



Review of Central Coast Council
water prices – Summary

Final Report

May 2022

Water >>

Tribunal Members

The Tribunal members for this review are:

Carmel Donnelly PSM, Chair
Deborah Cope
Sandra Gamble

Enquiries regarding this document should be directed to a staff member:

Scott Chapman	(02) 9290 8449
Sheridan Rapmund	(02) 9290 8430

The Independent Pricing and Regulatory Tribunal (IPART)

Further information on IPART can be obtained from [IPART's website](#).

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders, past, present and emerging.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Contents

Introduction	1
1 IPART has set prices for 4 years from 1 July 2022	2
1.1 Typical bills would increase by about 17% on 1 July 2022 and then by about 6%, 8% and 1% the following years	3
1.2 Our recommendations aim to improve CCC Water's performance and accountability	5
1.3 Our decisions reflect the costs CCC Water needs to cover	7
1.4 This should be the last time we set stormwater prices	8
1.5 Inflation has affected our final decisions	8
1.6 How we structured our Final Report Summary	10
2 We heard and responded to the community's views	11
2.1 Customers are concerned about affordability	12
2.2 Customers are unsatisfied with CCC Water's performance, accountability and transparency	13
2.3 Many customers are unhappy with the service they receive	14
2.4 Customers support funding stormwater services through local government rates, but some are concerned about the impact	15
2.5 Some stakeholders were concerned about the IPART review process	15
3 Our process for this review	16
3.1 We use a propose-respond model	17
3.2 We scrutinised cost forecasts - a significant contributor to prices	17
3.3 We questioned CCC Water and sought more information	18
3.4 We consulted widely and considered stakeholder views in forming our decisions	18
4 Summary of findings, decisions and recommendations	19
4.1 CCC Water must increase spending to provide acceptable services	19
4.2 Prices need to rise substantially	20
4.3 The main price increases are to fixed water and wastewater charges	24
4.4 We expect CCC Water to improve services at efficient cost	27
4.5 We recommend regulatory measures to improve CCC Water's performance	30
4.6 We intend this to be the last time we set stormwater prices	32
5 List of all decisions and recommendations	34

Introduction

IPART sets the maximum prices Central Coast Council can charge its customers for the water, wastewater and other services provided by it as a Water Supply Authority.

IPART also sets the maximum percentage by which Central Coast Council may increase its general income each year through the local government rate peg or special variations.

To ensure it is clear which of Central Coast Council's responsibilities IPART is referring to, throughout this report:

- we refer to the Central Coast Council's functions as a Water Supply Authority under the *Water Management Act 2000* as '**CCC Water**'
- we refer to the Central Coast Council's local government functions under the *Local Government Act 1993* as '**the council**'.

Further information is available in our [Technical Paper – Regulatory background](#).

We have reviewed CCC Water's prices for its water-related services and made a Determination on the maximum prices CCC Water can charge for the 4 years from 1 July 2022 to 30 June 2026.^a Our review only considers prices and costs related to CCC Water. It does not consider those related to the council's general activities for which it charges local government rates, levies and other charges.^b We consider our prices would allow CCC Water to deliver good quality water and improve services to the community – now and in the future.

The Central Coast community needs safe and reliable water, wastewater and other related services to protect the health and well-being of the community and environment. Through our consultation for this review, customers have told us they are concerned about price increases for these services, and about making CCC Water accountable for its performance. Customers have raised concerns with us about water quality and stormwater drainage infrastructure in their neighbourhoods and told us they lack trust in CCC Water's ability to deliver services.^c

^a As part of our review we must consider certain matters under the *IPART Act 1992 (NSW)* – detailed information is available in our [Technical Paper – Regulatory background](#).

^b IPART can also review increases to the council's income from rates, but this is a separate review through the special variation process.

^c The council was suspended in October 2020 and an independent Public Inquiry is currently underway into the council's financial management.

1 IPART has set prices for 4 years from 1 July 2022

IPART has set the maximum prices CCC Water can charge its customers for water, wastewater, and other water-related services in the 4 years from 1 July 2022 to 30 June 2026.

Our main goals in setting these prices were to ensure that:

1. CCC Water earns enough revenue to provide water-related services that meet the quality standards its customers expect, both now and into the future, and
2. CCC Water's customers pay no more than is required to provide these services efficiently.

Our decisions result in price increases for the next 4 years. With increases to CCC Water's spending and prices, it is crucial that it is more accountable to the community and is transparent about how it spends this money to improve services. We also know that price increases may lead to affordability concerns. This makes it increasingly important for CCC Water to ensure it has appropriate arrangements for customers to receive hardship assistance and that customers are receiving good value for money.

We recognise that many in the Central Coast community do not support price increases. However:

- Our review found that CCC Water must substantially increase its spending on water-related services so that it can adequately maintain the infrastructure required to provide these services. This should ensure that all customers receive good-quality drinking water, wherever they live in the region.
- To enable this higher spending, prices must also rise. Our price decisions would increase typical household bills for water, wastewater and stormwater services on average by an equivalent of 28% over 4 years. We have set prices so the increases occur over 4 years rather than all in the first year. This will help customers manage bill impacts, starting with a 17% increase in 2022-23, followed by 6%, 8% and 1% in the following 3 years. We also recommend the NSW Government and CCC Water do more to support low-income customers to manage their bills.
- We have not increased prices by as much as CCC Water proposed because we found it can make cost savings by operating its business more efficiently. We have set prices to recover CCC Water's efficient costs. If we had set prices in line with CCC Water's proposal, bills would have increased by around 37% in 2022-23 and remained at that level for 4 years.^d
- We have decided that this will be the last time we set stormwater prices. By 1 July 2026, we expect all stormwater costs to be paid through local government rates rather than water bills.

^d Earlier in this review, we referred to CCC Water's proposal as a 34% increase. The increase to 37% is because we updated the proposal for the most recent inflation data (March 2022). If we had accepted CCC Water's proposal, we would have added this inflation.

- Finally, we have made it clear to CCC Water that we expect it to markedly improve its performance and be more accountable for its spending. We recommend a set of short-term and long-term measures to drive these improvements, including that the NSW Government provide us with the terms of reference to review the level of improvement after 2 years of the determination period (from June 2024).

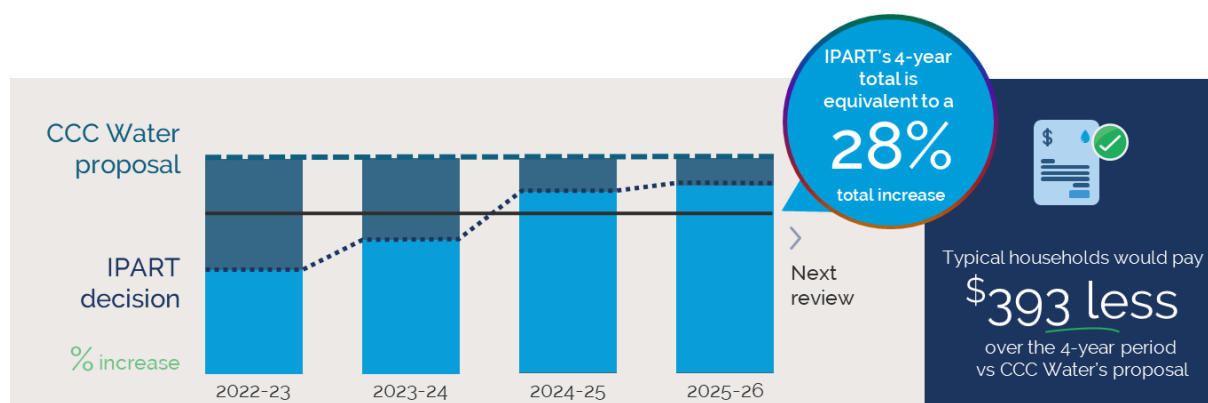
Overall, our decisions on prices and recommendations are similar to those in our Draft Report. The key differences are that:

- We updated prices to include actual inflation, which was higher than expected (5.1% instead of the 3.2% used in our draft prices).
- We changed our decisions on expenditure slightly, with additional funding for water services, reduced funding for wastewater services and an update for inflation. This made a minor difference to prices.
- We changed the way price increases are implemented to have a lower increase in the first year. This was in response to stakeholder comments about affordability.
- We strengthened our recommendations to improve accountability for CCC Water, with additional actions for CCC Water, and that the Minister consider a stronger monitoring and compliance framework such as an operating licence. This reflects stakeholder views.

1.1 Typical bills would increase by about 17% on 1 July 2022 and then by about 6%, 8% and 1% the following years

We have set prices that are higher than current prices. Our final prices result in a larger overall price increase than our draft decision. The key driver of this is the inclusion of actual inflation to March 2022.

The increases in prices and bills are mainly driven by the need for CCC Water to spend more on its Water Supply Authority functions, to deliver the services customers expect. This includes spending more for delivery, network operations and asset maintenance so it can deliver good quality water and services to its customers and improve its performance over time. We set these prices so CCC Water can collect the revenue it needs to function as a reasonably efficient business and as regulation requires it to.



Note: In our Draft Report, we reported our draft pricing decisions as equivalent to a one-off 25% increase in typical household bills and that CCC Water's proposal would increase these bills by 35%. The increase under CCC Water's proposal was initially referred to as 34% in its proposal and our Issues Paper. These figures were based on the most up-to-date inflation data at the time. We have since updated our final prices and CCC Water's proposal to reflect the recent increases in cost inflation from 2.9% to 4.2%, and price inflation from 3.2% to 5.1% (as at March 2022).

Typical household bills would increase by about 17% (or about \$183) to \$1,242 on 1 July 2022.^e Typical household bills would then continue to increase in each of the following 3 years. These increases are lower than the 37% (i.e. about \$397) bill increase CCC Water proposed begin from 1 July 2022.

The typical bill in the first year would be lower than it was under our draft decisions. We made this change in response to stakeholder comments who were concerned about affordability, to reduce the bill impact on 1 July 2022. However, a lower bill in the first year leads to higher bills in the later years to ensure the appropriate revenue is recovered. We considered various options and consider our final decision finds the right balance between managing bill impacts in all 4 years.

Bills would remain relatively low

We found that CCC Water's current bills are among the lowest in Australia for comparable water utilities.¹ Under our new prices, bills for the typical customer in 2022-23 would be:

- the third lowest compared to typical customer bills of the large water businesses in Australia
- lower than the typical customer would pay in neighbouring local government areas, which are serviced by Sydney Water and Hunter Water.^f

In 2023-24 and 2024-25, CCC Water bills would be 2-3% higher than for a Hunter Water typical customer, and 16% higher than for a typical Sydney Water customer. They would remain within the 20 lowest bills compared to 88 other water utilities in NSW.

^e A typical household bill is based on a household living in a house, with a water usage of 170 kilolitres (kL) a year.

^f Based on a typical usage of 170 kL for CCC Water household customers, 189 kL for Hunter Water household customers, 200 kL for Sydney Water household customers. If a customer of CCC Water, Hunter Water and Sydney Water uses 200 kL a year, in 2022-23, the CCC Water household customer would pay a bill that is 9% lower than what the Hunter Water household customer would pay and 5% higher than what the Sydney Water household customer would pay.

We acknowledge customer affordability concerns

We recognise that our price increases are large and some customers may have difficulty meeting the extra costs. We have set prices to introduce the increases over the 4 years rather than one increase in the first year, to ease the bill shock. We did this because stakeholders told us that they would prefer an increase to be phased-in, as they believed this would allow more time to manage the bill impacts.²

We considered various options to increase prices in stages over the determination period. Our final decision is to have a slightly smaller increase in the first year compared to the draft decision. This is in response to stakeholder feedback on our draft decision to make the impact on 1 July 2022 more manageable. Compared to our draft decisions, increases in the later years are slightly higher and the bill in the fourth year will be the largest. During the fourth year, we will be due for our next review for these prices. We will reset them again based on our findings in the next review, with the reset prices planned to start in July 2026.

1.2 Our recommendations aim to improve CCC Water's performance and accountability

CCC Water needs to address service levels, and the availability of information to customers on how it is performing. CCC Water agrees that an improvement to both accountability and transparency to the community is required. CCC Water has told us it is already in the process of making improvements.³ We note that CCC Water's responsiveness and the clarity of information provided to us has improved significantly since our previous review in 2019. While this does not necessarily mean improvements will flow through to better service or transparency in its performance, it shows at least a corporate willingness to improve its systems and processes. We expect CCC Water to extend this improvement to engagement with its customers on performance issues.

We have strengthened our recommendations for accountability measures compared to the Draft Report. In making our recommendations, we considered how best to address customers' concerns about CCC Water's performance, and its accountability for this performance. Our expenditure decisions allow CCC Water to invest in infrastructure and improve its service levels. CCC Water also needs to continue to improve its internal systems and processes to support improvements.

CCC Water should report on performance

We considered a range of options and recommend the introduction of reporting to hold CCC Water to account on how it spends its money to improve service outcomes for customers. We recommend CCC Water:

- publish available metrics going back 5 years, as well as strategic planning documents and contextual information for transparency and to keep the community informed
- engage with its customers to understand their preferences for service levels and performance reporting, and develop outcomes-based reporting
- report yearly on its performance through a clear, publicly available report on its website.

This would give CCC Water an opportunity to demonstrate it is implementing recommendations from the current Public Inquiry and that an elected council is driving its performance.

We recommend IPART review performance after 2 years

We recommend that the Minister authorises IPART to investigate and report publicly on CCC Water's performance as a Water Supply Authority and its progress implementing management and governance improvements in 2 years' time. At this review, we expect to also look at whether stronger elements of its regulatory framework are necessary. Terms of reference provided to IPART for this investigation should require CCC Water to provide us with the necessary information needed to assess its performance.

Further consideration into a stronger accountability framework

We also recommend that the Government further consider the merit of legislative reform to strengthen service level regulation for CCC Water.

CCC Water's service performance is currently overseen by the Department of Planning and Environment's (DPE). DPE's regulatory framework for the 84 local water utilities (LWUs) is currently under review.⁴ This recommendation takes into account the scale and impact of CCC Water compared to other LWUs, and the expected level of sophistication for a business of this size. CCC Water is significantly larger than other LWUs. Other large water utilities have an operating licence with requirements for management systems, service standards, reporting measures and auditing.

These measures would provide the community with the transparent information people want and need to assess CCC Water's performance and hold it to account for its performance. We consider this will help to ensure CCC Water better invests in its functions as a Water Supply Authority. In the long term, this should lead to better water and wastewater services and better value for money for customers.

More information on these recommendations is available in our [Information Paper – Improving performance](#).

1.3 Our decisions reflect the costs CCC Water needs to cover

We have set prices on the basis that the income CCC Water earns from its Water Supply Authority is no more or no less than it needs to provide the water and related services the community expects. This is important because:

- If it earns more than it needs during a determination period, CCC Water would collect more money from its customers than is fair during that period. It may also spend more than it should and would have little incentive to improve the way it manages its Water Supply Authority.⁹
- If it earns less than it needs during a determination period, it may not be able to spend what is required to provide services of a quality acceptable to the community. Over time, its dams, pipes, pumps and treatment plants may deteriorate, leaving future generations to pay steep price increases to 'fix' them or accept poor quality services.

CCC Water does not need to spend as much as it proposed

To help us get this balance right, we reviewed CCC Water's proposed operating and capital costs for its Water Supply Authority over the next 4 years and compared this to its past costs. We looked at what level of income would be necessary for a reasonably efficient water business to deliver these services compared to what level of income CCC Water had proposed. In making our decisions, we also considered advice from expert consultants Frontier Economics and Mott MacDonald.⁵ We engaged these consultants to review the efficient level of costs – that is, the least cost necessary to ensure water services are secure, safe and reliable.

Our decision on CCC Water's expenditure over the 4 years is:

- 8% lower for operating costs than CCC Water proposed
- 5% lower capital costs than CCC Water proposed.

Our decision reflects the efficient level of expenditure

We have based our decisions on an understanding of what a reasonably efficient water business's operating costs should be.^h This ensures that customers pay no more than necessary. The costs we have used to set prices are also lower because we expect that CCC Water's proposed spending should improve its systems and processes to deliver cost savings over the 2022 determination period. In addition, we are not accepting CCC Water's proposal to transfer additional stormwater services, which are currently funded through local government rates, to the Water Supply Authority.

⁹ We would consider any over or under-recovery as part of our assessment of costs and setting of prices for the next determination period.

^h This is based on our approach for reviewing what a water business's costs should be based on benchmarking Australian water businesses.

1.4 This should be the last time we set stormwater prices

We considered whether we should continue to set stormwater drainage prices as a water-related service at all, or whether these services should instead be fully funded through local government rates. In our view, stormwater services provide benefits to the whole community – not just specific customers. As such, they should be funded through local government rates like other services that benefit the whole community – such as maintaining public parks and sportsgrounds, roads and bridges.

We maintained our draft decision that these services should be fully funded through local government rates from July 2026.

We first raised this matter in our 2019 review. CCC Water said it would consider alternate funding sources, and we said we would consider it further during this price review.⁶ CCC Water proposed to move stormwater costs currently funded by the local government rates to the prices we set,⁷ which we have not accepted. In November 2021 the council made a resolution “demonstrating its commitment to fund all stormwater drainage services through local government rates – and not through the charges IPART sets for CCC Water as a Water Supply Authority – by the end of the next determination.”⁸

We decided to set prices for this review to allow for the council to plan and implement funding stormwater costs via its local government rates income, consult with customers and consider whether it needs to prepare for any necessary special variations to local government rates.

This change in funding received some stakeholder support but there were some concerns about the impact on rates, especially for rural properties.⁹ It is likely that the council would need to consider and consult on options for funding its stormwater services. The council should consider all options available to it with its current rates income before seeking to increase rates to raise additional funds. However, if it cannot cover its stormwater costs through existing local government rates at the next determination, it may consider whether it needs to apply to IPART for a special variation to its local government rates revenue to ensure that it recovers its stormwater costs and maintains services. The way the council distributes the charges between different types of ratepayers is a matter for the council. However, we expect the council to consult with its customers, including those with farmland, and the rural community as it develops a new system to fund stormwater services.

1.5 Inflation has affected our final decisions

Inflation is the main driver of the change in prices between our draft and final decisions. Other changes between our draft and final decisions were minor.

- Our draft decision on prices led to an increase equivalent to a 25% one-off increase in typical household bills.
- If our final decision used the same inflation rate as in the draft decision, the final increase would be equivalent to a 24% increase in typical household bills. This is due to a fall in the weighted average cost of capital (WACC) between our draft and final reports.
- Our final decision is equivalent to a 28% increase. The difference from the point above is only due to updates in inflation.

Inflation affected operating expenditure and final prices

There are 2 main ways we used inflation in this review – to update costs (both operating and capital expenditure) and to update prices.

- For **operating expenditure**, we applied inflation to reflect changes in benchmarked operating expenses, on which our decision is based.
 - For our draft prices, we used an inflation forecast of 2.9% for the 12 months to the June quarter 2022, ie, June/June. For our final prices, we updated this to 4.2% based on revised market expectations.
 - Between our draft and final decisions, the change in forecast inflation meant an additional \$6.0 million in efficient operating expenditure (from \$477.7 million to \$483.7 million). There were no further changes to operating expenditure between our draft and final reports.
- For **capital expenditure**, we applied inflation to maintain the real value of the Regulatory Asset Base (RAB) for capital costs.
- For **prices**, we calculated prices based on costs in \$2021-22, and applied inflation to escalate them to \$2022-23 (CPI March/March).

Each time we have presented prices, we have used the most current inflation rates available at the time. This means we used different rates in the Issues Paper, Draft Report and now this Final Report. Table 1.1 shows the inflation rates we used and how they changed over the course of this review.

Table 1.1 Rates of inflation used across our review

	Issues Paper	Draft Report	Final Report
Rate of inflation for costs	2.5%	2.9%	4.2%
Rate of inflation for prices	2.5%	3.2%	5.1%

Inflation changed the value of CCC Water's proposal during this review

We applied the inflation rates in Table 1.1 to CCC Water's proposed prices in our various publications. This is to show an accurate comparison, and to show what CCC Water's proposed prices would have been to customers if we had accepted the proposal in full. Table 1.2 shows the differences inflation made to CCC Water's proposal.

Table 1.2 Increase in typical household bills under CCC Water's proposal (compared to current bills) across our review

	Issues Paper	Draft Report	Final Report
CCC Water's proposal	34% in 2022-23, then by inflation only for the next 3 years	35% in 2022-23, then by inflation only for the next 3 years	37% in 2022-23, then by inflation only for the next 3 years

Source: IPART, *Review of Central Coast Council water, Issues Paper* September 2021, p 3; IPART, *Review of Central Coast Council water prices – Summary Draft Report*, March 2022, p 3.

Drivers of change between draft and final decisions

Table 1.3 below presents the key drivers of the price increase since our draft decisions. For more information on the:

- regulatory asset base and weighted average cost of capital, see our [Technical Paper - How we set the revenue level](#)
- how we set the operating expenditure, see our [Information Paper – Operating and capital costs](#).

Table 1.3 Drivers of price changes since the draft decisions

	Impact (change in percentage points)	Change in typical household bill from 2021-22
Draft Report		25.4%
Opening regulatory asset base (RAB) updated using latest June/June inflation forecast	+0.8	26.2%
Operating expenditure updated using latest June/June inflation forecast	+1.0	27.2%
Reduction in the weighted average cost of capital (WACC)	-1.5	25.7%
Prices updated using actual March/March inflation	+ 2.3	28.0%
Final Report		28.0%

Note: the second column shows the percentage point change of each driver.

1.6 How we structured our Final Report Summary

The following sections of this Final Report Summary discuss:

- what we heard from stakeholders, and how this has influenced our decisions
- the process we take to make our decisions
- each of the key points above in more detail.

Further detail on our review, our pricing decisions and their impacts on customers and CCC Water is available in our Information Papers and Technical Papers. A complete list of all our decisions and recommendations is available at the end of this Final Report Summary.



Use our **bill calculator** to find out how prices from 1 July 2022 for CCC Water will affect your bills.

2 We heard and responded to the community's views

During our review we sought community feedback on multiple occasions, and we have taken this into account in our final decisions. Sometimes we have had to balance conflicting views from stakeholders as well as our requirement to ensure that CCC Water receives sufficient funds to provide the level of service expected by the community. Table 2.1 provides an overview of the timing and level of input to the stakeholder engagement we undertook.



Table 2.1 Overview of our stakeholder engagement

Engagement item	Timing	Level of engagement	More information
Webinars to explain our review process	August 2021	24 participants (excluding IPART and CCC Water staff)	Information and recordings
Survey - CCC Water's proposal	September 2021	1,097 responses	Summary of results
Survey - Stormwater funding	September 2021	269 responses	Information Paper and results
Survey - Our draft decisions	March/April 2022	83 responses	Summary of results
Public Hearing - CCC Water's proposal	October 2021	58 participants (excluding IPART and CCC Water staff)	Information and recordings
Public Hearing - Our draft decisions and performance and accountability workshop	April 2022	38 participants (excluding IPART and CCC Water staff)	Information and recordings
Information Paper, seeking submissions	September 2021	171 submissions	Submissions are publicly available
Draft Report, seeking submissions	March/April 2022	66 submissions	Submissions are publicly available

Through surveys, public hearings and submissions to our Issues Paper and Draft Report, many stakeholders expressed opposition to CCC Water's proposed price increases. Their reasons for opposition included concerns about:

- the affordability of the proposed prices for customers
- CCC Water's level of performance, accountability and transparency
- dissatisfaction in the level of service received for the cost.

Below, we explain the key concerns we heard and how they have influenced our decisions.

2.1 Customers are concerned about affordability

Customers raised concerns about the impacts of price increases on affordability and their potential to cause financial hardship.

Customers spoke of worsening financial circumstances brought about by the COVID-19 pandemic, bushfires and the recent increase in local government rates as well as recent increases in the general cost of living (i.e. inflation).

Customers were especially concerned about the impacts of price increases on disadvantaged groups such as pensioners and low-income earners. If price increases were needed, most customers wanted them to occur gradually over the determination period, rather than all at once in the first year of the determination period.¹⁰

We amended the price path to reduce bill shock

Our prices are the equivalent of a 28% increase in the typical bill over the 4 years compared to current bill levels. That is, if we put the prices up in the first year then kept it at that level, that first year increase would have been 28%. We appreciate this is a large bill increase, especially for those on a fixed income.

To help reduce bill shock in the first year and ease affordability concerns, we opted to increase prices by a lesser amount in year 1. We were also conscious that by doing this, bills in the later years would be higher. That is, the lower the first year prices, the higher the prices would have to be in later years to ensure the appropriate amount of revenue is recovered.

We had to balance the concerns of affordability in the first year with affordability in later years. We consider our final decision was the best option available to balance affordability concerns across the period. The prices we decided on would result in the typical bill increasing by 17% in the first year, and it would increase steadily for 2 years, then by a small amount in the fourth year.

We recommend a review of pensioner rebates

We are also conscious that the pensioner rebate available to CCC Water customers (and all that receive their water from a local water utility) has not increased for many years. This is set in legislation at a capped amount and is significantly lower than the rebate available to pensioners served by Sydney Water and Hunter Water.

We recommend that the NSW Government review the appropriateness of pensioner concessions for water and wastewater bills across the state.

2.2 Customers are unsatisfied with CCC Water's performance, accountability and transparency

A lot of the stakeholder feedback considered that CCC Water's previous and current performance is poor. Service quality and level appears to vary across the Central Coast as indicated by complaints about the lack of services.

Some customers indicated they are not satisfied with their services, particularly water and stormwater (including kerb and guttering).

Most customers also expressed frustration about the standard of financial management by Central Coast Council, including both its functions as a council and its functions as a Water Supply Authority. Some were concerned that insufficient change had taken place within CCC Water, and that financial management issues would continue with any additional funding IPART approves.

In addition, some customers submitted that they feel disempowered without elected officials. They do not believe CCC Water has kept them informed of the need for greater expenditure, or that the community's input has informed CCC Water's and the council's strategic priorities.

Overall, submissions indicate that customers want CCC Water to be more strongly held to account going forward and want to see better water services, as well as improved transparency to build community trust.

We have taken steps within our power

We understand customers' frustration at the current situation of CCC Water and the council. Our review also identified outcome measures from our last review that CCC Water failed to meet, impacting directly on the customer experience of these services. We also note the results of the Public Inquiry into CCC Water's financial management and the Commissioner's recommendations.¹¹

We have taken actions within our power to improve the accountability and performance of CCC Water going forward. We have made recommendations to CCC Water on how it should improve its internal systems and processes to:

- understand community preferences
- improve its performance and service levels
- find efficiencies
- improve its accountability to the community.

We recommend a review into the legislative framework, and an additional terms of reference for IPART

We also made 2 recommendations to the Government to consider new arrangements to improve accountability. We are committed to improving the accountability of CCC Water and consider we could continue to add value with a review after 2 years of the 2022 determination period.

2.3 Many customers are unhappy with the service they receive

Many stakeholders complained about poor service levels. For some, the price increase is unacceptable without a change in performance. We heard about issues with drinking water quality wastewater overflows and stormwater drainage.

Some mentioned having no services – the majority referred to stormwater, but others are not connected to water and wastewater and were concerned about paying for these services.

We aim to drive improvement through our decisions and recommendations on expenditure and accountability

Service level issues are supported by our findings that CCC Water failed to meet a number of output measures set out with our 2019 price determination. We have recommended steps for CCC Water to take to improve its internal systems and processes including asset management. We also allowed CCC Water a higher level of expenditure for the next 4 years than it has had in the last 3 years, which we found to be the efficient level of funding needed to make needed improvements.

In response to our Draft Report, CCC Water agreed that it needs to improve both services and accountability. It noted additional expenditure that was for key areas of improvement and set out measures it intends to take to be more accountable and transparent with its customers.

Only customers connected to water and wastewater service pay for those services

People who do not have a connection to water or wastewater services should not receive a water or wastewater bill under our Determination.ⁱ As a water utility under the Water Management Act, a customer that is connected to the system may be liable for a charge. When we calculate prices, we use actual and forecast connection numbers for those services. If customers believe they are being billed for water and wastewater service they don't receive, they should contact [CCC Water](#) or the [NSW Ombudsman](#).

ⁱ Under the Water Management Act, a Water Supply Authority may notify a customer that a water or wastewater main has become available for connection and, if the landholder does not make a connection within 21 days, make the connection at the expense of the landholder. Once connected, the property will be liable to pay for the service(s). Comparatively, local government water utilities may generally, under the Local Government Act, levy a special rate or charge to land situated within 225 metres of a water pipe and 75 metres of a wastewater pipe even where the land is not actually supplied with water.

2.4 Customers support funding stormwater services through local government rates, but some are concerned about the impact

Some of those in the community argued that they were not receiving adequate (or indeed any) stormwater services and should not pay the proposed increase in charges. Submissions on stormwater typically focused on a lack of kerb and guttering in residential streets, and water that drains off slowly. Rural customers also argued that they should not pay stormwater charges because of the work they do to manage stormwater.

Our view is that stormwater services should be funded by local government rates because they provide broader benefits to the community. This would require the council to transfer all stormwater costs to its local government rates fund. Our survey on stormwater funding also showed that most customers support paying for stormwater through their local government rates.

However, CCC Water has options with how it would fund the stormwater services, if not through the prices we set. It should consult with its customers about how to achieve this.

2.5 Some stakeholders were concerned about the IPART review process

Some stakeholders expressed concern about the integrity of our review. We have been open and honest with the community, and closely scrutinised CCC Water's proposal. We are confident that our decisions strike the right balance between the 12 matters we must consider under section 15(1) of the IPART Act.

Section 3 of this paper outlines our review process in more detail, and our [Technical Paper – Regulatory background](#) explains the matters that we must consider and how we met them.

We note many stakeholders believed that our draft decision was to approve everything CCC Water had proposed. We did not. We approved a lower expenditure level which resulted in lower prices. We updated our prices [fact sheet](#) to better explain this to customers.^j For our final decision:

- CCC Water had proposed typical bills in each of the next 4 years that would be 37% above the 2021-22 typical bill.
- Under our prices, typical bill increases would be the equivalent of 28% above the 2021-22 prices if we decided to apply the total increase in year 1. However, we implemented these in stages to reduce bill shocks.
- Only in the final year of our prices is the typical bill close to CCC Water's proposed bill for each year. But our typical bills are less than 28% increase in the first 2 years which requires a greater than 28% increase (compared to current prices) in years 3 and 4.

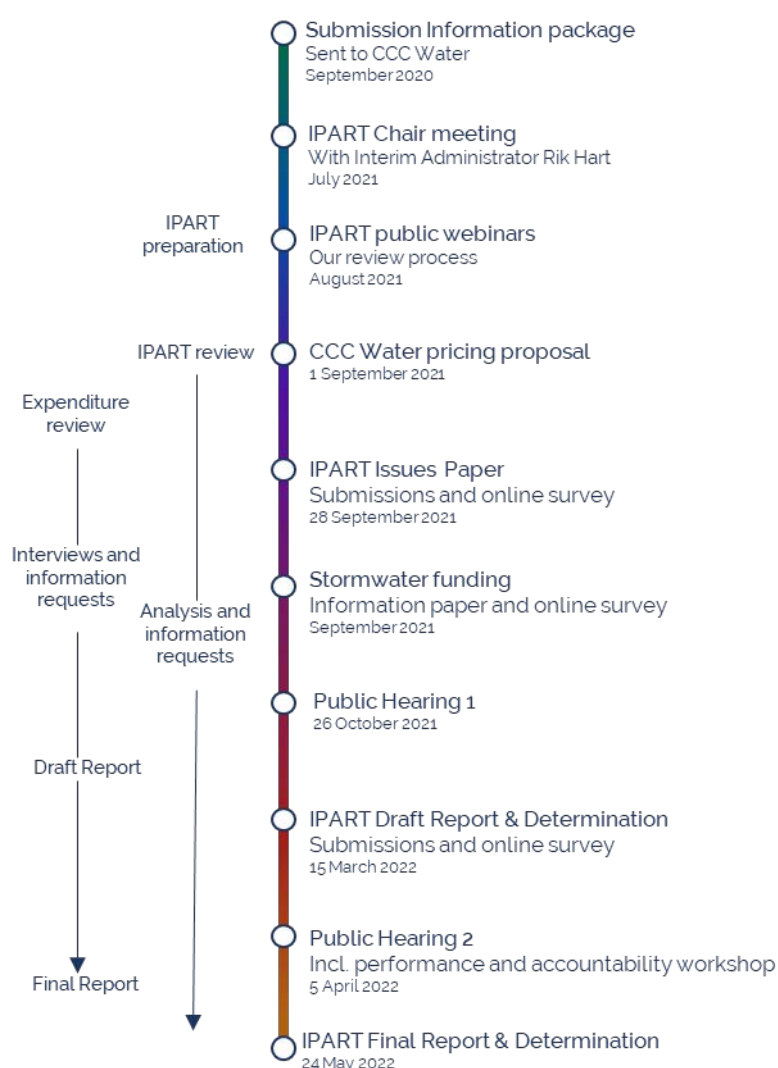
^j After updating for recent inflation rates, CCC Water's proposal would have been a 37% increase (rather than 34%), and our final decisions result in a 28% increase (rather than 25%).

3 Our process for this review

Some submissions to our Draft Report were concerned about the integrity and robustness of our review. Below, we provide an overview of the approach we took to make our decisions including interactions with CCC Water.

Our approach is similar to the approach we take with water price reviews for other utilities. However, for this review we had additional stakeholder engagement and incorporated benchmarking in our expenditure review.^k

Figure 3.1 Process for our pricing review



^k We also note our approach is similar to those taken by other regulators of monopoly services, including the Australian Energy Regulator and the Essential Services Commission which regulates water prices in Victoria.

3.1 We use a propose-respond model

CCC Water's proposal forms the starting point of our review.

We expect regulated businesses to engage with their customers to understand their preferences, and forecast their business activities for 5 years, including:

- the level of service they will provide
- ongoing operational costs
- infrastructure investment needed, including for a long-term horizon
- demand for their services and customer numbers
- the prices and preferred price structure to recover the costs.

In September 2020, we sent a Submission Information Package to CCC Water outlining our expectations for the proposal.

3.2 We scrutinised cost forecasts - a significant contributor to prices

To apply our due diligence and ensure the right outcomes for the community, we put significant effort into scrutinising CCC Water's proposal.

The expenditure requirement is the main component of revenue needed, and therefore the key basis of prices. We engaged expert consultants – Frontier Economics and Mott Macdonald (engineering firm) to assess the efficiency of CCC Water's proposed expenditure. This included to form a view and recommendation on:

- an efficient level of operational expenditure, based on benchmarking against other utilities
- the efficiency of capital expenditure over the last 3 years
- the scale, scope, timing and cost estimates for proposed assets.

The review took into account:

- regulatory requirements and proposed service levels
- operational planning and costs, and the costs the other similar sized utilities incur for similar service levels
- strategic planning, asset management systems, procurement policy and processes
- a sample of capital projects, including the 10 largest projects
- feedback we received on a Draft Report we published for public comment.

In order to do this, our consultants met with and interviewed CCC Water staff, and requested and reviewed a significant amount of information from CCC Water to inform their recommendations. They prepared a draft report which informed our draft decisions. We provided CCC Water and all other stakeholders the opportunity to respond to a Draft Report before finalisation.

This review spanned 6 months and was the key input to our decisions on efficient expenditure.

The consultants' [final report](#) is available on our website.

3.3 We questioned CCC Water and sought more information

Stakeholders also queried interactions between the Tribunal and council Administrator. The IPART Chair had one meeting with the interim administrator Rik Hart in July 2021, prior to the proposal being submitted. The [minutes](#) of this meeting are published. It is not uncommon for the Tribunal to meet with senior management of the businesses we regulate.

IPART staff also had to request additional information from CCC Water and ask questions about how CCC Water developed its proposal and why. Some of this information request is available in a published letter, other requests happened over the phone. For instance, we examined aspects of their pricing proposal in more detail, especially expenditure items and demand, and sought more information to ensure our understanding of how pensioner rebates apply and the hardship programs CCC Water offers. We also explained procedural matters such as the expenditure review process and the role we expect of CCC Water in the Public Hearings. Information requests and procedural explanations are a normal part of our function with setting water prices and most other functions we undertake.

We also sought information publicly by requesting feedback to our Issues Paper and Draft Report. CCC Water made a submission to both. These are available on our website.¹² The Information Papers and Technical Papers that accompany this Final Report Summary explain where we accepted CCC Water's proposal or came to a different view, and where CCC Water accepted or opposed our draft decision and our response.

Our first public hearing was also to hear stakeholder feedback on CCC Water's proposal. This was an opportunity for customers to question CCC Water, with CCC Water staff available to respond to questions and comments and justify its proposal.

3.4 We consulted widely and considered stakeholder views in forming our decisions

As shown in Figure 3.1, we consulted widely through several means. Section 2 explains how stakeholder views impacted the way we considered issues and made decisions and recommendations. Indeed, this was among the most consultation undertaken for an IPART water review, and we found the high number of responses valuable.

In particular, the views we heard informed:

- the way we set prices to ease affordability concerns, resulting in prices that increase in stages over multiple years rather than in one go
- the way we considered accountability and service levels, resulting in 5 recommendations for improved accountability
- a change in the way stormwater services are funded.

Some stakeholders were dissatisfied that we didn't agree with them. It was not an easy decision to increase prices by this amount. We acknowledge that there are a range of views in the community and we took care to give adequate weight to all views we heard. In making our decisions, we considered all relevant matters and looked at various options to balance competing interests and weigh up alternative views.

4 Summary of findings, decisions and recommendations

This section summarises our findings, decisions and recommendations, and the impact they will have on customers and CCC Water. Further detail can be found in our Information Papers and Technical Papers:

- [Information Paper - Prices and bill impacts](#)
- [Information Paper – Improving performance](#)
- [Information Paper - Operating and capital costs](#)
- [Information Paper - Funding stormwater services](#)
- [Technical Paper - Regulatory background](#)
- [Technical Paper - How we set the revenue level](#)
- [Technical Paper - Demand for water services](#)
- [Technical Paper - Trade waste and other prices.](#)

4.1 CCC Water must increase spending to provide acceptable services

Our review has shown that:

- customers are dissatisfied with the service they receive
- CCC Water has failed to meet a number of key output measures and regulatory requirements.

Last time we reviewed CCC Water's prices in 2019, we did not allow its proposed price increases. This was, in part, because CCC Water had for several years consistently spent less on operating costs than it recovered through prices (based on our previous pricing reviews (2013 reviews for the separate Wyong and Gosford councils) and in 2019 it could not justify that it needed any more funding than what it had been spending. While CCC Water had proposed price increases, we determined prices that we considered were necessary to provide its water services efficiently based on the information available. It was also not clear that service levels were declining.¹³

Now there is new information that indicates CCC Water needs to spend more, and prices need to increase so that it can maintain its infrastructure and improve water services for its customers. This includes information from customers who told us there are persistent water quality problems in some parts of the water supply system.

4.2 Prices need to rise substantially

Typical bills would increase by an equivalent of 28% over 4 years

The prices we set would increase typical household bills for water, wastewater and other services, but not by as much as CCC Water proposed.^l

Our final prices are also higher than our draft prices. This is because we added the most recent inflation figures which were higher than those used in setting the draft prices.^m Making the same adjustment to CCC Water's proposal, means its proposal would have been for a 37% increase.

In presenting our draft decision, we may not have been clear enough about the difference between CCC Water's proposal and our draft decisions. Some stakeholders had understood that we allowed the increases that CCC Water had requested, which is not the case. Under our final decisions, by the fourth year, the typical bill would be close to that proposed by CCC Water. However, CCC Water had proposed bills stay at that level for 4 years, while ours increase in stages over the period to reach that level. This means customers pay less over the 4 years than they would have under CCC Water's proposal. If we set bills to be the same over 4 years, then this would have been a 28% increase in the first year and they would have increased with inflation after that.

Prices will increase in stages to allow time to manage bill impacts

Customers have told us that the price and bill increases may raise affordability concerns among the community. Most indicated they would prefer the increases to come in gradually.

We set the price path to help manage bill impacts across the next 4 years.

To reduce the bill impact in 2022-23 we have introduced the increase over the 4 years rather than all in one go. For the typical customer (using 170kL, in a free-standing house) bills would increase as follows:

- 17% (\$183) from \$1,058 in 2021-22 to \$1,242 in the first year
- 6% (\$80) to \$1,321 in the second year
- 8% (\$106) to \$1,427 in the third year
- 1% (\$9) to \$1,436 in the last year of the determination period.ⁿ

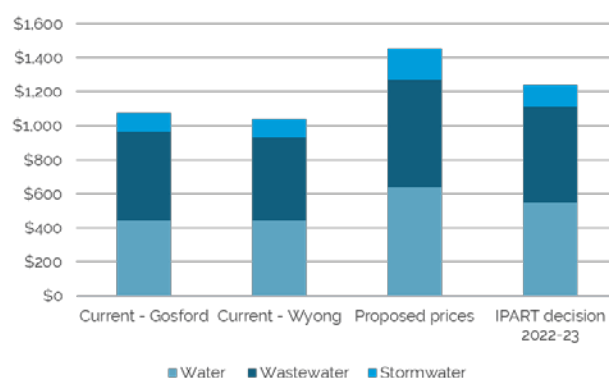
^l Detailed information is available in our [Information Paper – Prices and bill impacts](#).

^m 5.1% (March 2022/March 2021) compared to the 3.2% (December 2021/December 2020) used in our draft prices.

ⁿ Bills for 2021-22 are in \$2021-22. Bills for 2022-23 to 2025-26 are in \$2022-23. Bills from 2023-24 to 2025-26 would however also increase each year in line with inflation.

We designed this to ensure CCC Water receives the required amount of revenue over the 4 years. If we instead had introduced the full increase in the first year as preferred by CCC Water,¹⁴ this would be a 28% increase in the typical bill.

Figure 4.1 Typical household bills under our pricing decisions on 1 July 2022



Source: CCC Water pricing proposal 2021 and IPART analysis.

17%↑

On an average bill for a typical household on 1 July 2022, then by 6%, 8%, and 1% in the next 3 years

Our draft price path would have resulted in a 19% increase in typical bills in the first year, followed by 4% in the following years. We reduced the first year prices in response to stakeholder feedback about affordability concerns, particularly in light of recent inflation rates.

We found this final price path has the right balance between managing bill impacts in all 4 years. Some stakeholders sought a slower or more even increase.¹⁵ However, a lower bill in the first year leads to higher bills in the later years to ensure the appropriate revenue is recovered. Our decision balanced the need to reduce initial bill shock and contain bill levels in later years. In 2025-26, the typical bill would be 36% higher (plus inflation) than the typical bill in 2021-22.

During 2025-26, we plan to review CCC Water's costs and service levels and reset prices for the subsequent period based on our findings at the time. The prices in 2025-26 do not determine what the prices in the following period will be.



Use our **bill calculator** to find out how prices from 1 July 2022 for CCC Water will affect your bills.

CCC Water provides affordability assistance

We recognise that for some customers, the price increases would still be large and that resulting bill increases may lead to affordability concerns among the community.

Typical bills would represent around 1.8% of a typical Central Coast household's income over the determination period. For households living in apartments, bills would be around 1.5% of typical household income.¹⁶

We recognise that for some households, the bill impacts could be more or less than our analysis indicates, depending on their specific household characteristics, water usage and income. For example, for a pensioner who lives alone, bills could be around 3.6% of their income.¹⁷

We are concerned about the impact of price increases on those with limited income. To help customers with paying their bills, CCC Water provides assistance such as payment plans, and concessions for pensioners.^o We recommend that CCC Water promotes its assistance programs such as payment plans, as well as considering how to better target assistance to those who need it.

We found that the percentage increase to pensioner bills is higher compared to other groups of customers (even though the total bill is lower).^p Because of this, we recommend that the NSW government review pensioner concessions and consider whether these remain appropriate. This includes the legislative framework that sets out the pensioner concession CCC Water (and other Water Supply Authorities) can provide.

To help some customers pay their bills, we also recommend that CCC Water works with the community to assist with water conservation to allow them to manage their bill.

Business customers would also see similar increases in prices and bills

Our prices for businesses would rise by around the same percentage as prices for households. However, the impact on bills for business customers may vary. The impact on your bill as a business owner would depend on, for example, the type and size of your business, how much water your business uses, and how much wastewater it discharges, the size of your water meter, whether the business is located in the former Gosford or Wyong local government area, and the size of your property.

Bills would remain at comparable levels to other areas

Even though this is a sizeable increase in bills, we note that CCC Water prices have historically been among the lowest in NSW.

We found that in 2020-21, the typical CCC Water household customer paid the lowest bill compared to typical household customers of other NSW water businesses. This includes neighbouring Sydney Water and Hunter Water and comparable major Australian water utilities.

^o [Central Coast Council rebates and hardship assistance](#), August 2021

^p For instance, the typical household customer bill would increase by 17% in year 1. For typical pensioner households, the increase would be 18% - 24% on average (across Wyong and Gosford) depending on how many people in the household, and whether they receive a rebate. The total bills are smaller than for the typical household. For more analysis on typical pensioner bills, see section 5.2 and 5.3 in our [Information Paper – Prices and bill impacts](#).

In the first year of our pricing decisions (2022-23), the typical CCC Water household customer would pay 12% less than a typical Hunter Water customer, and 1% less than a typical Sydney Water customer, based on typical usage in each area.^q While prices are set to continue to increase above this, our analysis shows that they are reasonable compared to other water businesses and not excessive.

- In 2024-25 and 2025-26, CCC Water bills would be 2% and 3% higher than Hunter Water customer bills but 16% higher than Sydney Water customer bills (in both years).^r
- Compared to typical bills from 88 other NSW utilities, typical CCC Water bills would be fifth lowest in 2023-24, and 19th and 20th lowest in 2024-25 and 2025-26 respectively.
- Compared to typical bills from 14 other major Australian water businesses, CCC Water typical bills would be seventh lowest in 2023-24, and then 10th lowest in both 2024-25 and 2025-26.

We also appreciate, however, that there are some households and businesses on the Central Coast that might struggle with affordability. Socio-economic circumstances vary widely across the Central Coast, but we note that:

- In 2016, about 29.1% of Central Coast households were within the lowest household income quartile group comprising the largest income group in the Central Coast.¹⁸
- A significant proportion of Central Coast households are pensioners:
 - 13.7% receive the age pension^s
 - 3.7% receive the disability support pension
 - 22.5% have the pension concession card.¹⁹

For more information about prices, including bill impacts on different customer types, see our [Information Paper – Prices and bills](#).

^q Based on water and wastewater services (excludes stormwater services) and compares what bills would be in 2022-23 based on a typical usage of 170 kL for CCC Water household customers, 189 kL for Hunter Water household customers, 200 kL for Sydney Water household customers. If a CCC Water, Hunter Water and Sydney Water household customer used 200 kL a year, in 2022-23, the CCC Water household customer would pay a bill that is 9% lower than what the Hunter Water household customer would pay and 5% higher than what the Sydney Water household customer would pay. In 2023-24, CCC Water household customer bills would be 3% lower than Hunter Water household customer bills and 12% higher than Sydney Water household customer bills. This increase in 2023-24 excludes inflation.

^r Although we are due to set prices again for Hunter Water and Sydney Water in 2024-25, we have assumed they will remain the same except for the addition of inflation.

^s Based on the latest census data from 2016, 27.1% of the Central Coast population was aged over 60, reflecting a higher percentage of those aged over 60 than Greater Sydney (19%), including other neighbouring LGAs. This may contribute to a higher proportion of those on the age pension. We note however that CCC Water includes in its scope for pensioners other groups that hold concession cards that are not necessarily age pension recipients, e.g. disability pension recipients.

4.3 The main price increases are to fixed water and wastewater charges

We generally maintained the current price structures. The one exception is that we aligned the wastewater prices for the former Gosford local government area and former Wyong local government area from 1 July 2022. This was supported by stakeholder feedback²⁰ and results in larger increases for customers from the former Wyong LGA.

We set prices for:

- a water usage charge and a water service charge
- for wastewater:
 - separate fixed wastewater charges for house and apartments. This is because we deem the amount of waste discharged which is based on a lower typical water usage in apartments than houses
 - for non-residential properties, a fixed wastewater charge and a wastewater usage charge
- a set stormwater charge for houses, apartments and 'low impact' properties, and an area-based charge for non-residential properties.

The maximum prices we have set for the individual services are shown in Table 4.1.

Table 4.1 Summary of our household prices from 1 July 2022 to 30 June 2026 – (\$2022-23)

	2021-22 (current \$2021-22)	2022-23	2023-24	2024-25	2025-26	CCC Water proposed 2022-23 to 2025-26
Water prices						
Usage charge (\$/kL)	2.10	2.31	2.31	2.31	2.31	2.31
Yearly change		10%	0%	0%	0%	10%
Service charge (\$/year)	87.29	155.24	218.77	306.28	313.13	244.38
Yearly change		78%	41%	40%	2%	180%
Wastewater prices (\$/year)						
Houses – Gosford	524.74	563.78	579.83	598.22	600.08	631.37
Yearly change		7%	3%	3%	0%	20%
Houses – Wyong	488.34	563.78	579.83	598.22	600.08	631.37
Yearly change		15%	3%	3%	0%	29%
Apartments – Gosford	485.69	520.58	536.63	555.02	556.88	588.17
Yearly change		7%	3%	3%	0%	21%
Apartments – Wyong	449.29	520.58	536.63	555.02	556.88	588.17
Yearly change		16%	3%	3%	0%	31%
Stormwater charge (\$/year)^a						
Houses/farmland	108.00	130.07	130.07	130.07	130.07	186.31
Yearly change		20%	0%	0%	0%	73%
Apartments	81.00	97.56	97.56	97.56	97.56	139.73
Yearly change		20%	0%	0%	0%	73%

a. For customers in a declared drainage area.

Source: Central Coast Council pricing proposal to IPART, September 2021, pp 87-91 and IPART analysis.

The water usage price will increase to \$2.31/kL

We accepted CCC water's proposal to increase the water usage price by 10% to \$2.31/kilolitre (kL) in the first year of the 2022 determination period, with no further increase apart from inflation.

How this price increase would affect your bill depends on how much water you use. If you use a relatively small amount of water, the fixed water service charge would make up a relatively large proportion of your bill.

Some stakeholders preferred a higher usage charge considering it would be more equitable and better signal water conservation.²¹ We found a higher usage charge would result in only a very small reduction in the service charge and overall bills for customers with very low water usage (less than about 63 kL/year). However, it would increase bills for most other customers, including large families and renters and may disproportionately impact low-income households with higher water usage.

A usage price of \$2.50 rather than \$2.31 would mean the bill in 2022-23:

- for a single pensioner household with rebate using 81kL/year would increase by \$3 to \$258
- for a larger household using 250kL/year, would increase by \$35 to \$768
- for a renter using 170kL/year, would increase by \$32 to \$425 (renters only pay the usage charge and so do not benefit from a reduced service charge).

We maintained our draft decision for the usage charge (with the addition of inflation). This is based on an estimate of the long-run marginal cost of supply, which we consider sends the appropriate price signal about usage.

Our [Information Paper – Prices and bill impacts](#) provides more analysis of the impact of different usage prices on different customer types.

The water service charge will increase by \$226 by 2025-26

The water service price will increase by around 78% (\$68) in the first year (compared to the 180% increase proposed by CCC Water), then increase in stages over the next 3 years, by 41% (\$64), 40% (\$88) and 2% (\$7).

This increase is driven by the necessary increases in operating and capital costs. Higher fixed charges reflect that most of the higher costs CCC Water expects to incur are fixed and do not vary with the amount of water its customers use. Therefore, an increase in this charge has a relatively large impact on your bill.

Wastewater service charges increase slightly more for customers in the former Wyong LGA

We aligned yearly wastewater service prices across the former Gosford and Wyong local government areas (LGAs). This was proposed by CCC Water and had stakeholder support. However, our service price increases are lower than CCC Water proposed and will be introduced over 4 years.

We accepted CCC Water's proposal to increase the wastewater usage price by 10% to \$0.96/kL in 2022-23, with no further increase apart from inflation. We use this to deem a usage amount for residential customers (added in the fixed charge), and CCC Water will apply it to non-residential customers' individual deemed usages.

Stormwater prices will increase once only

Stormwater prices will increase by 20% (\$22) in 2022-23, with no further increase apart from inflation. This is substantially less than CCC Water's proposed 73% increase,^t mainly because we have not accepted its proposal to transfer \$15.5 million in stormwater costs currently funded through local government rates to the Water Supply Authority.²²

We also intend this pricing review will be the last time we set stormwater prices. We consider all costs for stormwater services should be fully funded by local government rates from 1 July 2026. In our view, these services provide benefits to the whole community – not just specific customers.^u CCC Water stated it has a council resolution to effect this by 2026.²³

4.4 We expect CCC Water to improve services at efficient cost

To set prices, we examined CCC Water's past and proposed costs, and decided what costs over the next 4 years should be covered to ensure customers pay no more in their prices than is necessary for their water services.^v We also took advice from expert consultants in making that examination. We found that, historically, CCC Water has not spent enough on its Water Supply Authority to ensure good quality services and meet customers' expectations.

We have set prices to recover a total \$195 million in expenditure each year (on average) for the next 4 years. This is 16% higher than the expenditure we used to set prices for the 3 years in our last review in 2019, and similar to combined costs of the former Gosford and Wyong councils for prices set in 2013. It is 7% lower than CCC Water had proposed.

We consider that an expenditure increase is necessary to ensure CCC Water can:

- provide an acceptable standard of water, wastewater and other services, and
- invest in its infrastructure so it can continue providing these services in the long term.

While we set the overall amount of money CCC Water can collect through the prices its customers pay, it is up to CCC Water to decide how it ultimately spends this money.

We set operating expenditure 8% lower than CCC Water proposed

Operating costs are CCC Water's day-to-day costs on items like staff wages, electricity and contractors. Like most water utilities, operating costs are the biggest expense CCC Water incurs in running its water, wastewater and other services. These remain fairly similar from year to year but may change over time due to efficiencies or a change in service levels.

^t This increase of 73% has been updated for inflation since our Draft Report which reported the increase as 69%.

^u More information is presented in our [Information Paper – Funding stormwater services](#) and our [Information Paper – Operating and capital costs](#).

^v Detailed information is available in our [Information Paper – Operating and capital costs](#).

Our assessment of operating expenditure includes benchmarking analysis against other similar water businesses, and an investigation into cost saving opportunities.

We asked our cost consultants to assess CCC Water's proposed operating costs for cost saving opportunities, compare the level of proposed operating costs to those of similar water utilities in Australia, and make recommendations on an efficient level of operating costs for the next 4 years.

We have decided CCC Water's yearly operating costs need to be 24% higher than what we allowed in the 2019 determination period. This means it can spend more on delivery, network operations and asset maintenance to improve its performance over time. Our decision considers that CCC Water has historically underspent and needs to spend more to meet its regulatory obligations, service standards, and deliver better services.

We also found that in CCC Water's proposal there was:

- double counting of water resilience activities and the transfer of stormwater costs
- opportunities for additional cost reductions as well as ongoing productivity improvements
- higher costs compared to those of a reasonably efficient water business, based on benchmarking analysis.

This decision is slightly higher than the draft decision, due to an adjustment for inflation. We did not accept CCC Water's submission to our Draft Report to shift some spending from the first 2 years of the determination period into the last 2 years.²⁴ We set prices to ensure the required revenue is recovered over the 4 years. We do not set annual budgets for CCC Water and consider CCC Water has some flexibility to manage the revenue and expenditure within those 4 years.

Benchmarking formed a part of our cost analysis

Some submissions to our Draft Report questioned the veracity of our decision and queried if we had considered certain costs and activities that CCC Water undertakes. Rather than scrutinise in detail CCC Water's individual costs, we based our decision on benchmarking against other businesses.

Our consultant found that the method CCC Water used to derive the base level of costs for its operating cost forecasts may not be appropriate. So, it used a base-step-trend approach to estimate what CCC Water's operating costs should be over the next 4 years, which included benchmarking against other similar sized water businesses. The base-step-trend is commonly used by pricing regulators to set efficient costs. The process is to:

1. Derive a base expenditure range using benchmarking. Base expenditure identifies costs to meet existing obligations. Frontier drew on data for 27 'Major' and 'Large' water utilities over the period from 2009 to 2019.

2. Identify genuine step changes. We identify genuine step changes as increases needed to meet new regulatory requirements, address major changes in external factors and/or meet efficient operating/capital expenditure trade-offs.
3. Incorporate trend factors. This includes adjustments for growth in connections and changes in wage price index and the consumer price index. We also applied a 0.7% per year reduction for expected productivity gains.²⁵

Capital costs are 5% less than CCC Water proposed

Capital costs are what CCC Water spends to buy or build new infrastructure and equipment for its Water Supply Authority. This might include repairing or replacing old water and wastewater pipes under roads, building a new wastewater treatment plant in a new development area, or installing a new computer system to help manage its day-to-day operations. Capital costs are usually for one-off projects. These are typically investments that last for many years so capital costs can fluctuate significantly from year to year depending on project need.

Our assessment of capital expenditure includes an assessment of key business systems and processes as well as key capital projects or programs

We reviewed capital costs to ensure they are adequate to allow CCC Water to maintain and improve its water system but as low as possible to ensure a secure, safe and reliable water supply. We asked our consultant to:

- review the key business systems and processes which drive the proposed costs to determine whether they represent good industry practice
- examine 10 of CCC Water's proposed capital projects to provide advice on whether they are needed, and the proposed costs are no higher than necessary.

We accepted recommendations from our consultants that CCC Water could explore alternative options and better target and prioritise its spending on improving water quality and wastewater treatment. This ensures customers do not pay more than what is needed.

We decided CCC Water's yearly capital costs need to be 5% higher than what we allowed in the 2019 Determination so it can invest in improvements in water quality and wastewater treatment. This is \$297.4 million over the next 4 years, 5% lower than CCC Water had proposed. We found that:

- some proposed capital projects would benefit from further investigations and may be delivered at lower cost
- better planning, project and infrastructure management will help lower the overall cost of the proposed capital program
- CCC Water should lower its capital costs over time through ongoing productivity improvements.

This total amount is consistent with our draft decision. However, the final decision includes more for water expenditure and less for wastewater expenditure. We made these changes in response to further information from CCC Water and recommendations from Frontier.

Capital costs are recovered through prices over time

These capital costs are not immediately recovered through prices. Instead, they are recovered over time to ensure that the people who use the infrastructure pay for it (to meet the principles of intergenerational equity). Some assets can be expected to be in service for a relatively short period, such as information technology that may be replaced after 10 years. Other infrastructure lasts 50 to over 100 years. We have taken this into account to recover the capital costs.

More information on our review of the council's costs is available in our [Information Paper – Operating and capital costs](#), our [consultants' report](#), and our [Technical Paper – How we set the revenue level](#).

4.5 We recommend regulatory measures to improve CCC Water's performance

We found that CCC Water had underdelivered on its service to customers and had failed to meet several output measures we set in our last review. Customers consider they have limited ability to influence the water services that are delivered to them and CCC Water is not sufficiently accountable for its performance. We have made several recommendations to improve CCC Water's accountability.

The community needs better information about service standards and CCC Water's performance. Regulatory reform would further improve accountability of CCC Water.

We are taking actions within our powers to improve CCC Water's performance and the value for money it provides to its customers. However, we have fewer options available to us compared to the way we regulate other water utilities that have operating licences.

We have therefore made recommendations to CCC Water and the NSW Government on steps that we consider would improve accountability and performance over time. Our recommendations are informed by targeted stakeholder consultation.²⁶ This consultation should also provide a basis for CCC Water to continue engaging with its customers.

CCC Water proposed steps to improve accountability

CCC Water acknowledged it needs to improve both its performance and accountability to customers. It outlined some steps it intends to take to improve its services, accountability and provide useful information to the community. This includes short-term and longer-term improvements.²⁷ This is a positive approach from CCC Water and we consider that this is a good first step to making necessary improvements.

We recommend CCC Water publish available performance metrics and strategic planning on its website within 3 months.

Other tasks will take longer to implement and show results, including deeper customer engagement, development of an outcomes-based reporting framework, and the improvement of asset management and other strategic documents and processes. To further improve confidence that CCC Water will achieve these actions, we recommend it publish an implementation plan by 31 October 2022. This would also guide its own planning and implementation.



We recommend the NSW Government give us a terms of reference for a review in 2 years' time

We recommend the Minister gives us a referral to, in 2 years' time, investigate and report publicly on CCC Water's performance as a Water Supply Authority and progress implementing management and government improvements.^w This investigation would look at CCC Water's performance between now and June 2024 to check whether it has:

- reported on the information that is important to the community and
- made the necessary improvements that it has committed to.

We would also look at the progress CCC Water has made in putting in place the governance, processes and systems needed to promote better services in the long-term.

The review would provide constructive advice to CCC Water as necessary, and inform our next pricing review, and could inform further consideration of regulatory reform going forward.

^w Detailed information is available in our [Information Paper – Improving performance](#).

We recommend the NSW Government consider further regulatory reform

Further regulatory reform may help to improve the accountability of CCC Water. We consider that there is merit in the NSW Government considering legislative reform to institute a regulatory framework for CCC Water more commensurate to its size and responsibilities.

CCC Water's service performance is currently overseen by DPE with its regulatory framework for the 84 local water utilities (LWUs) in NSW. However, CCC Water is significantly larger than other LWUs, which range from regional to rural areas. We note CCC Water is not as large as other major urban water utilities we regulate under an operating licence – Sydney Water and Hunter Water, however these might be more comparable. The operating licences govern service standards, management systems and contain auditing requirements and differ for the different utilities.

For a utility of the size, scale and location of CCC Water, a more targeted and comprehensive regulatory framework may promote lasting and ongoing improvement in CCC Water's performance and accountability. Consideration should be given to regulatory reform for a more formal regime that is likely to lead to a better overall outcome for customers in the long-term.

Our [Information Paper – Regulatory background](#) provides more information about CCC Water's regulatory settings. More information on our recommendations is provided in our [Information Paper – Improving performance](#).

4.6 We intend this to be the last time we set stormwater prices

Stormwater services collect rainfall runoff from household, business and public land, and then transport, treat and dispose of it into rivers, lakes or the ocean. Stormwater services allow people to move around after heavy rain, for example, to go to the shops and do errands. The council currently covers some of the costs it incurs in providing stormwater services (such as the council's environmental management activities for flood planning and stormwater quality management) through local government rates and the rest through stormwater drainage service charges paid by CCC Water customers.

Stormwater services benefit the whole community, for instance, by allowing people to move around after heavy rain, to go to the shops and do errands. They should be funded through local government rates like other services that benefit the whole community such as maintaining public parks and sportsgrounds, roads and bridges.

For this review, we considered 2 issues relating to stormwater services provided by the council:

- Firstly, we considered CCC Water's proposal to transfer stormwater costs currently funded by local government rates to CCC Water, so the stormwater drainage charge IPART sets would cover all of its stormwater-related costs.

- Secondly, we considered whether we should continue to set stormwater drainage prices as a water-related service at all, or whether these services should instead be fully funded through local government rates.

Stormwater services benefit the whole community

In our view, stormwater services provide benefits to the whole community – not just specific customers. Therefore, we think they should be funded through local government rates like other services that benefit the whole community – such as maintaining public parks and sportsgrounds, roads and bridges.

Stakeholders supported the change in funding but some expressed concerns about how it would impact the rates they pay. Some, particularly in rural areas, stated that they do not have stormwater services, or have to fund their own on their properties.

Our view, supported by our consultation with the Central Coast community, is that these services protect the whole community from flooding, with benefits to the natural environment. Therefore, they can be considered to be a public good, and the costs of providing these services should be funded through local government rates instead.^x We consider this is the last time that stormwater drainage charges should be collected from CCC Water customers.

For this reason, we have decided to:

- Not accept CCC Water's proposal to transfer the additional stormwater costs currently funded by its local government fund to drainage charges IPART sets for CCC Water customers.
- Make clear to the council that by 1 July 2026 all stormwater costs should be paid for through local government rates, instead of through drainage charges.

We decided to set the stormwater charges in this review to give the council time to make necessary adjustment to the change. This includes to consult with the community, and plan and implement funding stormwater costs via its local government rates income. We expect CCC Water to consider all options to fund the increase and consult with its customers. If the council decides it needs to apply for a special rate variation to fund stormwater costs at the end of the 2022 Determination, we will review the council's application at that time.

In the event our 2022 Determination extends beyond 4 years, CCC Water's stormwater drainage charges would be set at \$0 from 1 July 2026 to make clear that we intend this to be the last time we set these charges. CCC Water accepted this decision, but there were some concerns from customers about the move to local government funding.

More information about stormwater funding is in our [Information Paper - Funding stormwater services](#).

^x The stormwater drainage service charge we determine only applies to stormwater drainage services provided by Central Coast Council in its capacity as a Water Supply Authority.

5 List of all decisions and recommendations

Our decisions and recommendations are listed and explained in our information papers and technical papers. A complete list of all our decisions and recommendations is included below.

Our decisions on CCC water's **prices and bill impacts** are:

1. To increase water and wastewater prices in stages over the 2022 determination period rather than increasing them in one go from 1 July 2022.
2. To set maximum water prices for CCC Water as shown in Table 3.1 in our *Information Paper – Prices and bill impacts*, including to set the maximum water usage price at \$2.31 per kilolitre in real terms over the 4-year determination period from 2022-23 to 2025-26.
3. To set maximum wastewater prices for CCC Water as shown in Table 3.2 and Table 3.3 in our *Information Paper – Prices and bill impacts*, including to set the maximum wastewater usage price at \$0.96 per kilolitre in real terms over the 4-year determination period from 2022-23 to 2025-26.
4. To align wastewater prices so that customers in the former Gosford local government area pay the same as equivalent customers in the former Wyong local government area.
5. To set maximum stormwater prices for CCC Water as shown in Table 3.4 in our *Information Paper – Prices and bill impacts*, for the 2022 determination period from 2022-23 to 2025-26.

Our decisions on CCC Water's **operating and capital costs** are:

6. To set CCC Water's operating expenditure allowance at \$483.7 million over 4 years as shown in Table 3.1 in our *Information Paper – Operating and capital costs*.
7. To set the efficient level of past capital expenditure since 2018-19 to be included in the Regulatory Asset Base as set out in Table 3.2 in our *Information Paper – Operating and capital costs*.
8. To set CCC Water's efficient level of capital expenditure to be included in the Regulatory Asset Base for the 2022 determination period at \$297.4 million, as shown in Table 3.3 in our *Information Paper – Operating and capital costs*.

Our decisions on CCC Water's **funding of stormwater services** are:

9. To not accept CCC Water's proposal to transfer \$15.5 million in stormwater costs currently funded through local government rates to CCC Water.
10. To include in the Determination that the stormwater drainage service charge will be set to \$0 in the event that the 2022 Determination applies beyond 30 June 2026.

Our decisions on **setting CCC Water's revenue level** are:









11. To adopt a 4-year determination period from 1 July 2022 to 30 June 2026.
12. To set maximum prices for CCC Water's water services in each year of the 2022 determination period (a price cap).
13. To set the notional revenue requirement at \$810 million over the 2022 determination period as shown in Table 3.1 in our *Technical Paper – How we set the revenue level*.
14. To calculate the return on assets using:
 - an opening regulatory asset base of \$1,481 million for 2022-23, and the regulatory asset base for each year as shown in Table 3.2 in our *Technical Paper – How we set the revenue level*.

- CCC Water's reported historical asset disposals for the 2019 determination period as shown in Table 3.4 in our *Technical Paper – How we set the revenue level*
- CCC Water's forecast asset disposals for the 2022 determination period as shown in Table 3.2 in our *Technical Paper – How we set the revenue level*
- a real post-tax weighted average cost of capital of 2.8% to calculate the return on CCC Water's assets
- a sampling date of 31 March 2022 for market observations
- a true-up for differences between the forecast and actual cost of debt over the 2022 determination period in the 2026 Determination.

15. For the purpose of calculating CCC Water's allowance for return of assets, to:
 - calculate regulatory depreciation using a straight-line method
 - set the asset lives for existing and new assets as shown in Table 3.8 and Table 3.9 in our *Technical Paper – How we set the revenue level*.
16. To set CCC Water's allowance for return of assets at \$154 million over the 2022 determination period as shown in Table 3.7 in our *Technical Paper – How we set the revenue level*.
17. To set the working capital allowance for the 2022 determination period as shown in Table 3.10 in our *Technical Paper – How we set the revenue level*.
18. To calculate the tax allowance using:
 - a tax rate of 30%
 - IPART's standard methodology.
19. To adopt the regulatory tax allowance as shown in Table 3.13 in our *Technical Paper – How we set the revenue level*.
20. To set an allowance for pensioner rebates for the 2022 determination period as shown in Table 3.15 in our *Technical Paper – How we set the revenue level*.
21. To deduct non-regulated revenue from CCC Water's notional revenue requirement (NRR) for the 2022 determination period as shown in Table 3.16 in our *Technical Paper – How we set the revenue level*.

-  22. To set prices to recover the total NRR over 4 years, in present value terms.

Our decisions on CCC Water's **demand for water services** are:

-  23. To set water, wastewater and stormwater prices using the forecast customer numbers in Table 2.1, Table 2.2 and Table 2.3, as set out in our *Technical Paper – Demand for water services*, in line with CCC Water's proposal.
-  24. To set water prices using the water sales forecasts in Table 2.5, as set out in our *Technical Paper – Demand for water services*, in line with CCC Water's proposal.
-  25. For setting developer charges, to maintain the equivalent tenement value per customer at 150 kilolitres (kL).
-  26. For setting wastewater prices, to maintain the wastewater deemed discharge allowance for:
- standalone residential properties at 125 kilolitres (kL)
 - multiple and mixed multiple premises at 80 kL
 - non-residential properties within mixed multiple premises at 125 kL.
-  27. For setting wastewater prices, to maintain the 75% discharge factor for all residential properties and unmetered properties.
-  28. To set wastewater prices for non-residential customers using the discharge factors and resulting billable discharge volumes in Table 2.6, as set out in our *Technical Paper – Demand for water services*, in line with CCC Water's proposal to align wastewater charges for customers in the former Gosford local government area with those in the former Wyong local government area.
-  29. To apply the demand volatility adjustment mechanism (DVAM) to compensate CCC Water for lost water sales compared to what we forecast for the 2019 Determination, amounting to \$2.1 million.
-  30. To not set drought prices for CCC Water for the 2022 Determination.

31. To consider making an adjustment to future prices to address any over or under-recovery of revenue over the 2022 determination period due to material variation between the level of actual water sales and forecast water sales used in making the 2022 Determination, where
- a material variation is defined as more than 5% (+ or -) over the whole determination period
 - we would only consider adjusting for variation greater than 5% (+ or -).

Our decisions on CCC Water's **trade waste and miscellaneous prices** are:

32. To accept CCC Water's proposed fixed trade waste prices as listed in Table 2.1 in our *Technical Paper – Trade waste and other prices*.
33. To accept CCC Water's proposed compliant and non-compliant usage prices as listed in Table 2.2 in our *Technical Paper – Trade waste and other prices*.
34. To accept most of CCC Water's updated list of mass-based prices for category 3 customers as listed in Table 2.3 in our *Technical Paper – Trade waste and other prices*.
35. To decrease the price for a minority of revenue-intensive miscellaneous charges as listed in Table 3.2 in our *Technical Paper – Trade waste and other prices*.
36. To set CCC Water's maximum miscellaneous charges as set out in full in Table 3.3 in our *Technical Paper – Trade waste and other prices*.

Our decisions on CCC Water's **other prices** are:

37. To maintain our approach from our 2019 Determination of charging retirement villages as standard non-residential customers.
38. To allow CCC Water to charge WICA Licensees as standard non-residential customers if they do not have an unregulated pricing agreement.
39. To not revoke or replace the current 2019 Determination that sets a maximum price for bulk transfers between Hunter Water and CCC Water with reference to the Short Run Marginal Costs (SRMC) (but allow for Hunter Water and CCC Water to agree on a different price).

Our recommendations are:

1. That the NSW Government undertakes a comprehensive state-wide review on:
 - the current pensioner concessions for water and wastewater services
 - broader guidelines for water utilities on customer hardship protection to better assist vulnerable households.
2. That CCC Water:
 - develop and implement a targeted assistance strategy to proactively address the needs of the community
 - further promote its hardship assistance programs and water conservation to assist customers to manage paying for their increased water bills.
3. That CCC Water, by 31 October 2022, publishes an implementation plan for improving its performance, accountability and transparency. At a minimum, this should include:
 - expected timing to develop its Accountability Strategy, its Customer Charter and improvements to asset management
 - expected timing and methods of customer engagement.
4. That CCC Water, by 30 September 2022, publishes the performance data and strategic documents it has committed to. This should be presented in a clear and accessible form on the website and include:
 - the metrics in Figure 1.1 in our *Information Paper – Improving performance*
 - results from 2017-18.
5. That CCC Water prepares and publishes an annual performance report by 31 October each year, commencing in 2023. This should set out its performance against measures that reflect the community's preferences. It should be endorsed by the council as an accurate reflection of its performance.
6. That the NSW Government authorises IPART to investigate and report publicly on CCC Water's:
 - performance as a Water Supply Authority
 - progress implementing management and procedural improvements.

We recommend that this investigation commence in the second half of 2024.

7. That the NSW Government considers the merit of amending the way CCC Water is regulated to:
 - implement a more targeted and robust framework for CCC Water, such as an operating licence
 - strengthen performance and accountability
 - remove any resulting redundant regulatory requirements on CCC Water.
8. That CCC Water improves its water demand forecasts by incorporating the impacts of climate change in its next pricing proposal.
9. That CCC Water considers and incorporates climate change risks and risk management of their investment and management of assets and infrastructure in its next pricing proposal to IPART. We also encourage a longer-term focus and planning for climate change for CCC Water.

- ¹ IPART analysis of NSW Department of Planning, Industry and Environment (DPIE) *Local Water Utilities (LWUs) performance monitoring data and reports (2020-21)*, 2022, Bureau of Meteorology (BOM), *National performance report 2020-21: urban water utilities, Complete dataset 2020-21*, 2022.
- ² IPART, *Thank you for your response to our survey on Central Coast water prices*, 16 December 2021, p 4.
- ³ CCC Water, *submission to IPART's Draft Report*, April 2022, pp 8, 34-35.
- ⁴ NSW Government, Department of Water and Energy, *Best-Practice Management of Water Supply and Sewerage Guidelines*, August 2007.
- ⁵ Frontier Economics & Mott MacDonald, *Central Coast Council Water Expenditure Review – Final Report*, 22 April 2022.
- ⁶ IPART, *Review of Central Coast Council's water, sewerage and stormwater prices To apply from 1 July 2019*, pp 125-126.
- ⁷ CCC Water, *pricing proposal to IPART*, September 2021, pp 17-18.
- ⁸ CCC Water, *submission to IPART's Draft Report*, April 2022, p 57, CCC Water, *submission to IPART's Information Paper on Stormwater Drainage*, 15 November 2021, p 1.
- ⁹ See for instance: IPART, *Public Hearing Transcript – Session A*, 5 April 2022, p 11; Central Coast Chamber of Commerce, *submission to IPART Draft Report*, April, 2022; Public Interest Advocacy Centre, *submission to IPART Draft Report*, April, 2022, p 2.
- ¹⁰ IPART, *Thank you for your response to our survey on Central Coast water prices*, 16 December 2021, p 4.
- ¹¹ NSW Office of Local Government, *Central Coast Council Public Inquiry*, accessed 14 February 2022.
- ¹² CCC Water *submission to IPART's Issues Paper*, October 2022; CCC Water *submission to IPART's Draft Report*, April 2022.
- ¹³ IPART, *Review of Central Coast Council's water, sewerage and stormwater prices To apply from 1 July 2019*, May 2019, pp 47-48, 58-59.
- ¹⁴ CCC Water, *submission to IPART's Draft Report*, April 2022, p 30.
- ¹⁵ PIAC, *submission to IPART's Draft Report*, April 2022, p 3; IPART, *Central Coast Council water prices Results of survey on our draft decisions*, April 2022, p 2.
- ¹⁶ IPART analysis based on *2015 Household survey of electricity, gas and water usage*, 2016, Profile id, Central Coast Council area Household income quartiles, 2016, 1 accessed 7 December 2021, Services Australia, Aged Pension, April 2022, accessed 5 May 2022, Services Australia, Disability Pension, March 2022, accessed 5 May 2022.
- ¹⁷ IPART analysis based on *2015 Household survey of electricity, gas and water usage*, 2016, Profile id, Central Coast Council area Household income quartiles, 2016, 1 accessed 7 December 2021, Services Australia, Aged Pension, April 2022, accessed 5 May 2022, Services Australia, Disability Pension, March 2022, accessed 5 May 2022.
- ¹⁸ Profile.id, Central Coast Council area, Household income quartile, accessed 10 November 2021.
- ¹⁹ Australian Government, Department of Social Services *Payment Demographic Data*, December 2021, accessed 5 May 2022, Forecast.id, Central Coast NSW population forecast, 2021, accessed 5 May 2022.
- ²⁰ See, for instance, IPART, *Thank you for your response to our survey on Central Coast water prices*, 16 December 2021, p 4.
- ²¹ PIAC, *submission to IPART's Draft Report*, April 2022, p 4; Community Environment Network, *submission to IPART's Draft Report*, April 2022, p 3; Avoca Beach Community Association, *submission to IPART's Draft Report*, April 2022, p 3.

-
- ²² CCC Water, pricing proposal to IPART – *Technical Paper 5 Operating Expenditure*, September 2021, pp 60 & 61.
- ²³ CCC Water, [submission to IPART's Information Paper on Stormwater Drainage](#), 15 November 2021, p 1.
- ²⁴ CCC Water, submission to IPART's Draft Report, April 2022, p 30.
- ²⁵ Frontier Economics and Mott MacDonald, *Central Coast Council Water Expenditure Review – Final Report*, April 2022, pp 23-27 & 66-69.
- ²⁶ See for instance: IPART, [Public hearing session B](#) (transcript and recordings), 5 April; IPART, *Central Coast Council water prices Results of survey on our draft decisions*, April 2022, pp 9-11.
- ²⁷ CCC Water, submission to IPART's Draft Report, April 2022, pp 8, 34-35.

© Independent Pricing and Regulatory Tribunal (2022).

With the exception of any:

- a. coat of arms, logo, trade mark or other branding;
- b. photographs, icons or other images;
- c. third party intellectual property; and
- d. personal information such as photos of people,

this publication is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Australia Licence.



The licence terms are available at the [Creative Commons website](https://creativecommons.org/licenses/by-nc-nd/3.0/au/)

IPART requires that it be attributed as creator of the licensed material in the following manner: © Independent Pricing and Regulatory Tribunal (2022).

The use of any material from this publication in a way not permitted by the above licence or otherwise allowed under the Copyright Act 1968 (Cth) may be an infringement of copyright. Where you wish to use the material in a way that is not permitted, you must lodge a request for further authorisation with IPART.

Disclaimer

This document is published for the purpose of IPART fulfilling its statutory or delegated functions as set out in this document. Use of the information in this document for any other purpose is at the user's own risk, and is not endorsed by IPART.

Nothing in this document should be taken to indicate IPART's or the NSW Government's commitment to a particular course of action.

ISBN 978-1-76049-565-7