IPART
Independent Pricing and Regulatory Tribunal
New South Wales

Sydney Water and WaterNSW Greater Sydney

Review of maximum charges from 1 July 2020

Joint Public Hearing, SMC Conference & Function Centre

26 November 2019

The proposals at a glance

WaterNSW's prices, 2020-24

Opex:	$384 million
Capex:	$682 million
Revenue:	$890 million
Proposed price changes:	↓ 1%

Sydney Water's prices, 2020-24

'Baseline' costs		If drought continues...	
Opex:	$5.5 billion	**Opex:**	$5.9 billion
Capex:	$5.1 billion	**Capex:**	$5.5 billion
Revenue:	$10.7 billion	**Revenue:**	$10.7 billion
Residential bill:	↓ 3.2% (-$37)	**Residential bill:**	↑ 2.5% (+$30)
Non-residential:	↓ 0.5-12%	**Non-residential:**	↓ 9% to ↑ 6.5%

2017 SDP prices

When SDP was turned on (mid-2019), residential water bills increased by an average of $25 to $35.

How today will proceed

Part A – WaterNSW Greater Sydney

From 10:30 to 12:15pm

WaterNSW presentation

Two sessions

Part B – Sydney Water

From 1:00 to 3:30pm

Sydney Water presentation

Three sessions

Drop-in Session

From 4:00 to 6:00pm

We are using “Slido” to take questions

Go to **slido.com** and enter the event code:

#G848 – WaterNSW GS review

#F950 – Sydney Water review

WaterNSW Greater Sydney's prices

WaterNSW's presentation on its pricing proposal

Then followed by:

1. Efficient expenditure, cost allocation and prices
2. How best to share risk between WaterNSW and its customers
3. Open question session

WaterNSW's presentation

SESSION 1

Efficient expenditure, cost allocation and prices

We will review WaterNSW's proposed operational expenditure

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We have engaged expert consultants to review WaterNSW's proposed operating costs.

2016 Determination

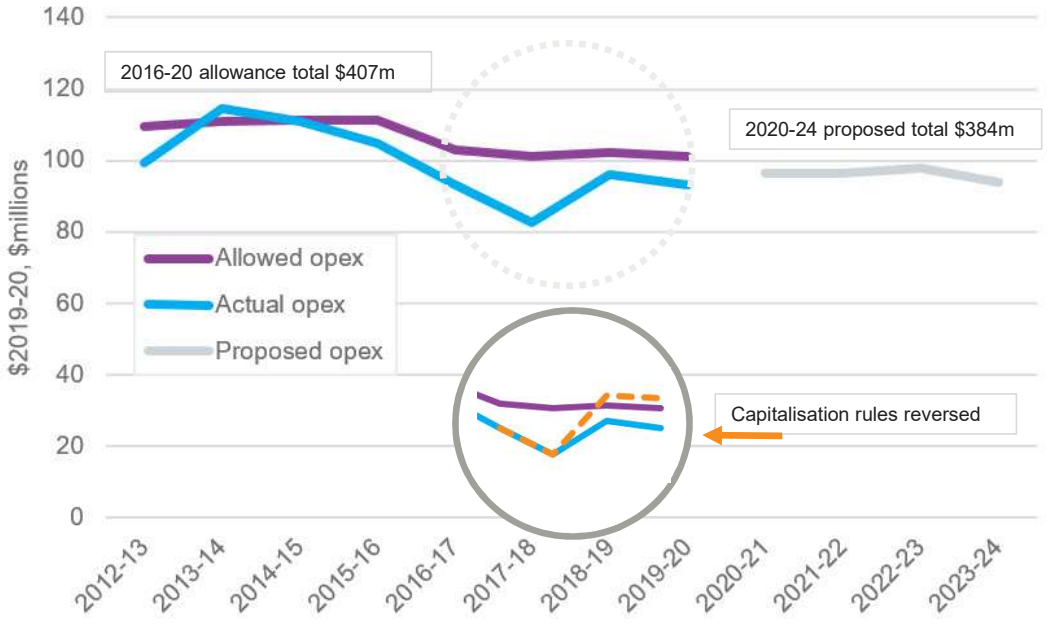
Business restructure & capitalisation policy

2020 Determination

▼ 6%

Steady state environment
1% productivity adjustment

WaterNSW's proposed and historical operational expenditure



We will review WaterNSW's proposed capital expenditure

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We have engaged expert consultants to review WaterNSW's proposed capital costs.

2016 Determination

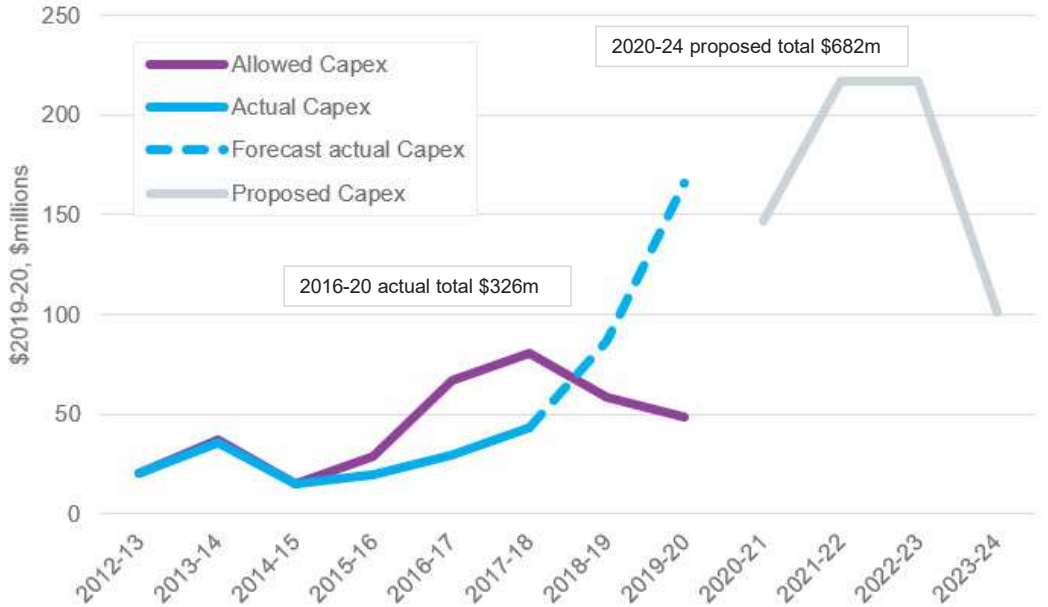
Mixed results due to
Some deferral and cancellation
Change in scope and new projects

2020 Determination

▲169%

Growth in demand
Regulatory compliance
Drought and water resilience

WaterNSW's proposed and historical capital expenditure



Cost allocation and prices

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WaterNSW's proposal

Generally **maintain** the existing:

- **Allocation of costs** between the Sydney Water, councils and raw/unfiltered water customers, with most costs being allocated to Sydney Water.
- **Fixed to volumetric charges ratio (80:20)** for its bulk water prices to Sydney Water and councils.

Issues

- While improving **pricing certainty**, the proposed council charges may not reflect the **underlying cost structure** of supplying them.
- There may be scope for greater alignment between WaterNSW's **price structure** and **cost structure** by moving to a price structure that has greater fixed share.

Stakeholder feedback

- Most stakeholders support maintaining **predominantly fixed charges** in WaterNSW's price structure.
- WaterNSW considered 90:10 could better match its cost structure in its submission to our Issues Paper.

Session 1 – Questions for discussion

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Q1 Should WaterNSW have achieved greater operational efficiencies from its restructuring? Are WaterNSW's projected efficiencies over the 2020 determination period sufficient?

Q2 Is WaterNSW's proposed expenditure appropriate in terms of drought and growth? Does WaterNSW have the capacity to deliver its proposed capital program?

Q3 Is WaterNSW's proposal to reduce current charges to all three councils by 1% (rather than update these charges to reflect current cost and demand estimates) appropriate?

Q4 Should we move away from an 80:20 price structure? What would any changes look like?

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Questions from the audience

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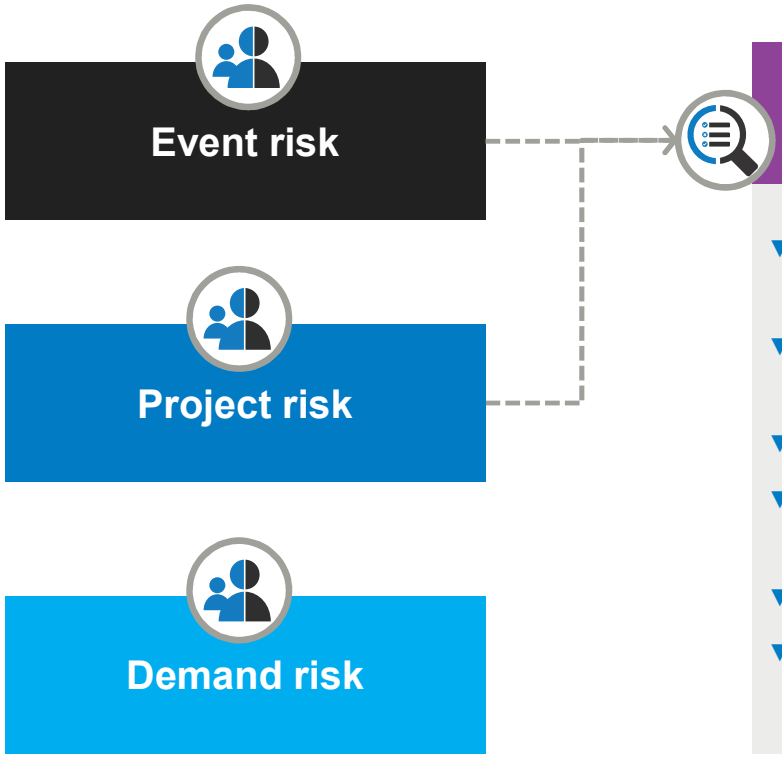
SESSION 2

How best to share risk between WaterNSW and its customers

Key proposals on its regulatory framework



Criteria for cost pass-through mechanisms

- Is there a trigger event that can be clearly defined and identified?
- Can we fully assess the resulting efficient cost associated with the trigger event?
- Does the resulting costs exceed a materiality threshold?
- Can the regulated business influence the likelihood of the trigger event or the resulting costs?
- Is the mechanism symmetric?
- Will the resulting prices better reflect the efficient cost of service both before and after the trigger event occurs?

How to allocate event risk

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What is the type of risk being addressed?

Unforeseen costs that may arise from a **change in regulatory requirements** and/or a **catastrophic event** during the determination period

What is WaterNSW proposing?

Establish **new** cost pass-through mechanisms for these two events

What feedback did we get?

Stakeholders are concerned that this may inefficiently shift risk to end-use customers and not create the right incentives to minimise these risks efficiently

How does the current framework address this risk?

- For utilities to plan for these events
- Seek an early determination

How to allocate project risk

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What is the type of risk being addressed?

Capital project(s) that may commence during the determination period which are not factored in the prices

What is WaterNSW proposing?

- Establish a contingent project mechanism or capex reopener
- Obtain a preapproval that costs will be roll-forward in subsequent reviews
- Seek an early determination

What feedback did we get?

Stakeholders are concerned that this may result in significant bill increases and lack of consultation for these projects

How does the current framework address this risk?

- Incur costs first and roll-forward into next reviews
- Reprioritise expenditure
- Seek an early determination
- Length of the determination period

How to allocate demand risk

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What is the type of risk being addressed?

Forecast demand is not equal to actual demand

What is WaterNSW proposing?

To introduce the demand volatility adjustment mechanism which is in place for Sydney Water and Hunter Water

What feedback did we get?

WaterNSW maintains its position in its proposal

Sydney Water does not support a demand volatility adjustment

How does the current framework address this risk?

- Establish a demand volatility adjustment
- Manage through price structures

Session 2 – Questions for discussion

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Q1 How would WaterNSW's proposal affect its incentives to manage the risk of unexpected events?

Q2 Does our current framework adequately address risk from uncertain projects that arise during the determination period?

Q3 Does WaterNSW need a demand volatility adjustment mechanism? If we change its price structure to have greater fixed share, will it still need this mechanism?

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Questions from the audience

Slido #G848

SESSION 3

Open question session

LUNCH

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Sydney Water's prices

Sydney Water's presentation on its pricing proposal

Then followed by:

1. Drought, the environment and expenditure
2. Growth and expenditure
3. Prices and form of regulation
4. Open question session

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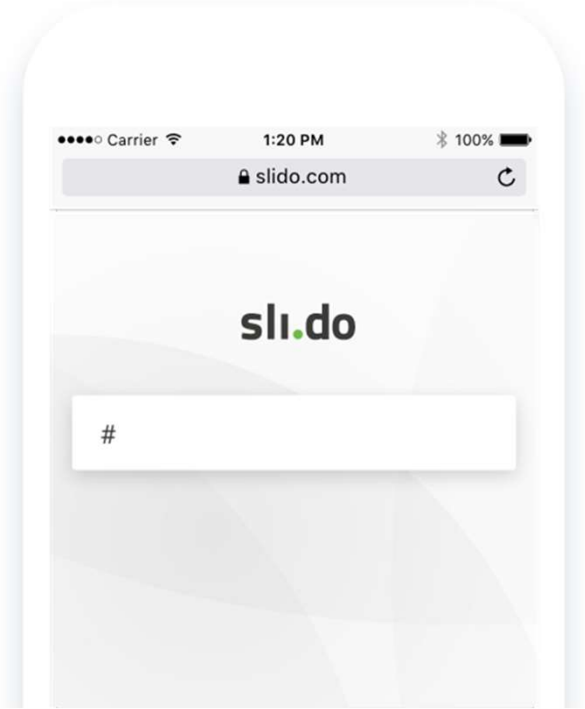

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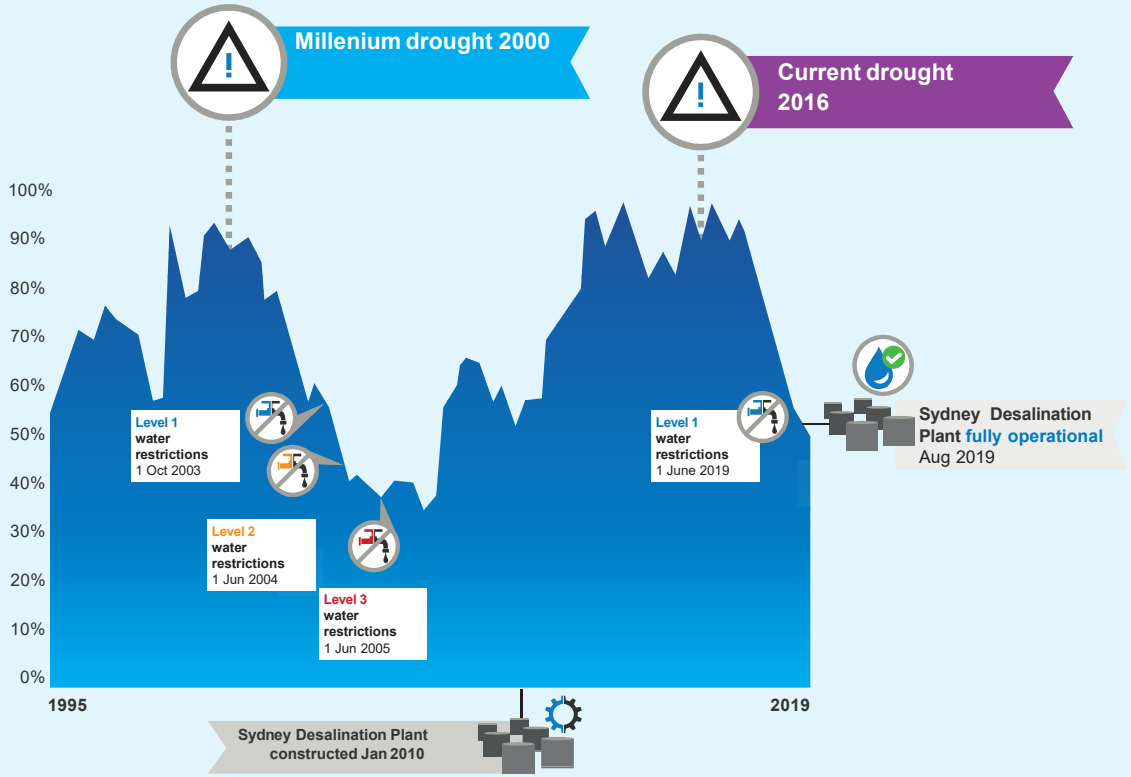
#F950 – Sydney Water review

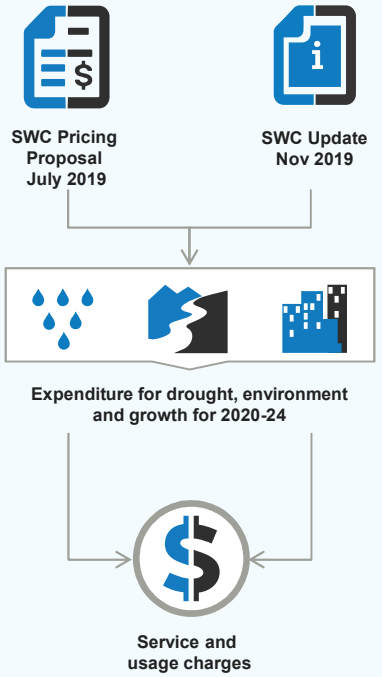
Sydney Water's presentation

SESSION 1

Drought, the environment and expenditure

Our review recognises the impact of ongoing drought conditions





Drought conditions expected to have large impact on Sydney Water's ongoing costs

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Expenditure may grow by $1.4 bill

Additional water security and resilience expenditures brings total expenditure up to $11.4 bill over 2020-24 (from $10 bill)

Additional capex

Up to $0.9 bill

- Network upgrades for increased Sydney Desalination Plant (SDP) output $368 mill
  - We will take into account infrastructure investments recovered from IPART's 2017 SDP determination
- Compressed investment horizon for Macarthur-Prospect pipeline link $484 mill
  - An additional $77 mill in capex will also be invested in 2019-20
- Increase wet weather overflow program to meet new EPA standards $52 mill
  - Wet weather overflows performance has met EPA standards, but dry weather overflows have not
- Cascade water filtration plant upgrades $41 mill

Additional opex

Up to $0.5 bill

- Conditional opex for consumer water saving programs ($239 mill) and implementing water restrictions ($106 mill);
- The key increases in base opex are from water efficiency programs and increased reactive maintenance (net increase of $135 mill)
  - Potential to invest more in addressing leakage or water pressure reduction

Impact of drought on Sydney Water assets and environmental performance

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Asset renewal program

- ***$2.7 bill on existing assets, including expenditure to address deteriorating asset conditions -*** increase in number of systems breaching Environmental Protection Licence limits in terms of dry weather overflows to waterways over 2016 period
  - Partly due to a reduction in regular inspections and root clearance in past years

Discretionary spend above regulated standards: 2% capex

- ***$80 mill on 2 discretionary projects*** based on customer engagement & willingness to pay
  - We will consider if costs should be recovered from customers' bill or as a separate charge
  - Also review works against EPA standards, customer WTP, and if it will be delivered efficiently

Economic Level of Water Conservation (ELWC) programs

- ***$8 mill in 2019-20, to increase to $10 mill/yr and up to $239 mill extra*** over 2020 determination period if triggers are reached
  - Potential to increase focus on leakage reduction activities

Session 1 – Questions for discussion

Q1 What are your views on Sydney Water's proposals for addressing drought and environmental performance? Are there other efficient ways to achieve water security and resilience?

Q2 What are some ways our review could assess the cost of reactive and proactive asset management related to drought?

Q3 How should our review account for the risks of drought and support water conservation, including the cost of leakage?

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Questions from the audience

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SESSION 2
Growth and Expenditure

Longer term trend indicates more growth

In June 2015, the population of Greater Sydney was estimated to be 4.92 million…

By 2029, Greater Sydney's population is **expected to reach 6.4 million**, to be accommodated through higher density dwellings as well as inland development.

We usually set prices for a 4 or 5 year period.

2029 population growth may be realised within the next two price periods.

We will review Sydney Water's proposed costs

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Developer charges have been set to zero since 2008

We have engaged expert consultant's to review Sydney Water's key growth assumptions and proposed expenditure. They will:

1. Review growth demand projections, including forecast water sales
2. Review proposed growth expenditure programs (largely capex)
3. Recommend efficient expenditure for the 2020-24 determination period

Session 2 – Questions for discussion

Q1 What are your views on Sydney Water's forecast growth projections?

Q2 What are your views on Sydney Water's proposed capital expenditure including expenditure related to growth?

Q3 How should Sydney Water plan for and recover the investment needed to service Sydney's growing population?

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Questions from the audience

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SESSION 3

Prices and form of regulation

The impact of ongoing drought on prices

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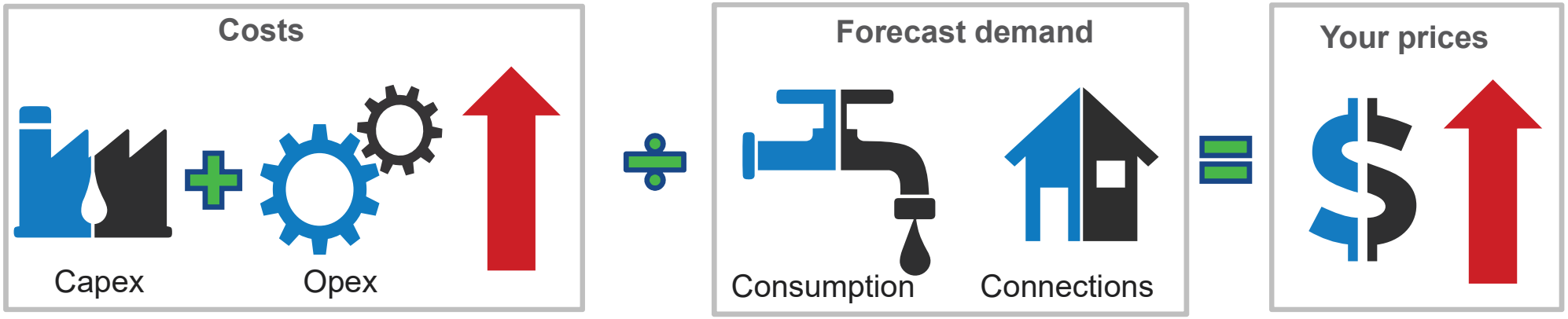
Sydney Water has proposed cost pass-throughs if drought conditions worsen.

These costs include:

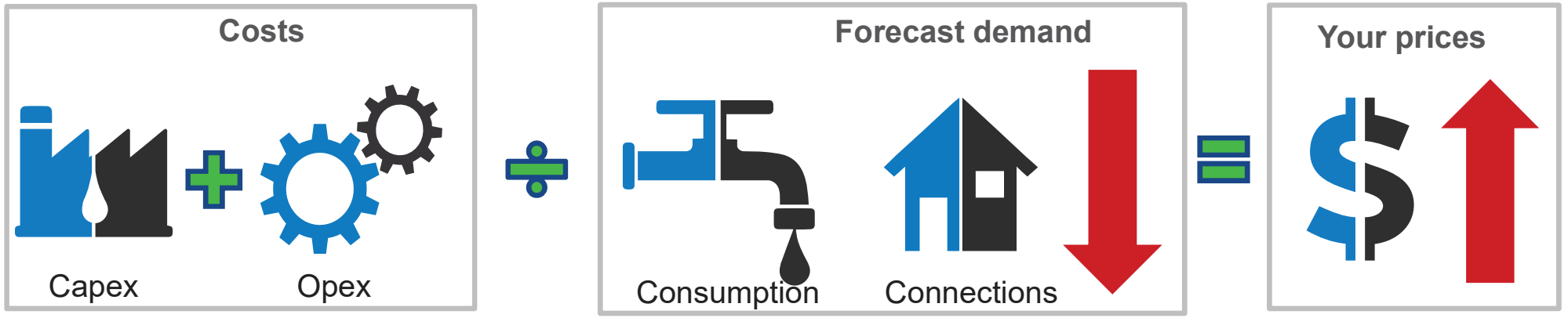
▼ Network upgrades to accommodate increased flows from the expansion of SDP

▼ Additional water conservation programs, water restriction implementation costs and drought management costs if water restrictions worsen



The impact of drought on forecast water sales

Demand is difficult to forecast in drought conditions and Sydney Water has assumed "average" demand. Sydney Water has proposed to adjust demand annually to take account of variations in actual demand compared to its forecast demand.



Sydney Water's key proposed prices

		Current prices	Proposed price: 'baseline'	Proposed prices if drought continues
Water	Water usage ($/kL)	2.11	2.11	**2.24**
	Water service - 20mm ($/year)	82.28	97.54	**151.0**
Wastewater	Wastewater usage ($/kL)	1.17	0.61	0.61
	Wastewater service – 20mm ($/year)	585.80	628.34	628.34
	Deemed usage charge – ($/year)	176.34	91.51	91.51
Stormwater	Service charge – residential single ($/year)	78.88	80.98	80.98
	Service charge – residential multi ($/year)	24.62	25.28	25.28

Drought prices are based on:

- Dam levels at 40%-30%
- The existing Sydney Desalination Plant is turned on
- An expansion of the Sydney Desalination Plant
- No adjustments to demand.

Stakeholders have asked us to consider scarcity pricing

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A water scarcity price

- The water **usage charge** increases as dam levels fall.

Incentive to reduce water consumption

- **You have control over the usage component** of your water and sewerage bill.

Service charge + (usage price X water consumption) = your bill

Customers can influence future prices

- Scarcity pricing can reduce consumption and possibly delay the next augmentation required.
- Can reduce the severity of water restrictions.

Late and declined payment fees

	2020-21	2021-22	2022-23	2023-24
Late payment fee ($)	4.75	4.80	4.85	4.90
Declined fee ($)	14.30	14.46	14.62	14.78

Session 3 – Questions for discussion

Q1 What are your views on Sydney Water's proposal to maintain the 2019-20 water usage charge?

Q2 What are your views on stakeholder suggestions to introduce a water scarcity price given ongoing drought conditions?

Q3 How should we incorporate Sydney Water's proposed cost pass throughs and annual true-up of demand volatility in our approach?

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Questions from the audience

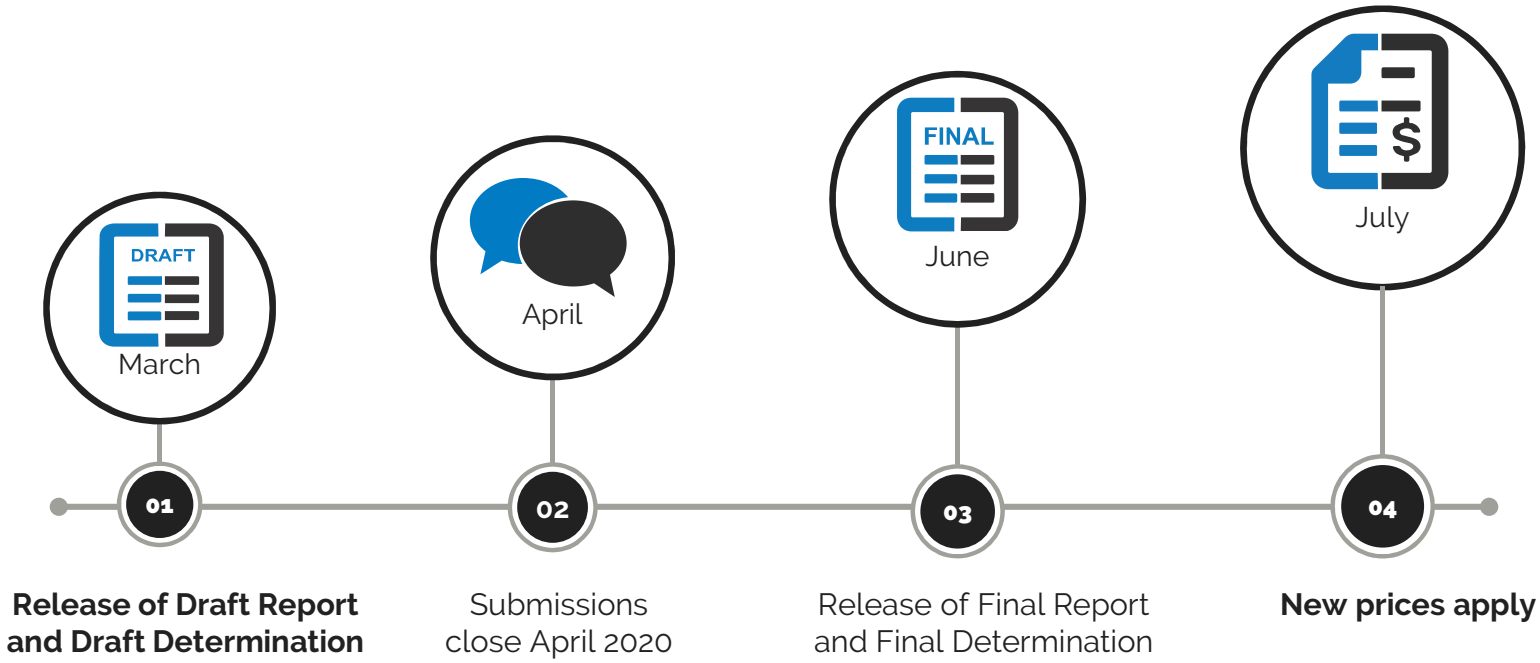
Slido #F950

SESSION 4

Open question session

Closing remarks

Review timeline



Next: Drop-in Session

Supplementary information

WaterNSW's proposed prices from 1 July 2020

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	2019-20	2020-21	2021-22	2022-23	2023-24
Sydney Water Corporation					
Fixed charge ($ million/year)	175	175	176	176	177
Volumetric charge ($/ML) (SDP 'Off') [a]	80	76	75	75	74
Volumetric charge ($/ML) (SDP 'On') [a]	95 [b]	90	89	88	87
Councils					
Wingecarribee Council fixed charge ($ millions)	1.12	1.11	1.11	1.11	1.11
Shoalhaven City Council fixed charge ($ millions)	0.02	0.02	0.02	0.02	0.02
Goulburn-Mulwaree Council fixed charge ($ millions)	0.03	0.02	0.02	0.02	0.02
Volumetric charge ($/ML)	58	58	58	58	58
Raw water customers					
Fixed charge ($)	-	-	-	-	-
Volumetric charge ($/ML)	736	729	729	729	729
Unfiltered water customers					
Fixed charge for 20mm meter ($) [c]	112	111	111	111	111
Fixed charge for 200mm meter ($) [c]	11,241	11,131	11,131	11,131	11,131
Volumetric charge ($/ML)	1,280	1,268	1,268	1,268	1,268

[a] SDP 'Off' means when the Sydney Desalination Plant (SDP) is not supplying water to Sydney Water. Then, SDP 'On' is when the SDP is being used to supply water to Sydney Water.

[b] In its pricing proposal, WaterNSW indicated a volumetric charge of $80/ML to Sydney Water assuming SDP 'On' in 2019-20, which is the same as the charges assuming SDP 'Off'. Using the same method that WaterNSW has used to calculate the prices assuming SDP 'On' over the 2020 determination, we estimated the volumetric charge to be $95/ML in 2019-20 period.

[c] For unfiltered customers, there are separate fixed charges for 20mm, 25mm, 30mm, 32mm, 40mm, 50mm, 80mm, 100mm, 150mm and 200mm meter connections. We only present the fixed charges for 20mm and 200mm connections in this table.

Sydney Water's key proposed 'baseline' prices from 1 July 2020 ($2019-20)

	2019-20	2020-21	2021-22	2022-23	2023-24
Water					
Residential service price $/year	82.28	97.54	97.54	97.54	97.54
Water usage price $/kL	2.11	2.11	2.11	2.11	2.11
20mm non-residential service price $/year[a]	82.28	97.54	97.54	97.54	97.54
Wastewater					
Residential service price $/year	585.80	628.34	628.34	628.34	628.34
Deemed wastewater usage price $/year (residential and non-residential)	176.34	91.51	91.51	91.51	91.51
20mm non-residential service price ($/year) [a]	585.80	628.34	628.34	628.34	628.34
Wastewater usage price $/kL	1.17	0.61	0.61	0.61	0.61
Stormwater					
Units, small non-residential(<200 sqm) $/year	24.62	25.28	25.28	25.28	25.28
Houses, medium non-residential (201-1,000 sqm) $/year	78.88	80.98	80.98	80.98	80.98
Large (1,001-10,000 sqm) non-residential $/year	459.67	471.93	471.93	471.93	471.93
Very large (10,001-45,000 sqm) non-residential $/year	2,043.03	2,097.52	2,097.52	2,097.52	2,097.52
Largest (>45,000 sqm) non-residential $/year)	5,107.59	5,243.81	5,243.81	5,243.81	5,243.81

[A] For meter size not specified above the following formula applies:

$$\frac{(\text{Meter size})^2 \times 20\text{mm meter charge}}{400}$$