8 Pricing of Water, Sewerage and Stormwater Drainage Services

Central Coast Council

- Central Coast Council consulted with customers when determining pricing and levels for water, sewerage and stormwater drainage services
- Proposed water usage charge is $2.25 ($2022-23) per kL
- Proposed water service charge is $238.33($2022-23) residential
- Proposed sewer usage charge is $0.93 ($2022-23) residential
- Proposed sewer charge is $664.94 ($2022-23) residential (or $614.96 including 125kl deemed usage @.93 per Kl * .75 discharge factor)
- Proposed stormwater charge $181.70 ($2022-23) standard residential charge

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1 Introduction

Central Coast Council (Council) has calculated water, sewer and stormwater drainage prices that allow for the recovery of proposed target revenues. The proposed pricing allows Council to recover the revenue between residential and non-residential customers via the fixed and usage charges for water and sewer and via standard charges for stormwater drainage. This pricing reflects IPART's best practice principles and past IPART decisions.

The bills have been calculated to remain consistent in real terms throughout the proposed determination period. This was done by summing up the total revenue required for the proposed 4-year determination period and smoothing the billing evenly so the only increase will be the application of the Consumer Price Index (CPI) per annum.

When establishing Council's pricing for the 2022 determination period, the community was engaged to gather feedback on proposed increases to pricing for specific issues regarding environmental licences and regulatory obligations. This Technical Paper outlines the proposed increases in pricing to:

- Improve Workplace Health and Safety
- Implement a transition strategy to improve proactive maintenance and improvement of risk management planning of critical water and sewer assets
- Improve rectification programs, pump station analysis and reduce Sewage Pump Station (SPS) overflows
- Increase mains cleaning programs to improve water quality
- Increase sewer inspections and maintenance programs
- Introduce a Sewage Treatment Plant (STP) improvement program including clean out of the grit chambers, aeration tanks and digesters, wet weather ponds, as well as improvements in sludge management
- Improve sampling results with a quality database
- Improve bushfire management practices by reducing hazards, reducing water quality risks, maintain a balanced ecology and protect water and sewer assets
- Improve Council's catchment management practices by elimination or minimisation of all sources of impurity in the catchments resulting in clean and safe water, reducing the costs of treatment as well as protecting the environment
- Ensure that the standards are met in relation to dam safety
- Improve Council's outfall monitoring thus reducing ecological impacts of effluent to ocean outfalls
- Undertake critical asset inspections, cleaning and repair to inform forward planning, manage risk, reduce reactive maintenance requirements and prevent catastrophic asset failure

- Deliver floodplain risk management planning required to guide sustainable development and strategic prioritisation of stormwater drainage upgrade works
- Improve stormwater quality management to maintain the health of Council's waterways
- Implement Plans of Management for creeks identified as being critical to maintaining flood planning levels and preventing flooding of existing properties.

Getting the community involved

Council began its consultation with the community in early 2021 where it surveyed approximately 1,300 residents. Apart from lowering the price of water, (as emerged as an unprompted response) water quality improvement was seen to be a key area that the community would like Council to focus attention on in the future.

In addition to surveys, Council was also interested in collecting views on price increases specific to meeting regulatory and environmental obligations and its ability to maintain its assets. With the help of engagement consultants Woolcott Research & Engagement, two additional community forums were run in July 2021 with approximately 80 participants.

The overriding aim of the engagement exercise was to explore preferences for future service delivery amongst Council's customers regarding water, sewer and stormwater drainage for the Central Coast area.

More specifically, the objectives were to:

- Explore water quality issues within the household
- Explore sewerage service issues (sewerage overflows) both within the home and the wider community
- Obtain feedback in relation to a series of costed water supply service options
- Obtain feedback in relation to a series of costed sewerage service options
- Obtain feedback in relation to a series of costed stormwater drainage service options; and
- Determine preferences for each service option (once all costed options had been revealed)

For each service area, participants were provided three options:

1. **Option A** – No change to services and maintain existing pricing with a minimal increase, however, Council will only to able to respond to risk-based issues and will not meet its regulatory obligations.
2. **Option B** – Increase bills slightly to assist Council maintaining its assets with better environmental outcomes. This will decrease the risk to the community, assets and the environment.

3. **Option C** – Some topics also included a third option, Option C, that involved a more significant improvement to service levels for a higher additional cost e.g. additional investment in SMART technologies to exceed our regulatory obligations and environmental standards (this includes all the revenue required for Option B).

The overall response was that the community agreed to pricing in relation to a combination of both Options B and C. Option A was preferred by some forum participants understanding that this would not improve existing performance.

- Choosing option A was an increase to bills based on the 2019-20 re-baselined expenditure of $23M ($2021-22) resulting in approximately $19 per quarter on existing bills.
- Choosing option B would result in an increase in bills by approximately $208 ($52 per quarter)
- Choosing option C would result in a quarterly increase in bills by approximately $328 ($82 per quarter)

A summary of the outcomes is detailed in Table 1 and the detailed scenarios are in Appendix A (a copy of the full report from the forums is located in Technical Paper 1)

Table 1: Community forum result. The no# in the columns represent votes for each scenario

	Option A	Option B	Option C
Water quality and reliability	5	54	40
Environmental and safety management	9	91	Not offered
Water conservation and engagement	21	79	Not offered
Sewerage overflows	10	35	54
TPs and outfalls	12	88	Not offered
Critical Stormwater Drainage Asset Inspections, Cleaning and Repairs	10	90	Not offered
Stormwater quality and urban channels	28	72	Not offered
Flood planning	22	39	40
TOTAL	117	548	134

This Technical Paper details Council's current bills, its proposed billing for water, sewer and stormwater drainage services, and the reasons for its proposed bills.

2 Background

The current levels of pricing for water and sewer for Council's residential customers are at levels reminiscent of the 2009 IPART regulatory period.

Figure 1 and Figure 2 show the pricing for previous Local Government Areas (LGA's) of Gosford and Wyong in the 2008-09 determination period.

In 2009 the water service charge was:

- $88.48 ($real) for Gosford
- $97.38 ($real) for Wyong
- The current water service charge is $88 ($real)

The 2009 sewer service charge was:

- $446 ($real) for Gosford
- $413 ($real) for Wyong
- The current average sewer service charge is $398 ($real)

The water usage charge is also comparable to what was set in 2019 which was $2.00 per kL compared to $1.71 ("$real) (with CPI) = $2.07.

Table 1 Gosford City Council charges for residential customers ($2008/09)

		2008/09 Current	2009/10	2010/11	2011/12	2012/13	Overall increase
Water	Service pa	88.48	88.48	88.48	88.48	88.48	0%
	Usage per kL	1.67	1.71	1.76	1.82	1.89	
Year on year increase			2.5%	3.0%	3.5%	3.5%	13.1%
Sewerage	Service pa	399.40	446.19	456.11	466.27	476.62	
Year on year increase			11.7%	2.2%	2.2%	2.2%	19.3%
Stormwater	Service pa	60.82	69.33	70.71	72.11	73.54	
Year on year increase			14.0%	2.0%	2.0%	2.0%	20.9%

Note: Water service charge is based on a 20mm meter.

Figure 1: Source IPART fact sheet based on Final report May 2009 from July 1 July 2009 $real

Table 3 Wyong Shire Council charges for residential customers ($2008/09)

		2008/09 Current	2009/10	2010/11	2011/12	2012/13	Overall increase
Water	Service pa	97.31	97.86	114.03	130.53	149.13	
Year on year increase			0.6%	16.5%	14.5%	14.2%	53.3%
	Usage/kL	1.67	1.71	1.76	1.82	1.89	
Year on year increase			2.5%	3.0%	3.5%	3.5%	13.2%
Sewerage	Service pa	412.67	413.00	413.00	413.00	413.00	
Year on year increase			0.1%	0.0%	0.0%	0.0%	0.1%
Stormwater	Service pa	0	80.00	80.00	80.00	80.00	

Note: Water Service charge is based on a 20mm meter.

Figure 2: Source IPART fact sheet based on Final report May 2009 from 1 July 2009

Figure 3 and Table 2 show the comparison of bills from the 2009 determination to the 2019 determination using $2019-20.

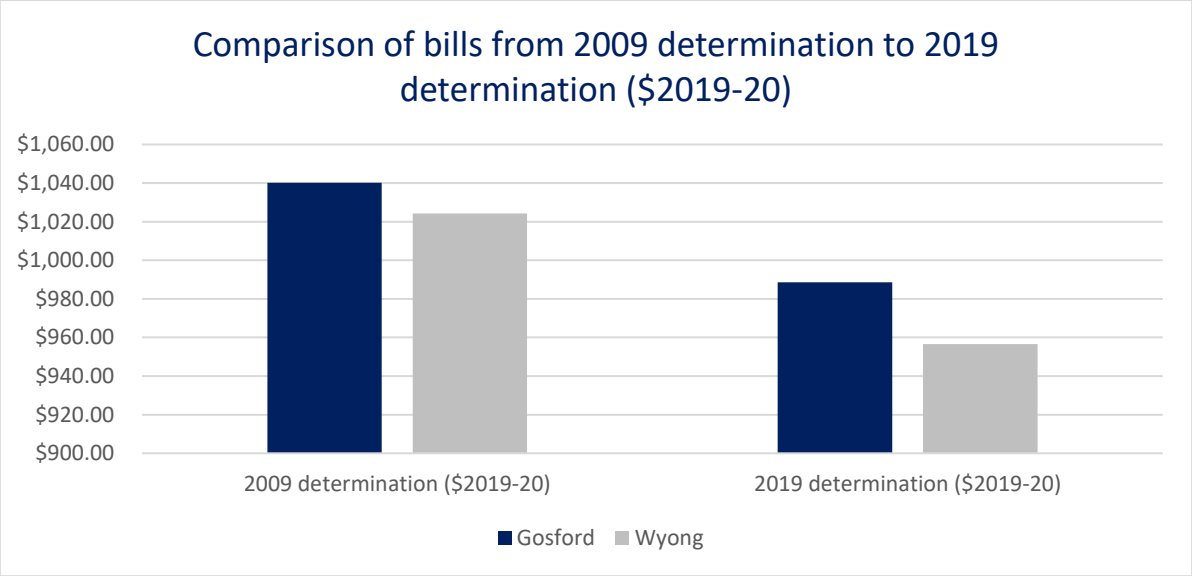


Figure 3: Comparison from 2009 determination to 2019 determination ($2019-20)

Table 2: 2009 determination compared to 2019 determination using ($2019-20)

Previous LGA	Service	2009 determination ($2009-10)	2009 determination ($2019-20)	2019 determination ($2019-20)
Gosford	Water service charge	88.48	106.89	84.50
	Water usage charge	256.50 (1.71*150kL)	310.50 (2.07*150kL)	304.50
	Sewer service charge	446.19	539.05	495.06

Previous LGA	Service	2009 determination ($2009-10)	2009 determination ($2019-20)	2019 determination ($2019-20)
	Stormwater drainage charge	69.33	83.76	104.55
TOTAL bill		**860.50**	**1,040.20**	**988.61**
Wyong	Water service charge	97.86	118.23	84.50
	Water usage charge	256.50 (1.71*150kL)	310.50	304.50
	Sewer service charge	413	498.95	463.00
	Stormwater drainage charge	80	96.65	104.55
TOTAL bill		**847.36**	**1024.33**	**956.55**

In the 2019 IPART determination, the requested operational expenditure was reduced significantly. In total, a reduction of $37.6M ($2021-22) over the three years from 2019-22.

This reduction resulted in lower bills for the community. However, the level of pricing is not sustainable and is resulting in failing asset performance, breaches in Council's Environmental Protection Licence thus impacting its environment and not meeting the regulatory obligations. Council's community will see higher proposed pricing for the 2022 determination to address these issues to that at a similar level in the 2018-19 financial year.

	2019-20	2020-21	2021-22	Total
Council proposed operating expenditure	**103.1**	**102.6**	**102.0**	**307.7**
Adjusting baseline to 2017-18 level	-13.1	-12.6	-12.0	-37.7
Productivity from IT transformation	-0.8	-1.5	-1.5	-3.8
Reduced overtime from call centre	-0.2	-0.4	-0.4	-1.0
Labour cost reduction	-1.7	-1.6	-1.6	-5.0
Hire services adjustment	0.1	0.1	0.1	0.4
Additional materials	0.2	0.2	0.2	0.6
Energy cost increase	4.0	3.5	3.7	11.1
Continuing efficiencies	-0.2	-0.5	-0.7	-1.4
IPART operating expenditure	**91.4**	**89.9**	**89.8**	**271.0**
% difference	-11.3%	-12.4%	-12.0%	-11.9%

Note: Numbers may not add due to rounding.
Source: Atkins Cardno, *Central Coast Council Expenditure Review*, March 2019, Chapter 3 and IPART analysis.

Figure 4: IPART allowance/adjustments for revenue – Source IPART Final Report 2019 ($2018-19)

The reduction in overall revenue resulted in significant reductions in the bills, in some cases up to 53%.

	IPART prices	Council proposed		Former Gosford		Former Wyong	
	2019-20[a]	2019-20[a]	% change	2018-19	% change	2018-19	% change
Water usage price ($/kL)							
All customers	**2.00**	2.20	-9%	2.29	-13%	2.29	-13%
Service prices ($/year)							
Residential[b]	**83.41**	113.20	-26%	197.81	-58%	164.63	-49%
Non-residential							
▼ 20mm meter	**83.41**	113.20	-26%	176.67	-53%	146.01	-43%
▼ 25mm meter	**130.34**	176.88	-26%	276.05	-53%	228.14	-43%
▼ 40mm meter	**333.66**	452.80	-26%	706.68	-53%	584.04	-43%
▼ 50mm meter	**521.34**	707.50	-26%	1,104.19	-53%	912.56	-43%
▼ 80mm meter	**1,334.64**	1,811.20	-26%	2,826.72	-53%	2,336.16	-43%
▼ 100mm meter	**2,085.37**	2,830.00	-26%	4,416.75	-53%	3,650.25	-43%
▼ 150mm meter	**4,692.08**	6,367.50	-26%	9,937.69	-53%	8,213.06	-43%

Figure 5: Water bills from 2019 determination: Source IPART Final Report 2019 ($2018-19)

Table 1.1 Water supply service charges

Meter size or Property type	1 July 2019 to 30 June 2020 ($)	1 July 2020 to 30 June 2021 ($)	1 July 2021 to 30 June 2022 ($)
Unconnected Property	0	0	0
Unmetered Property	84.50	84.50 x CPI_1	84.50 x CPI_2
20mm	84.50	84.50 x CPI_1	84.50 x CPI_2
25mm	132.03	132.03 x CPI_1	132.03 x CPI_2
32mm	216.32	216.32 x CPI_1	216.32 x CPI_2
40mm	338.00	338.00 x CPI_1	338.00 x CPI_2
50mm	528.12	528.12 x CPI_1	528.12 x CPI_2
80mm	1,351.99	1,351.99 x CPI_1	1,351.99 x CPI_2
100mm	2,112.48	2,112.48 x CPI_1	2,112.48 x CPI_2
Other Meter sizes	$\frac{(Meter\ size\ in\ mm)^2 \times water\ supply\ access\ charge\ for\ a\ 20mm\ Meter\ for\ the\ applicable\ Period}{400}$		

Figure 6: Water prices from 2019 determination ($2018-19)

	Current prices 2018-19	Council proposed each year	IPART prices			Change (current to 2019-20)	Difference from Council proposal
			2019-20	2020-21	2021-22		
Former Gosford LGA							
House	672.66	538.70	488.81	488.81	488.81	-27%	-9%
Multi-premises	672.66	538.70	451.46	451.46	451.46	-33%	-16%
Former Wyong LGA							
House	483.28	538.70	457.45	457.45	457.45	-5%	-15%
Multi-premises	483.28	538.70	420.10	420.10	420.10	-13%	-22%

Note: A 75% discharge factor has been applied to all residential prices. These charges also include the deemed discharge component, which is: 150 kL per annum for all residential properties in current prices; 112.5 kL per annum for all the Council's proposed prices; and 125 kL per annum for houses and 80 kL per annum for apartments in our prices.

Sources: Central Coast Council, *Submission to IPART Review of Prices for Water, Sewerage and Stormwater Drainage Services*, September 2018, p 11, and IPART analysis.

Figure 7: Prices from 2019 determination ($2019-20)

	Current prices 2018-19	Council proposed each year	IPART prices			Change (current to 2019-20)	Difference from Council proposal
			2019-20	2020-21	2021-22		
Former Gosford LGA							
20mm meter	862.59	493.70	513.41	513.41	513.41	-40%	4%
25mm meter	1,417.83	771.41	802.20	802.20	802.20	-43%	4%
40mm meter	3,823.86	1,974.80	2,053.64	2,053.64	2,053.64	-46%	4%
50mm meter	6,044.81	3,085.63	3,208.81	3,208.81	3,208.81	-47%	4%
80mm meter	15,668.94	7,899.21	8,214.56	8,214.56	8,214.56	-48%	4%
100mm meter	24,552.75	12,342.52	12,835.25	12,835.25	12,835.25	-48%	4%
150mm meter	55,399.31	27,771.66	28,879.31	28,879.31	28,879.31	-48%	4%
Former Wyong LGA							
20mm meter	358.78	448.70	471.60	471.60	471.60	31%	5%
25mm meter	358.78	771.41	448.16	528.77	624.20	25%	-42%
40mm meter	1,012.10	1,974.80	1,147.29	1,353.64	1,597.96	13%	-42%
50mm meter	1,651.44	3,085.63	1,792.64	2,115.06	2,496.81	9%	-42%
80mm meter	4,421.90	7,899.21	4,589.16	5,414.57	6,391.84	4%	-42%
100mm meter	6,979.25	12,342.52	7,170.57	8,460.26	9,987.25	3%	-42%
150mm meter	15,858.94	27,771.66	16,133.78	19,035.58	22,471.30	2%	-42%

Note: All prices assume a discharge factor of 100%. The Council will apply each relevant customer's discharge factor on the prices it levies. For example, a discharge factor of 50% applied to the 40mm meter charge in Wyong in 2019-20 would result in a price of $573.65 (that is 50% of $1,147.29). To compare the service charges, we have removed the deemed usage amount from the current and Council proposed prices. Our non-residential prices no longer include a deemed usage (this is discussed below).

Sources: Central Coast Council, *Submission to IPART Review of Prices for Water, Sewerage and Stormwater Drainage Services*, September 2018, p 11, and IPART analysis.

Figure 8: Sewer non-residential prices for 2019 determination ($2019-20)

Meter size or Property type	1 July 2019 to 30 June 2020 ($)	1 July 2020 to 30 June 2021 ($)	1 July 2021 to 30 June 2022 ($)
Unconnected Property	0	0	0
Unmetered Property	520.08	520.08 x CPI_1	520.08 x CPI_2
20mm	520.08	520.08 x CPI_1	520.08 x CPI_2
25mm	812.63	812.63 x CPI_1	812.63 x CPI_2
32mm	1,331.42	1,331.42 x CPI_1	1,331.42 x CPI_2
40mm	2,080.34	2,080.34 x CPI_1	2,080.34 x CPI_2
50mm	3,250.53	3,250.53 x CPI_1	3,250.53 x CPI_2
80mm	8,321.35	8,321.35 x CPI_1	8,321.35 x CPI_2
100mm	13,002.11	13,002.11 x CPI_1	13,002.11 x CPI_2
Other Meter Sizes	$\frac{(Meter\ size\ in\ mm)^2 \times sewerage\ access\ charge\ for\ a\ 20mm\ Meter\ for\ the\ applicable\ Period}{400}$		

[Note: Applying the fixed Sewerage Discharge Factor of 75% for Residential Properties, the adjusted sewerage service charge for a Residential Property in the Former Gosford Area is $390.06 from the Commencement Date to 30 June 2020 and escalated for inflation in each subsequent Period.]

Figure 9: Unadjusted sewerage service charges in former Gosford LGA ($2019-20)

Meter size or Property type	1 July 2019 to 30 June 2020 ($)	1 July 2020 to 30 June 2021 ($)	1 July 2021 to 30 June 2022 ($)
Unconnected Property	0	0	0
Unmetered Property	477.73	477.73 x CPI_1	477.73 x CPI_2
20mm	477.73	477.73 x CPI_1	477.73 x CPI_2
25mm	453.99	535.64 x CPI_1	632.32 x CPI_2
32mm	743.81	877.59 x CPI_1	1,035.99 x CPI_2
40mm	1,162.21	1,371.24 x CPI_1	1,618.73 x CPI_2
50mm	1,815.95	2,142.56 x CPI_1	2,529.27 x CPI_2
80mm	4,648.82	5,484.96 x CPI_1	6,474.93 x CPI_2
100mm	7,263.79	8,570.24 x CPI_1	10,117.08 x CPI_2
Other Meter Sizes	$\frac{(Meter\ size\ in\ mm)^2 \times sewerage\ access\ charge\ for\ a\ 25mm\ Meter\ for\ the\ applicable\ Period}{625}$		

[Note: Applying the fixed Sewerage Discharge Factor of 75% for Residential Properties, the adjusted sewerage service charge for a Residential Property in the Former Wyong Area is $358.30 from the Commencement Date to 30 June 2020 and escalated for inflation in each subsequent Period.]

Figure 10: Unadjusted sewerage service charges in former Wyong LGA ($2019-20)

	2018-19	2019-20	2020-21	2021-22	Council proposed
Houses	Gosford: 124.64 Wyong[a]: 128.32	103.21	103.21	103.21	110.77
Annual change, Gosford		*-17%*	*0%*	*0%*	
Annual change, Wyong		*-20%*	*0%*	*0%*	
Apartments	Gosford: 124.64 Wyong[a]: 96.24	77.41	77.41	77.41	83.08
Annual change, Gosford		*-38%*	*0%*	*0%*	
Annual change, Wyong		*-20%*	*0%*	*0%*	
Farmland	Gosford: 124.64 Wyong[a]: 128.32	103.21	103.21	103.21	Not specified
Annual change, Gosford		*-17%*	*0%*	*0%*	
Annual change, Wyong		*-20%*	*0%*	*0%*	
Vacant land – all customers	Gosford: 124.64 Wyong: Not specified	77.41	77.41	77.41	
Annual change		*-38% (Gosford)*	*0%*	*0%*	

[a] For customers in a declared drainage area.

Figure 11: Stormwater drainage residential prices from 2019 determination ($2018-19)

Property Category	1 July 2019 to 30 June 2020 ($)	1 July 2020 to 30 June 2021 ($)	1 July 2021 to 30 June 2022 ($)
Low Impact Property	104.55	104.55 x CPI_1	104.55 x CPI_2
Residential Property that is not part of a Multi-Premises	104.55	104.55 x CPI_1	104.55 x CPI_2
Each Property within a Residential Multi-Premises or Mixed Multi-Premises	78.41	78.41 x CPI_1	78.41 x CPI_2
Vacant Land	78.41	78.41 x CPI_1	78.41 x CPI_2

Figure 12: Stormwater drainage residential prices from 2019 determination ($2019-20)

2.1 How Council determine the price for water and sewer

Council's customers live in different types of residences associated with both residential and non-residential properties, therefore the way Council bills its customers is varied.

For residential properties there are:

- Standalone properties - houses where there is one 20mm meter to the property
- Multi premises (apartment, duplex etc.) where the residences are individually metered or have a shared meter. These residences can be strata or non-strata
- Mixed multiple residences (residential and non-residential are in the same property (e.g. residences that are on top of shops) where there is a common meter

- Retirement villages where there is a shared meter/s
- Unmetered properties - where there is a service line to the property but not a meter
- Unconnected property – where there is no connection to the infrastructure
- Exempt properties – properties exempt includes hospitals, public land, charities, cemeteries and Aboriginal land Council

Water service and usage charge

Except for retirement villages, water service charges are billed based on dwelling (not the size of the meter). For example, a person living in a unit within a residential six-unit apartment block, receives a water service charge which is the same charge as a person living in a house. Each apartment is deemed to be a dwelling even though it has a shared meter. Usage is measured through the meter and then apportioned based on the unit entitlement.

Sewer service and usage charge

Except for retirement villages, service charges are based on dwelling (not meter). Like the water service charge, a person living in a unit within a six-unit apartment block would receive a sewer service charge, the same charge as a person living in a house (there is normally a 75% reduction on the sewer service charge for residential properties). Usage is deemed and varies whether is it a multi premise or standalone property. Multi premises have a deemed sewerage usage of 80kl and a standalone house is 125kl.

Retirement village pricing is based on the meter size, similar to non-residential properties. Council bills the owner of the retirement village and then it is the owner of the retirement village's responsibility to proportion the charge amongst residents.

For Non-residential properties there are:

- Standalone properties where there is one meter
- Multi premises with individual meters
- Multi premise where there is a shared meter
- Unmetered property -where there is a service line to the property but not a meter
- Unconnected property – where there is no connection to the infrastructure
- Exempt properties – properties exempt includes hospitals, public land, charities, cemeteries and Aboriginal land Council

Water service and usage charge

Non-residential properties are billed based on the meter size. The meter size varies according to the business and the required meter to service it needs. Meter sizes vary from a

25mm to a 100mm. The larger the meter the higher the service charge. Usage is billed based on the consumption that goes through the meter.

For non-residential properties that share a meter, the charge is divided by the number of properties. This is the same for water usage where it is divided by the number of properties or by the unit entitlement.

Sewer service and usage charge

The sewer service charge, like the water service charge for non-residential properties, is based on the meter size. For non-residential properties that share a meter, the charge is divided by the number of properties.

Sewer usage is based on the water consumption, however depending on the type of business, a discharge factor is applied that reduces the sewer usage applied.

Unmetered property

Unmetered properties where there is a water service line or sewer sideline connected to the property but does not have a meter, are charged a service charge. The exception being where there has been a requested disconnection. Water usage is only charged if there has been previous consumption within the previous billing period.

Exempt properties

Exempt properties pay only water and sewer usage charges.

2.2 How Council determine the price for stormwater drainage

Like water and sewer customers, stormwater drainage customers live in different types of residences associated with both residential and non-residential properties, therefore the way customers are billed also varies.

For Residential properties there are:

- Houses (standalone properties)
- Multi premises (apartment, duplex etc.)
- Mixed multiple residences (residential and non-residential are in the same property (e.g. residences that are on top of shops)
- Farmland
- Vacant properties

Stormwater drainage charge

Residential properties, including farmland, are deemed low impact and therefore receive a standard charge per annum. There is no association of the charge to the area of land.

For Non-residential properties there are:

- Standalone properties (can be deemed low impact)
- Multi premise (can be deemed as low impact)
- Unmetered property
- Unconnected property
- Exempt properties (do not pay a service charge)

Non-residential stormwater drainage charges are based on the size of the land area once it is >1000m2. There are 3 categories of land size:

- Small (<1000m2)
- Medium (1001-10000m2)
- Large (10001-45000m2)
- Very large (>45000m2)

Depending on the size of the property, an escalation factor is applied to the standard charge to calculate the non-residential charge.

2.3 Bill comparison

Summary bill impacts are provided in the table below for residential properties, showing combined movement in prices from the:

- 2013-2019 determination period
- 2019-2022 determination period
- 2022-2026 determination period

Table 3: Historical and proposed bills ($2022-23)

Assumptions 3 bed house 1x20mm meter Annual metered water usage of 150kL*	2013-2019 Previous Determination Former Wyong LGA ($2022-23)	2013-2019 Previous Determination former Gosford LGA ($2022-23)	2019 Current Determination Former Wyong LGA ($2022-23)	2019 Current Determination Former Gosford LGA ($2022-23)	2022 Proposed Determination Central Coast Council LGA ($2022-23)
Water Service	176.30	211.15	89.47	89.47	238.33
Water usage (kL x usage charge)	364.50	364.50	322.87	322.87	337.50
Sewer service (includes usage @125kL x usage charge)	517.62	720.57	502.12	539.42	614.96
Stormwater drainage	137.35	133.25	110.70	110.70	181.70
TOTAL bill	**$1,195.77**	**$1,429.47**	**$1,025.16**	**$1,062.46**	**$1,372.49**

**Note usage charge 2013-2019 = $2.43 2019-022 $2.15 Proposed 2022 $2.25 ($2022-23) usage is based on 150Kl*

The following scenario shows the proposed pricing for the 2022 determination period. (Also totalled in $2022-23 using a CPI of 2.5% on $2021-22).

Residential bills ($2022-23)

House

$238.33 Water service charge +
$337.50 ($2.25 kl Usage charge (150kL)) +
$498.71($664.94 Sewer service charge * 75%)
$116.25 (Deemed usage 125kL x 0.93) +
$181.70 Stormwater drainage
Total $1372.49

Total = $1372.49 Total = $1285.21

Apartments

$238.33 Water service charge +
$337.50 ($2.25 kl Usage charge (150kL)) +
$498.71 ($664.94 Sewer service charge * 75%)
$74.40 (Deemed usage 80KLx 0.93) +
$136.27 Stormwater drainage
Total $1285.21

Non- Residential prices

Service charges depend on meter size, discharge factors and customer type e.g customer with own meter or shared meter. The following is calculated on a 25mm own meter using 180kl sewer usage with a low impact premise

Non residential

Total = $2201.39

$363.31 Water service charge +
$450 ($2.25 kl Usage charge (200kL)) +
$1038.98 Sewer service charge +
$167.40 (Deemed usage 180Kl @ 0.93per kL) +
$181.70 Stormwater drainage (;low impact)
Total $2201.39
(sewer usage assumes .90 discharge factor on water usage)

Scenario 1: Billing Summary

3 Water prices

3.1 Current water prices

Water prices consist of a fixed service charge and volumetric usage charges.

3.1.1 Water usage charge

The water usage charge is applied to the volume of water that is used by Council's customers. The average household usage is approximately 150KL per year. Usage charges normally account for approximately 80% of the total bill.

Council's water usage charge is currently $2.10/kL in 2021-22 and is set with reference to the Long Run Marginal Cost (LRMC).

3.1.2 Water service charge

The water service charge is a fixed annual charge and serves, in part, to recover the costs of providing water services that are not recovered via the water usage charge.

A common service charge is applied to residential customers regardless of the dwelling type or metering arrangements. The service charge that non-residential customers pay is based on their meter size using a 20mm equivalent as the basis to the final price[1]. The current service charge for a 20mm meter being $87.29 ($2021-22).

Table 4: Example of current water bills - non-residential consumption is higher than the average for residential here for illustrative purposes only using 150Kl ($2022-23)

Water	Service charge ($2022-23)	Usage per kL ($2022-23)	Usage charge based on 150kL ($2022-23)	Average bill ($2022-23)
20mm	89.47	2.15	322.50	411.97
25mm	139.79	2.15	322.50	469.29
40mm	357.87	2.15	322.50	680.37
50mm	559.18	2.15	322.50	881.68
80mm	1,395.58	2.15	322.50	1,718.08
100mm	2,236.74	2.15	322.50	2,559.24

[1] The 20 mm equivalent is using the following methodology Meter size(squared)* 20mm price/400. Using a 25mm meter = 25*25 =625 *$87.29 /400 = $136

When setting prices, Council ensures that it complies with IPART's pricing principles that are illustrated below.

IPARTs overarching principles

In developing your pricing submission, you should be mindful that we aim to replicate the effects of a competitive market so that you deliver what customers want at lowest (or, in other words, you maximise value to customers). In regulating your prices, we aim to ensure prices reflect:

- *The efficient costs of providing the monopoly services while meeting broader regulatory requirements*
- *Customer preferences and willingness to pay.*

Therefore, your pricing submission should reflect the efficient costs of providing your services and a strong understanding of what your customers want.

3.2 Proposed water usage price and service charge

Council's proposed water prices are set in accordance with IPART's pricing principles. The usage charge is set with reference to the long run marginal cost (LRMC) of water supply and customer preferences. The fixed service charge is calculated as a balancing item to allow the overall recovery of the water revenue requirement.

3.2.1 Calculating the water usage and service charges

Step 1**: Determine the revenue required that we need to recover from charges (**Technical Paper 6)
***Step 2**: Calculate the water usage charge based on the Long Run Marginal Cost (LRMC)*
Step 3:** Calculate how much revenue we forecast to recover from usage charges (**Technical Paper 7)
***Step 4:** Calculate the residual revenue that we need to recover from service charges*
***Step 5:** Calculate the water service charges by dividing the residual revenue by the forecast number of connections based on 20mm equivalents*

The current and proposed prices for standard 20mm[2] residential customers are shown in Table 5. Non-residential charges are shown in Table 6. Bill impacts are shown in Table 7 and Table 8.

[2] *All services charges are based on the 20mm equivalent e.g. the IPART formula is applied (meter size mm)2 x water services charge for a 20mm Meter /400 for a 25mm = 363.31 ($2021-22)*

All the requested expenditure is based on thorough analysis of the critical needs of Council to ensure that it can provide sustainable and efficient services for its community.

Table 5: Water bills - standard residential 20mm service charge shows both ($2021-22) and ($2022-23 applied CPI of 2.5%)

	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Service charge ($ pa)	87.29	232.52	238.33
Service charge change (%)		166%	
Usage charge ($/kL)	2.10	2.20	2.25
Use charge change (%)		4.7%	

Note: the service charge applies equally to those living in houses, apartments, multi premises, mixed multi premise and unmetered properties. Exempt properties pay for water and sewer usage only. The table above and below sets the price for the meter sizes in Councils current fleet. The prices to be charged for any meter not currently in Councils fleet the following formula to be used: (meter size mm)2 x water services charge for a 20mm Meter /400 e.g. for a 25mm = 363.31 ($2021-22)

Table 6: Water non-residential service charge based on meter size both ($2021-22) and ($2022-23 applied CPI of 2.5%)

Water Service charge ($pa)	Current prices ($2021-22)	Proposed price 2022-26 ($2021-22)	Proposed prices 2022-26 ($2022-23)
25mm	136.39	363.31	372.39
Service charge change (%)		166%	
32mm	223.46	595.25	610.13
Service charge change (%)		166%	
40mm	349.15	930.08	953.33
Service charge change (%)		166%	
50mm	545.55	1,453.25	1,489.58
Service charge change (%)		166%	
80mm	1,396.61	3,720.32	3,813.32
Service charge change (%)		166%	
100mm	2,182.19	5,813.00	5,958.32
Service charge change (%)		166%	
150mm	4,909.98	13,079.25	13,406.23
Service charge change (%)		166%	
200mm	8,728.85	23,252.00	23,833.30
Service charge change (%)		166%	
250mm	13,638.83	36,331.25	37,239.53
Service charge change (%)		166%	
300mm	19,639.91	52,317.00	53,624.92
Service charge change (%)		166%	
350mm	26,732.10	71,209.25	72989.48
Service charge change (%)		166%	

Water Service charge ($pa)	Current prices ($2021-22)	Proposed price 2022-26 ($2021-22)	Proposed prices 2022-26 ($2022-23)
400mm	34,915.40	93,008.00	95,333.20
Service charge change (%)		166%	
Usage charge ($/kl)	2.10	2.20	2.25
Using 300kL	630	660	675
Usage charge change (%)		4.7%	
Exempt (usage only)	2.10	2.20	2.25
Using 300kL	630	660	675

Note: Water usage is charge at $2.25 per kL and this needs to be added to the service charge based on 300kL

Table 7: Bill impacts residential 20mm connection 150kL per annum ($2022-23 applied CPI of 2.5%)

Financial year ending 30 June	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Service charge	87.29	232.52	238.33
Usage charge	315.00	330 .00	337.50
TOTAL	**402.29**	**562.52**	**575.83**
Service charge change (%)	0%	40%	
Usage charge change (%)	0%	4.7%	

Table 8: Bill impacts non-residential 20mm connections 300kL ($2022-23 applied CPI of 2.5%)

Financial year ending 30 June (assume 300kl p/a)	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Service charge 25mm	136.39	363.31	372.39
Usage charge (based on 300kL)	630.00	660.00	675.00
Total	**766.39**	**1,023.31**	**1,047.39**
Total change (%)		**33.8%**	
Service charge 32mm	223.46	595.25	610.13
Usage charge (based on 300kL)	630.00	660.00	675.00
Total	**853.46**	**1,255.25**	**1,285.13**
Total change (%)		**47%**	
Service charge 40mm	349.15	930.08	953.33
Usage charge (based on 300kL)	630.00	660.00	675.00
Total	**979.15**	**1,590.08**	**1628.33**
Total change (%)		**62%**	
Service charge 50mm	545.55	1,453.25	1,489.58
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**1,175.55**	**2,113.25**	**2,164.58**
Total change		**80%**	
Service charge 80mm	1,396.61	3,720.32	3,813.32
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**2,026.61**	**4,380.32**	**4,488.32**
Total change		**116%**	
Service charge 100mm	2,182.19	5,813.00	5,958.32
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**2,812.19**	**6,473.00**	**6,633.32**
Total change		**130%**	
Service charge 150mm	4,909.98	13,079.25	13,406.23
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**5,539.98**	**13,739.25**	**14,081.23**
Total change		**148%**	
Service charge 200mm	8,728.85	23,252.00	23,833.30
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**9,358.85**	**23,912.00**	**24,508.30**

Financial year ending 30 June (assume 300kl p/a)	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Total change		**155%**	
Service charge 250mm	13,638.83	36,331.25	37,239.53
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**14,268.83**	**36,991.25**	**37,914.53**
Total change		**159%**	
Service charge 300mm	19,639.91	52,317.00	53,624.92
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**20,269.91**	**52,977.00**	**54,299.91**
Total change		**161%**	
Service charge 350mm	26,732.10	71,209.25	72,989.48
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**27,362.10**	**71,869.25**	**73,664.48**
Total change		**162%**	
Service charge 400mm	34,915.40	93,008.00	95,333.20
Usage charge (based on 300kl)	630.00	660.00	675.00
Total	**35,545.40**	**93,668.00**	**96,008.20**
Total change		**163%**	

Note. the sewerage usage of 300kL is indicative only as sewerage usage for non-residential customers varies across different business types and water consumption.

3.2.2 Pensioner Rebates

Currently Council provides pensioners with a reduction of 50% of the water supply service and water usage charges levied up to a maximum of $87.50 per annum. A further reduction of 50% of sewerage service and sewerage usage charges is levied up to a maximum of $87.50 (residential customers only).

The pensioner rebate is calculated based on the percentage ownership of the property. For example, where a property is jointly owned and only one property owner is an eligible pensioner, the maximum pensioner rebate is 50%. Maximum rebate is $43.75 per annum being $87.50 x 50%. Table 9 and Table 10 show potential pricing relevant to the application of the pensioner rebate.

Table 9 and Table 10 are an illustration of the pensioner rebate against proposed prices for the 2022 determination. There is no rebate shown against the usage charge as it is expected that the service charge will increase, and the total rebate will be applied. If this is not the case

and the service charge remains low, then the usage charge will again be used to apportion the total rebate. Pensioner rebates are applied to service charges first and then to usage charges if there is any remaining pensioner rebate.

Table 9: Water bills including pensioner rebate where the eligible pensioner has 100% ownership of the property (150kL p.a.) ($2022-23 applied CPI of 2.5%)

Financial year ending 30 June	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Service charge	87.29	232.52	238.33
Pensioner rebate	(45)	(88)	(88)
Usage charge	315	330	337.50
Pensioner Rebate	(43)	-	-
Total	**314.29**	**474.52**	**487.83**
Total rebates	**(88)**	**(88)**	**(88)**

Table 10: Sewer bills including pensioner rebate where the eligible pensioner has 100% ownership of the property ($2022-23 applied CPI of 2.5%) (Service charge is the average of the two former LGA's with application of a 75% discharge factor usage based on 80kl)

Financial year ending 30 June	Current prices ($2021-22)	Proposed prices 2022-26 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Service charge	398.07	486.54	498.71
Pensioner Rebate	(88)	(88)	(88)
Usage Charge	69.90	72.80	74.40
Total Charges	379.97	471.34	485.11
Total Rebates	(88)	(88)	(88)

3.2.3 Long run marginal cost of water supply

The tariff increases largely apply to the fixed charge. The usage tariff, which is the amount paid per kL, is set as the long run marginal cost (LRMC) of water supply.

The LRMC was calculated based on the outputs of Council's Water Supply Plan (CCCWSP). The CCCWSP is a joint project with Hunter Water to develop a set of water supply portfolios that provide water security for the two connected regions. The CCCSWP is yet to be finalised but, based forecasts, the proposed supply portfolio and augmentation year is shown Table 11.

Table 11: Supply portfolio - A2 and proposed augmentation year

Supply portfolio – A2	Augmentation year
Increased utilisation of ground water	2034
Expand existing sewerage treatment plant-based recycling schemes (low-high)	2037
Potable recycled water (6ML/d)	2038
Desalination plant (30 ML/d) ON@45;OFF@55	2043
Desalination plant (30 ML/d) ON@50;OFF@55 (Incremental)	2055
Desalination plant (30 ML/d) ON@60;OFF@65 (Incremental)	2057

The LRMC is calculated as the discounted cost per megalitre (ML) of the supply portfolio based on the capital and operating costs of the portfolio infrastructure. The LRMC calculations are shown in Table 12.

Table 12: LRMC calculations

Augmentation	Unit	NPV ($2021)
Increased utilisation of ground water	$million	4.32
Expand existing sewerage treatment plant based recycling schemes (low-high)	$million	4.49
Potable recycled water (6ML/d)	$million	27.83
Desalination plant (30 ML/d) ON@45;off@55	$million	77.87
Desalination plant (30 ML/d) ON@50;OFF@55 (Incremental)	$million	-
Total	**$million**	**114.51**
Additional demand	ML	52,000
LRMC	**$/kL**	**2.20**

4 Sewerage prices

4.1 Current sewerage price structure and prices

Council's current sewerage prices consist of a fixed service charge based on a 20mm service and a usage charge based on a deemed allowance for residential properties. Sewer usage is currently 125kL for a house and 80kL for mixed premises (apartment).

Also included is a fixed sewerage discharge factor of 75% which reduces the service charge. Non-residential customers have the service charge based on the size of their meter and the usage is based on the water consumption with a discharge factor applied, which is relevant to their type of business.[3] This discharge factor can range from 80-95% which reduces the sewerage usage (as not all water through the meter goes to the sewerage network as effluent).

4.1.1 Calculating the sewerage usage and service charges

***Step 1**: Determine the revenue required that we need to recover from charges*
***Step 2**: Calculate the sewer usage charge based on the Short Run Marginal Cost (SRMC)*
***Step 3**: Calculate how much revenue we forecast to recover from usage charges by multiplying the usage charge by the forecast volumes of sewerage sales*
***Step 4**: Calculate the residual revenue that we need to recover from service charges*
***Step 5**: Calculate the sewer service charges by deducting the usage revenue from the total revenue required then dividing the result by the number of sewerage connections (based on 20mm equivalents)*

4.1.2 Sewerage service charge

The sewerage service charge is a fixed charge at a rate to recover the capital and operating costs of the sewerage system. Most of the costs associated with providing sewerage services are fixed and do not vary with the volume of sewage. Unlike water, where most of the revenue is recovered via usage charges, sewerage revenue is recovered mostly via service charges.

[3] *A discharge factor reduces the amount of consumption charged understanding that the metered water is not necessarily the water that is discharged as effluent, it will be lower.*

The service charge is calculated with reference to the water meter size and a discharge factor. For residential properties this is a 20mm service. For non-residential properties, like water, the service charge is based on a 20mm equivalent[4].

Currently the sewerage service charge between the former LGA's are different, as referenced in IPART's 2019 determination. The pricing shows an alignment where there is one price across the previous LGA's.

Service prices also vary depending on whether a customer is in the former Gosford or Wyong council area, with prices in the former Gosford area being substantially higher. The higher prices in Gosford reflect higher underlying costs, which partly reflect the former Gosford Council's larger capital program in the lead up to the 2013 determination. The capital program related to the location of suitable sewage disposal sites and the increased costs of complying with sewerage system licences. This increased the capital allowance in the NRR and thus increased prices

4.1.3 Sewerage usage charges

The variable tariff for sewer is the Short Run Marginal Cost (SRMC) of sewage transport and treatment. The SRMC represents the cost of transporting and treating an additional kL of sewage. Previous IPART determinations have noted that the SRMC does not provide a longer-term price signal on the cost of treatment and transport for the customer. But the inability for customers to materially change their sewer discharge means that a LRMC is not considered appropriate. For this submission, the SRMC will continue to be used.

The SRMC is based on the annual sales volume of sewerage and the variable costs associated with its treatment and transport (Table 13).

The current deemed usage for residential is 125kL for residential (houses) and 80kL for multi residential premises (apartments). Non-residential properties are based on the water consumption multiplied by a discharge allowance. There is no intention to change these parameters for the 2022 determination.

[4] *All services charges are based on the 20mm equivalent e.g. the IPART formula is applied (meter size in mm)2 x sewer service charge for a 20mm Meter /400*

Table 13: 2019-20 variable cost categories

Variable cost categories	2019-20 Full Year Actuals ($M)
800002. Salaries and Wages - Overtime	1.9
820001. Materials	0.4
820004. Chemicals	0.02
821005. Consultants	0.07
821006. Contractors - Labour Hire	0.1
821007. Contracts - Other	1.3
821008. Effluent Collection	0.05
821009. External Plant Hire	0.01
890115. Internal Expense - Plant and Fleet Hire	2.2
890124. Internal Expense - Tipping Fees	0.01
890126. Internal Expense - Water Charges	0.0
890131. Internal Expense - Electricity and Gas	0.9
899900. Internal Expense - Standard Labour Charges	6.0
TOTAL	**13.1**

There are several projects proposed for the 2022 determination period which will increase the variable costs associated with transport and treatment. The total variable costs, volumes and SRMC are shown in Table 14.

Table 14: SRMC calculation

Financial year ending 30 June	Units	
Annual volume	**ML 2022**	**19.2**
Variable costs		
Actual treatment & transport	$2021-22 $million	13.2
Additional opex - STP treatment	$2021-22 $million	2.6
Additional opex - transport	$2021-22 $million	1.7
Total	**$2021-22 $million**	**17.4**
SRMC	**$/kL**	**0.91**

4.2 Proposed sewerage usage and service charges

Council's proposed sewerage charges should allow the recovery of target revenue. The revenue required is detailed in Technical Paper 6.

Investment in the sewerage network is primarily due to upgrades to Council's sewage treatment facilities to provide capacity for growth or meet environmental regulatory requirements (see Technical Paper 4).

Higher sewerage operating costs reflect outcomes of upgrades to Council's treatment facilities and additional long-term preventative maintenance.

The proposed residential bill impacts are shown in Table 15

Table 15: Proposed residential sewerage bill impacts both ($2021-22) includes 75% discharge allowance. And ($2022-23 applied CPI of 2.5%)

Financial year ending 30 June	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Service charge ($ pa) former Gosford	416.27	486.54	498.71
Service charge ($ pa) former Wyong	379.88		
Usage charge 125kl	110.00	113.75	116.25
Usage charge 80kl	70.4	72.80	74.40
Total charge % change		51%	
Usage charge ($/kL)	0.88	0.91	0.93
Service charge change (%) Gosford		17%	
Service charge change (%) (Wyong)		28%	
Usage charge change (%)		3%	

There is a different deemed usage between residential and multi premises. Apartments etc have a deemed usage on 80kl whereas a house is 125kL. Note: the service charge applies equally to those living in houses, apartments, multi premise, mixed multi premise and unconnected properties. Exempt properties pay for water and sewer usage only (usage charge).

4.2.1 Sewerage service charge

For this submission, Council is proposing to align the service charges between the former LGAs. It also intends to maintain the 75% discharge allowance for residential customers as well as the 125kL deemed sewage usage for houses and 80kL for apartments.

Table 16: Sewer service charge- proposed non-residential sewerage bills both ($2021-22) and ($2022-23 applied CPI of 2.5%)

Connection size Non-residential	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
20mm Gosford	555.03	648.73	664.94
20mm Wyong	506.50		
Service charge change average (%)	530	23%	
25mm Gosford	867.24	1,013.64	1,038.98
25mm Wyong	673.51		

Connection size Non-residential	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Service charge change average (%)	770	32%	
32mm Gosford	1,420.88	1,660.74	1,702.26
32mm Wyong	1,103.48		
Service charge change average (%)	1,262.18	32%	
40mm Gosford	2,220.13	2,594.92	2,659.79
40mm Wyong	1,724.18		
Service charge change average (%)	1,972	32%	
50mm Gosford	3,468.96	4,054.56	4,155.92
50mm Wyong	2,694.03		
Service charge change average (%)	3,081	32%	
80mm Gosford	8,880.54	10,379.68	10,639.17
80mm Wyong	6,896.73		
Service charge change average (%)	7,888	32%	
100mm Gosford	13,875.83	16,218.25	16,623.70
100mm Wyong	10,776.15		
Service charge change average (%)	12,325	32%	
Exempt (usage only)	0.88	0.91	0.93
Sewer usage charge	0.88	0.91	0.93
Usage charge change (%)		3%	

These prices do not include the discharge factor – the maximum to be paid. Exempt properties pay for sewer usage only based on water consumption and discharge factor (usage charge). Note: the service charge applies equally to those living in houses, apartments, multi premises, mixed multi premise and unconnected properties. Exempt properties pay for water and sewer usage only. The table above sets the price for the meter sizes in Councils current fleet. The prices to be charged for any meter not currently in Councils fleet the following formula to be used: (meter size mm)2 x service charge for a 20mm Meter /400

5 Stormwater prices

5.1 Current stormwater charges

The stormwater pricing methodology for this regulatory period is to remain the same.

Houses, apartments, farmland customers and non-residential customers classified as low impact receive a standard charge per year. The prices for other non-residential customers are based on the land area of their property using the standard charge as a base line and (based on escalation factors used in the 2019 determination). Properties classified as exempt land do not have service charges.

5.1.1 Calculating the stormwater charges

Step 1: *Determine the revenue required that we need to recover from charges*
Step 2: Determine the property types i.e. house, multi premise, farmland, business
Step 3: Determine if businesses are zoned recreation, environmental or waterways
Step 4: Determine the number of residential equivalents
Step 4 Divide revenue by number of residential equivalents taking into account the area-based ratios for medium, large and very large properties

5.2 Proposed stormwater charges

Proposed stormwater prices are set to recover the annual stormwater revenue requirement in line with projected customer numbers. The proposed stormwater tariffs are shown in Table 17, Table 18 and Table 19.

Table 17: Proposed stormwater bills standard connection both ($2021-22) and ($2022-23 applied CPI of 2.5%)

Financial year ending 30 June	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Residential Property Charge ($ pa)	108	177.27	181.70
Residential Property Charge change (%)		61%	

Table 18: Stormwater Drainage Residential bills both ($2021-22) and ($2022-23 applied CPI of 2.5%)

Residential	Current prices $2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Property	108.00	177.27	181.70
Residential Property Charge change (%)		61%	
Multi-premise	81.00	132.95	136.27
Mixed Multi-premise	81.00	132.95	136.27
Residential Property Charge change (%)		64%	
Farmland	108.00	177.27	181.70
Residential Property Charge change (%)		61%	
Vacant Land	81.00	132.96	133.96
Residential Property Charge change (%)		64%	

Table 19: Stormwater Drainage Area Non-Residential based bills both ($2021-22) and ($2022-23 applied CPI of 2.5%)

Non-Residential	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Multi-premise	81.00	132.95	136.27
Mixed Multi-premise	81.00	133.95	136.27
Property Charge change (%)		64%	
Low Impact	108.00	177.27	181.70
Property Charge change (%)		61%	
Area Based			
Small(<1000m2)	108.00	177.27	181.70
Property Charge change (%)		61%	
Medium (1,001-10,000m2)	189.01	310.22	317.97

Non-Residential	Current prices ($2021-22)	Proposed prices 2022-2026 ($2021-22)	Proposed prices 2022-2026 ($2022-23)
Property Charge change (%)		70%	
Large (10,001-45000m2)	891.02	1,462.47	1,499.03
Property Charge change (%)		70%	
Very large (>45,000m2)	2,700.07	4,431.75	4,542.54
Property Charge change (%)		70%	
Vacant Land			
All customers	81.00	132.95	136.27
Property Charge change (%)		64%	

6 Bill impacts

The following shows a holistic bill impact scenario for water, sewer and stormwater drainage from the 2013, 2019 and 2022 (proposed) determinations. The proposed pricing is very closely aligned to the 2012-19 pricing as highlighted in the tables below.

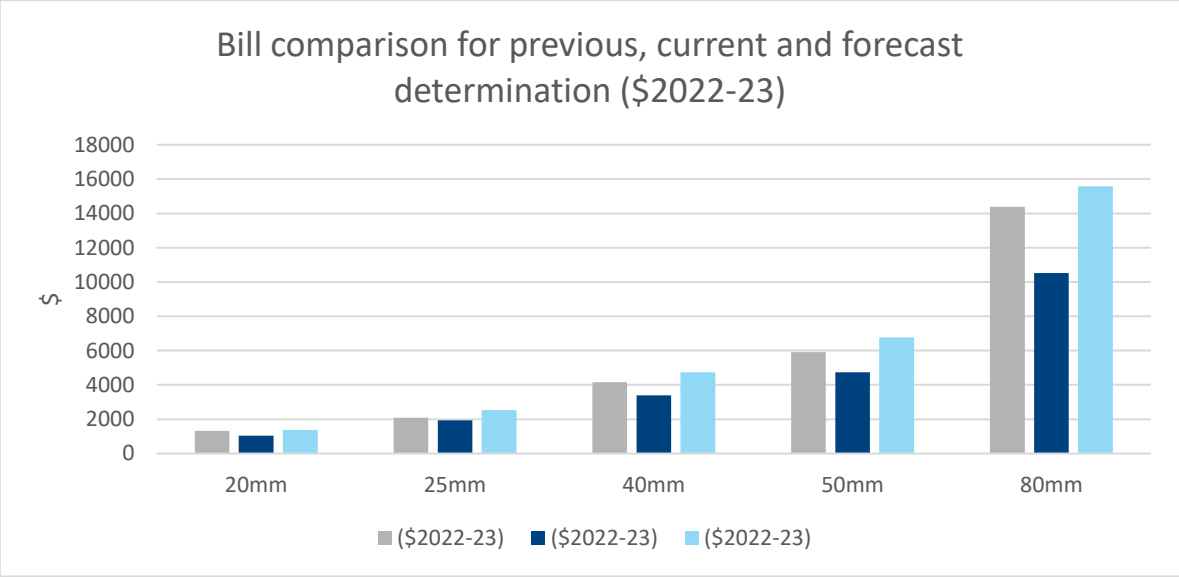


Figure 13: Bill comparison previous, current and forecast determinations ($2022-23)

Table 20: Total bills per service size ($2021-22) compared to previous, current and proposed 2019 and 2022 determination (Bills rounded for illustration purposes only. 20mm meter consumption water based on 150Kl and meter >20mm based on 300Kl water and 280Kl for sewer usage

Service size	2018-19 ($2022-23)	2019-2022 ($2022-23)	2022-2026 ($2022-23)
20mm	1,313	1,046	1,372
25mm	2,089	1,939	2,529
40mm	4,151	3,389	4,730
50mm	5,919	4,728	6,762
80mm	14,390	10,527	15,570

Note maximum bills the sewer >20mm meter does not include a .91 discharge factor applied to non-residential

Table 21: Bills totals forecast 2022-2026 ($2022-23) 75% discharge factor for sewer residential. Bills rounded for illustration purposes. 20mm meter consumption water based on 150Kl and meter >20mm based on 300Kl water and 280Kl for sewer usage

	20mm ($2022-23)	25mm ($2022-23)	40mm ($2022-23)	50mm ($2022-23)	80mm ($2022-23)
Water	575	1,047	1,628	2,164	4,488
Sewer	615	1,300	2,920	4,416	10,900
Stormwater	182	182	182	182	182
Total	1,372	2,529	4,730	6,762	15,570

Table 22: Bills total current determination 2019-22 ($2022-23) (sewer averaged between service charges). Bills rounded for illustration purposes. 20mm meter consumption water based on 150Kl and meter >20mm based on 300Kl water & 280Kl for sewer usage

	20mm ($2022-23)	25mm ($2022-23)	40mm ($2022-23)	50mm ($2022-23)	80mm ($2022-23)
Water	413	785	1,003	1,205	2,077
Sewer	520	1,041	2,273	3,410	8,337
Stormwater	113	113	113	113	113
Total	1,046	1,939	3,389	4,728	10,527

Table 23: Bills total previous 2012-2019 determination ($2022-23) (service charges averaged average between previous LGA service charges). Bills rounded for illustration purposes. 20mm meter consumption water based on 150Kl and meter >20mm based on 300Kl water and 280Kl for sewer usage

	20mm ($2022-23)	25mm ($2022-23)	40mm ($2022-23)	50mm ($2022-23)	80mm ($2022-23)
Water	560	1,004	1,426	1,661	3,488
Sewer	619	951	2,591	4,124	10,768
Stormwater	134	134	134	134	134
Total	1,313	2,089	4,151	5,919	14,390

7 Benchmarking

The 2019 IPART determination resulted in the Central Coast having the lowest water and sewerage bill in New South Wales.

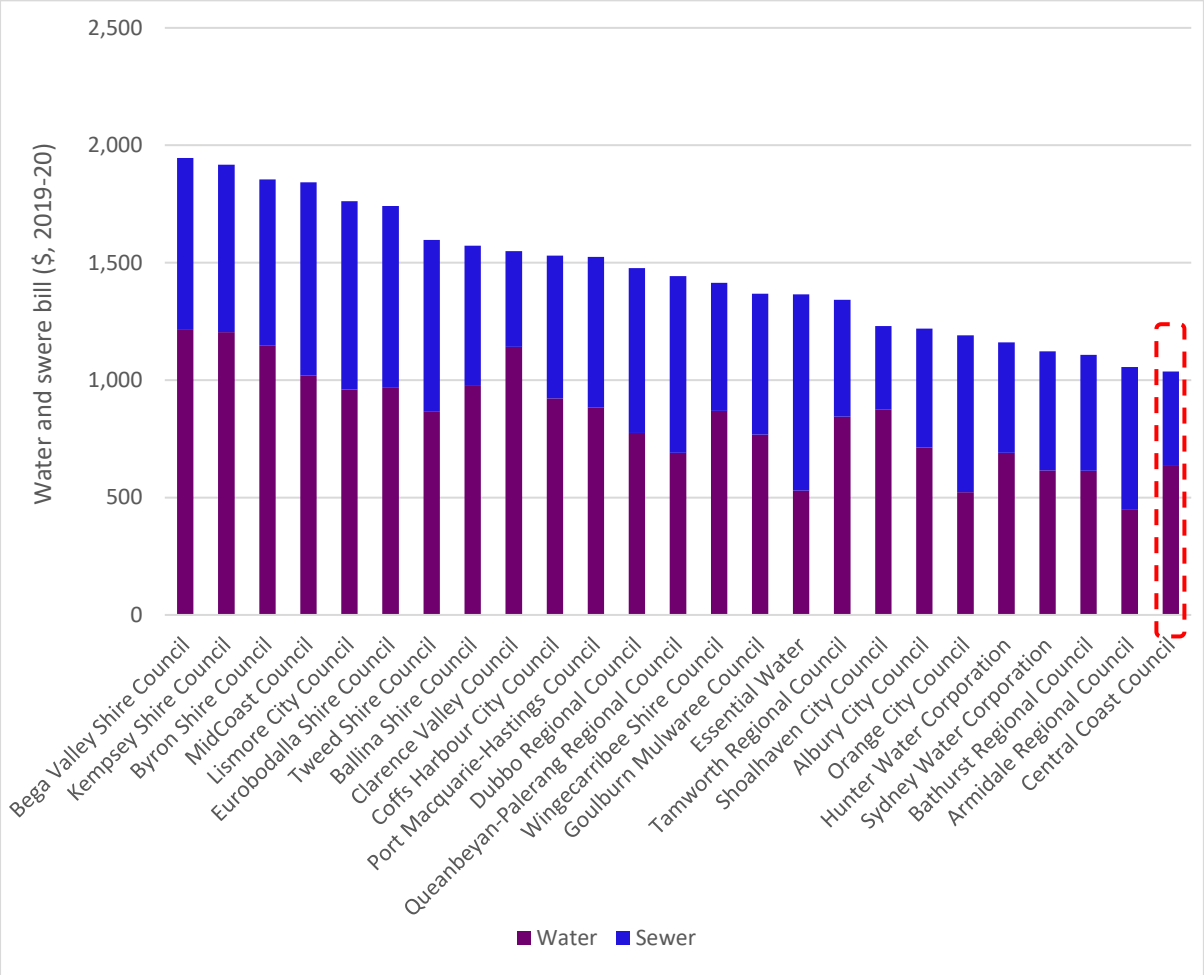


Figure 14: water and sewer bills 2019-20 ($2019-20)

The proposed increases in annual water and sewer bills will result in the Central Coast having the 5th lowest bill over the 25 councils as shown in Figure 15, above Hunter Water and Sydney Water.

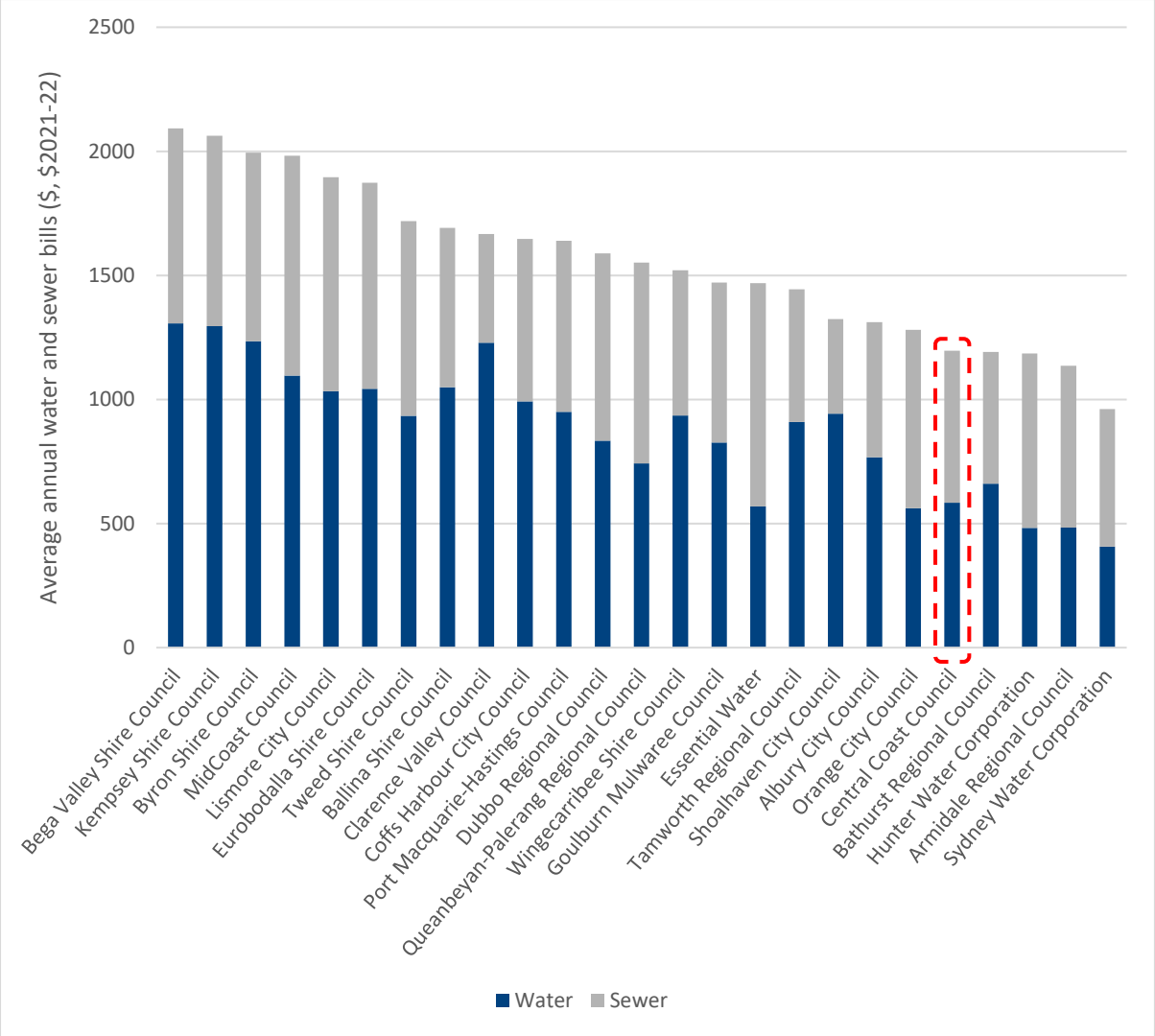


Figure 15: Forecast average annual water and sewer bills in 2022-23 ($2021-22)

8 Non-Potable Water (Unregulated charges)

Non-potable water usage information has been extracted from Council's billing systems as at March 2021. Customer's bills are based on the non-potable water consumed except for two customers who have a contract with fixed charges. For the customers who are charged based on non-potable water consumed, the charge per kL is set at 50% of the potable water charge.

Customers either have separate meters for non-potable water usage or are able to access non-potable water via fixed stations using coded key fobs.

Non-potable water meters are read when potable water meters are read. In Council's billing systems, the non-potable meters can be distinguished from potable meters as the meter ID beings with "R" or the meter type includes "RW".

A meter is attached to the fixed station which records the volume of non-potable water consumed by the coded key fob. This information is transmitted to Avdata who bills the customer, collects the amount owing and remits the balance to Council less their fees. There are two fixed stations at Kincumber Sewer Treatment Plant and Central Coast Stadium.

Table 24: Non-potable water usage

Customer Type	2020-21 Annualised Usage in kL
Residential	68,650
Non-Residential	143,427
Non-Residential – Exempt	54,124

9 Water Industry Competition Act (WICA)

The Water Industry Competition Act 2006 seeks to:

- encourage competition in relation to the supply of water and the provision of sewerage services
- develop infrastructure for the production and reticulation of recycled water.

The Act also provides for a prospective private entrant to negotiate terms and conditions of access to the infrastructure (and products) of an existing public water agency.
There are two Water Industry Competition Act (WICA) schemes active within the Central Coast LGA. One is at Narara Eco Village, the other located at Catherine Hill Bay (run by Solo Water).

Council does not propose bulk supply charges in place of our standard regulated charges. Council does not favour separate "wholesale" or "retail-minus" price determination for WICA schemes.

Council favours continuing its transparent approach of treating these schemes as large meter customers.

10 Affordability

When Council sets its proposed prices, it endeavours to address the following affordability concerns:

1. Are prices set at a level such that most customers can afford them?
2. Will proposed pricing for year 1 cause a rapid increase in so far that it may create social impacts? Households have budget commitments and long-term planning on the assumption that the continued low pricing will continue.
3. Do Council's services have a positive impact on the community and the environment?
4. Has the proposed revenue and pricing been spread across the determination period to avoid price shock?

According to economy.id, Central Coast household expenditure for utilities is lower compared with other NSW areas.

In 2019-20, the household expenditure on utilities on the Central Coast was $3,225[5] ($3463.65 $2022-23) per annum or 3.3% of the disposable income. This compares to $3,749 ($4026.42 $2022-23) in other areas of NSW.

The total disposable income (post tax per household) for Central Coast in 2019-20 was $116,730 ($2019-20 or $125,368.02 $2022-23) with total expenditure of $97,670 ($2019-20 or$104,897 $2022-23)[6].

The proposed increase in residential pricing of approximately $332 ($2022-23) based on proposed pricing, will see an increase in utility spend in 2022-23 from $3,414 ($2022-23) to $3,744 ($2022-23) which will increase the % of utility expenditure to 3.6%. This is still lower than other areas of NSW which is approximated at $3,968 ($2022-23).

The average water, sewer and drainage bill will remain at around 1.3% of the equivalised household disposable income (EHD) for the Central Coast. The $332 increase per annum ($80 per quarter) was supported by the community in the community forums where the expected increase in pricing was between $53-$82 ($54.32 $2022-23 & $84.05 $2022-23) per quarter.

[5] Note all dollars mentioned here also shown in $2022-23 using a CPI multiplier 7.4% i.e. 4.9% to bring $2019-20 to $2021-22 and then additional 2.5% to bring to $2022-23 as per IPART's SIP.
[6] Household expenditure is modelled based on a setoff expenditure items collected every 5 years by the Australian Bureau of statistics. Source Household expenditure Central Coast NSW economy.id Note this does not include pensioner rebates

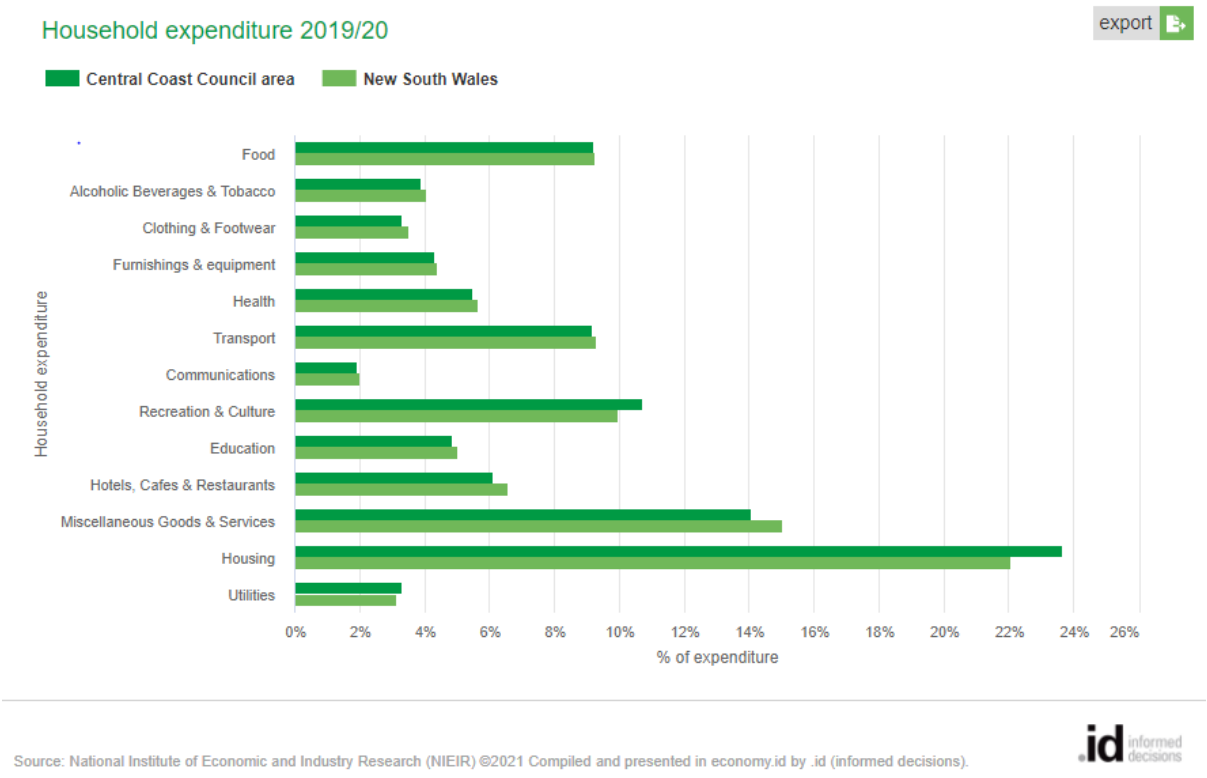


Figure 16: economy.id Household expenditure 2019-20

11 Abbreviations

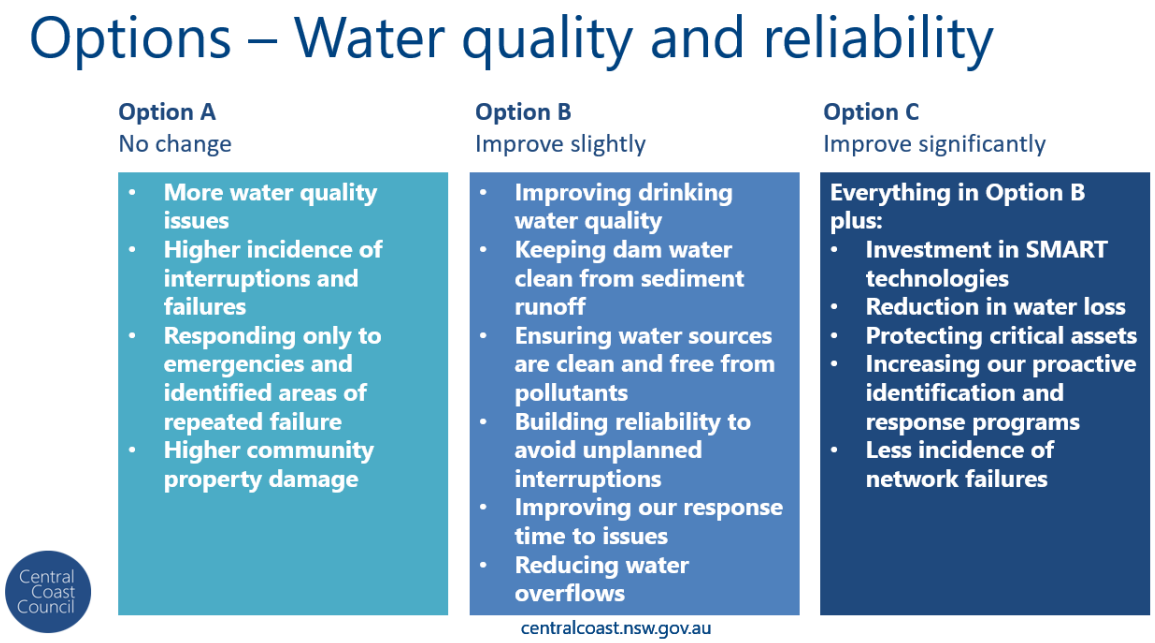
CCCWSP	Central Coast Council Water Supply Plan
KL	Kilolitres 1000 litres
LGA	Local Government Agency
LRMC	Long Run Marginal Cost
ML	Megalitre (a metric unit of capacity equal to a million litres
OPEX	Operating expenditure
SRMC	Short Run Marginal Cost

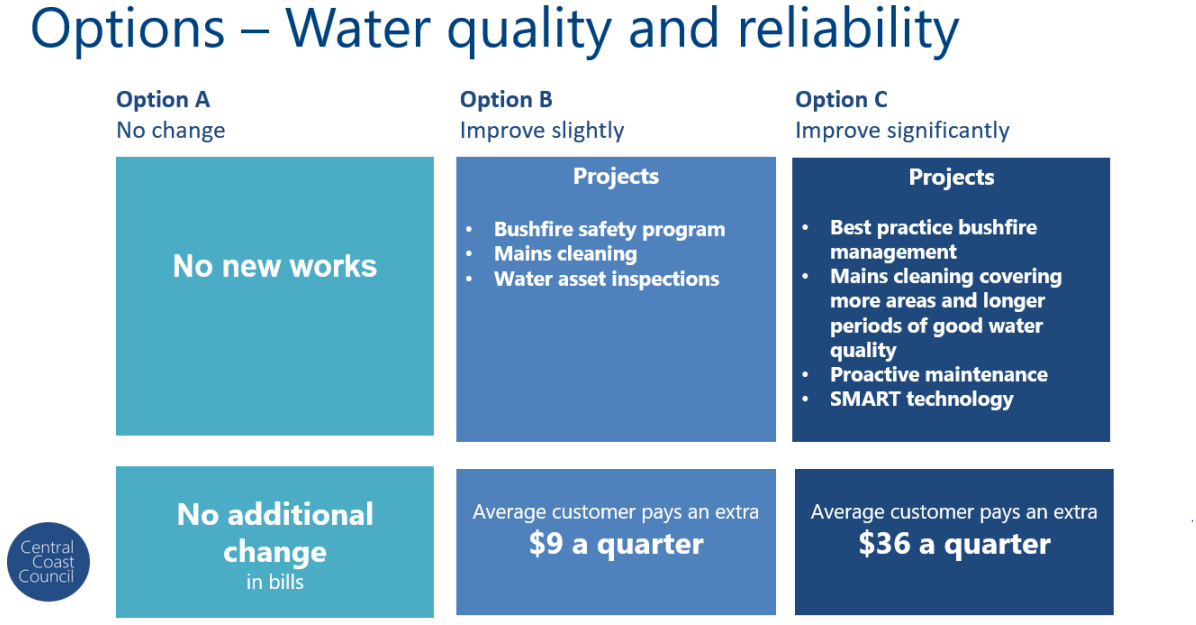
12 References

- .id informed decisions, Central Coast NSW community profile, https://profile.id.com.au/central-coast-nsw
- IPART Review of Central Coast Council's water, sewerage and stormwater prices to apply from 1 July 2019, May 2019
- Woolcott Research & Engagement, Community Feedback for IPART Submission, April 2021
- Woolcott Research & Engagement, Deliberative Engagement on Future Service Options, 2021

Appendix A

A summary the detailed scenarios provided for the community forums, as detailed in Section 1 of this Technical Paper (a copy of the full report from the forums is located in Technical Paper 1).





Options – Environmental and safety management

Option A
No change

- **Will not meet our legislative requirements for dam safety**
- **Potential dam failure impacting community safety**
- **High safety compliance costs**
- **Water utility competency standards won't be met**
- **Costs of business will potentially increase**

Option B
Improve

- **Ensuring water storage assets are safe and compliant**
- **Making sure the services delivered to our community are aligned with industry practice**
- **Ensuring staff safety and reduce workers compensation costs**

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Options – Environmental and safety management

Option A
No change

No new works

No additional change
in bills

Option B
Improve

Projects

- **Dam safety**
- **Safety management:**
  - **Meet national competencies**
  - **Competency based training programs**
  - **Equipment needs**
  - **Highly trained staff**

Average customer pays an extra
$2.25 a quarter

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Options – Water conservation and engagement

Option A No change	Option B Improve
• **Lack of planning will mean future generations may experience water shortages pushing pricing up** • **Limited understanding of your needs and delivering services that do not align with your expectations**	• **Building important relationships with our community and understanding what your needs are** • **Making it simpler for you to connect with us** • **Working with you to preserve water and develop sustainable opportunities for the future of your water supply**
No additional change in bills	Average customer pays an extra **$2.75 a quarter**

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Options – Water conservation and engagement

Option A No change	Option B Improve
No new works	**Projects** • **Improving customer engagement** • **Improved communication** • **Building water conservation** • **Building water security** • **Community education programs**
No additional change in bills	Average customer pays an extra **$2.75 a quarter**

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Options – Sewerage overflows

Option A No change	Option B Improve slightly	Option C Improve significantly
• Can only inspect pipes in high risk/problems areas • Will continue to experience high sewerage overflows • Increased odour complaints • Sewerage overflowing into local waterways • Less money to replace or repair aging pipes	• Reducing our overflows • Protecting our environment • Increasing our proactive inspections • Improving our response time to fix issues • Fixing small problems to avoid big problems in the future	• Everything in Option B plus: • More proactive inspections • Further increasing the frequency and volume of repairs • Proactive methods to response times • A reduction in sewer breaks and odour complaints

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Options – Sewerage overflows

Option A No change	Option B Improve slightly	Option C Improve significantly
No new works	PROJECTS • Odour reduction • Sewer asset inspections • Reactive to planned maintenance • Improved systems to track network issues	PROJECTS All of option B plus • Optimising proactive inspections • Further increasing frequency of repairs • More proactive responses
No additional change in bills	Average customer pays an extra $6.25 a quarter	Average customer pays an extra $8 a quarter

Central Coast Council

Options – Treatment Plants and Outfalls

Option A
No change

- **Continued poor ocean water quality**
- **Public health impacts**
- **Not compliant with our EPA licenses**

Option B
Improve

- **Improved effluent quality**
- **Improved processes**
- **Improved ocean water quality**
- **More environmentally responsible**
- **Better compliance with our EPA licenses**

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Options – Treatment Plants and Outfalls

Option A
No change

No new works

No additional change
in bills

Option B
Improve

PROJECTS

- **Clean out and inspection of:**
  - **Aeration tanks at all TPs**
  - **Digesters**
  - **Wet weather ponds**
  - **Grit chambers**
- **Proactive maintenance plans**
- **Sludge management at TPs**

Average customer pays an extra
$4 a quarter

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Options – Critical Stormwater Drainage Asset Inspections, Cleaning and Repairs

Option A
No change

- **We reactively inspect, clean and repair high risk assets when problems occur**
- **There is no reduction in the frequency of road or property flooding**
- **There is a greater chance of catastrophic asset failure**

No additional change
in bills

Option B
Improve slightly

- **We proactively inspect, clean and repair high risk assets to address problems before they become an issue**
- **We reduce the frequency of road or property flooding**
- **We reduce the chance of catastrophic asset failure**

Average customer pays an extra
$1.58 a quarter

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Options – Stormwater Quality and Urban Channels

Option A
No change

- **We will not meet our legislative requirements**
- **We will have polluted stormwater and waterways**
- **We will not be able to reduce flood risk**

No additional change
in bills

Option B
Improve slightly

- **We met our legislative requirements**
- **We reduce the amount of pollutants entering our waterways**
- **We reduce flood risk**

Average customer pays an extra
$5.45 a quarter

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Options – Flood Planning

	Option A No change	**Option B** Improve slightly	**Option C** Improve significantly
	• **Our flood information will become outdated** • **Future decisions and advice about flood prone land will expose the community to greater flood risk**	• **We will be able to provide up to date flood information and advice to the community** • **We will prepare flood studies and flood mapping to guide decision making and manage flood risk**	• **Greater funding will allow faster delivery of flood management options, such as flood mitigation works to reduce flood risk.**
Central Coast Council	**No additional change** in bills	Average customer pays an extra **$2.18 a quarter**	Average customer pays an extra **$3.41 a quarter**

Potential bill impacts - quarterly

	No change ($)	Improve slightly ($)	Improve significantly ($)
1. Water quality and reliability	0	9.00	36.00
2. Environmental and safety management	0	2.25	2.25*
3. Water conservation and engagement	0	2.75	2.75*
4. Sewerage overflows	0	6.25	8.00
5. Treatment plants and outfalls	0	4.00	4.00*
6. Stormwater drainage	0	9.21	10.44
Quarterly bill impact	0	33.46	63.44
Total quarterly bill impact	19	52.46	82.44

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Note that all options will include an additional $19
* These are the same as the 'improve slightly' costs