IPART

Independent Pricing and Regulatory Tribunal

New South Wales

SYDNEY WATER PRICE REVIEW

PRICES FROM 1 JULY 2020

Final Report

16 June 2020

- Overview
- Prices
- Bill impacts
- Expenditure
- WACC and Financeability
- Other decisions

Overview

- Key themes in 2020 water reviews
- Matters which IPART considers

Key themes in 2020 water reviews

Prices and bills

From 1 July 2020, bills for water, wastewater, stormwater and related services will fall in Greater Sydney and Hunter regions

Encourage customers to conserve water

Give customers control over their bills by increasing usage charges and reducing service charges in all periods, promoting water conservation

Introduced drought and non-drought pricing

Record expenditure

Significant increase in capital investment over four years to meet growth, build drought resilience, and maintain or improve service standards and environmental performance

Improving water planning processes

Our regulatory framework will support any additional investment, provided it is efficient, which strengthens Sydney's and the Hunter's drought resilience

Overview

Dynamic pricing approach

- Increase usage prices and reduce service charges to give customers more bill control
- Higher water usage price in drought to recover increased costs and send a stronger signal to customers
- Typical household will pay less in non-drought conditions, but slightly more in drought
- Bill impacts in drought conditions will be moderated by reduced water consumption

Form of regulation

- 4 year determination period
- Price caps
- Maintain efficiency carryover mechanism to encourage utility to deliver efficiencies
- We will undertake a comprehensive review of our regulatory framework

Efficient expenditure allowance

- Large increase in capital expenditure to support network resilience
- Broadly accept Sydney Water's proposed operating expenditure to allow it to meet or exceed service standards and encourage planning for growth, drought and resilience.
- Increase in expenditure offset by record low interest rates

Better planning and outcomes

- Better environmental outcomes – increased costs to meet obligations set by NSW EPA
- Opportunity for Sydney Water to undertake more coordinated long term planning and continue to understand what its customers want
- Monitor Sydney Water on its water conservation targets to meet community expectations

Matters for IPART to consider

In setting prices, IPART is required to have regard to the matters specified under section 15 of the IPART Act

- What are the costs?
- Are customers protected from abuses of monopoly power?
- Is there an appropriate return on assets?
- What is the effect on general price inflation?
- What are the social impacts of our prices?
- What is the impact of our prices on quality, reliability and safety standards?
- Has efficiency improved?
- Do the prices promote environmentally sustainable development?
- What is the impact of our prices on the finances of the utility?
- What is the impact of our prices on contractors etc. of the utility?
- What is the impact of our prices on demand management and least cost planning?
- Do our prices promote competition?

Prices

- Dynamic pricing approach for water usage charges – how it works and advantages of this approach
- Comparison of current prices, Sydney Water's proposed and IPART decisions on prices

Dynamic water prices

What

Lower service charge and dynamic water usage price (non-drought and drought conditions)

Why

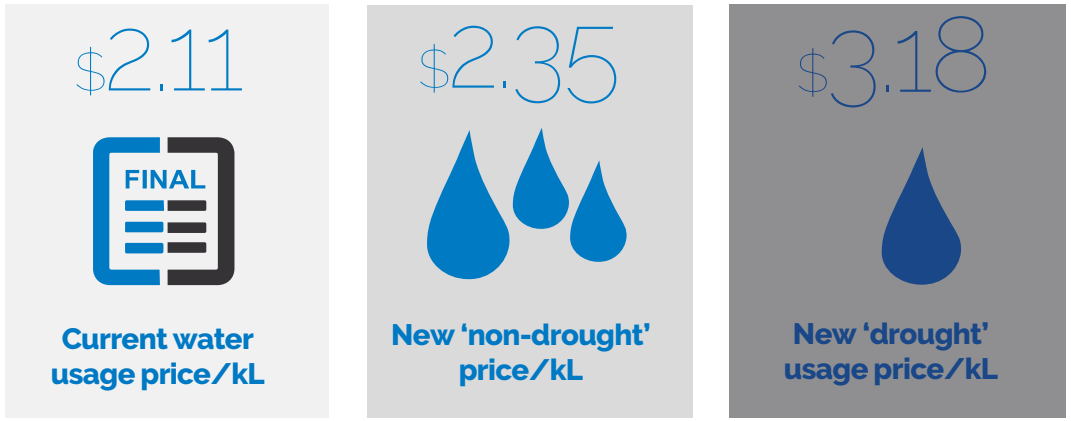
1. Send appropriate price signals to customers in times of drought
2. More reflective of the additional costs that Sydney Water incurs during drought (eg, cost pass through projects)
3. Non-drought usage price is still based on the cost of water supply augmentation (long run marginal cost)

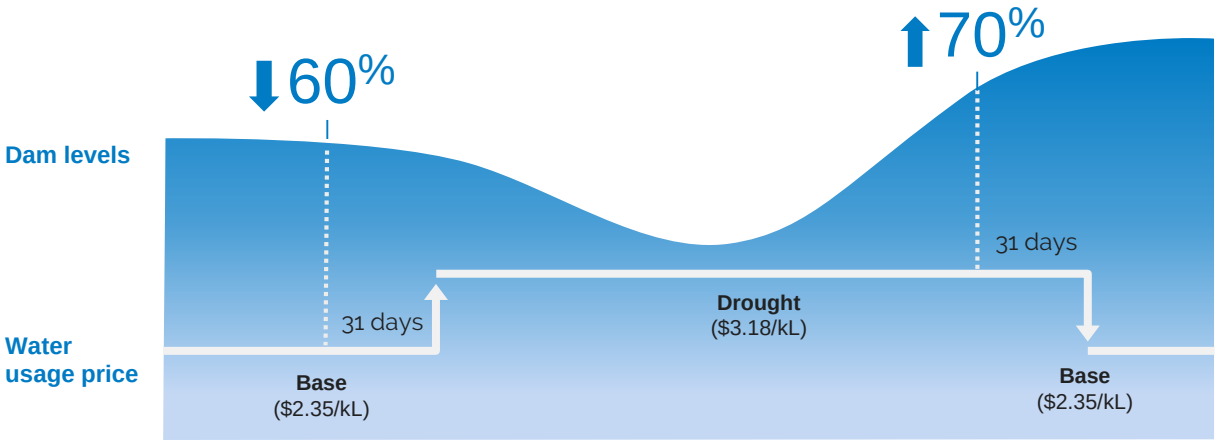
How

60/70 trigger for moving between non-drought and drought usage prices.

- Drought water usage price would commence 31 days after water storage levels fall below 60% and remain in place until 31 days after storage levels reach 70%
- Costs recovered in drought price include additional drought-related costs, such as SDP operation, water conservation activities and Shoalhaven transfers

Water prices





Our approach to dynamic pricing

A dynamic pricing approach:

- Responds to climate uncertainty – ensures customers only pay the increased cost of supplying water in drought conditions when needed. Non-drought usage price is still based on the 'average' long-term costs of supplying water (LRMC).
- Sends a clear message to customers about the need to change behaviour and conserve water when it is most scarce, without locking in higher prices when dams are full.
- Is simple to implement for all water users, including non-residential customers. All customers face the same signal to conserve water.
- Does not distinguish what constitutes 'essential' and 'non-essential' water usage. Recognises that the cost to produce water is not influenced by the end use of that water. For example, this method does not require value judgement about what is non-discretionary vs discretionary water consumption, and disregards other drivers of consumption such as household size.
- If we pass through drought costs via the fixed service charge, rather than the usage charge, the service charge would be around $140 higher per year.

We considered stakeholder views on an Inclining Block Tariff

What is an Inclining Block Tariff (IBT)?

Under an IBT customers pay a higher water usage charge for water consumption above a certain 'essential' level.

Stakeholders such as the Public Interest Advocacy Centre have suggested that households who consume less water should face a lower per unit price.

An IBT will hurt large households and is difficult to apply

Large low income families will be worse off under an IBT, given their higher essential usage.

Renters with high water usage could see larger and more persistent bill increases under an IBT.

An IBT is difficult to apply to non-residential customers, which include the highest water users.

An IBT penalises customers outside of drought

Hunter Water's costs are higher during drought, while its water sales are lower.

Our drought pricing encourages all customers to conserve water when it is most scarce, without locking in higher prices when dams are full.

An IBT is less cost reflective

At all times, one of the price tiers under an IBT would be too low or too high, meaning that some customers would be paying not enough or other customers would be paying too much for each kL of water supplied to them.

An IBT would provide less incentive for smaller households to conserve water and penalise large households.

Prices for customers

Charges	Current price ($2019-20)	Sydney Water proposed price* ($2020-21)	IPART decision ($2020-21)
Water usage charge – non-drought ($/kL)	2.11	2.16	2.35
Water usage charge – drought ($/kL)	2.11	2.99	3.18
Water service charge ($/year)	96.69	110.44	39.90
Wastewater usage charge ($/kL)	1.17	0.62	1.20
Wastewater service charge ($/year)	614.85	601.57	542.84
Stormwater charges – residential – units ($/year)	24.62	26.56	23.94
Stormwater charges – residential – houses ($/year)	78.88	85.09	76.70
Discretionary – Waterway Health Improvement ($/year)	NA	0.87	0.85
Discretionary – Vaucluse Diamond Bay ($/year)	NA	1.02	1.04

*Sydney Water's proposed prices as at April 2020 in response to our Draft Report, inflated with 2.2% inflation

We have accepted Sydney Water's recycled water price of 90% of our water usage price (non-drought) -$2.12/kL

Other prices

Trade waste

- We have accepted Sydney Water's revised prices, with one exception (BOD corrosion charge).

Miscellaneous and ancillary charges

- We have accepted Sydney Water's proposed prices for its 34 miscellaneous and ancillary charges.

Dishonoured or declined payment and late payment fees

- We have accepted Sydney Water's proposed prices, as it has proposed to largely maintain these fees.

Unfiltered water charges

- We have set unfiltered usage charge at $0.31/kL less than the usage charge for potable water.

Unmetered water charges

- We have maintained the current approach to charging unmetered properties. That is, water service charge equal to the residential service charge, and 180 kL of deemed water usage per year.

Bill impacts

- Residential customers (including pensioners and renting households)
- Non-residential customers

Impacts of our prices

Customers' bill impact

A typical household's bill will be 7% lower in average conditions, and 7% higher in drought.

Service standards

Prices are set to recover efficient costs of Sydney Water's service standards obligations.

Financial viability

We did not identify a financeability concern for Sydney Water that needs to be addressed in this review.

NSW Gov't Consolidated Fund

A $1 decrease in pre-tax profit of Sydney Water will result in a loss of revenue to the NSW's Consolidated Fund of $0.49.

General inflation

The impact of our prices on general inflation is not significant.

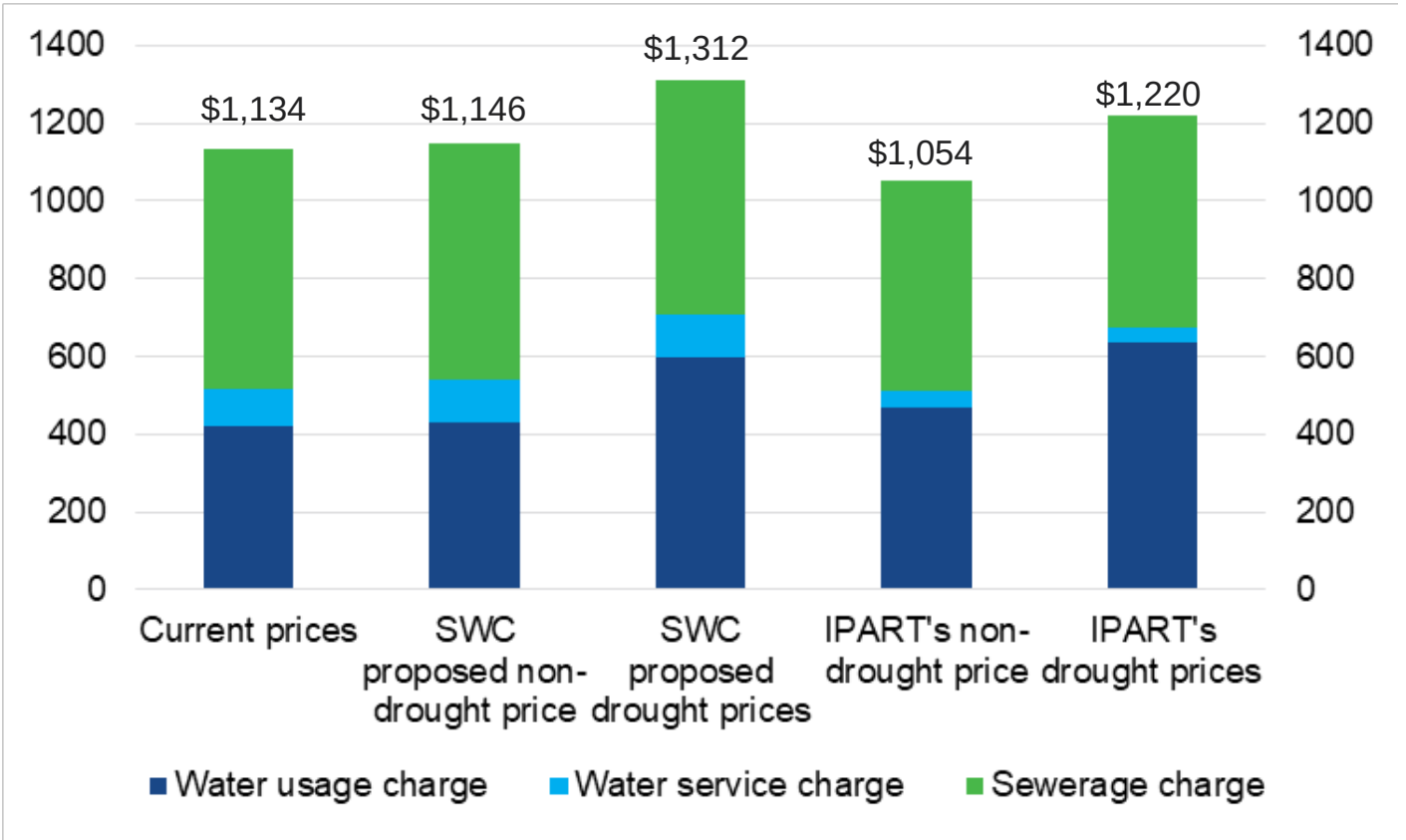
Environment

Prices are set to recover efficient costs of Sydney Water's environmental obligations.

Bill impacts: residential customers

- The decrease in service charges and increase in the water usage charge means that if customers reduce their water use, they reduce their bill.
- A typical household (200kL/year) will see a bill decrease by 7% during non-drought periods, and an increase of 7% during drought. This 7% increase could be avoided by reducing water use by 26%.

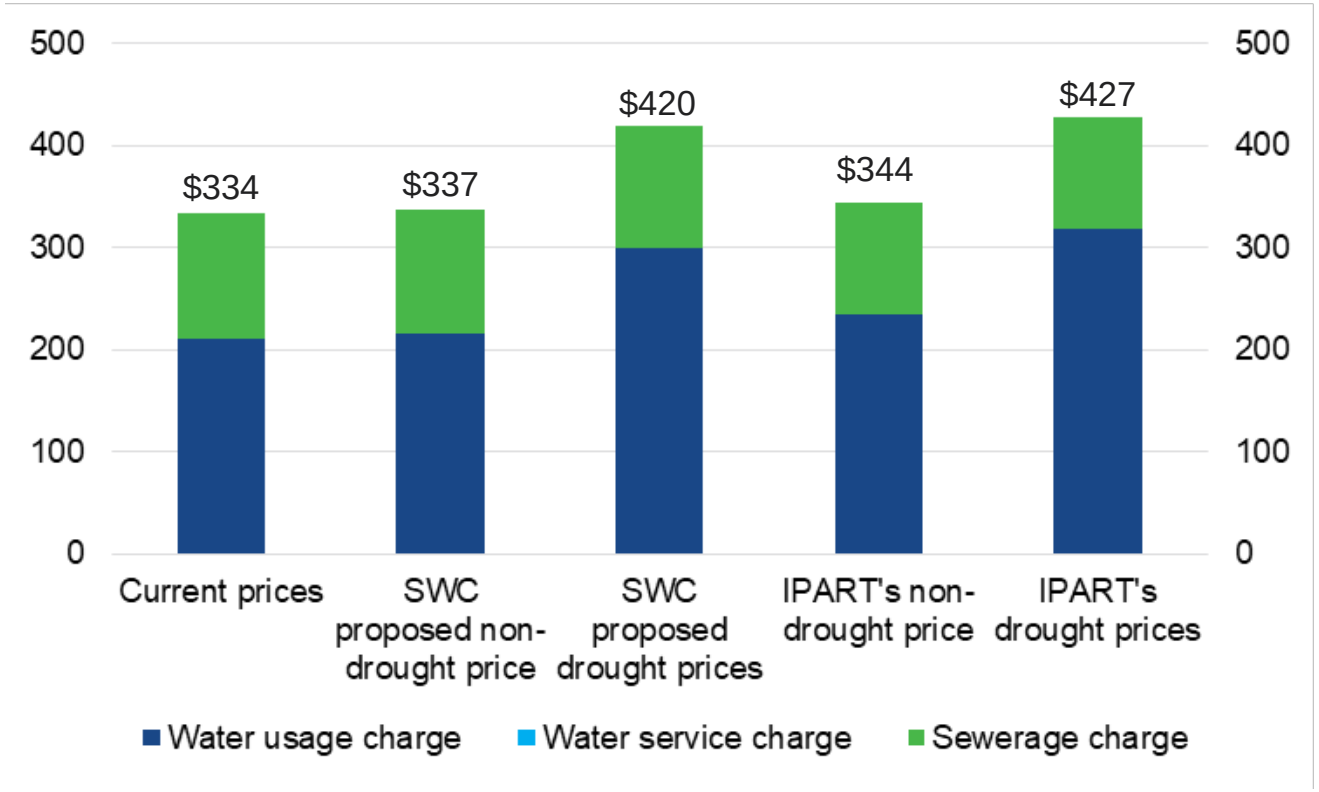
A typical household bill ($2020-21)



Bill impacts: pensioners

- Under non-drought conditions, bills for a typical pensioner would increase by $10 or 3% from current prices.
- Without changes to the current pensioner rebate, under drought conditions, pensioners would experience a larger bill increase. Pensioners receive a rebate on their fixed service charges and their bills mostly comprise water usage.
- In response to our Draft Report, submissions from the Department of Planning, Industry and Environment and Sydney Water both stated that they will work to adjust pensioner rebates to ensure pensioners are not disproportionately disadvantaged by our dynamic water usage prices.

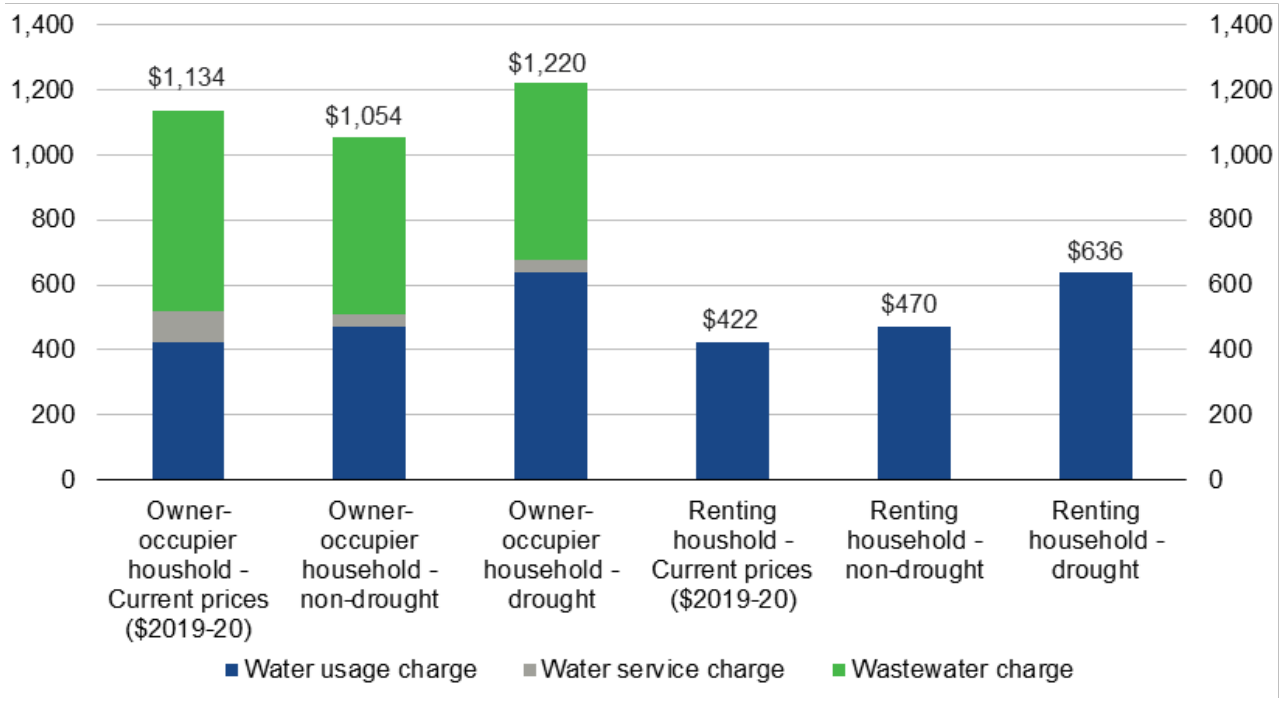
Estimated bill for pensioner customers using 100kL/year, under various scenarios ($2020-21)



Bill impacts: renters

- Under both drought and non-drought conditions, a typical renting household would continue to pay lower water bills than owner-occupier households.
- We are asking all Sydney Water customers to pay the same water usage charges and same increases in charges under drought conditions. This is more cost reflective, and consistent with the 'user pays' principle.
- These bills are comparable to what is paid by renting households in other areas of Australia (as shown in Chapter 15 of the Final Report).
- Sydney Water has various ways to assist households having difficulty paying their bills. For more information, please visit Sydney Water's website: https://www.sydneywater.com.au

Estimated bill for renting customers using 200kL/year, under various scenarios ($2020-21)



Bill impacts: non-residential customers

The bill impacts for non-residential customers are more mixed – as they are influenced by meter-size, discharge factors and usage patterns.

Under non-drought conditions:

- Customers that use up to around 2000kL of water per year will see bills fall, while those using more than this will see some increase in their bills. Largest increase for the most intensive users.
- Average bill changes range from -25% to 8%.

Under drought conditions:

- Customers that use up to around 200kL of water per year will see their bills fall, while those using more than this will see some increase in their bills.
- Average bill changes range from -18% to 35%

Expenditure

- Operating expenditure (incl. water conservation)
- Capital expenditure (incl. ProMac)
- Efficiency adjustment

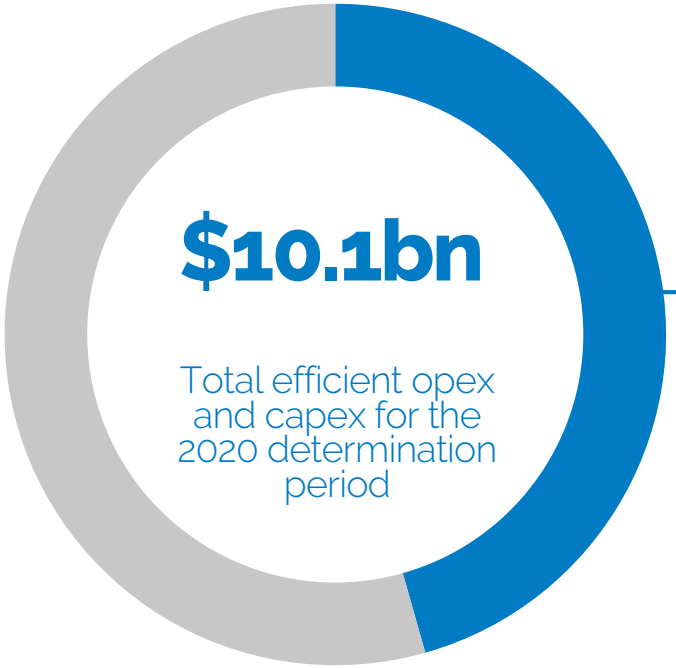
Expenditure decisions

Opex: $5.5b

1.5% lower than Sydney Water's proposed expenditure
2.4% lower than actual opex over 2016-2020

Drought cost pass through: $326m

Additional expenditure during drought conditions including water conservation, water wise campaigns, reactive maintenance works



Capex: $4.6b

41% higher than Sydney Water's actual capex over 2016-20
(and **43% higher** than efficient capex over this period)
10% lower than Sydney Water's proposed expenditure

Expenditure – encouraging efficiency

Efficient operating expenditure is similar to Sydney Water's proposal

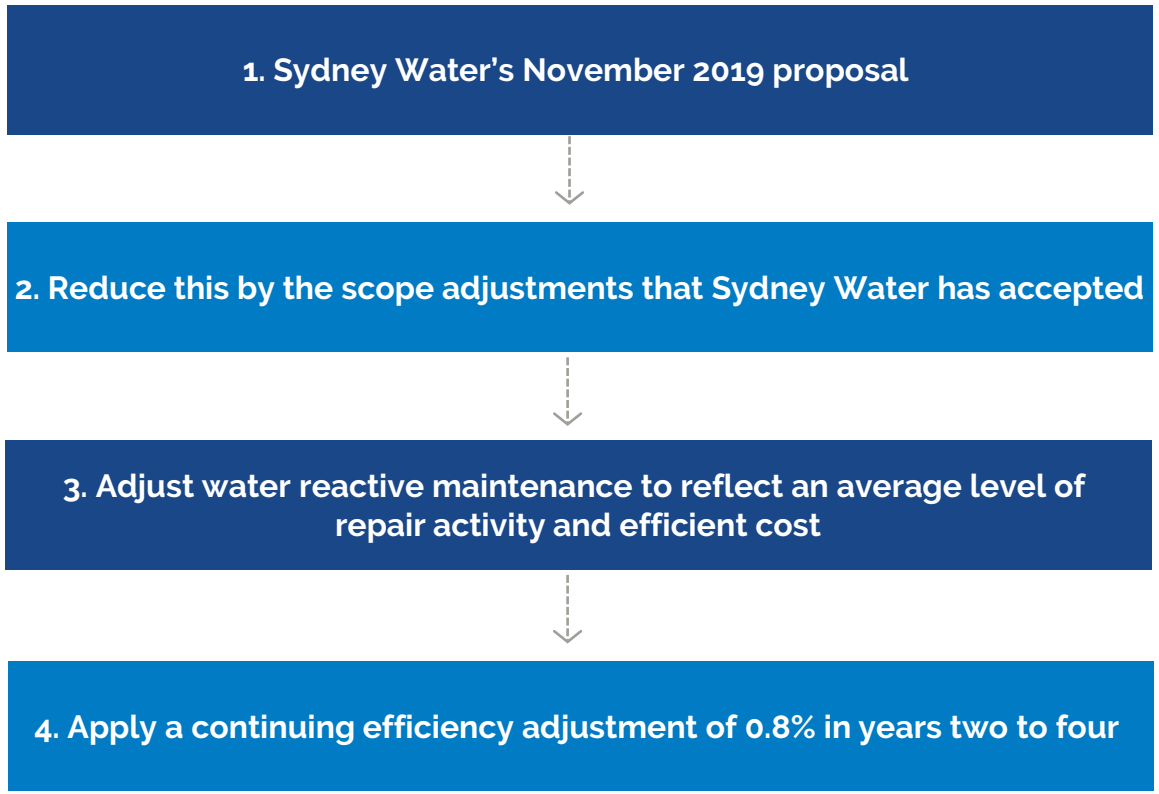
- We have adjusted for an efficient level of reactive maintenance on water works, to reflect a gradual return to long-term average level of repairs.
- We have decided on a drought cost pass through if dam levels were to fall below 60%.

A large increase in capital expenditure and a focus on network resilience

- We recognise the need for Sydney Water to invest in its network to keep levels of service high and build resilience to drought, as well as meet its environmental obligations.
- At the same time, we did not find that all of Sydney Water's proposed expenditure is efficient.

Operating expenditure

- Our decision reflects an efficient 'envelope' of expenditure that will allow Sydney Water to meet or exceed service standards and encourage good planning for future growth, drought and resilience
- Our expenditure allowance is based on a gradual return to the efficient, long-term average, level of water maintenance activity
- Combined with the recent improvement in weather conditions after the heavy rainfall in Feb 2020, this will help Sydney Water achieve higher levels of performance



Operating expenditure – water conservation and water wise campaigns

Item	Sydney Water's proposal	IPART's decision	Rationale
Base program			
Water conservation	$40 million	$40 million	No adjustment made. Sydney Water's forecast of $10m/yr is based on its expenditure in 2019-20 to meet its ELWC operating licence requirements.
Water wise campaigns	$40 million	$20 million	Transfer of $20 million to cost pass through (see below), as the proposed campaigns on water efficient customer behaviour and advertising are mainly driven by drought conditions. Sydney Water has accepted this in response to our Draft Report.
Drought cost pass through (only recovered when dam levels fall below 60%)			
Water conservation	$240 million	$204 million	Reduction of $36 million. We agree with our consultants' findings that the costs and benefits of this additional program beyond the expenditure level in the first year of the determination period were not robust cost estimates - in particular, the level 3 restriction activities (dam levels < 30%). Sydney Water did not disagree with our reduction in response to our Draft Report.
Water wise campaigns	$40 million	$60 million	Increase of $20 million from base program.

Capital expenditure

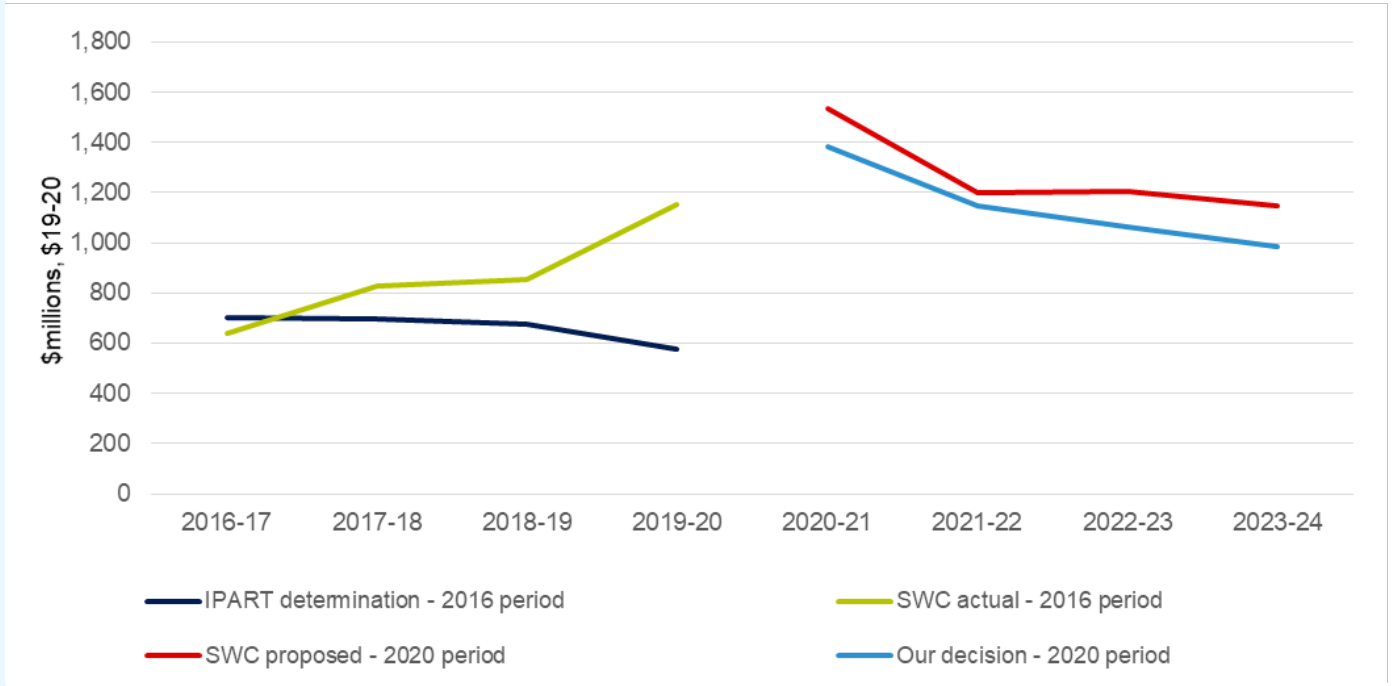
Baseline

- We have set total capital expenditure at $4,586 million. This is:
  - An 85% increase to our 2016 decision
  - A 41% increase to Sydney Water's actual capex over the 2016 determination period
  - 43% higher than efficient capex over the 2016 determination period
- Our decision is 10% lower than Sydney Water's proposal.

Cost pass-through

- $436 million for a cost pass-through of network upgrades if SDP were expanded within the 2020-24 period, subject to a decision by Government.

Capital expenditure over the 2016 and 2020 periods



Capital expenditure

$205 million for the Prospect to Macarthur Link (ProMac) to service the growth projected by Sydney Water and the NSW Government.

$1.7 billion expenditure to service growth over the 2020-24 period.

Recognise all additional obligations set by the NSW Environment Protection Authority (EPA) which Sydney Water must meet to achieve better environmental outcomes.

ProMac

Sydney Water initially proposed $484m for the 2020 determination period.

Our draft decision

It was not prudent to include an expenditure allowance for ProMac without better planning

- Defer investment for more comprehensive drought response and long-term supply-demand plan

Sydney Water re-proposed $453 million to cater for growth and resilience.

Our final decision

A strong case was found for the growth capex portion of the pipeline.

Analysis of the ProMac scheme commissioned by Sydney Water concluded that the resilience capex would **not** be cost-beneficial to proceed from 2020.

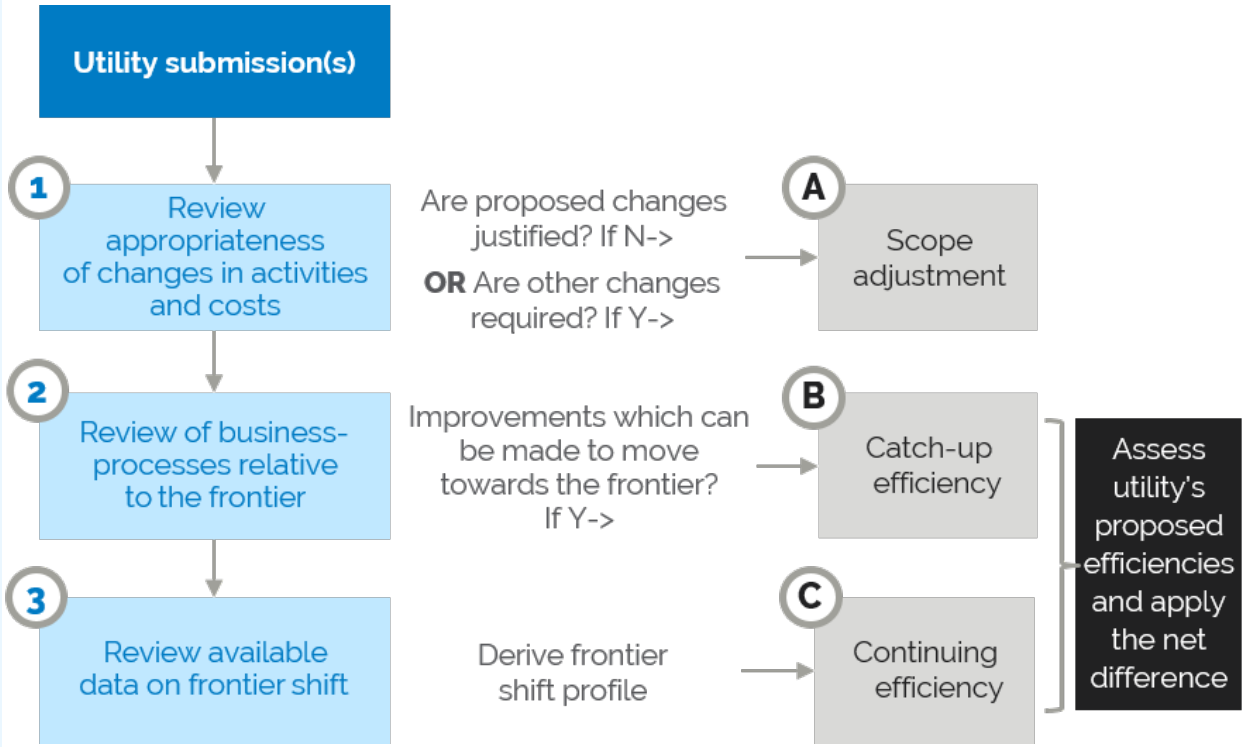
We decided to include $205 million over the 2020-24 period, which caters for future customer growth over the 2020-24 period.

Efficiency adjustment

We applied a continuing efficiency factor to Sydney Water's operating and capital expenditure.

- Efficient businesses continually innovate and deliver services at least cost to customers.
- We applied an adjustment of **0.8% per annum** consistently across operating and capital expenditure, based on long-term productivity trends in Australia.
- We **have not applied** the adjustment in year 1 of the 2020 period, recognising the impact of COVID-19. This equates to an average of 0.5% over the four year period (similar to Sydney Water's revised proposal of 0.6%).

Approach to assessing efficiency



Operating Expenditure: accept Sydney Water's $104.5 million of base efficiencies as catch up efficiency. Apply $48 million of continuing efficiency instead of Sydney Water's $89m of efficiency challenge in its Nov 2019 update.

Capital Expenditure: catch up efficiency of $56 million applied to 2 programs; $51 million of continuing efficiency

WACC and Financeability

- Inflation and WACC
- Financeability

Weighted average cost of capital (WACC)

We applied our standard 2018 WACC method with:

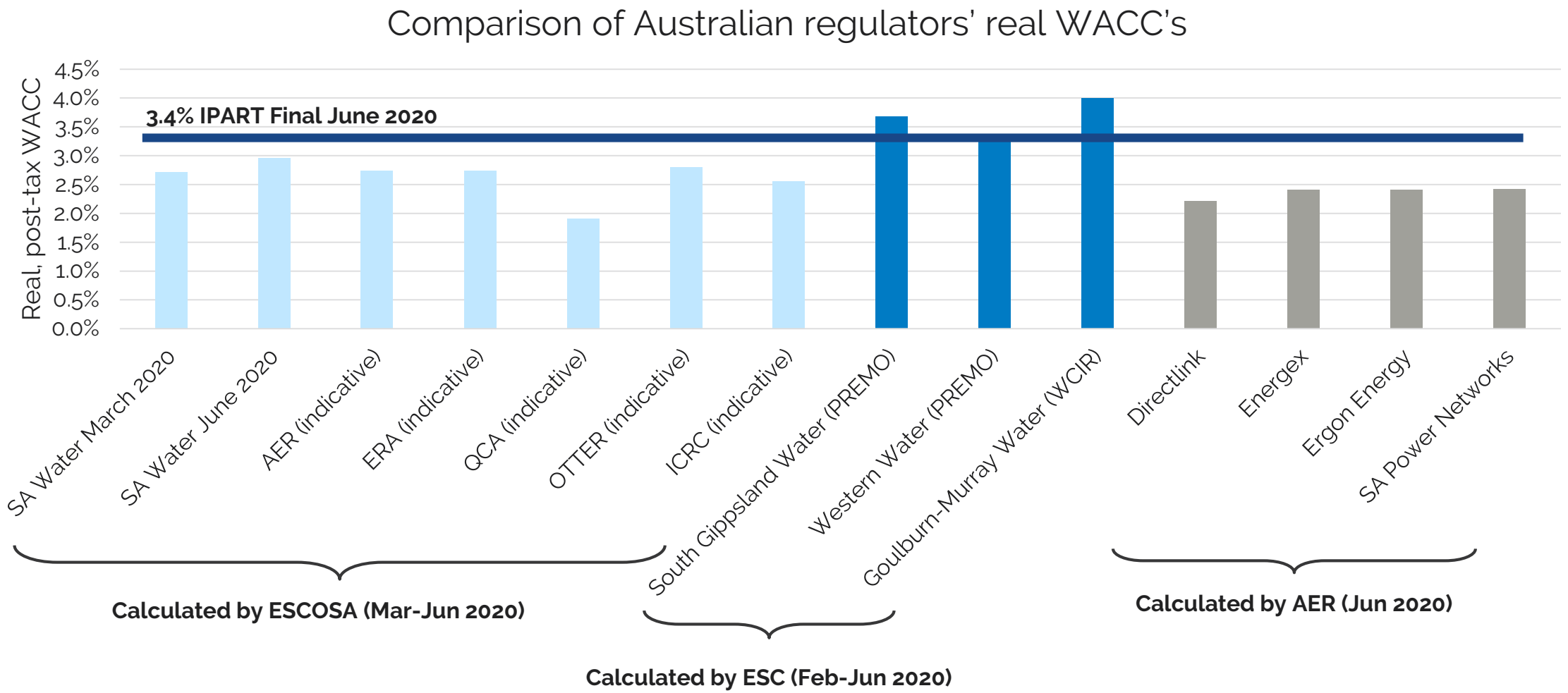
- An estimate of inflation expectations of 2.3%
- Taking the midpoint of current market data and long term averages.

In response to concerns from the water utilities, we found:

- The WACC we set is efficient, is relatively high compared to other regulators, and would allow the utilities to remain financeable
- Maintaining a transparent and objective approach is appropriate, when there is no clearly superior method for estimating inflation expectations
- An adjustment to prices, for the difference between actual and expected inflation, is not appropriate.

Adjusting one element of the WACC in isolation is problematic because it ignores the fact that many WACC parameters are interrelated. WACC parameters should be considered together on a holistic and internally consistent basis through periodic WACC reviews.

Our WACC is currently high compared to other jurisdictions

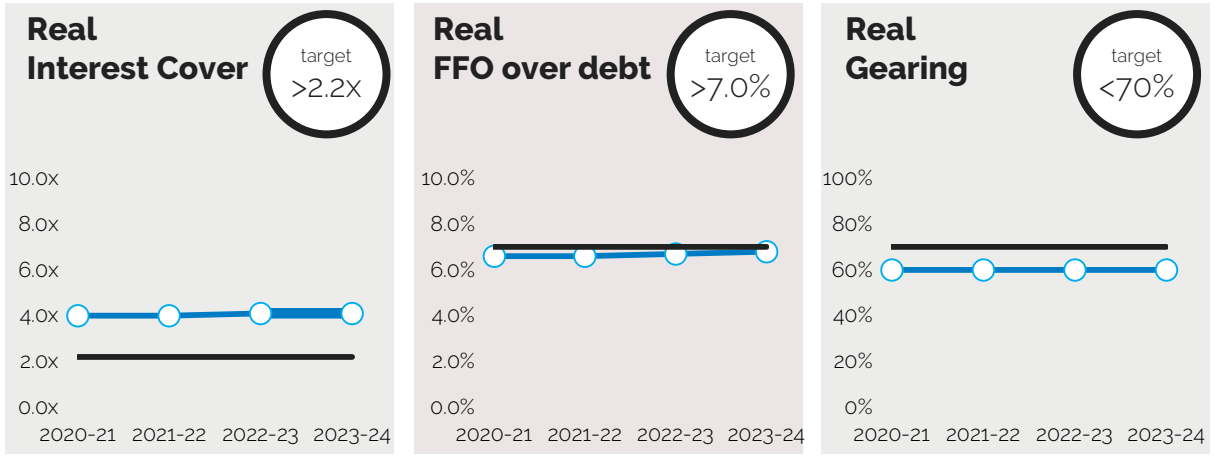


Financeability test

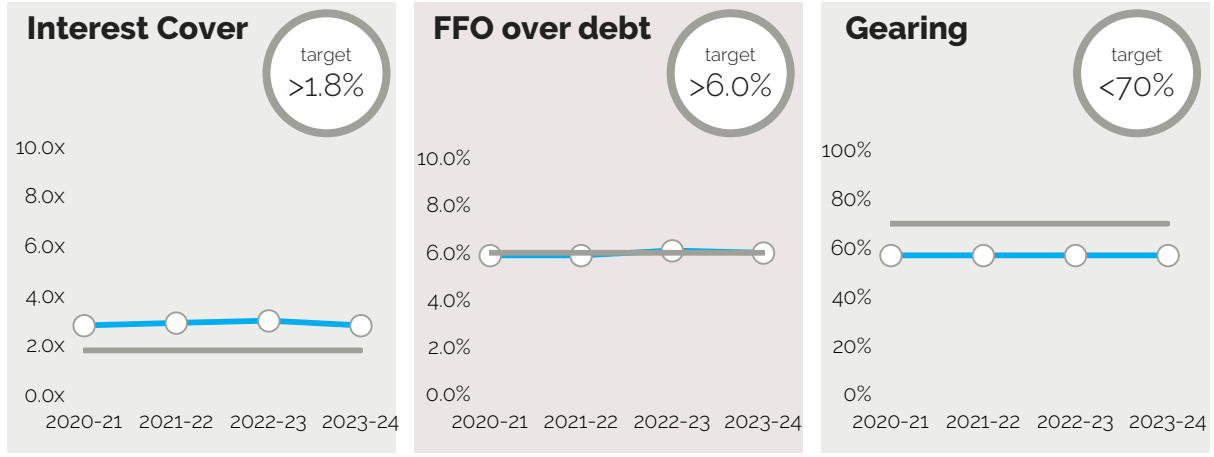
We analysed Sydney Water's ratios and did not identify a financeability concern

- There is significant headroom in interest cover ratio
- FFO over debt is marginally below the target level, however it is improving slightly over the four year period
- Gearing ratios meets our target of below 70%.
- Regulatory mechanisms moderate financial risks to Sydney Water
- Transparent and predictable regulatory framework results in revenue predictability

Benchmark Test



Actual Test



Other decisions

- Discretionary expenditure
- Output measures
- Demand volatility adjustment mechanism
- Efficiency carryover mechanism
- Unregulated pricing agreements
- Recycled water
- Developer Direct

Discretionary expenditure

- Discretionary expenditure achieves outcomes/services above service standards, licence or regulatory obligations.
- We have accepted Sydney Water's proposed projects
  - $22.4 million to improve the Waterway health improvement program
  - $64.3 million for Vaucluse Diamond Bay to divert wastewater outflows to a treatment plant
- Bill impacts are small, and Sydney Water has an opportunity to do more to find out what customers want.

$64m

Vaucluse Diamond Bay

$1.04 per year for residential customers

$1.39 per year for non-residential customers

$22m

Stormwater Waterway Health

$0.85 per year for stormwater customers

Output measures – water conservation / discretionary projects

We have set output measures to:

- Track the progress of discretionary expenditure and ensure Sydney Water's customers are informed on discretionary expenditure
- Monitor Sydney Water's performance on leakage and water conservation

Output measures on water conservation

No.	Project description	Measure	Target
1	Water demand management	Report the percentage reduction in demand from a defined base which Sydney Water currently uses, compared with target reductions during periods of water restrictions.	Whilst in drought: meet the demand reduction and water conservation targets as agreed with the NSW Government
2	Water demand management	Report on expenditure for water wise behaviours campaigns and enforcement of water restrictions.[a]	That Sydney Water invests in water demand management activities to a level that is consistent with the value of water.
3	Leakage	The rolling annual average leakage in ML/day at the end of the quarter compared with the Economic Level of Leakage (ELL)	Rolling annual average leakage is at the ELL, within an allowance to reflect the 'band of uncertainty'
4	Leakage	The quarterly average leakage value in ML/d compared with target for the last five years	Leakage is consistent with the ELL
5	Water recycling	The volume of recycled water produced (ML/d) against capacity from each of the S16a plants at Rosehill-Camelia and the St Mary's plant	Increase the utilisation of recycled water at the Rosehill-Camelia plant and achieve average environmental flows at the St Mary's plant of 43.3ML/day.

Other decisions

Area	Decision	Rationale
Demand volatility adjustment mechanism (DVAM)	We will maintain the demand volatility adjustment mechanism for the 2020 determination period.	The DVAM remains an appropriate mechanism to manage demand risks for Sydney Water.
Efficiency carryover mechanism (ECM)	To maintain an ECM for operating expenditure, and not extend it capital expenditure in this review.	This removes an incentive for the utilities to delay efficiency gains for operating expenditure. However, we have not identified a suitable incentive mechanism to apply to capital expenditure.
Unregulated pricing agreements	Maintain existing ability to enter into unregulated pricing and service level arrangements with large customers, and expand the definition of large customer.	While there has been no uptake of these agreements, we do not see cause to change the option of having them. Expanding the definition of large customer will make more customers eligible.
Recycled water	To continue to defer setting prices for these schemes.	Sydney Water's proposed prices are reasonable, as they are consistent with the pricing principles we developed in our 2019 Recycled Water review.
Sydney Water Developer Direct (SWDD)	We recommend that SWDD revisit its model for pricing application services.	Sydney Water may be unintentionally setting prices too low, which may impact competition. It has stated it will adopt our recommendations in its annual application fee review.

Further information

- Final Report and Determination
- Bill calculator
- Key contacts
  - Review contact: Anthony Rush (02) 9113 7790
  - Media contact: Adrian Flood 0427 105 865