allowance for Debt Raising Costs	26	27	28	29	109	n.a
Total	3,001	2,981	2,958	2,885	11,825	

Capital Expenditure in the current determination period

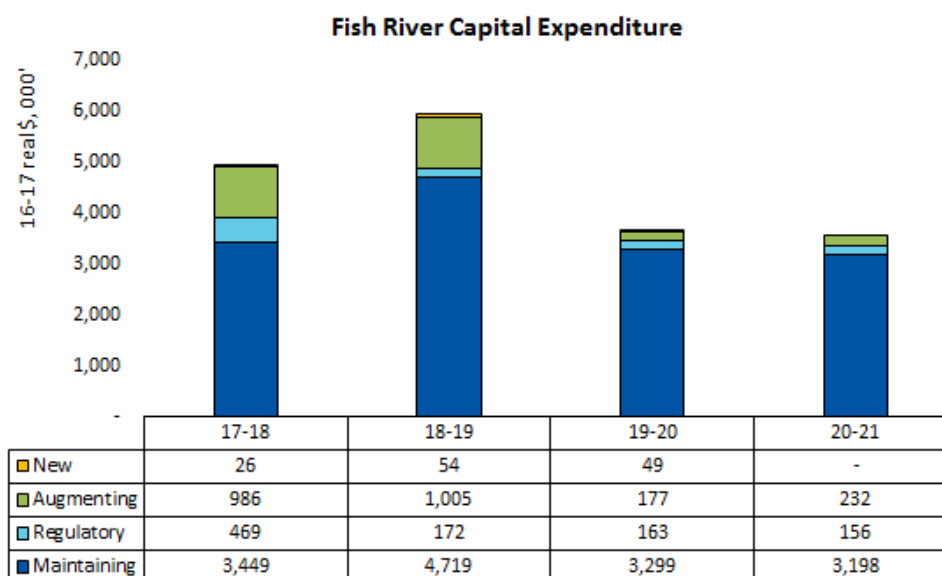
A87 Capital expenditure in the current determination period for Fish River Scheme



The capital underspend in the Fish River Scheme is largely the result of the deferral of major Dam Safety regulatory compliance work at Rydal Dam given the changes to the Dam Safety Act and impending regulations. Catch-up renewals and replacement expenditure is expected to proceed in 2016-17.

Forecast Capital Expenditure

A88 Forecast capital expenditure for Fish River Scheme



Regulated asset base**A89 Proposed RAB values for Fish River Valley from 2014-15 to 2020-21 (\$2016-17 '000)**

Fish River	Step 1 - RAB Roll Forward (nominal)				Step 2 - Forecast RAB (2016-17\$)			
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Opening RAB	69,746	72,209	72,593	73,057	79,422	83,066	87,661	89,903
+ Capex/Additions	1,049	867	340	6,290	4,930	5,950	3,688	3,586
- Depreciation	705	1,581	1,695	1,829	1,209	1,292	1,366	1,421
- Disposals	0	0	0	0	78	62	80	65
+ Indexation	2,119	1,098	1,819	1,905	0	0	0	0
Closing RAB	72,209	72,593	73,057	79,422	83,066	87,661	89,903	92,004

Appendix C. Internal expenditure decision processes

WaterNSW has a number of measures to ensure prudent operating and capital expenditure.

Strategic Action Plans

To ensure success in meeting the legislated objectives of WaterNSW, we have designed and implemented comprehensive strategic action plans (SAPs).

Annually a statement of corporate intent (SCI) is submitted to WaterNSW's shareholding ministers for approval. Contained in this document are the SAPs supported by detailed ten year financial projections and these financial projections are used as the basis of regulatory submissions.

To prepare the financial projections, WaterNSW uses a combination of top down and bottom up budgeting techniques. Monthly, the board and executive receive a comprehensive report on financial performance, position and cash flows of the business as compared to SCI agreed outcomes.

Material variances are analysed and enquiry made as to the reasons for the variance. Additionally, top down rolling forecasts are submitted that consider recent trends and information from key business managers. These forecasted outcomes are compared against SCI, variances investigated and if necessary, corrective actions made.

Within this context of top down control, WaterNSW undertakes a bottom up process of budgeting and, as part of the annual SCI process, the business undertakes an examination of short term and long term resource planning. The results of these plans are expressed in umbrella thematic plans and costed into specific projects necessary to achieve objectives.

Business units and the teams that comprise business units, under the guidance of thematic plans, detail expenditures at a project level for the coming two financial years and estimates for another eight years. These expenditures are consolidated, analysed and compared against the last SCI projections. The differences are investigated and business managers are interviewed, adjustments identified, the process is iterated and then submitted to the executive committee and board for consideration.

In particular, interviews are conducted regarding prudence and efficiency of expenditure during the budget process. For example expenditures on external consultants and external contractors are specifically examined. Only those expenditures on services assessed as specialised and unable to be undertaken by WaterNSW are approved to go forward.

There is a second level of review for prudence and efficiency which takes effect before project implementation. A rigorous approval process is undertaken and material expenditure (opex and capex) are subject to business case and analysis of alternatives before approval is granted to proceed. The Approval to Spend process is described in the section below.

Of importance to the budget process is salary and wages which comprise the largest component of operating expenditure. The people, the skills and the cost significantly influence the success of achieving SCI objectives and the financial performance WaterNSW.

After the establishment of WaterNSW and SAPs, every job within the organisation was considered in the context of the SAPs and external benchmarks. As a consequence up to 70 per cent of the roles in WaterNSW were redesigned and aligned. Moreover a workforce management plan was implemented and the WaterNSW will move to negotiate a common enterprise bargaining agreement.

When budgeting salary and wages, each position in the organisation was costed according to the workforce management plan and then the time and cost of each position costed against projects that have been proposed to meet objectives. These projects, along with other direct expenditures:

- comprise the direct cost of a project and on aggregation are classified into activities

- each project is classified as either Greater Sydney, a rural valley or overhead and aggregated to the segmented costs of these areas. Overhead costs are then allocated to projects (and therefore regulatory area) by percent of salaries. The cost allocation method is described in section 10 of the pricing proposal.

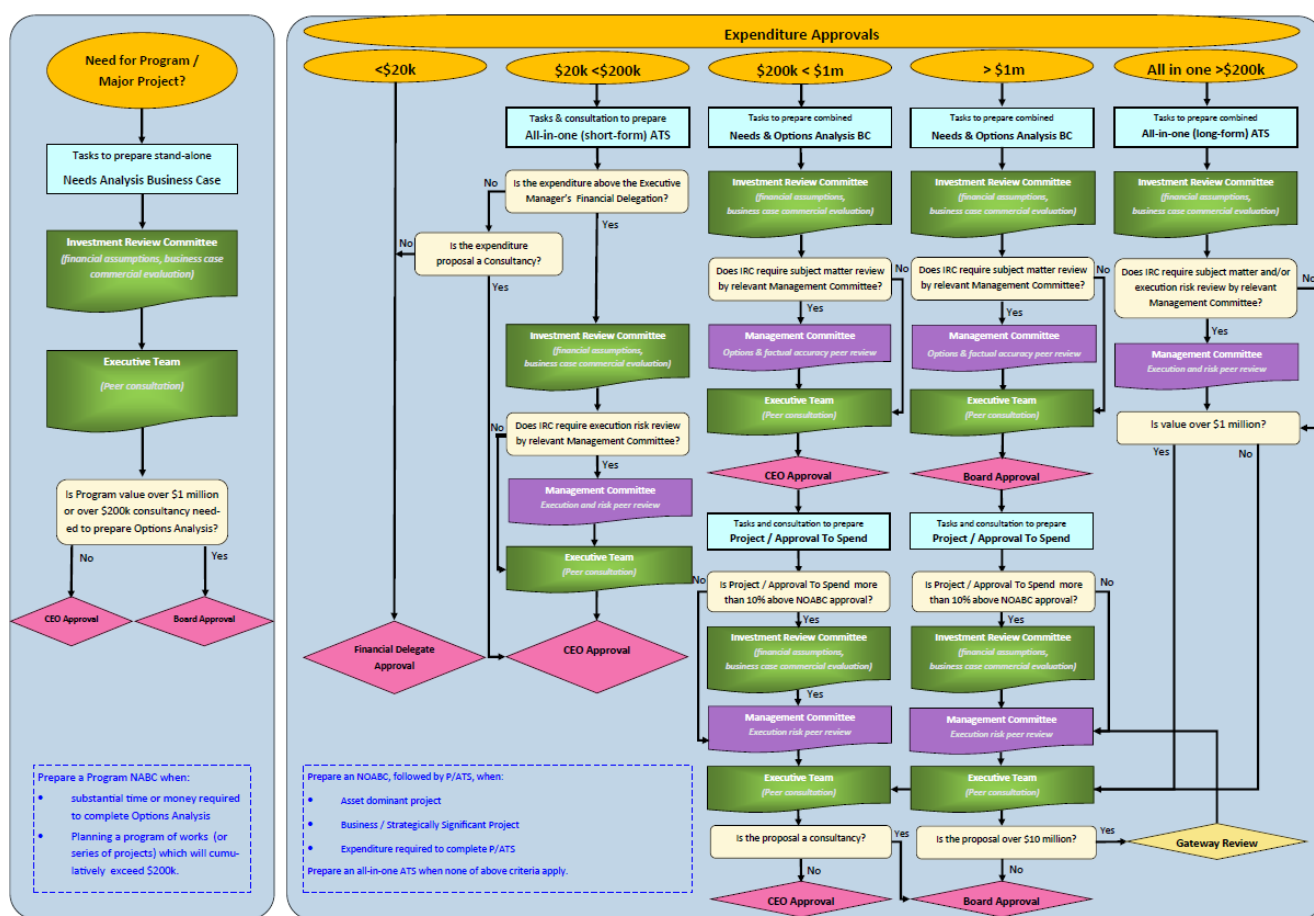
Approval to spend process

The Approval To Spend (ATS) process is WaterNSW's investment evaluation and governance framework. The process aims to ensure that WaterNSW makes prudent and efficient decisions that ensure effective delivery of business objectives and value-for-money.

The ATS Process exists to ensure that all expenditure, both budgeted and non-budgeted is carefully considered for prudence, efficiency and the delivery of business objectives on a best value-for-money basis.

A Flowchart of the process is presented below.

A90 WaterNSW Approval to Spend Process



The process is conducted in the following steps:

Step 1 Needs Analysis Business Case

The first step in determining whether a Project or other action/expenditure is warranted is to identify a 'need' or 'opportunity' is the first step. It is required for major project expenditure where expenditure is required to prepare the Options Analysis Business Case (OABC), or a program of works is being proposed with a cumulative value over \$200K.

The Needs Analysis Business Case (NABC) sets out the problem or opportunity, and lays the case on why it needs to be addressed / why it should be taken advantage of.

A NABC is required when a major need or opportunity is identified, which may (but not necessarily) result in the requirement for a project or major expenditure. The NABC is required if

funding is to be requested to conduct investigations and prepare the Options Analysis Business Case (OABC).

If no funding is being sought for investigations or to prepare the OABC, then the needs analysis can be covered in the Combined Needs and Options Analysis Business Case.

The NABC should provide detailed evidence to support the stated issue / need / opportunity, quantified to the extent possible.

Step 2 Needs and Options Analysis Business Case (OABC)

The next step involves considering the various options available, and forming a recommendation, to address an identified need.

For asset dominant projects and expenditure over \$200K, an OABC is required to be prepared, and endorsed by the Investment Review Committee, prior to progressing detailed project planning, preparatory procurement and the final Project / Approval to Spend (P/ATS).

Step 3 Project / Approval to Spend (P/ATS)

Approval to Spend' is the final approval step in the ATS process. For expenditure

- under \$200k, approval of 'Short-form ATS' documentation by an Executive Manager or CEO constitutes 'Approval to Spend'
- over \$200k, following OABC endorsement by IRC and approval by CEO, a P/ATS is required to be prepared for final IRC endorsement and CEO or Board approval, before expenditure can occur.

Appendix D. Asset Management System

The following diagram illustrates elements of WaterNSW's AMS and how they interact to achieve asset management objectives.

A90 WaterNSW's Asset Management System

