Technical Paper 4

Capital expenditure

September 2025

Central Coast Council

Water and Sewer

1 Contents

List of figures

List of tables

1 Key points

Council is forecasting an over-delivery of capital works in the current determination period (2022-2026). The cost of delivering capital works within the water sector has increased significantly since IPART's last pricing determination in May 2022 (2019-2022) and has outpaced the broader Consumer Price Index (CPI) used to adjust Council's capital works' allowances.

Additional investments in water assets have mainly occurred due to cost increases in the Mardi Water Treatment Plant upgrade, Council's largest capital works project in the current determination period. These increases are despite Council implementing a range of efficiency measures, which included a capacity and staging review and value engineering exercise, undertaken as part of an Early Contractor Involvement (ECI) phase with Council's eventual contractor. Council has also seen additional cost increases across its broader program consistent with other New South Wales water businesses.

Additional investment in sewer assets has occurred as a result of increases to construction costs across the civil and mechanical/electrical disciplines above CPI. Council has also increased expenditure in upgrades to its sewage treatment plants to address poorly performing assets and mitigate risks to the environment. Many of these projects have been subject to Pollution Reduction Programs/studies or investigations/enforcement action by the NSW Environmental Protection Authority (EPA).

Stormwater drainage has delivered its determination capital allowance for the period. It is noted that drainage expenditure does not form part of the next IPART determination.

Capital grants have been obtained to offset the cost of capital works to water and sewer customers. Relevant grants include the Housing Acceleration Fund, Accelerated Infrastructure Fund and Safe and Secure Water Program.

Over the current determination period, Council has undertaken ongoing engagement with its customers to understand their values around water supply and sewer services. This has enabled Council to prepare its proposed capital investment in consideration of those values. The key investment themes for the next determination period are centred on the customer values of reliable services, good quality water, quality treatment (sewage) and effective planning. The customer value of environmental outcomes is also intrinsic to the majority of reliability driven projects, particularly those related to sewer assets. The associated projects are a mixture of asset renewals to address ageing infrastructure risks and growth-related projects to meet the needs of a growing region.

To ensure this increased level of expenditure is delivered efficiently, Council has improved its investment governance arrangements. The key initiatives in this regard are the formation of the Water Investment Review Committee (WIRC) and adoption of the Water and Sewer Project Lifecycle. The project lifecycle is a gated process that commences following the completion of project ideation and continues to the completion of defects liability and 12-month benefits realisation phase. The WIRC's role is to oversee the passage of projects through the project lifecycle and ensure the project adequately meets the needs of customers, planners, operators, and maintainers.

Council has continued to improve its asset management capabilities, with several risk and condition assessment programs undertaken over the current determination period. These improve understanding of asset risk and performance and allow improved prioritisation of asset renewals over the next determination period.

Asset Delivery capabilities have also improved, with several delivery panels and period contracts established to improve delivery efficiency and manage the scale of emerging major projects at Council's sewage treatment plants and network assets. These include major works at Charmhaven Sewage Treatment Plant and West Gosford Major Sewer Rising Main.

2 Current determination performance

2.1 Overview

Table 1: Current determination financial performance

$M	2022-23	2023-24	2024-25	2025-26	Total
Water	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
IPART determination	14.2	47.5	27.9	32.0	121.5
Actuals/forecast	22.0	32.2	45.3	41.5	141.1
$ Variance	(7.9)	15.2	(17.4)	(9.6)	(19.6)
% Variance	(55.5%)	32.1%	(62.5%)	(29.9%)	(16.1%)
Sewer	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
IPART determination	35.1	35.1	49.0	64.3	183.5
Actuals/forecast	49.9	53.1	70.3	90.7	263.9
$ Variance	(14.8)	(18.0)	(21.2)	(26.4)	(80.4)
% Variance	(42.0%)	(51.4%)	(43.3%)	(41.0%)	(43.8%)
Drainage	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
IPART determination	8.8	10.0	9.4	10.0	38.2
Actuals/forecast	10.7	9.1	9.3	9.3	38.4
$ Variance	(1.8)	0.9	0.1	0.7	(0.2)
% Variance	(20.8%)	8.8%	1.6%	6.6%	(0.4%)

Central Coast Council is forecasting an over-delivery of its 2022 IPART Capital allowance. This is mostly attributed to prioritisation of critical asset renewals as well as increased costs of materials and contract rates.

Council has experienced some challenges with managing cost escalation within its Capital program, particularly in relation to the escalation seen across the industry in construction activities, procurement and supply materials and equipment, which saw cost increases outpace general inflation.

Council has endeavoured to manage investment levels to IPART's 2022 allowance for efficient capital expenditure by ensuring projects undertaken are adequately prioritised with continuity of service to our community, mitigating business risk and regulatory compliance being the primary drivers for all works undertaken in the current period.

In addition, all capital projects are assessed within a gated process known as the Water and Sewer Project Lifecycle. Each project proposal must pass through a prioritisation process to assess risk of deferral (refer Figure 1).

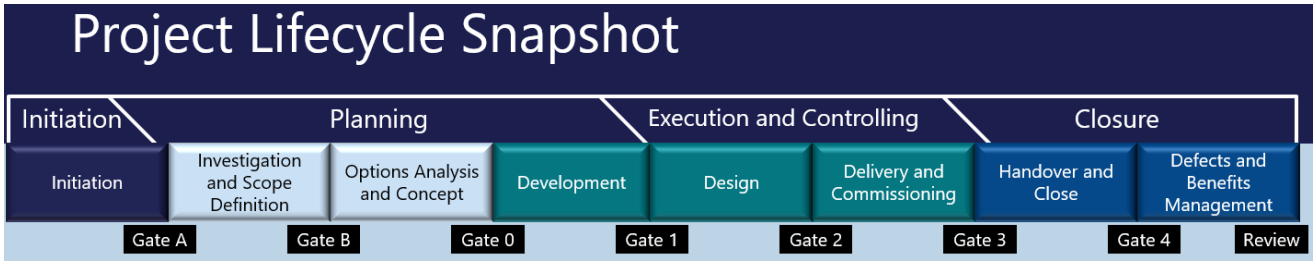


Figure 1: Gate approval process

2.2 Water

Council is forecasting a $19.6M over-delivery of Water capital expenditure to IPART's 2022 Determination. This increase is primarily due to increase in project costs associated with the major Mardi Water Treatment Plant Upgrade (refer Table 22).

Table 2: Water fund capital expenditure summary for the current determination period

$M	2022-23 Expenditure	2023-24 Expenditure	2024-25 Expenditure	2025-26 Forecast	Total
Water	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
IPART determination	14.2	47.5	27.9	32.0	121.5
Actuals/forecast	22.0	32.2	45.3	41.5	141.1
$ Variance	(7.9)	15.2	(17.4)	(9.6)	(19.6)
% Variance	(55.5%)	32.1%	(62.5%)	(29.9%)	(16.1%)

Council considers that its actual and forecast Water capital expenditure for the 2022 Determination is efficient because:

- There are no material changes to the scope of the Water investment program that IPART assessed as prudent in the 2022 Determination
- The primary driver for capital expenditure being higher than IPART's allowance was significant cost escalation related to the Mardi Water Treatment Plant upgrade and across our Water program. Market volatility, resource constraints and supply chain uncertainties have contributed to the costs of constructing and renewing infrastructure outpacing consumer inflation during the period
- Council applied appropriate project management and planning processes to deliver the program, including addressing IPART recommendations as part of the 2022 Determination, such as a Capacity and Staging Review and value engineering exercise for the Mardi Water Treatment Plant.

Council was also successful in receiving grant funding for three water projects. The Restart NSW, Safe and Secure Water Program which is contributing $6.85M ($nominal) to the major upgrades being undertaken at Mardi Water Treatment Plant. The Commonwealth and NSW Governments' Bushfire Local Economic Recovery (BLER) Fund contributed $2.6M ($nominal) to the Mangrove Creek Dam Visitor Centre project after the original site was destroyed by the 2019 Three Mile Fire. The Housing Acceleration Fund (HAF) which was received prior to the current pricing period and continues to fund works in the Gosford Central Business District (CBD) and Warnervale Town Centre for water and sewer infrastructure upgrades.

The funding received is forecast to offset the additional expenditure incurred, above IPART's 2022 Determination allowance (refer Table 33).

Table 3: Water fund capital revenue summary for the current determination period

Water – Funding Received $M	2022/2023 Capital Revenue	2023/2024 Capital Revenue	2024/2025 Capital Revenue	2025/2026 Forecast Revenue	Total
	$2025-26	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Water Infrastructure Reinforcements - Gosford CBD	1.95	1.23	2.05	1.08	6.31
Water Treatment Plant Major Upgrade - Mardi	0.36	0.60	1.46	3.85	6.27
Water Catchment Picnic Area and Visitor Centre - Mangrove Creek Dam	2.79	-0.04	0.00	0.00	2.75
Water Infrastructure - Warnervale Town Centre	0.06	0.00	0.19	1.22	1.47
	5.17	1.79	3.70	6.15	16.80

2.2.1 Mardi Water Treatment Plant (MWTP) major upgrades

The upgrade of MWTP was required to secure the original design 160ML/day plant capacity to Australian Drinking Water Guidelines, for a contemporary raw water quality envelope, which reflects changed water quality conditions in Mardi Dam following previous major water supply scheme yield augmentation projects.
The expenditure summary for this project is shown in Table 44.

Table 4: MWTP expenditure summary

Mardi Water Treatment Plant ($nominal)	Costs $M
Council 2021 Proposed Expenditure	45.8
Council Actual Expenditure/Forecast June 2023 Business Case	82.5
*2022 Consultants recommended *p101*[1]	*No Change*

Scope

The scope of works is largely unchanged since the 2021 Gate 2 Business Case, with the main change being the introduction of staging following IPART's challenge in their previous Determination (2019-2022). This was in relation to project delivery efficiency, and a

[1] Frontier Economics Expenditure Report Central Coast Council May 2022

subsequent Capacity and Staging Review and value engineering exercise undertaken during the Early Contractor Involvement (ECI) phase with the ECI Contractor.

The need for the project is unchanged and further raw water quality challenges have presented following the filling of Mangrove Creek Dam for the first time since its construction. These additional challenges will be manageable by the proposed upgrade work.

Schedule

The project schedule has changed significantly since the Gate 2 Business Case due to delays resulting from:

- The January 2022 Council resolution following the initial tender evaluation to decline all tenders received in September 2021 and further negotiate with the tenderers.
- An inability to obtain shortfall funding to address the significant escalation in the market since the pre-tender estimate of November 2020 until receipt of an IPART Determination aligned with the project.
- The execution of a 14-step Negotiation Plan that included tender repricing, an ECI phase and contract negotiations.

A summary of key forecast schedule dates is set out in the below Table 55.

Table 5: MWTP milestone summary

Milestone/Activity	Gate 2 Business Case Amendment (Jun 2023)
Complete Preliminary design	July 2021
Procurement & ECI	July 2021 – June 2023
Complete Sludge lagoon early works	June 2023
Award D&C Contract	**July 2023**
Detailed design	July 2023 – August 2024
Construction	February 2024 – June 2025
Commissioning, proving and wet weather contingency	July 2025 – November 2025
Practical Completion	**November 2025**
End of Defects Liability Period	November 2026

Cost

The Design and Construct (D&C) contract sum has increased substantially reflecting the volatility, resource constraints, supply chain uncertainties and significant escalation seen in the market since the Gate 2 Business Case.

A risk-based 'Monte Carlo'0[2] analysis has been carried out with a 90% (P90) contingency value included in the project budget estimate.

The business has been successful in securing partial funding of $6.85M ($nominal) through the NSW Government's Restart NSW Safe and Secure Water Program.

The budget estimate has been revised to reflect the change to scope, schedule, resources and risks as described above. A budget comparison with the Gate 2 Business Case is provided in Table 6.

Table 6: MWTP business case financial summary

	Gate 2 Business Case February 2021 ($M)	Gate 2 Business Case June 2023 amendment ($M)
D&C contract sum	31.8	56.4
Early works and ECI	3.2	5.9
Project management	6.3	10.5
Contingency	4.5	8.5
Escalation		1.2
TOTAL	**45.8**	**82.5**
Grant income	-6.8	-6.8
NET TOTAL	39.0	75.7

Ongoing construction of the new dissolved air floatation tanks.

[2] technique that uses repeated random sampling to model the probability of different outcomes in a process that cannot easily be predicted due to the intervention of random variable

2.2.2 Water trunk main renewal – Avoca lagoon

Council proposed to invest in the renewal of a critical section of trunk water main that feeds through Avoca Lagoon. Sections of the main have experienced multiple breaks in the past. The trunk water main is a critical supply feed to the suburbs of North Avoca, Avoca Beach, Copacabana and MacMasters Beach. The expenditure for the project is shown in Table 77.

Table 7: Avoca Lagoon water main expenditure

$M ($nominal)	Total
Project Expenditure	4.6

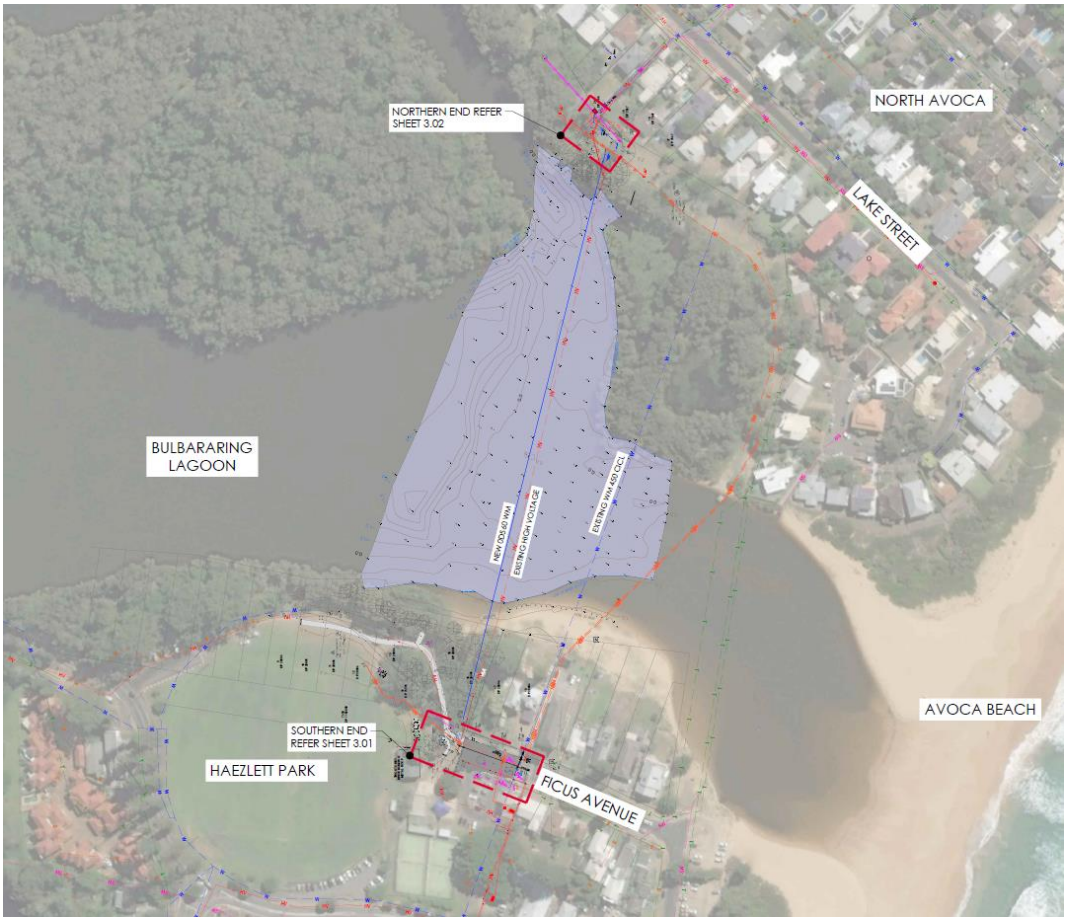


Figure 2: Avoca lagoon crossing Horizontal Directional Drilling (HDD) setup areas

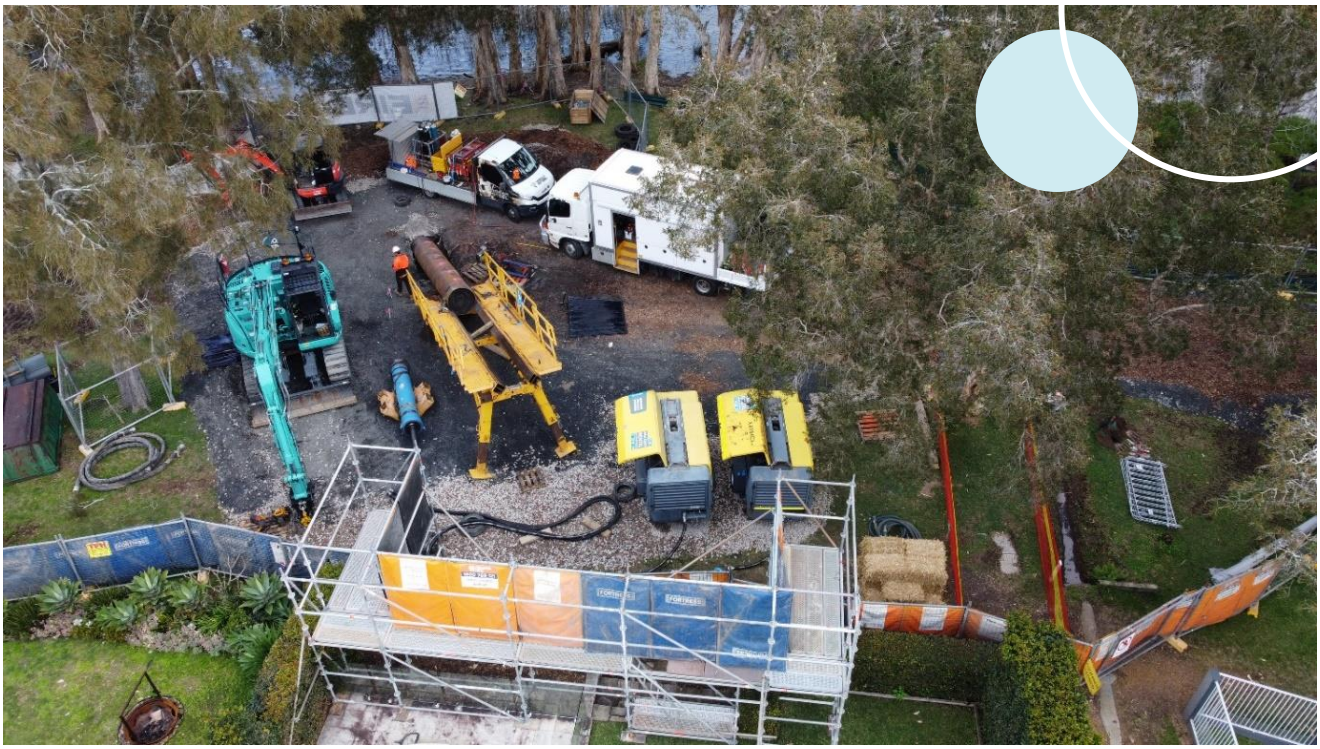
The Avoca Beach Lagoon project (refer Figure 2) was a vital initiative aimed at enhancing the water supply infrastructure for approximately 11,000 residents across the Central Coast of NSW. This project was completed in September 2024 in response to challenges posed by a deteriorating 450mm diameter cast iron cement lined water main, which was plagued by maintenance issues due to its age and construction. The existing trunk main, situated on the lagoon bed, had become increasingly difficult to access and repair, particularly at the critical point where it enters the water.

Previous repairs undertaken to original 450mm diameter cast iron cement lined trunk main

To address these challenges and ensure a reliable water supply, a new 560mm diameter polyethylene water main, strategically positioned 29 meters into the rock bed beneath the lagoon was proposed as the preferred option. This approach provided greater durability and reduced the need for future maintenance. A crucial first step in this process involved the installation of a 100-metre conductor casing into the rock. This pathway was essential for navigating the sand and sediment above, enabling effective management of drill fluid and spoil through dedicated mud return lines. The team successfully pulled a 560mm diameter poly pipe string approximately 400m in total length (12 metre welded lengths) through an under bore, securing it to the casing on the north side.

Overall, the project aimed to provide a robust and sustainable water supply solution, enhancing service reliability for local communities while minimising environmental impact during installation. By modernising the infrastructure, Council laid the groundwork for a resilient future, ensuring that residents can count on clean and dependable water resources.

The new infrastructure translates to cost savings in the long term by minimising the frequency of emergency repairs and the associated expenses, the project not only safeguards public funds but also supports local businesses that rely on a stable water supply. The increase in capacity will also support future development in the region. A reliable water service is vital for economic growth and development in the region.



Horizontal Directional Drilling (HDD) North Avoca side with casing pipe in place

Avoca side with pipe string

2.2.3 Mardi high lift pumpstation interconnection

The Central Coast Water supply is distributed to the network from Mardi Water Treatment Plant (MWTP) and Somersby Water Treatment Plant (SWTP). Treated water from MWTP is pumped from the clear water tank via the Mardi High Lift Pumping Station (MHLPS). MHLPS pumps to Tuggerah 2 Reservoir and from there water gravitates to the northern and southern systems.

The new Mardi to Warnervale Pipeline (M2WP) connects the existing Hunter trunk main at Sparks Road in Warnervale, directly to the Tuggerah 2 Reservoir system, enhancing the water supply flow rate between the Central Coast and Hunter Water Corporation (HWC). The M2WP also meets the obligations of the Hunter Central Coast Pipeline agreement, a key component of the State Government's Lower Hunter Water Plan.

The investment in this project is shown in Table 8.

Table 8: Mardi High Lift Pumpstation Interconnection expenditure summary

$M ($nominal)	Total
Project Expenditure	5.8

To ensure that Council could efficiently distribute the improved southbound transfers (33ML/day) from HWC, an interconnection was required between the M2WP and the MHLPS. This allows greater distribution of higher flow rate bulk water transfers from HWC – to customers outside of the Kanwal Reservoir supply zone. The interconnection also required the installation of two additional pumps within the MHLPS (within spare pump train) to ensure correct hydraulic performance when transferring up to 33ML/day from HWC.

An overview of the project including the new interconnection pipework is provided below in Figure 3.

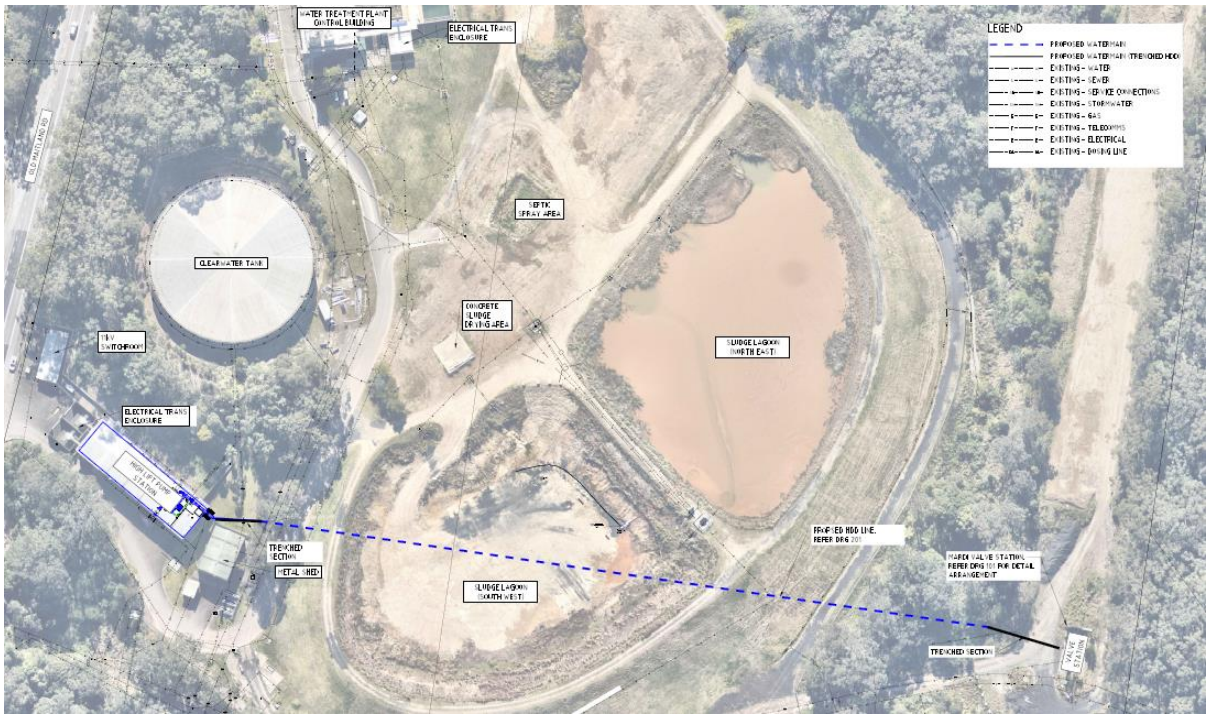


Figure 3: MHLPS interconnection overview

The project was successfully delivered within a compressed timeline to ensure its benefits were available to assist Council manage resilience risks posed by the ongoing staged shutdowns of MWTP as part of delivering the major upgrades to that site. Council's design and construction partner, Eire Constructions, were also acknowledged for the success of the project by the Civil Contractors Federation, receiving an award for excellence in civil construction as part of delivering the work.

2.2.4 Water main renewal program

Council has continued to deliver its water main renewal program to address risk and reliability issues posed by ageing Cast Iron Cement Lined (CICL) and Asbestos Cement (AC) water mains across the region. Over the current determination period Council has further developed is Pressure Main Criticality Analysis (PMCA) tool and is now using this tool to guide its prioritisation of water mains for the program. This has coincided with a shift to increasing the number of water mains replaced in each work front based on a cohort approach to achieve better delivery efficiency. Expenditure summary for the renewal program is shown in Table 99.

Table 9: Water Main Renewal Program expenditure summary

Water Mains Asset Renewal Program	2022-23	2023-24	2024-25	2025-26	Total
$M	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Council Proposed Expenditure	2.2	7.0	5.7	6.0	20.8
Council Actual Expenditure	4.3	5.1	5.9	5.2	20.5
*2022 Consultants recommended *p104*	0.8	5.4	5.4	5.4	17.1

Customer performance metrics for water main breaks and unplanned water outages (refer

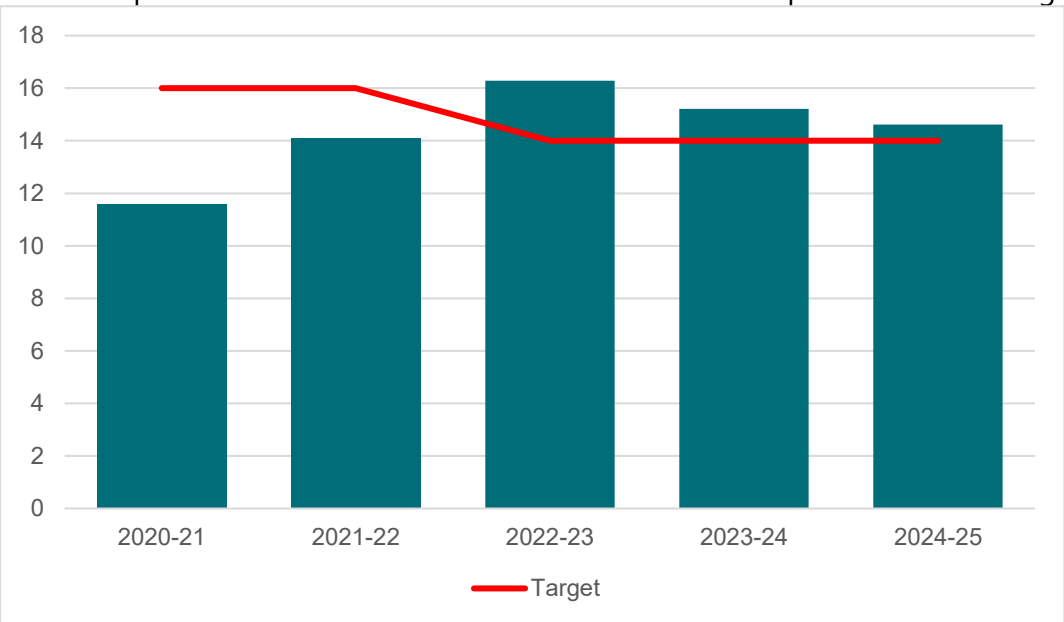


Figure 4 and Figure 5) declined over the current determination in response to continued ageing of infrastructure. The water main renewal program is seeking to scale up in response to improve customer performance and stay ahead of a future 'bow wave' of asset renewals as large cohorts of cast iron cement lined and asbestos cement mains reach the end of their serviceable life.

Council is also working on refining the use of a satellite imaging-based tool with machine learning to inform the likelihood of failure of water main assets. The tool (Rezatec) has been reviewing observed changes in vegetation density, soil moisture and other parameters versus water main break data. The tool has shown to be increasing in accuracy in assessing the likelihood of failure of water main assets and will be used as an additional input to Council's pressure main criticality analysis (PMCA) tool during the next determination period.

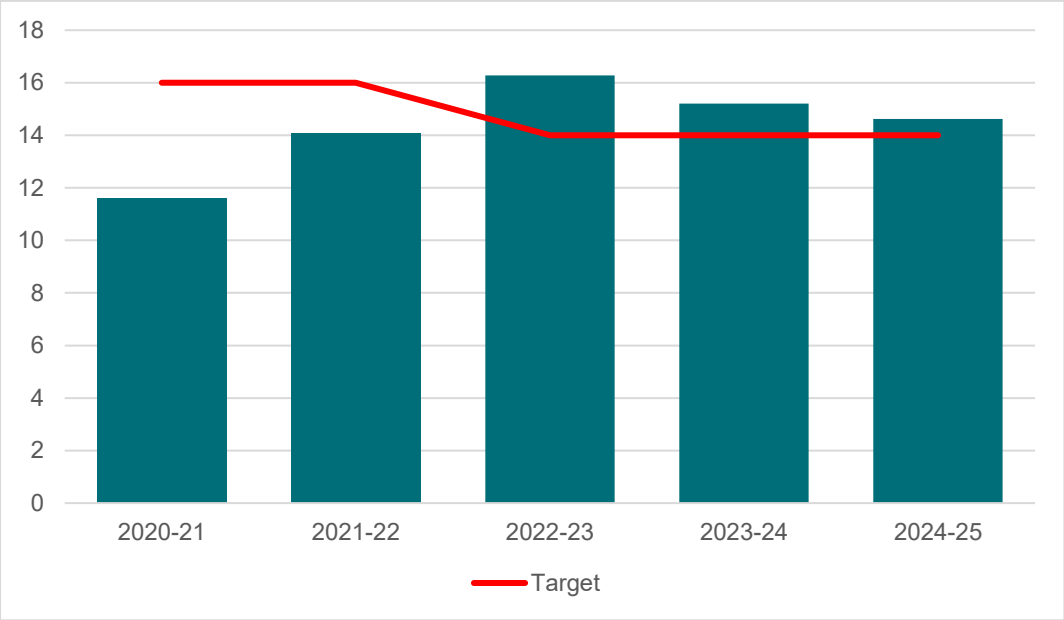


Figure 4: Water main break performance per 100 km of main trends

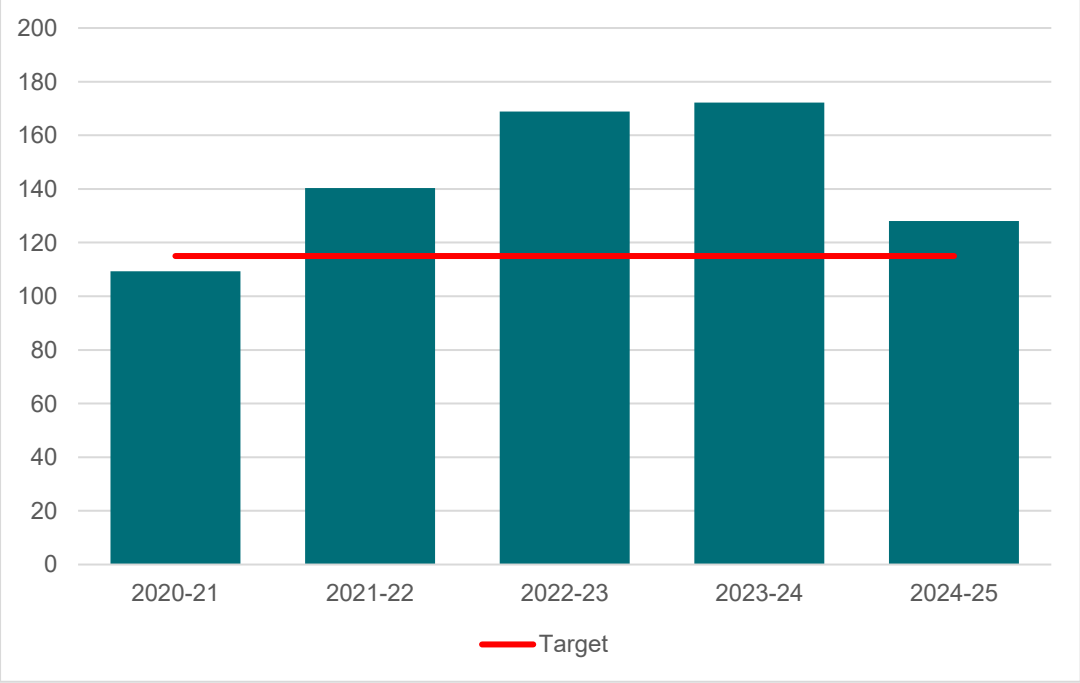


Figure 5: Unplanned water outage performance per 1,000 properties trends

2.2.5 Minor water projects

Council proposed investment of $39.1M for water renewal works in the 2022 pricing submission. (Refer Table 10 and Figure 6).

Table 10: Water Asset Renewals expenditure summary

Water Asset Renewal Delivery	Council Proposed Expenditure	Actual Expenditure
$M	**$2025-26**	**$2025-26**
Groundwater	0.2	0.0
Water Headworks	5.4	4.4
Water Mains	20.8	24.7
Water Meter	2.0	0.6
Water Network Asset	2.0	0.0
Water Pump Stations	2.8	0.7
Water Reservoir	6.7	2.7
Water Treatment Plant	2.6	0.9
Total	42.6	34.0

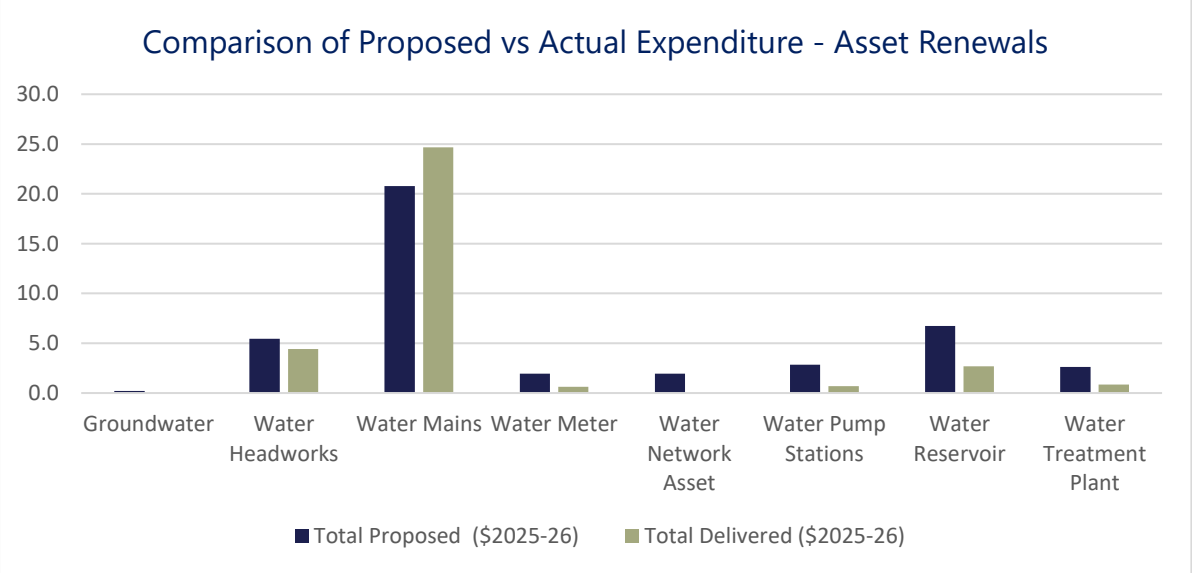


Figure 6: Comparison of proposed v actual water renewal expenditure

The key variances between Council's proposed renewal expenditure and delivery:

- An increase in the renewal of water mains was required to address service levels as discussed in Section 2.2.4 of this paper.

- The remainder of proposed works for the period were primarily reassessed for risk and were able to be deferred to allow for alternate options to be investigated.

2.3 Sewer

Council is forecasting a $80.4M over delivery of Sewer capital expenditure to IPART's 2022 Determination. This is primarily due to increases in construction costs above standardised inflation and the need to increase expenditure to address poorly performing assets within the network to mitigate risk and ensure service continuity. (Refer Table 111)

Table 11: Sewer capital expenditure summary for the current determination period

$M	2022-23	2023-24	2024-25	2025-26	Total
Sewer	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
IPART determination	35.1	35.1	49.0	64.3	183.5
Actuals/forecast	49.9	53.1	70.3	90.7	263.9
$ Variance	(14.8)	(18.0)	(21.2)	(26.4)	(80.4)
% Variance	(42.0%)	(51.4%)	(43.3%)	(41.0%)	(43.8%)

Council considers that its actual and forecast Sewer capital expenditure for the 2022 Determination is efficient:

- The primary driver for capital expenditure being higher than IPART's allowance was additional prudent and efficient expenditure to address poor performance in breaks, chokes and overflows into the environment, including a major replacement of the West Gosford Rising Main which did not form part of Council's proposed projects in the 2022 submission period, but which was required to meet EPA requirements.
- Other drivers outside Council's control include general cost increases for materials and delivery, and unforeseen site complexities in areas of indigenous significance, requiring additional services that were not envisaged in the 2022 submission period.
- Council applied appropriate project management and planning processes to deliver the program, including addressing IPART recommendations as part of the 2022 Determination.

The business was successful in receiving funding for four sewer projects. The Accelerated Infrastructure Fund (AIF), contributed $9.56M ($nominal) for the upgrade of the Gwandalan Sewage Treatment Plant and $4.61M ($nominal) for further system upgrades to the sewerage system in Gosford CBD. The Housing Acceleration Fund (HAF) which was received prior to the current pricing period and continues to fund works in the Gosford CBD and Warnervale Town Centre for water and sewer infrastructure upgrades. The funding received is forecast to partially offset the additional expenditure incurred, above IPART's 2022 Determination allowance. (Refer Table 122).

Table 12: Sewer fund capital revenue summary for the current determination period

Sewer – Funding Received	2022/2023 Capital Revenue	2023/2024 Capital Revenue	2024/2025 Capital Revenue	2025/2026 Forecast Revenue	Total
$M	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Sewer Infrastructure Reinforcements - Gosford CBD	10.86	6.53	6.75	2.39	26.53
Sewer Infrastructure - Warnervale Town Centre	0.00	2.09	0.07	2.35	4.51
Sewer System Upgrades - Gosford CBD Racecourse Precinct	3.88	1.10	0.00	0.00	4.98
Sewer Treatment Plant Major Upgrade - Gwandalan	0.14	0.30	1.07	6.58	8.09
	14.88	10.02	7.89	11.31	44.10

Key contributors to the over delivery of Sewage expenditure to IPART's allowance were major sewage treatment plant upgrades. These projects have been presented in section 4.4 *Forecast capital* as the majority of construction costs will be incurred in the forecast determination period. Other contributors are addressed in the below sections and include West Gosford Rising Main replacement which was not forecast as a major renewal project in Council's 2022 pricing submission, additional sewer main renewals to address aged infrastructure, reportable overflows, and EPA directives.

2.3.1 West Gosford major rising main replacement

The West Gosford Major (WGMJ) Sewer Rising Main (SRM) was constructed in 1986, with a total length of over 4 km. There have been three breaks in the sewer rising main in recent years the latest triggering prosecution from the Environmental Protection Agency (EPA) in 2024. Expenditure is shown in Table 13.

Table 13: West Gosford Major Rising Main expenditure summary

West Gosford Major Rising Main	2022 Determination Expenditure	2026 Determination Forecast	Total Forecast
	$2025-26	**$2025-26**	**$2025-26**
Council 2025 Proposed Expenditure	20.47	13.39	33.87

As part of commitments made during the prosecution process, Council is delivering the renewal of approximately 2.2km of the sewer main that is understood to be subject to corrosion following previous condition assessment. The extent of the proposed renewal is shown below in Figure 7.

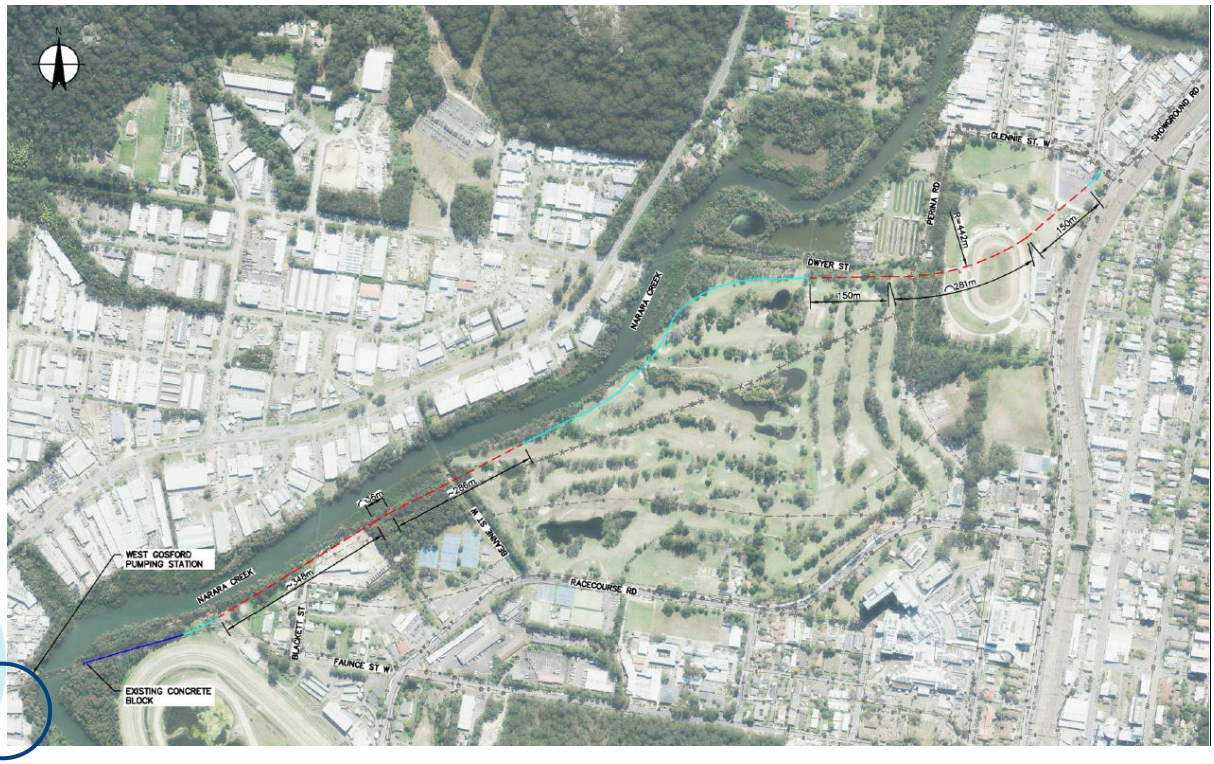


Figure 7: West Gosford major rising main replacement route alignment

The project is currently progressing through detail design, with a planned construction completion date of mid to late 2026 in line with commitments made to the NSW EPA. The construction will include a mixture of trenching and trenchless construction techniques to manage environmental and community constraints.

Due to the cost and complexity of the project a new panel has been formed to procure the construction of this, and other major projects.

2.3.2 Sewer main renewal program

Council has continued to deliver its sewer main renewal program to address risk and reliability issues posed by Vitreous Clay (VC) sewer mains and concrete manhole components impacted by tree roots. Expenditure summary refer Table 144.

Table 14: Gravity Sewer Main Renewal Program expenditure summary

Gravity Sewer Main Asset Renewal Program	2022-23	2023-24	2024-25	2025-26	Total
	$2025-26	$2025-26	$2025-26	$2025-26	$2025-26
Council Proposed Expenditure	3.05	5.99	5.66	6.20	20.90
Council Actual Expenditure	6.89	10.30	10.49	8.15	35.84
*2022 Consultants recommended *p104*	*No change*				

Customer performance metrics for sewer main breaks and chokes have declined in the second half of the current determination period in response to increased incidents of tree root intrusion to sewer mains and precast manholes as shown in Figure 8 and Figure 9 below. The sewer main renewal program is seeking to scale up the renewal of impacted precast manholes in addition to well established gravity pipeline relining activities.

Council is also responding to risks of concrete corrosion at points in the network where sewer rising mains discharge into the gravity network. Where septic conditions develop within a sewer rising main there is a risk of concrete corrosion and Council has recently completed a condition assessment of over 1,500 manholes immediately downstream of sewer rising main discharge points to address this risk.

Council has also been developing the previously mentioned Rezatec satellite tool to improve its ability to inform the likelihood of failure of Council's sewer assets. It is planned to integrate the tool into Council's renewal program prioritisation during the next determination period.

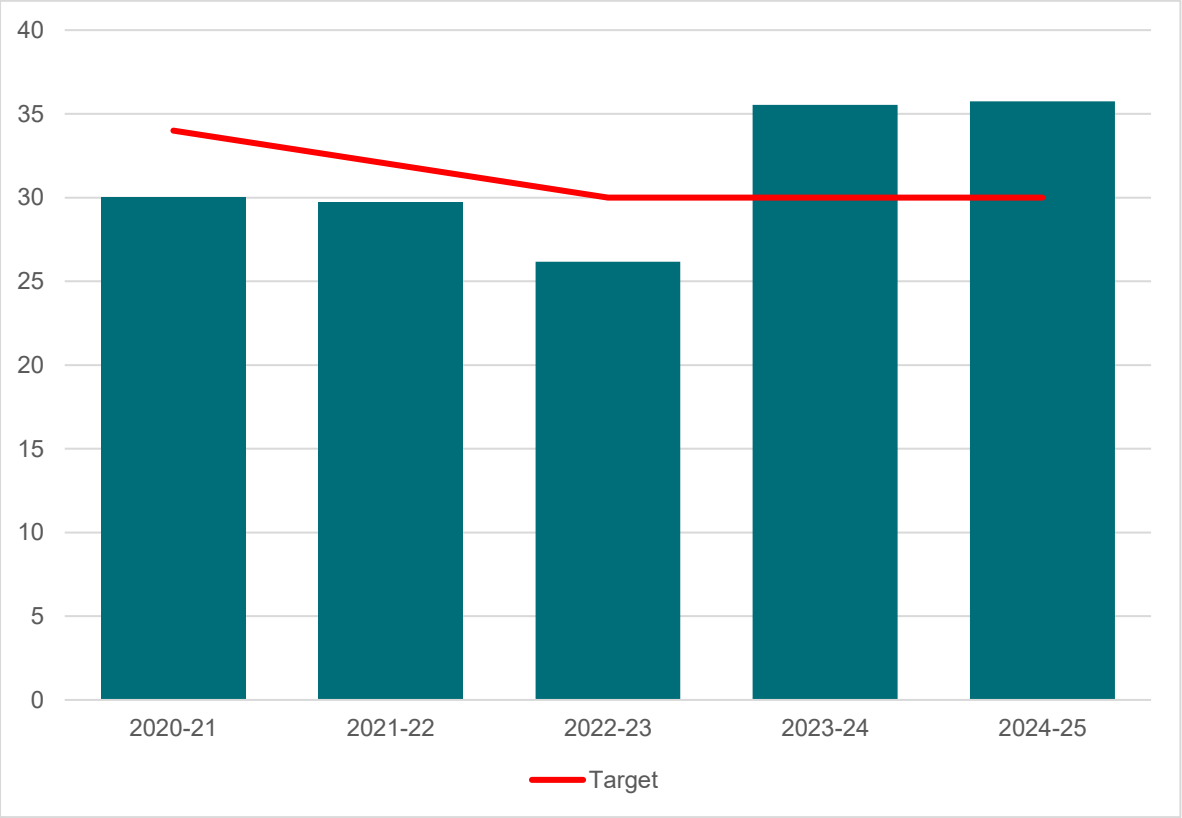


Figure 8: Sewer main breaks and chokes performance trend per 100 km of main

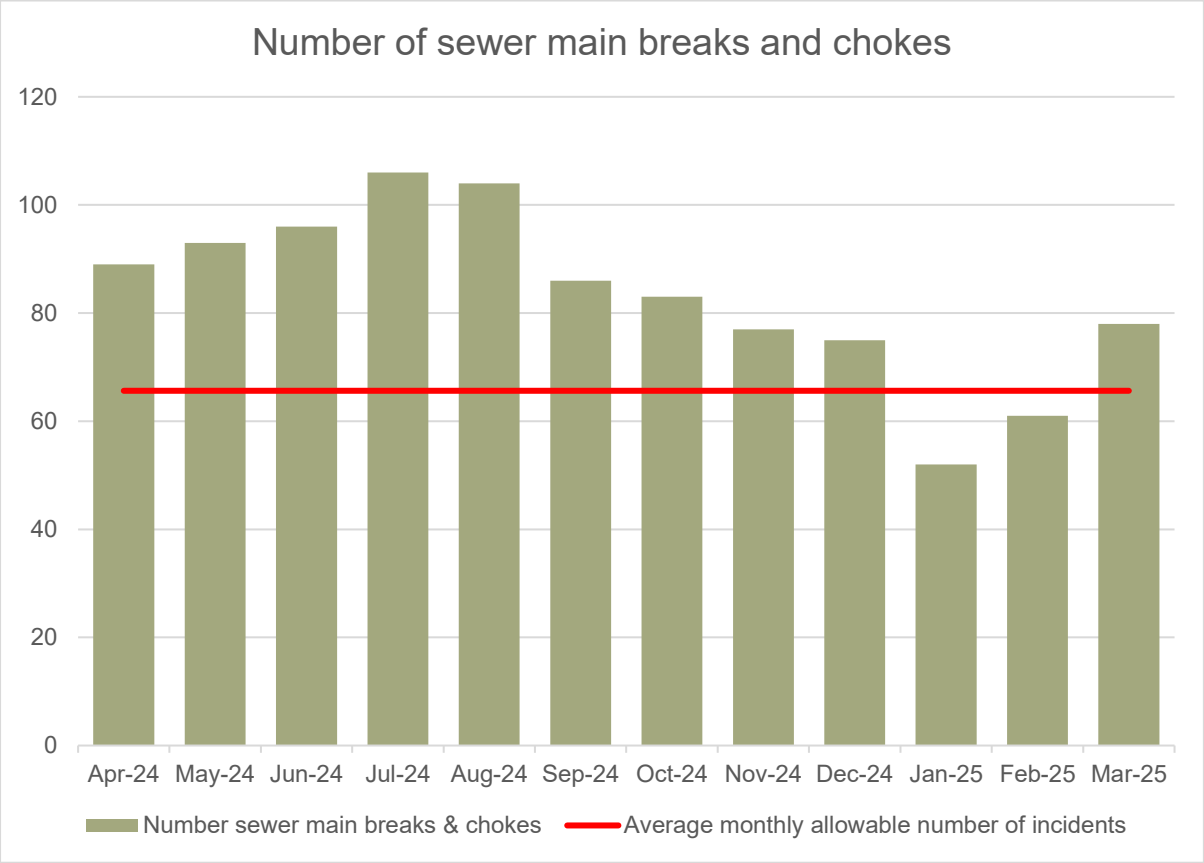


Figure 9: March 2025 sewer main breaks and chokes trend per 100 km of main

Council's Sewer Rising Main (SRM) renewal program had slowed in the middle of the current determination period, as staff focused on a series of condition assessments guided by the PMCA tool. This has since provided a reprioritisation of renewal requirements, with several rising mains proceeding through design and construction in 2025/26 FY. Expenditure summary refer Table 155.

Table 15: Sewer Rising Main Renewal expenditure summary

Sewer Rising Main Renewal Program	2022-23	2023-24	2024-25	2025-26	Total
$M	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Council Proposed Expenditure	1.85	3.48	4.35	4.24	13.93
Council Actual Expenditure (excl WGMJ SRM)	5.01	0.99	1.65	6.65	14.30
*2022 Consultants recommended *p109*	0.00	3.22	3.83	3.83	10.88

Renewals have been performed using a mix of detail design and design and construct procurement methods, typically favouring design and construct where trenchless construction methods are required to manage environmental and/or community impacts.

Rising main breaks contribute to the sewer main breaks, chokes and overflows reported to the environmental regulator performance metrics which are both currently trending unfavourable to target. They also often give rise to investigation by the environmental regulator and potential prosecution as was the case for West Gosford Major SRM.

Council is also working on refining the use of the Rezatec satellite tool to inform the likelihood of failure of sewer rising main assets though the next determination period as part of continued use of its PMCA tool.

2.3.3 Minor sewer projects

Council proposed investment of $72.7M for sewer renewal works in the 2022 pricing submission distributed across its major asset categories to address aging infrastructure and support service reliability. Expenditure summary refer Table 166 and Figure 10.

Table 16: Sewer Asset Renewals expenditure summary

Sewer Asset Renewal Delivery	Council Proposed Expenditure	Actual Expenditure
$M	**$2025-26**	**$2025-26**
Sewage Treatment Plant	13.9	11.3
Sewer Low Pressure Vacuum System	5.3	10.6
Sewer Main	34.8	71.1
Sewer Network Assets	1.9	1.2
Sewer Pump Station	23.4	26.7
Total	**79.3**	**120.8**

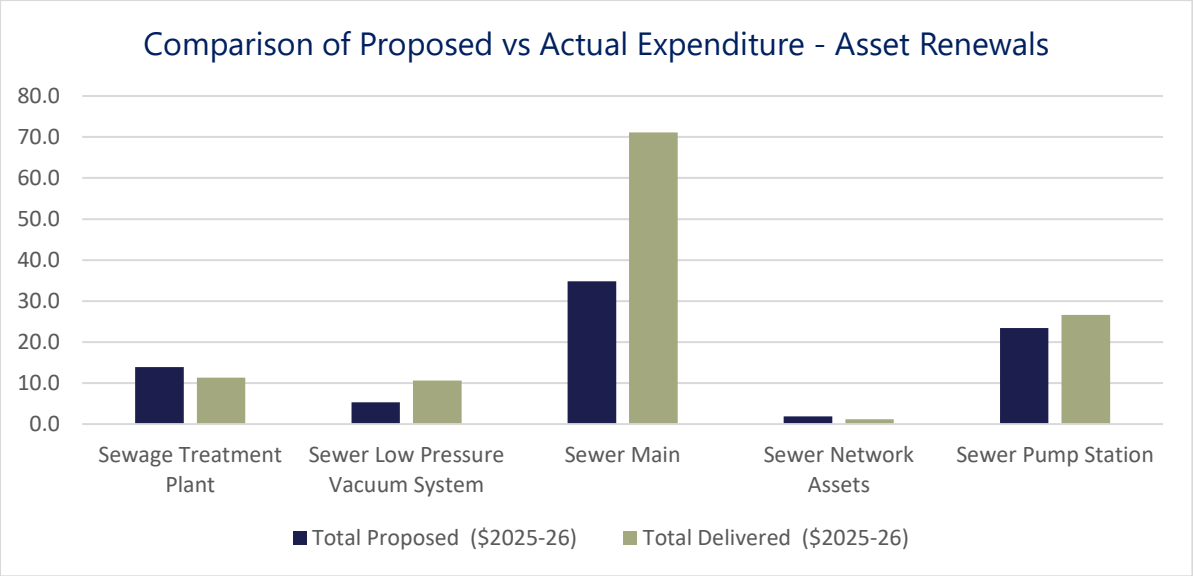


Figure 10: Comparison of proposed vs actual sewer renewal expenditure

The key variances between Council's proposed renewal expenditure and delivery:

- Some Sewage Treatment Plant forecast renewals have been included in the scoping for the major Treatment Plant Capacity upgrades to achieve efficiencies through packaging delivery of asset renewals with process upgrades.
- Renewals of low pressure and vacuum systems saw a general increase of costs for materials and delivery as well as the project encountering additional unforeseen site complexities with works occurring in areas of indigenous significance. This saw the need to engage in additional services that were predicted during the 2021-22 submission period.
- Sewer main investment increased overall to address poor performance in breaks, chokes and overflows into the environment as well as the addition of major replacement of West Gosford Rising Main which did not form part of Council's proposed projects in the 2022 submission period. More information on this project is detailed in section 2.3.1 of this paper.
- The increase of expenditure in the Sewer Pump Station category is primarily due to general cost escalation Council saw an increase in contract costs from 40% from the 2022 submission.

2.4 Stormwater drainage

Council is forecasting a $0.2M over delivery of stormwater drainage capital expenditure to IPART's 2022 Determination. This increase is primarily due to increases in construction costs above standardised inflation. An example of this is the Lakedge Avenue Drainage Upgrade project presented below. (Refer Table 17)

Table 17: Stormwater drainage capital expenditure summary for the current determination period

$M	2022-23	2023-24	2024-25	2025-26	Total
Stormwater drainage	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
IPART determination	8.8	10.0	9.4	10.0	38.2
Actuals/forecast	10.7	9.1	9.3	9.3	38.4
$ Variance	(1.8)	0.9	0.1	0.7	(0.2)
% Variance	(20.8%)	8.8%	1.6%	6.6%	(0.4%)

Council has also continued to update its asset condition data during the determination period – and when justified, this has required the reprioritisation of capital projects to address poorly performing assets, mitigate risk and ensure service continuity. As a result of this process three critical assets were identified as requiring prioritised replacement based on external structural consultant advice – drainage culverts at Yakalla Street Shelly Beach, Rushby Street Bateau Bay and Lakedge Avenue Berkeley Vale.

To enable timely delivery of these projects and remain within budget, other stormwater drainage projects were deferred to future financial years

2.4.1 Lakedge Avenue, Berkeley Vale from Jean Drive to Shannon Parade and Aloha Drive to Platypus Drive – Drainage Upgrade

Table 18: Lakedge Avenue drainage upgrade expenditure summary

Lakedge Ave – Drainage Upgrade	2022/2023 Expenditure	2023/2024 Expenditure	2024/2025 Expenditure	2025/2026 Forecast	Total
$M	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Council 2021 Proposed	2.4	1.6	2.5	2.1	8.7
Council Actual Expenditure	2.1	2.5	2.9	1.7	9.1
Variance to IPART Determination	-0.4	0.9	0.4	-0.4	0.4

The construction cost has exceeded initial project estimates primarily due to increases in construction costs exceeding standardised inflation estimates – refer Table 188. The increase in cost is also attributed to the extent of acid sulphate soils encountered onsite which exceed forecasts based on the level of testing completed prior to the works.

2.4.2 Yakalla Street, Shelly Beach - Culvert Renewal

Table 19: Yakalla Street culvert renewal drainage expenditure summary

Yakalla Street – Culvert Renewal	2022/2023 Expenditure	2023/2024 Expenditure	2024/2025 Expenditure	2025/2026 Forecast	Total
	$2025-26	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Council 2021 Proposed	0	0	0	0	0
Council Actual Expenditure	0.3	0.9	1.0	0.0	2.3

This priority project was identified via Council's critical asset inspection programs. The inspections highlighted that the culverts were displaying signs of accelerated deterioration. External consultant structural engineering advice was obtained to investigate options and recommend short-, medium- and long-term actions.

This resulted in a recommendation to prioritise the replacement of the asset within three years.

Figure 11: Yakalla Avenue culvert looking downstream prior to replacement

The replacement project was immediately placed into a design development phase and the culvert has now been replaced in full with a modern equivalent concrete culvert design.

Figure 12: Yakalla Avenue culvert looking upstream following project completion

2.4.3 317 Lakedge Avenue, Berkeley Vale - Culvert Renewal

Table 20: 317 Lakedge Avenue culvert renewal drainage expenditure summary

317 Lakedge Avenue – Culvert Renewal	2022/2023 Expenditure	2023/2024 Expenditure	2024/2025 Expenditure	2025/2026 Forecast	Total
$M	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Council 2021 Proposed	0	0	0	0	0
Council Actual Expenditure	0.3	0.9	1.0	0.0	2.3

This priority project was identified via Council's critical asset inspection programs. The inspections highlighted that the culverts were displaying signs of accelerated deterioration. External consultant structural engineering advice was obtained to investigate options and recommend short-, medium- and long-term actions.

This resulted in a recommendation to prioritise the replacement of the asset within three years.

Figure 13: 317 Lakedge Avenue culvert looking downstream prior to replacement

The replacement project was immediately placed into a design development phase. The detail design and construction procurement has now been completed. The contract has been awarded and construction commenced in July 2025.

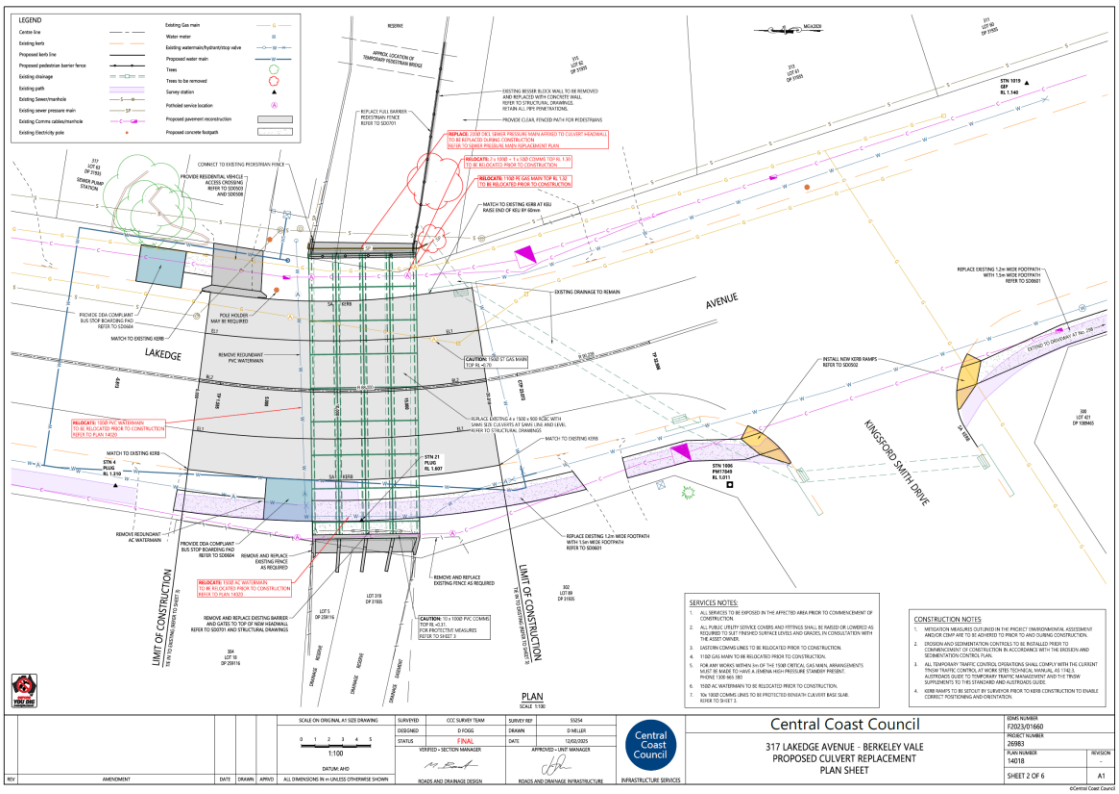


Figure 14: 317 Lakedge Avenue culvert replacement detail design plans

2.4.4 Rushby Street, Bateau Bay - Culvert Renewal

Table 21: Rushby Street culvert renewal drainage expenditure summary

Rushby Street - Culvert Renewal	2022/2023 Expenditure	2023/2024 Expenditure	2024/2025 Expenditure	2025/2026 Forecast	Total
$M	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Council 2021 Proposed	0	0	0	0	0
Council Actual Expenditure	0.3	0.9	1.0	0.0	2.3

This priority project was identified via Council's critical asset inspection programs. The inspections highlighted that the culverts were displaying signs of accelerated deterioration. External consultant structural engineering advice was obtained to investigate options and recommend short-, medium- and long-term actions.

This resulted in a recommendation to prioritise the replacement of the asset within three years.

Figure 15: Rushby Street culverts looking upstream and showing the structural failure in the arch

The replacement project was immediately placed into a design development phase. The project is now in the detail design phase with construction forecast to commence in 2025/26.

3 Investment planning

3.1 Overview

Council's investment planning processes ensure that investment decisions are aligned to its investment drivers and strategic direction whilst managing risks to its operations.

The Water and Sewer Directorate seeks to align its outcomes within the overall Council community vision and objectives. Prioritisation of identified investment needs is undertaken to ensure that Council provides a value for money service to its customers.

Figure 16: Project ideation overview

Candidate projects that are developed from the ideation pipeline (Figure 16) are assessed within a gated investment process known as the Water and Sewer Project Lifecycle. This process is overseen by the Water Investment Review Committee, with management representation from asset planners, deliverers, operators, and maintainers. This process is outlined in Figure 17 and described in Section 5 Investment Governance.

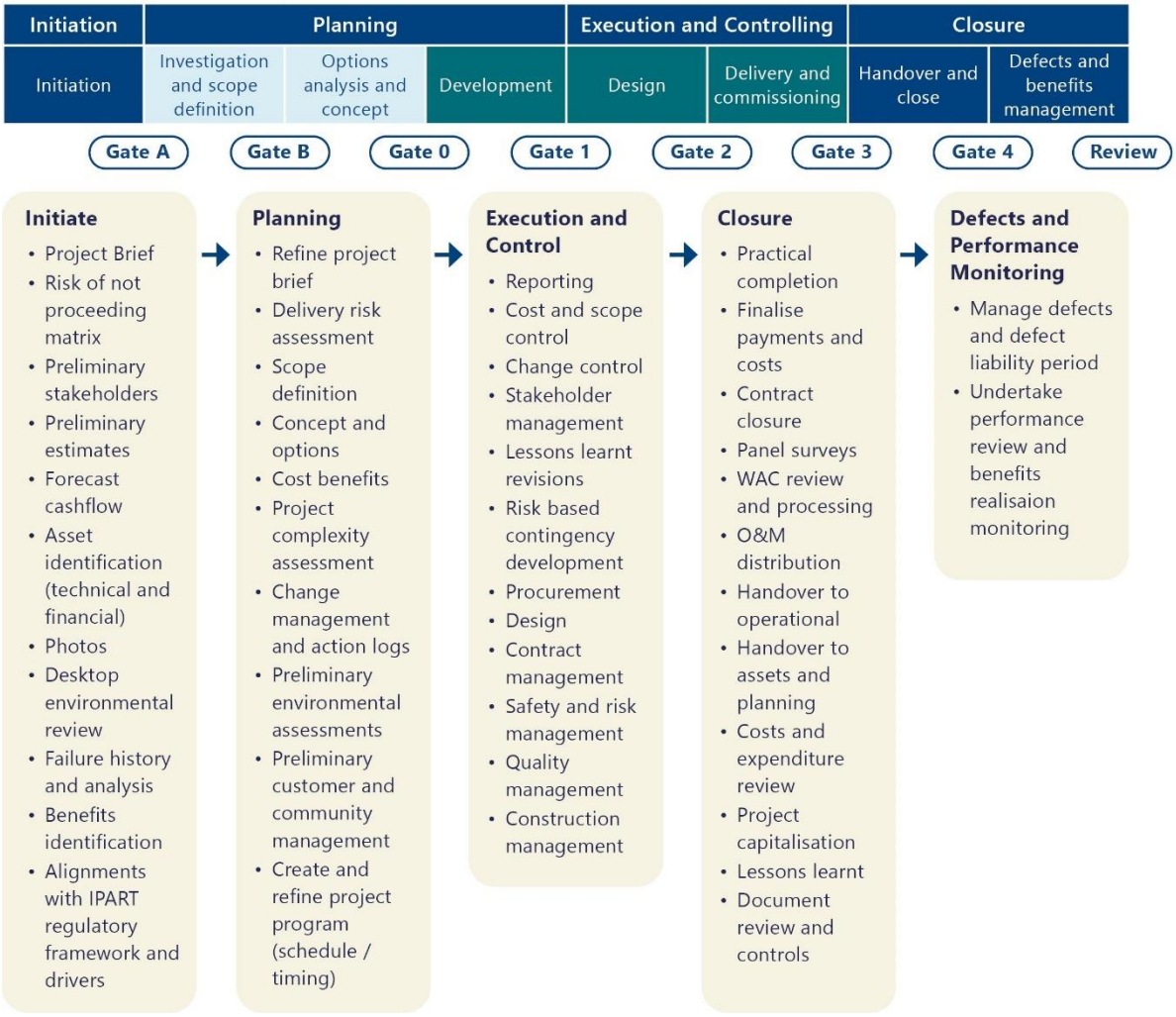


Figure 17: Water and Sewer Project Lifecycle

While there may be numerous candidate project proposals seeking to pass through the gated process, the Water and Sewer project prioritisation process is required to assess the risk of deferral of each proposal. This is required to determine which projects can continue to pass through each gate in consideration of available resources and budgets. The prioritisation process is described in Section 5 Investment Governance.

3.2 Investment objectives

Council's investments are planned and delivered as part of balancing performance, cost and risk across Council's water and sewer assets, in consideration of its customers' values.

3.3 Strategic objectives

Water and Sewer's strategic focus areas and associated objectives are described in its Strategic Business Plan 2022-26 and outlined below:

- Utilise asset management to drive decision making
    - Build and maintain assets that support our customers' needs
    - Maximise the value of our customers' Water and Sewer assets
- Streamline systems and processes to increase efficiency, resilience, and reliability
    - Simplify our way of doing business
    - Provide trusted information and data to support good decision making
- Build an empowered workforce that proudly delivers customer focused outcomes
    - Develop an empowered workforce that is skilled, empowered and engaged
    - Strengthen leadership capability and impact
    - Build a service focused, productive and collaborative culture
- Invest customers money responsibly and transparently
    - Strengthen financial education and skill
    - Improve service delivery with financial planning and reporting
- Improve internal collaboration and be a trusted partner to our customers and key stakeholders in service delivery
    - Build strong internal service relationships, partnerships, and collaboration
    - Deliver on our promises to customers
    - Maintain and strengthen key stakeholder partnerships.

3.4 Customer objectives

Council has continued ongoing engagement with its customers over the current determination period. Through this engagement, the participants identified and developed the following values and desired outcomes (refer Figure 18).

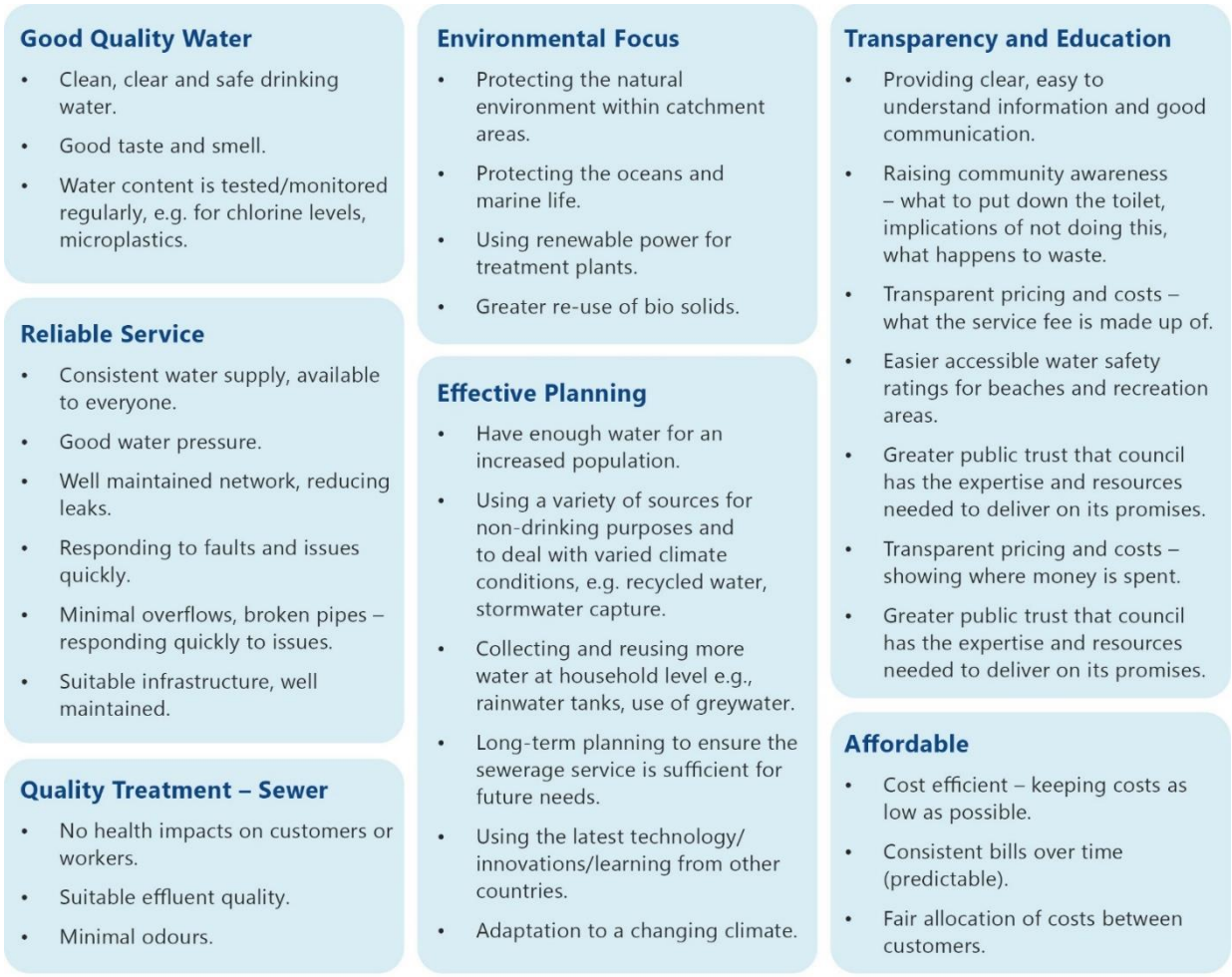


Figure 18: Water and Sewer customer values and outcomes

3.5 IPART's investment drivers

An outline of each of IPART's expenditure driver is provided in Table 22 below, with a summary of planned expenditure within each asset class, related to the expenditure drivers provided in Section 5.

Table 22: Current determination expenditure summary by IPART investment driver

Current Determination Expenditure $M	2022-23 Expenditure	2023-24 Expenditure	2024-25 Expenditure	2025-26 Forecast	Total
	$2025-26	$2025-26	$2025-26	$2025-26	$2025-26
Renewals	37.4	42.9	71.4	85.5	237.2
Growth	34.1	37.4	41.2	42.4	155.0
Compliance	0.4	5.0	3.0	4.3	12.7
Improvements	0.0	0.0	0.0	0.0	0.0

3.5.1 Renewals

The renewals driver is associated with providing a reliable water and sewer service to our customers. Council must renew the right assets, at the right time, to achieve a suitable balance of performance, cost, and risk to its customers.

Council has undertaken a variety of condition assessment programs throughout the current determination period to better understand the overall condition and risk profile of its assets. Tools such as Council's Pressure Main Criticality Assessment also guide the prioritisation of assets within the renewal programs.

3.5.2 Growth

The growth driver considers upgrades to existing assets or the provision of new assets to meet the needs of a growing region. These investments ensure new and existing customers receive an appropriate level of service for considerations such as water security, water pressure and sewer overflow performance with increasing loads.

Council works closely with the development sector to understand where key lead-in/lead-out works can be integrated as part of the land subdivision and local utility provision process. Works In Kind Agreements (WIKA) may be determined with lead developers to ensure these relevant greenfield assets are provided at the right time and realise efficiencies with associated subdivision delivery activities.

Council's Water Security Plan outlines future investment options to manage the bulk water supply/demand balance. The Water Supply and Sewerage Development Servicing Plans (DSP) (2024) then provide an overview of future growth requirements within the region's treatment and network assets to manage a growing population.

The Central Coast Water and Sewer Master Plan (CCWSMP) is currently under development and will provide a holistic update of treatment and network planning based on current population forecasts and updated asset modelling and master planning. The outcomes of the CCWSMP will inform the next update of the DSPs, while also guiding future asset upgrades being implemented in the upcoming price path.

3.5.3 Improvements

The improvements driver relates to the improvement of customer service levels and reliability to meet customer preferences.

3.5.4 Compliance

The water industry is heavily regulated, and the compliance driver considers expenditure required to meet existing or new regulatory/legislative requirements. This can require the upgrade of existing or the creation of new assets across various asset classes. Expenditure summary in Table 233.

Key compliance drivers for the upcoming price path include:

- Dams Safety NSW Regulation
- Workplace Health and Safety
- Australian Drinking Water Guideline and Recycled Water Guidelines
- Environmental Protection Licenses for Sewerage Schemes.

Table 23: Next determination expenditure summary by IPART investment driver

Forecast Determination Expenditure $M	2026-27 Forecast	2027-28 Forecast	2028-29 Forecast	2029-30 Forecast	2030-31 Forecast	Total
	$2025-26	$2025-26	$2025-26	$2025-26	$2025-26	$2025-26
Renewals	43.8	45.3	41.6	50.3	54.8	235.8
Growth	113.3	94.3	47.4	52.2	17.6	324.7
Compliance	3.1	10.3	3.9	0.0	0.0	17.3
Improvements	0.0	0.0	0.0	0.0	0.0	0.0

3.6 Strategic planning

As a Local Water Utility (LWU), Council is required to demonstrate effective, and evidence based strategic planning in line with the *'Regulatory and assurance framework for local water utilities 2022*. This framework is managed by the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) and focuses on 12 outcomes that a LWU should address to a reasonable standard. The outcomes are a combination of technical and business enabling and are shown in Figure 19.

Figure 19: DCCEEW strategic planning outcomes

Council is currently working towards the framework and intends to use a combination of technical and business enabling documents to demonstrate effective strategic planning. The current proposed document hierarchy is shown in

20.

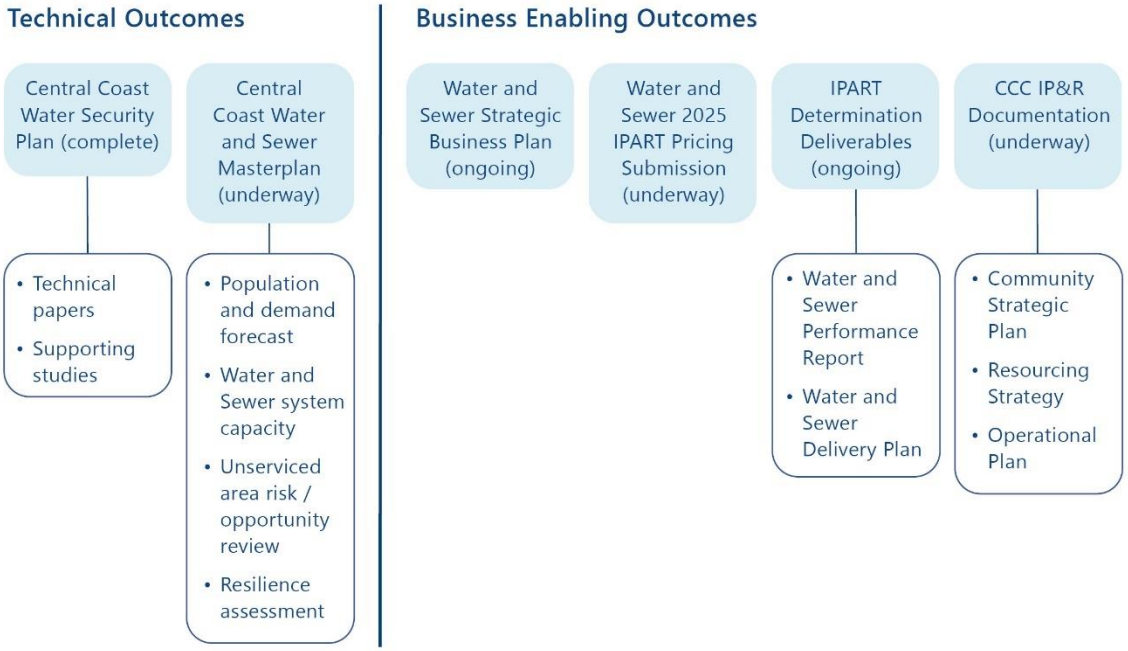


Figure 20: Council proposed Strategic Planning Assurance Document Hierarchy

The first phase in the delivery of the technical outcomes associated with the above framework was developing the Central Coast Water Security Plan (CCWSP). The second phase is the development of the Central Coast Water and Sewer Master Plan (CCWSMP). The CCWSMP is currently under development and will focus on treatment and network planning using recently available hydraulic models, population forecasts and spatial distribution of growth across the region. The planning will also include a system resilience assessment and allow assessment of options within a holistic decision-making framework that aligns to the objectives of the CCWSMP as well as the themes within the Council's Community Strategic Plan. At the conclusion of the CCWSMP, Council will have developed a preferred servicing pathway for new and upgraded assets over a 30-year horizon.

While the CCWSMP is being developed, Council is still required to make investment decisions for a variety of growth-related projects or the renewal/upgrade of existing facilities. To support these decisions reference is made to a variety of previous strategies, with retesting of key assumptions to ensure the right assets are provided at the right time. These include the Water Supply and Sewerage Development Servicing Plans, Gosford Water and Sewerage Master Plan Strategy and various treatment and network master planning strategies.

To support these improvements to Water and Sewer Strategic Planning, a focused Water Planning Team has been developed. This team includes planning engineers, a data analyst and technical officer and is responsible for undertaking network and treatment asset analysis and guiding the creation of capital works projects arising from those investigations, including the CCWSMP. This team also administers the various hydraulic modelling tools that assist both asset planners and asset operators make informed decisions about the planning and operation of water and sewer systems.

3.7 Asset management

Strategy 1 within the Water and Sewer Strategic Business Plan (WSSBP) is to 'Utilise asset management to drive decision making'. The focus of this strategy is described as:

- *We will build and maintain our assets to support our customers' needs as well as ensuring the performance is maximised.*
- *We will implement the recommendations made by IPART in the 'Improving Performance' Information Paper. In addition, we will implement asset management and project management strategies that ensure that the assets provide maximum value and meet our customers' needs now and into the future.*

The two objectives identified within this strategy are to:

- Build and maintain assets that support our customers' needs, and
- Maximise the value of our customers water and sewer assets.

The Strategy states as an objective, that Council needs to strategically manage its assets to operate the asset base at the lowest lifecycle cost, while planning for the changing and

future community needs and supporting growth in the region in a financially sustainable manner. In support of this objective, Council is optimising investment in assets through:

- Development and implementation of a Strategic Asset Management framework to support a capital works pipeline.
- Implementation of an Asset Management Continual Improvement Plan.
- Implementation of a decision-making framework based on extracting the long-term maximum value from assets for the community benefit.
- Adoption of an approach to asset renewals that is driven by consideration of all relevant factors - asset condition, demand factors, functional demands, etc.
- Engagement with the community regarding levels of service to be provided or supported through a financially sustainable asset base.

The Water and Sewer asset management framework identifies the key plans and strategies that enable the above objectives to be met, while guiding the development of the capital works program. The key asset management document hierarchy is outlined below in Figure 21.

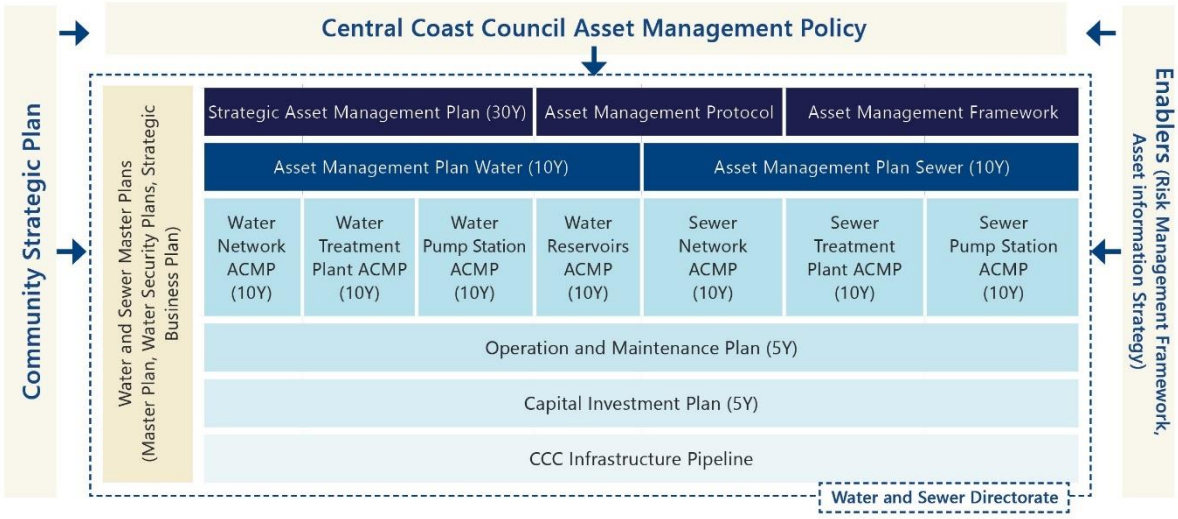


Figure 21: Water and Sewer asset management document hierarchy

3.8 Asset management maturity review and improvement plan

In 2022 Council undertook a maturity assessment of its Water and Sewer asset management practices against the Global Forum on Maintenance and Asset Management (GFAM) and the Institute of Asset Management's (IAM) 6-box model. This involved three workshops facilitated by AECOM which assessed Council's maturity against the 39 areas within the model, and the criticality of those areas to Council and can be seen in Figure 22 below.

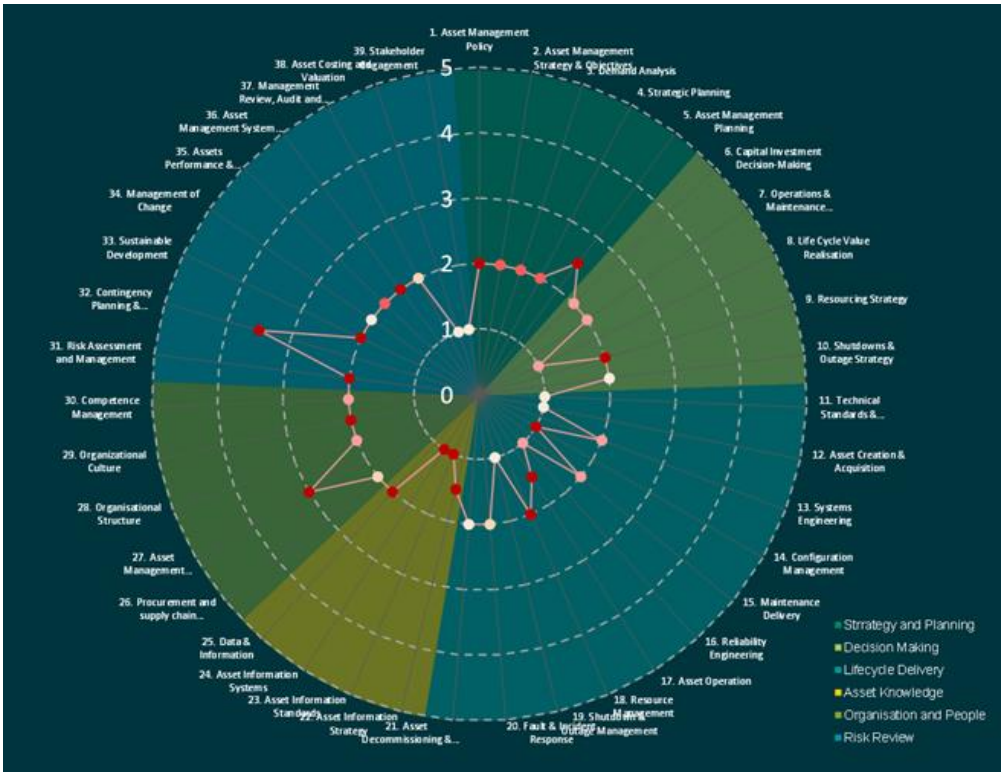


Figure 22: 2022 Water and Sewer asset management maturity assessment

Following the initial review, Council is now implementing an Asset Management Improvement Plan (AMIP) which aims to drive the Water and Sewer Directorate towards a rating of 'competent' across the 39 asset management areas as outlined in the IAM Maturity Gap Analysis that also encapsulates the 6-box areas.

The Improvement Plan also identified six asset management strategic objectives which are outlined in Figure 23 below.

Figure 23: Asset Management Improvement Plan Objectives

The current focus areas of the AMIP that will improve capital investment planning outcomes for our customers include:

- Aligning the water and sewer asset management framework with the Council's organisational objectives
- Creation of prioritised works program; scoping and budgeting for proposed capital works (obtaining specialist advice if necessary) working with WSAMIP PCG concurrence and its Investment Committee
- Monitor project nominations for the Capital Delivery Program, obtain approvals, commission new work, or liaise with water investment review committee if required.

To support these improvements to Water and Sewer Asset Management, a focused Water Asset Management Team has also been developed. This team includes asset engineers, data analysts and a technical officer and is responsible for preparing asset management plans and strategies, undertaking targeted asset condition assessments, and guiding the creation of capital works projects arising from those investigations, including long term renewal strategies. This team also administers the Technical Asset Register that assist both asset planners and asset operators make informed decisions about the planning and maintenance of water and sewer systems.

3.9 Asset management driving capital works

As part of Council's asset management improvement journey, a range of criticality and condition assessment programs have commenced that guide the development of renewal and upgrade programs.

Treatment plant condition and performance assessment program

The focus of the process performance assessments is on operational improvements, asset renewals and minor upgrades to maximise the performance of the existing assets, rather than major augmentations which will instead be guided by the Central Coast Water and Sewer Master Plan. However, where assets are at the end of their life and require replacement as determined by the condition assessment, preferred options for upgrades/replacement are considered and a prioritised renewal program is created from these assessments.

Water and sewer pump station condition assessment program

The objectives for the pump station condition assessment programs are:

- Review the condition and serviceability of the pump stations civil structures, mechanical and electrical assets and metal; including any Odour Control Units along the length of associated rising/trunk main and vent at discharge manholes for SPSs
- Identify risks emerging in terms of not being able to meet performance objectives due to asset deterioration or non-performance of assets
- Reduce operational, environmental, WHS and public health and safety risk
- Reduce critical infrastructure and third-party property damage risk
- Comply with the objectives of the Environmental Protection Licences
- Highlight and prioritise refurbishment work
- Provide a register on the overall condition and remaining useful life of the WPSs, SPSs, OCUs, and sewer vents
- Identify maintenance and operations adjustments that can extend asset life.

Criticality, condition assessment and renewal program for water mains, pressure and gravity sewer mains

The condition assessment of water and sewer mains is undertaken to:

- Assist in root cause failure analysis
- Determine remaining asset life
- Improving the accuracy of the risk rating of individual pipes or pipe sections
- Understand criticality of assets
- Inform decision making for capital renewal programs.

These considerations are important for the current and future management of these linear assets to ensure that Council is identifying the right balance between risk, cost, and performance for these mains. This enables Council to make optimal whole of life asset management decisions supported by the right asset information.

3.10 Water resilience

The Central Coast Water Security Plan June 2023 is an adaptive plan that aims to manage the supply and demand balance for the Central Coast's water supply scheme. The plan seeks to manage risks and uncertainty within a growing population and a changing climate and was delivered in cooperation with the NSW Government and in close collaboration of the Lower Hunter Water Security Plan.

The plan presents three key pillars to manage the supply and demand balance as shown below in Figure 24.

Figure 24: CCWSP Pillars

Council's current initiatives are focused on operational planning and resolving risk/uncertainty within the preferred portfolio of options. The renewal and upgrade of existing recycled water schemes is also currently under planning to allow the schemes to continue to deliver water to existing customers in line with the National Guidelines for Water Recycling.

3.11 Growth planning

Council continues to provide new and upgraded assets to meet the needs of a growing region. These assets are either delivered by Council (brownfield and major projects) or by the lead developer (greenfield lead in/out works) under Works in Kind Agreements (WIKA). Council seeks grant funding for growth related infrastructure projects when available, with programs such as the Housing Acceleration Fund and Accelerated Infrastructure Fund offsetting the cost of key projects in the current determination period.

Delivery of the Warnervale Town Centre and Gosford CBD enabling infrastructure has been the focus of the current determination period with over $45M of infrastructure delivered. A range of new greenfield water and sewer assets have also been delivered across various development sites under WIKA's, totalling approximately $25M over the current determination. Other previously forecast growth projects have not hit their development triggers over the determination and their timing will be reassessed under the Central Coast Water and Sewer Master Plan (CCWSMP).

Key growth-related projects being delivered in the next determination period include:

- Charmhaven Sewage Treatment Plant Upgrade
- Gwandalan Sewage Treatment Plant Upgrade
- CH12 Sewer Rising Main and Sewer Pumpstation Upgrade
- Kiar Ridge Water Supply Reservoir.

Existing projects have been guided by previous planning studies, master plans or developer servicing strategies. Council is now developing the CCWSMP which will consider the most recently prepared population and dwelling forecasts to determine a preferred 30-year investment pathway for network and treatment assets. This will also include a review of currently un-serviced villages and nomination of the future water supply and sewer servicing areas.

Council's Development Servicing Plans (DSPs) and associated developer charges are next due for update in 2030 and will be able to incorporate the outcomes of the CCWSMP to ensure developers continue to contribute their share of future infrastructure costs.

4 Proposed capital investment

4.1 Overview

Council is proposing $577.8M of capital investment over the coming five-year price path. This is an increase from the 2022 determination's annual average allowance of $73.9M to a forecast annual average of $115.6M. [3](refer Table 244 and Table 255).

Council's first draft proposed 5-year program totalled an average of $135.6M per annum. This included projects already committed in the current determination, forecast renewal works, rectifying identified defects within the network, growth driven upgrades and a forecast for assets predicted to fail within the proposed determination period. Council performed further refinements and reprioritised its program, focusing on deliverability of works, factoring resources both internal and current market trends as well as community preferences of keeping costs for the customer low to ease cost-of-living pressures within our community and the risk of projects not proceeding. Further refinements of budget estimates and smoothing of expenditure over the period occurred, which resulted in the revised program.

Council's forecast capital investment was developed using several scenarios in a combined top down/bottom-up approach, building an investment profile based on levels of acceptable risk, prioritising projects, and renewal programs within a desired expenditure range to minimise future bill impacts.

Current continuing projects are projects that have already commenced in the current period with works continuing into the upcoming period. These projects were prioritised as they are progressing and are expected to be in construction by 30 June 2026.

Projects supporting growth and development form part of Council's Developer Servicing Plans and are required to service new development and growth within the region. These projects are considered mandatory and must be undertaken by Council when capacity requirements trigger system upgrade works.

Asset Management driven programs allow Council to replace aged infrastructure that has reached the end of its serviceable and operable life. Council undertakes progressive prioritisation reviews of assets within each asset category reviewing age, location, risk of failure, physical condition, history of asset failures and operability to identify assets that require investment through renewal or upgrade.

[3] Represented in $2025-26

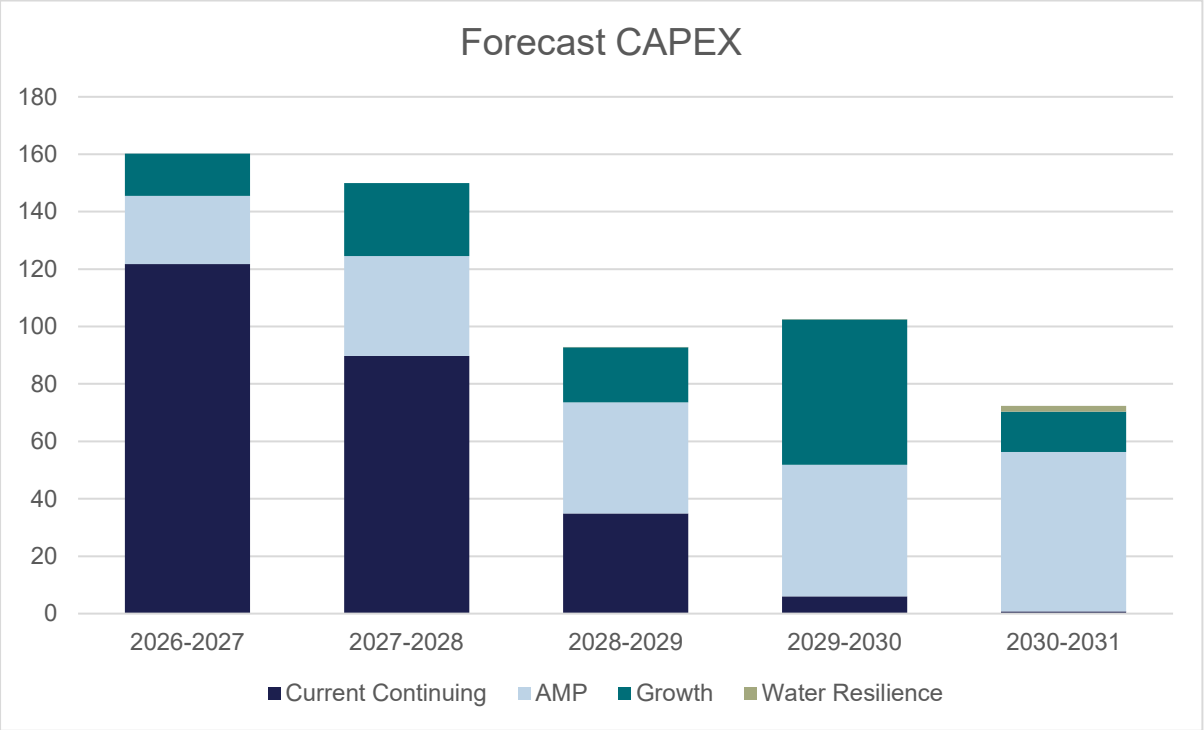


Figure 25: Forecast capital expenditure by project type

Table 24: Proposed water capital investment forecast ($2025-26)

Water $M	2026-27	2027-28	2028-29	2029-30	2030-31	Total
	$2025-26	$2025-26	$2025-26	$2025-26	$2025-26	$2025-26
Current Continuing	2.2	0.3	0.0	0.0	0.0	**2.4**
Asset Management Driven Projects	9.8	14.9	16.6	20.5	23.3	**85.2**
Projects Supporting Growth and Development	0.2	4.0	4.9	10.4	3.8	**23.2**
Water Security and Resilience	0.0	0.0	0.0	0.0	2.0	**2.1**
Total	**12.2**	**19.1**	**21.6**	**30.9**	**29.1**	**112.9**

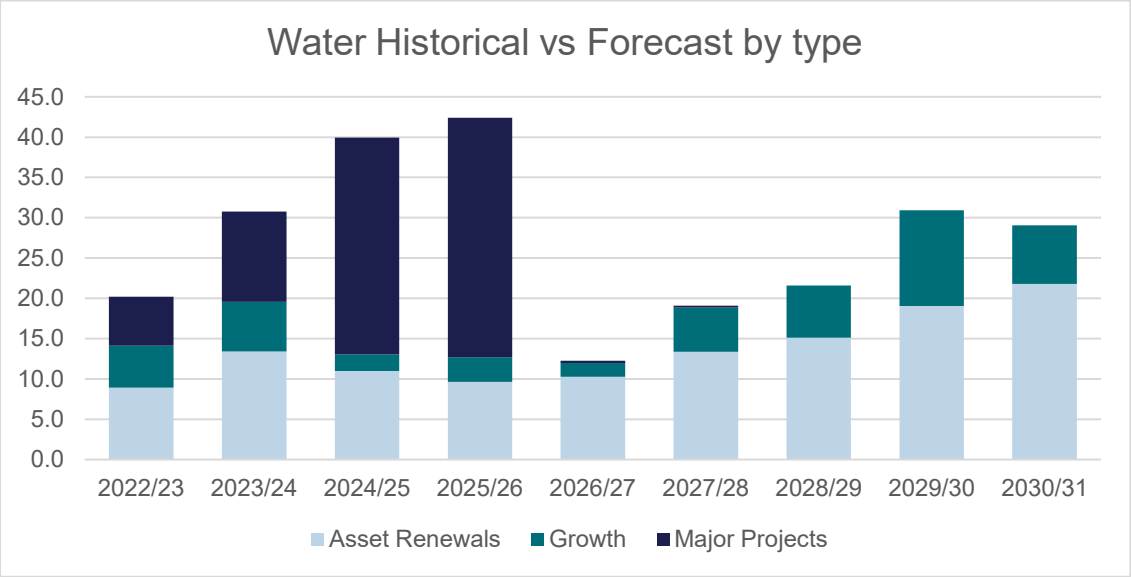


Figure 26: Forecast water capital expenditure by project type

Investment in asset renewals is forecast to increase in the coming determination period. This is to allow for the renewal of water assets that are reaching the end of their operable life and to replace assets deemed in poor condition.

Table 25: Proposed sewer capital investment forecast ($2025-26)

Sewer $M	2026-27	2027-28	2028-29	2029-30	2030-31	Total
	$2025-26	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**	**$2025-26**
Current Continuing	119.6	89.5	34.9	6.0	0.8	**250.8**
Asset Management Driven Projects	13.9	19.9	22.1	25.2	32.2	**113.2**
Projects Supporting Growth and Development	14.5	21.5	14.3	40.3	10.3	**100.9**
Total	**148.0**	**130.9**	**71.3**	**71.5**	**43.3**	**464.9**

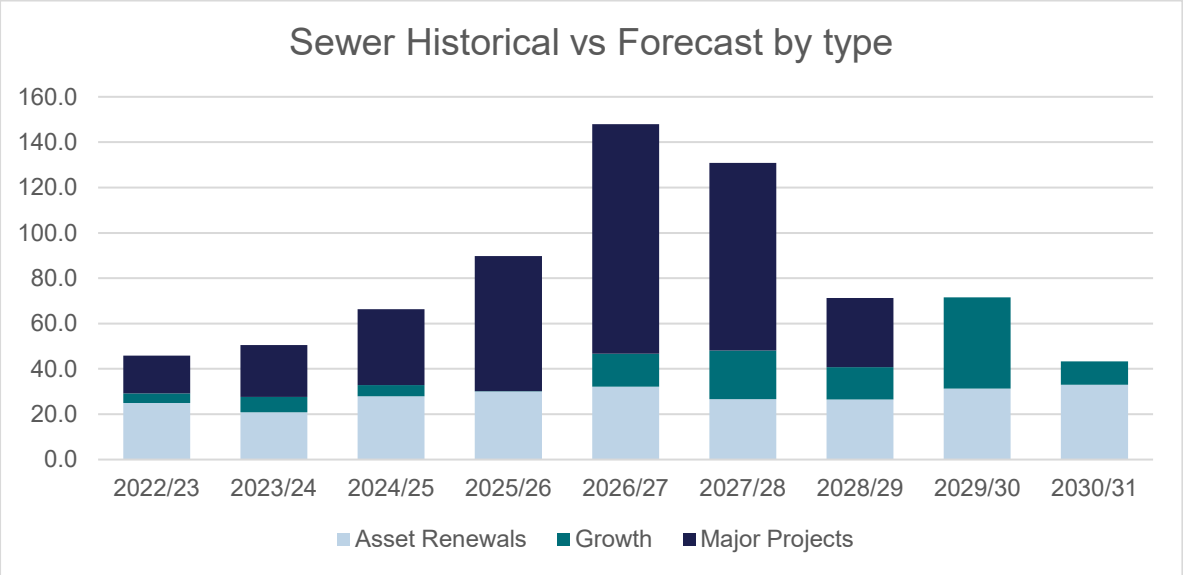
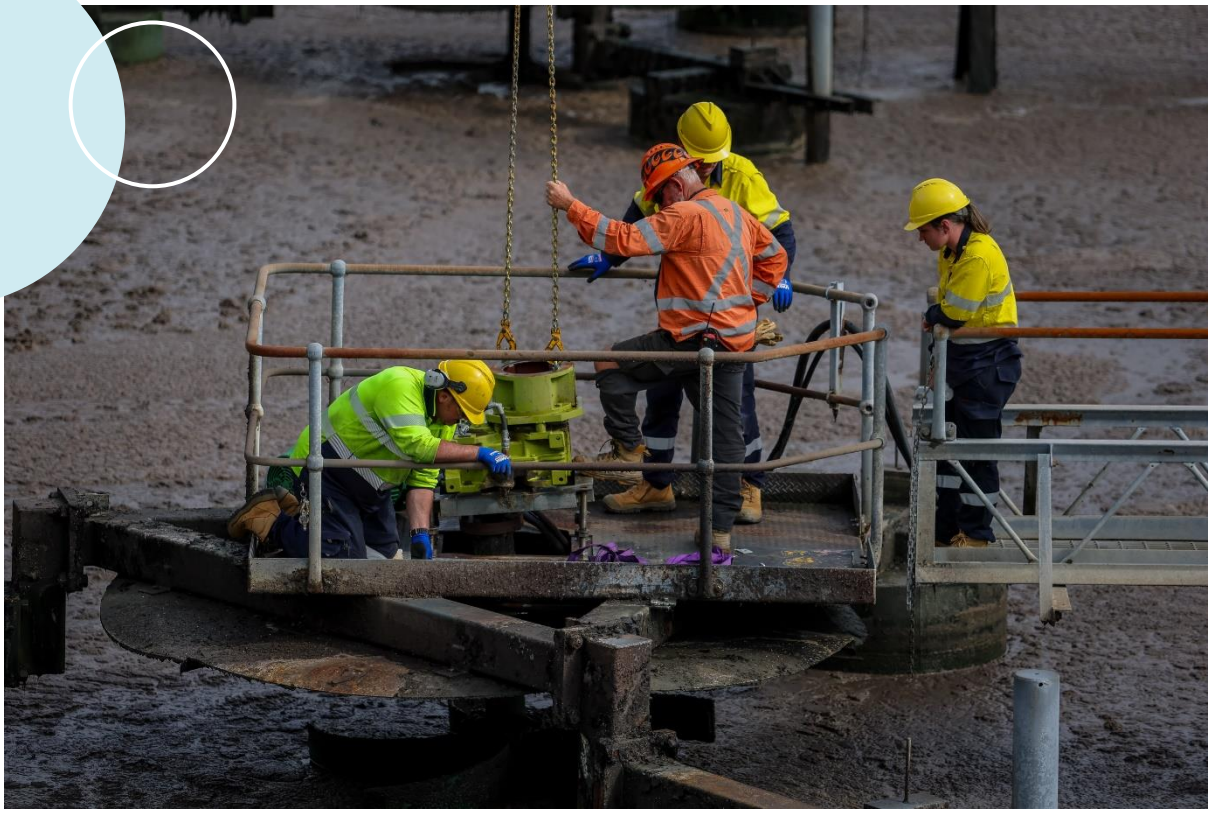


Figure 27: Forecast sewer capital expenditure by project type

Investment in asset renewals is forecast to remain consistent with historical spend patterns in the coming determination period.



4.2 Customer values

Council's proposed capital projects have been mapped within the Customer's values and in consideration of the associated outcomes for our water and sewer products. While individual projects may align with multiple customer values, there were key themes within both the water and sewer programs.

Effective planning through the provision of new/upgraded assets for a growing region, renewal of ageing infrastructure to improve the reliability of assets towards customer performance targets and improving the quality of treatment were the three key themes across each program. A summary of proposed expenditure by the primary customer value is provided in Table 266 and Table 277.

The environmental focus value was intrinsic to most projects, particularly within the sewer program, as part of Council improving the reliability of its network and treatment assets.

Council also continues to seek government grants where appropriate to fund capital works and reduce the cost to its customers in consideration of the affordability value.

Table 26: Proposed water capital expenditure by customer value

Water $2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Effective planning	1.1	4.0	4.9	10.4	5.8	26.2
Good Quality Water	0.3	0.3	0.0	0.0	0.0	0.5
Reliable service	10.8	14.9	16.6	20.5	23.3	86.2

Table 27: Proposed sewer capital expenditure by customer value

Sewer $2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Effective planning	110.5	88.8	40.9	40.3	10.3	290.8
Quality treatment	5.1	13.7	10.5	9.1	11.1	49.5
Reliable service	32.4	28.3	19.8	22.1	21.9	124.6

4.3 Asset management driven programs

The key customer value of reliable service is being addressed through an ongoing program of asset renewals - across mechanical, electrical and civil asset types. These programs are required to manage the risks posed by Council's ageing infrastructure – particularly mechanical and electrical assets.

The renewal programs are also required to continue to improve performance of various customer metrics towards the relevant targets. Unfavourable customer performance metrics as of June 2025 included:

- Water main breaks
- Number of unplanned water outages
- Sewer main breaks and chokes
- Sewer overflows reported to the environmental regulator.

Each of the above performance metrics requires ongoing capital investments to improve performance, in addition to improvements in operation and maintenance practices.

The renewal programs are informed by various asset condition assessment programs that have been undertaken during the current determination period. These programs were completed across several asset classes and aim to improve Council's understanding of asset condition and improve the prioritisation of each of the renewal programs. Asset classes subject to increased condition assessments over the current determination period include:

- Water treatment plants
- Water pump stations
- Water reservoirs
- Sewer mains
- Sewer pump stations
- Sewage treatment plants.

4.4 Major projects

Council is continuing the delivery of major projects during the next determination period in alignment with the customer values of effective planning and environmental outcomes. Council is also planning to commence the delivery of the Kiar Ridge Reservoir in response to active development in the Northern Growth Corridor.

4.4.1 Kiar Ridge reservoir

Kiar Ridge Reservoir (KRR) is a proposed water supply reservoir that will provide security of supply to greenfield development within the Wyong Employment Zone (WEZ), Warnervale Town Centre (WTC) and proposed development at Bushells Ridge as identified in the Central Coast Regional Plan 2041. The KRR was originally identified in Water Distribution System Planning undertaken in the mid 2000's, with the slower than forecast rate of growth within the Greater Warnervale Area allowing its deferral since.

Development of the reservoir follows the previous delivery of the Mardi to Warnervale Pipeline which has enabled the initial stages of the Warner Industrial Park to be delivered. Council is seeking to secure land tenure over one of two preferred sites over the next two years, while delivery of the CCWSMP will confirm the most efficient reservoir volume and potential for staging. Design and construction phases would follow over the course of the next determination period.

4.4.2 Charmhaven sewage treatment plant

The Charmhaven Sewage Treatment Plant (CSTP) Major Upgrade Project is currently in the delivery phase to meet current performance issues and future population projections. CSTP was commissioned in 1988 with limited capital expenditure since. Most of the infrastructure including pipework, mechanical equipment and electrical switchboards at the site are the original equipment. The original design capacity was 40,000 Equivalent Persons (EP) per day. However, a capacity assessment review (GHD, 2021) estimated the operational capacity at 32,600 EP due to a range of constraints at the site. The current estimated serviced population exceeds 45,500 EP and is the main driver for ongoing breaches of the Toukley Sewage Treatment System Environmental Protection License (EPL 2647).

A major upgrade is required to provide capacity for the current connected population and forecast growth in the medium term. The upgrade also aims to minimise the risks of offsite odour impacts on nearby growth precincts, while leaving sufficient remaining footprint for future augmentations for future growth within the catchment.

As of 30 June 2025, the detailed design has been completed by GHD, with construction forecast to commence early 2026. The 75,000EP capacity projected out to 2041 has been adopted for the current augmentation, with footprint allowance made to duplicate the treatment capacity to an ultimate population projection of 150,000EP. The extent of works at the site is shown below in Figure 28. Summary of expenditure is shown in Table 288.

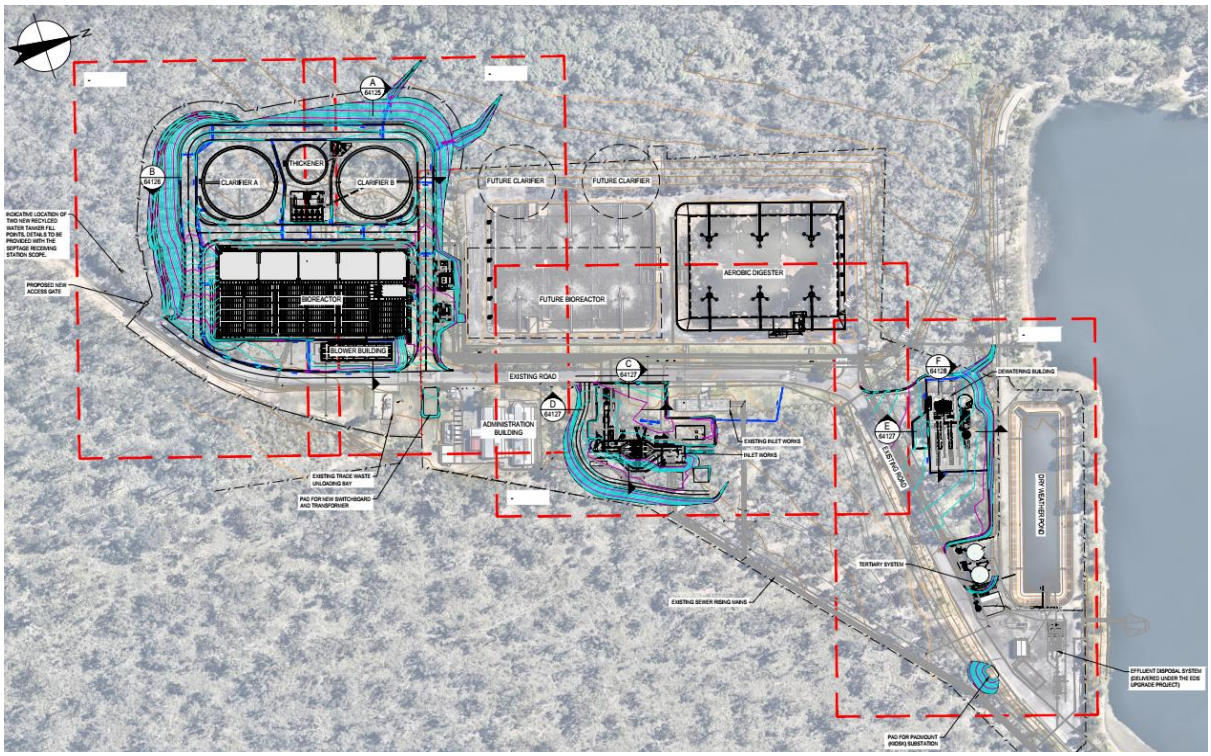


Figure 28: Charmhaven STP upgrade overview

Table 28: Charmhaven STP expenditure forecast

Year	Capital costs incurred to date	2024-25	2025-26	2026-27	Future Years	Total
Water and Sewer Revenue	1.89	3.96	8.68	18.79	4.49	37.80
Water and Sewer Developer Charges Revenue (s64)	1.89	11.17	24.48	53.02	12.67	103.22
Sub-total	3.78	15.13	33.16	71.81	17.15	141.03

4.4.3 Sewage treatment plant upgrade program

Overview

In addition to progressing the delivery of the major upgrades to Charmhaven Sewage Treatment Plant, Council is progressing the planning and design of significant improvements to a number of its sewage treatment plants. These are being informed by the recently completed condition and performance review project and previous asset planning studies.

Bateau Bay

The Bateau Bay Sewage Treatment Plant (BBSTP) was originally constructed in the 1970s as a trickling filter facility, with an upgrade was completed in the late 1980s to include an activated sludge (MLE process[4]) and a modified trickling filter plant. Subsequent Environmental Protection Licence revisions have been implemented and although still operating within original design parameters, the plant currently struggles to achieve load-based licence requirements for nitrogen and suspended solids.

The condition of aging assets introduces further licence non-compliance risks, particularly in the primary sedimentation area which had seen one of the tanks taken offline. This lack of redundancy has led to hydraulic capacity issues during wet weather, leading to poor effluent quality. Additionally, odour control has also been an issue with a history of odour complaints from the local community.

An ongoing program of process optimisation is underway which includes renewal and upgrades to primary treatment assets, upgrades to odour control, improvements to aeration equipment, construction of a new sludge dewatering system and site wide electrical/automation improvements. An overview of the site is in Figure 29 below.

Figure 29: Bateau Bay STP site overview

[4] a biological wastewater treatment method that combines both anoxic and aerobic zones to remove nitrogen and BOD (Biochemical Oxygen Demand)

Gwandalan

The Gwandalan Sewer Treatment Plant (GSTP) was constructed in 1986 and similar to CSTP has had limited capital expenditure since. The current functional capacity of the STP is approximately 6,000 EP. The current estimated serviced population now exceeds 7,000 EP with ongoing population growth occurring in response to recent greenfield subdivision development within the catchment. GSTP is also a contributor to ongoing breaches of the Toukley Sewage Treatment System Environmental Protection License (EPL 2647).

A major grade is required to provide capacity for the current connected population and forecast growth in the medium term. Planned works include the construction of a new inlet works including grit removal, upgrades to bioreactors and the installation of a sludge dewatering system. The upgrade also aims to minimise the risks of offsite odour impacts on nearby developable land currently impacted by Council's odour buffer zone. Overview of Gwandalan Sewage Treatment Plant is provided in Figure 30 below.

Figure 30: Gwandalan STP site layout

Toukley

The Toukley Sewage Treatment Plant (TSTP) was constructed in two stages in 1969 and 1986 and operates with a trickling filter process. The site operates two sludge lagoons and onsite dewatering via a belt filter press. Previous contamination studies have identified the sludge lagoons as the likely source of local groundwater contamination within the site. Recent maintenance activities have also confirmed ground water ingress into one of the sludge lagoons when it was recently de-sludged. In addition to the sludge lagoon integrity issues, the installed belt press has been subject to decreasing reliability as it is at the end of its serviceable life. Its deteriorating performance has been impacting the treated effluent quality leaving the plant.

Council intends to undertake improvements to at least one of the sludge lagoons (potentially decommissioning the other) and install a new dewatering system and out loading facilities based on Rotary Screw Press technology. These upgrades will resolve environmental impacts posed by the lagoons while also improving the reliability of treatment plant operations. This will result in improved consistency of effluent quality and improved biosolids product leaving the site. Toukley Sewage Treatment Plant sludge lagoon in Figure 31 below.

Figure 31: Toukley STP sludge lagoon

5 Investment Governance

Council manages its investment portfolio through the compilation and adoption of Annual Operational Plans and four-year Delivery Plans. The Operational and Delivery Plans are contributed to by each Directorate within Council to form the overall delivery program, with each Directorate having its own internal assessment and approval process to prioritise investment.

Each Directorate within Council has its own individual framework for managing project and program delivery. This is due to the diverse nature of each of the Council Directorates and their individual project delivery requirements. Corporately, contractual rules and policies exist to ensure each Directorate complies with contract, tender and service engagement regulations.

5.1 Water Investment Review Committee

The Water and Sewer Capital Project Review Team (PRT) was formed in 2019 to manage, monitor and review the Water and Sewer Capital Delivery Program for deliverability and ensuring projects aligned with corporate and regulatory expectations. The Project Review Team supported the business to ensure only valid, prudent, and efficient projects were approved for investment and ensured projects aligned with the strategic business plan, IPART, community strategic plans, Asset Management Plans and legislative requirements.

IPART released its Determination in May 2022, where recommendations for improvements to governance and delivery were made. In July 2023, IPART released their Water Regulation Handbook, which details changes to the way it intends to regulate the water business moving forward, which also highlighted the need for further refinement and adjustment to the water businesses governance framework.

In June 2024, the updated committee charter was endorsed to ensure recommendations in the current and future determination were implemented as well as ensuring impending regulatory requirements were considered and implemented.

The Water Investment Review Committee (WIRC) was established with the primary roles and responsibilities aligning closely with those of a Board structure. Consisting of the Water and Sewer Senior Leadership Team.

To fulfil its responsibilities, the Committee performs the following functions:

- Ongoing monitoring of delivery and cost commitments
- Monitor endorsed submissions (projects) against monthly cashflow and planned milestones
- Review and mitigate any deliverability risks or performance issues
- Review overall program for opportunities or risks
- Monitor proposed outcomes and benefits against business case proposal.

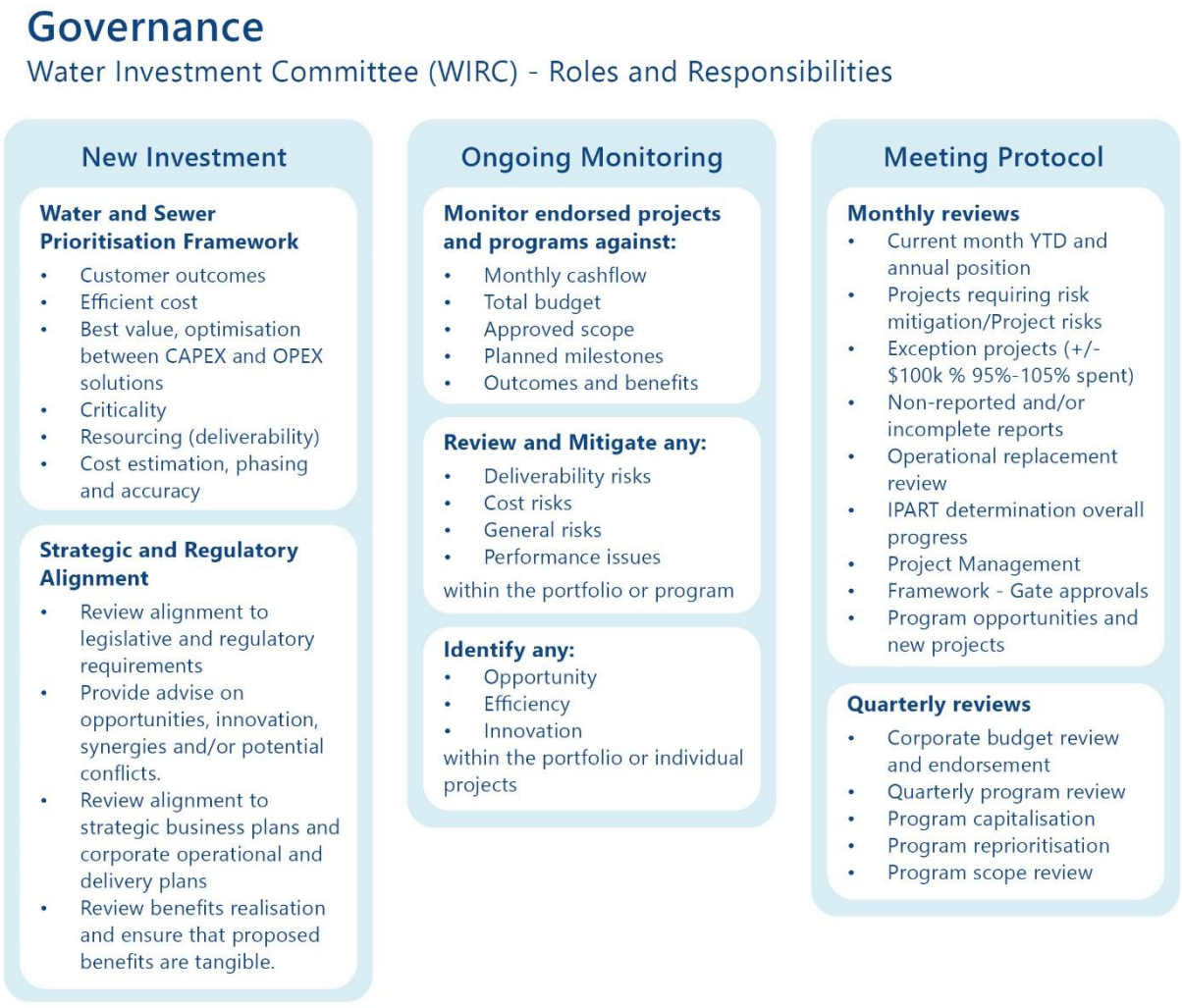


Figure 32: Water Investment Review Committee roles and responsibilities

The committee is also responsible for overseeing delivery of projects through the Project Lifecycle Gate Review and Approval process.

New investment proposal review and approvals

Review all new investment submissions considering the prioritisation framework principals with:

- Customer outcomes
- Efficient cost
- Best value, optimisation between Capital and Operational expenditure solutions
- Criticality
- Resourcing (deliverability)
- Cost estimation, phasing and accuracy, being the primary considerations
- Review alignment to legislative and regulatory requirements
- Provide advice on opportunities, innovation, synergies and/or potential conflicts
- Review alignment to strategic business plans and corporate operational and delivery plans
- Review benefits realisation and ensure that proposed benefits are tangible and align with community objectives and outcomes.

Project approval is heavily weighted toward risk where the risk of not proceeding is seen as high or unacceptable.

Risk areas primarily considered are:

- Compliance
- Work Health and Safety and Public health
- Levels of service
- Loss of service
- Property damage
- Internal property overflows
- Community and economic disruption
- Disruption to traffic
- Cultural / heritage impact
- Damage
- Repair and clean-up costs
- Reputation.

The investment prioritisation process governs the commencement of new capital projects and the transition of major projects from planning to delivery and within key procurement milestones during the delivery process. The process aims to ensure efficient and prudent assessment of capital works, while providing flexibility to reprioritise projects as needs and contexts change.

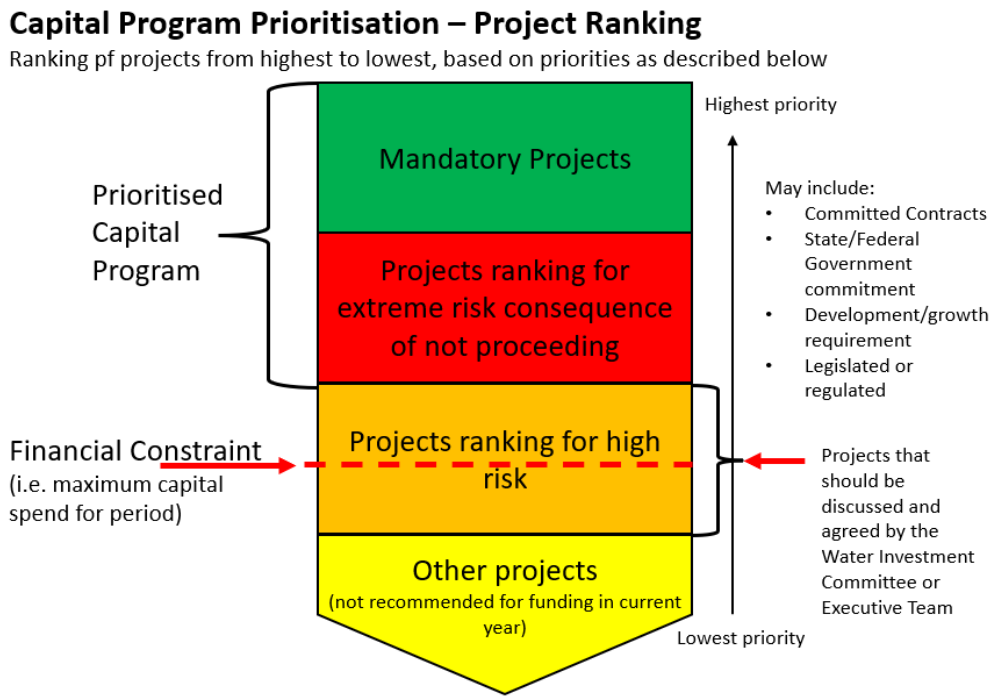


Figure 33: Water and Sewer capital prioritisation approach

5.2 Strategic Infrastructure Committee

Council has a corporate capital investment committee that oversees investment across the wider organisation. When Water and Sewer projects progress through the water and sewer specific committee (WIRC) they must also be approved by the Strategic Infrastructure Committee (SIC). The SIC strategically manages matters relating to corporate Asset Management, Developer Contributions and Capital Project Expenditure and Delivery in line with Council's Strategic Plan, financial processes, and annual budget.

The SIC comprises of Council's Executive Leadership Team (ELT) and its key objectives are:

- Ensuring Council plans, manages and delivers what we promised to the community.
- To provide leadership and set direction and priorities for the development of Council's asset management capabilities.
- Monitor Developer Contributions income and expenditure, the current and projected growth of the Central Coast region and the rate of infrastructure delivery within contribution areas.
- Meet expenditure requirement of between 95% and 102% of the capital works program.
- Ability to make unforeseen changes.
- Support the subject matter expert working groups; Technical Assets Working Group (TAWG), Developer Contributions Working Group (DCWG) and Project Management Working Group (PMWG).

Once projects have been endorsed by the SIC, they are then presented to Council through a budget review or ordinary Council meeting for Council adoption of proposed budget.

5.3 Project management framework and gated lifecycle processes

As part of the review into investment governance the Project Management Framework and Project Lifecycle also underwent a continuous improvement review to implement recommendations made in the 2022 IPART Determination as well as lessons learnt from the previous determination's capital delivery program.

Capital Delivery was divided up into three categories based on common initiation requests, value and risk in both delivery and business processes was considered.

Process 1 – emergency reactive replacement process

- Where a critical asset unexpectedly fails and is required to be replaced or remediated immediately.
- Works are delivered operationally.
- The value of works exceeds $10,000.
- Works have a material impact to the assets expected life.

Process 2 – operational asset replacement process

- Where an asset fails or is about to fail and time is available to seek quotes, wait for material/equipment delivery and/or plan onsite replacement works. Works are delivered operationally, by the business area requesting approval.
- Operational replacements of assets with a value less than $250,000 and that are delivered operationally.

Process 3 – project lifecycle and project management framework

- Higher complexity and value projects that require comprehensive planning, project management, site supervision or large contracts to deliver.
- The project management framework and suite of complimentary templates is designed to guide project managers through the planning and delivery process and encompasses monthly reporting and budget delivery KPI management.
- Phase one of the implementation of the project lifecycle focuses on business risk (risk of not proceeding) being the primary consideration. Moving into the next determination Phase two of the Project lifecycle will incorporate a second prioritisation consideration focusing on Customer and Community outcomes and benefits and accountability for achieving proposed benefits as part of a project's approval. This will be monitored, measured, and reported by introducing a final gate review to capture and evidence improvements made by undertaking investment.

6 Investment delivery

6.1 Overview

The Water and Sewer Directorate has further implemented a range of contractor panels to achieve time efficiencies in the tendering, contract approval and award phases, to ensure capital works are delivered using the most efficient strategies available.

There has been an implementation of several long-term contracts for service provisions to deliver Capital projects and programs. These contracts negate the need to tender individually for services the business requires on an ongoing basis.

6.2 Procurement

As the Water and Sewer Directorate is part of a Council, it is limited in its ability to find the same procurement efficiencies other utilities may achieve. The Water and Sewer Directorate is required to adhere to Council's procurement policies in relation to goods and services procured which includes the procurement of contractor engagement.

Council is required to undertake specified procurement in accordance with:

- The Local Government Act 1993 (LGA) [in particular section 55]
- The Local Government (General) Regulation 2005 2021 (Regulation) [in particular Part 7 – Tendering]

This legislation applies to all contracts for goods and services unless a relevant exception applies. One exception is where the estimated expenditure for a contract is less than $250,000 (excluding GST).

6.3 Contract management

Council has a corporate contract management framework and supplementary manual procedure staff must follow this for contract management. The Business Owner will nominate an individual within their area of responsibility to act as the Contract Manager for each contract.

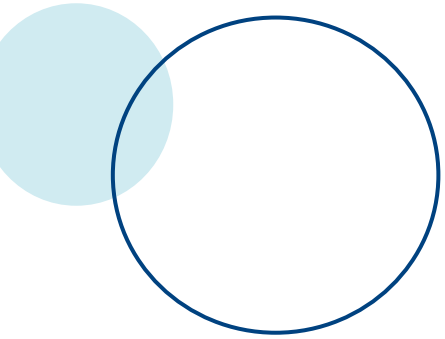
As the value, risk and complexity of a contract increases, so does the contract management requirements. The Contract Manager is responsible for managing risks and seeking appropriate professional advice at an early stage where insurance, legal or governance issues arise. They must be adequately resourced and skilled to manage a contract and the particular requirements of the contract.

Council must ensure appropriate levels of resourcing and management are applied to the contract management process in line with the importance of the contract and risk. Contracts and related contractors may be segmented according to value and risk as follows:

Operational (low importance)
For the supply of commodity items or services that are deemed to be low risk, low volume, have multiple contractors, little or no front-line impact and are typically of a low value.

Tactical (low or medium importance)
For the supply of goods or services that are deemed to be low or medium risk. There may be multiple or stable vendors that can supply the required goods or services and the impact to the front line is typically minor.

Strategic (high importance)
For the supply of goods and or services that directly impact operations, are highly sensitive or are high risk. In most situations, issues with the supply of the goods or services will impact Council with varying degrees of severity.



6.4 Delivery strategies

6.4.1 Water services and construction

Single supplier arrangement, four-year contract with extension options for the provision of all water main renewal, water service and water meter installations.

The scope of work performed under this contract includes routine scheduled exchange of existing water meters ranging in size from 20mm to 150mm; maintenance of water meters, water services and fire hydrants, including ad hoc meter exchange; tapping of water mains and construction of new water services from main to meter ranging in size from 20mm to 150mm, including meter only installations and fire services construction; adjustments to existing water services; in situ replacement of water mains up to 300mm in nominal diameter; replacement of fittings on existing water mains; and ad hoc relocation of water mains up to 300mm in nominal diameter and after-hours emergency works availability.

6.4.2 Sewer rehabilitation and construction services

Single supplier arrangement, four-year contract with extension options for the provision of all sewer main relining, manhole rehabilitation along with provisions for closed circuit television (CCTV) inspections including structural condition assessment, critical sewer and infiltration assessments.

The works executed consist of all work associated with the design, manufacture, supply, CCTV investigation, flow control, data collection, community liaison, traffic control, installation, restoration, testing and commissioning of rehabilitation works to targeted sewer mains and manholes.

6.4.3 Contract 3543 engineering services consultancy panel

The objective of the Water and Sewer Engineering Services Panel is to streamline Council's ability to procure consulting services enabling Council to deliver its capital program more efficiently than using a traditional project by project procurement approach for engineering services. The "Panel" was established through a Competitive Open Tender process for a four-year contract with a one year plus one year extension available. The contract installed two panel members. AECOM Australia Pty Ltd and GHD Pty Ltd.

At the project's inception an estimate of monies to be expended through the Panel was approximated $2M per annum ($nominal). There is no guarantee to the amount to be expended nor that the Panel has exclusivity to services required.

Requests for each individual service is made via Vendor Panel with submission of project brief and Request for Tender. Estimate of service cost provides flexibility with respect procurement and sourcing requirements. Central Coast Council's Procurement and Sourcing accept a stepped approach to requirements to facilitate streamlining of service procurement. Single source engagement request with reduced supplier response time of seven days is accepted for projects with estimated value(s) under $150K. For contracts over $150K requests must be made to all panel members with response times of upwards 21 days.

Central Coast Council decided to extend the initial four-year engagement period by one year of the two-year extension option. Council is unlikely to extend this engagement for the further one year. Central Coast Council is planning to establish a tiered panel which will include with the large engineering firms providing the complex project capability, smaller local suppliers which will provide greater flexibility and choice for Central Coast Council in the procurement of smaller ad-hoc services. It is expected smaller firms will have reduced delivery times and reduced cost for equivalent services due to overheads and the larger engineering firm governance. Central Coast Council also sees the value in sourcing and supporting local.

Central Coast Council personnel have a sound and friendly working relationship with the panel members. Workshops and knowledge sharing activities have complemented individual project management engagement meetings to develop collaborative teams in the delivery of engineering services.

6.4.4 Contract 2043 general works construction panel (2019-2023)

The General Works Construction Panel was implemented in 2019 to meet IPART drivers for efficient delivery of Infrastructure projects. The panel commenced as a pilot program for construction of projects from $150k to $2M.

During the term, the panel was utilised to deliver $ 46.6M in infrastructure delivery from its initial inception in 2019 until the contracts' conclusion in 2023 an average of $11.7M annually. The 2019-2023 panel trial was successful, and a second-round general construction works panel was implemented.

6.4.5 Contract 5009 general works delivery panel (2023-2027)

It has been utilised to deliver in excess of $35M in infrastructure delivery so far from its initial inception in 2023 to date, delivering projects from $150k to the upper limit of the panel $7.5M. Council is also working to increasing the upper limit to $10M of this Panel to align with the Major Construction Panel starting limit. This will close the grab between both Panels avoiding going to open market for those projects.

Council has realised the efficiencies of this delivery method through a reduction in working hours for staff reducing the time to prepare, advertise, review and award contracts that would have historically been placed on the Open market which has an average timeframe of 112 days from tender advertise to award. The average timeframe for contracts utilising the general construction panel has reduced this period to an average of 88 days.

As well as efficiencies through time and administration costs, Council has also found benefits through partnerships with panel contractors gaining a better knowledge of Council's assets and operations allowing them to deliver works to a higher standard with less variations received.

6.4.6 Contract 6185 major works delivery panel (2025-2029)

Due to the success of the General Works Construction Panel, Council has established a similar arrangement to implement a panel for construction works valued at $10M to $50M contract value. Council adopted a list of recognised contractors of up to eight Contractors with two categories to undertake and deliver major construction works in relation to Water and Sewer assets. Council anticipates realising the same benefits in this panel as was experienced in the General Works Delivery Panel with cost efficiencies received through time saving and quality service delivery.

6.4.7 Works In Kind delivery

Council works closely with the Development sector to understand where key lead-in/lead-out works can be integrated as part of the land subdivision and local utility provision process. Works In Kind Agreements (WIKA) may be determined with lead developers to ensure these relevant greenfield assets are provided at the right time and realise efficiencies with associated subdivision delivery activities.

Under a WIKA, the value of Water and Sewerage Developer Charges payable for the subject development are offset by value of regional infrastructure works that the developer delivers on behalf of Council. WIKA's may be used for new greenfield assets, while brownfield asset upgrades or major capital works are delivered by Council.

Council has delivered a range of regional growth assets including water trunk mains, sewer pump stations and sewer rising mains as part of WIKAs during the current determination period. Ongoing delivery of greenfield growth assets are planned during the upcoming determination period.

6.5 Delivery portfolio management

Council has traditionally exhibited challenges in delivering on its determination allowances in the Capital delivery space with most historical determination periods trending for under delivery. To address past performance trends, Council has undertaken a detailed review of forecast portfolio deliverability trending historical spend rates against quantity and complexity of projects delivered as well as looking at historical and current resourcing across the planning and delivery business functions.

As part of this review Council was able to establish the greater number of individual projects being delivered in a single financial year had a direct impact to under delivery of the proposed program. This was mostly due to administrative effort required in pre-construction phases, particularly contract preparation and award and managing consultancies and key stakeholders for endorsement and review of planning and design proposals. Council has taken on this learning and implemented several improvements to processes, structure and roles within projects as well gathering data from past learning to apply to projects moving forward.

This process improvement's successful outcome is evidenced through Council's successful delivery of its 2022 determination allowance.

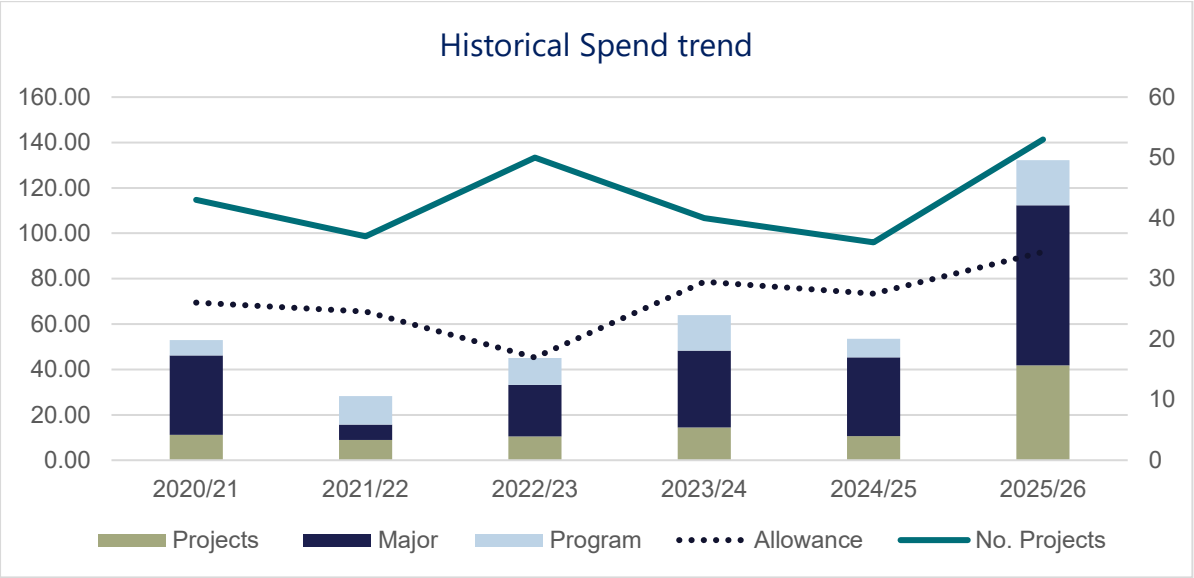


Figure 34: Historical expenditure by project resourcing type

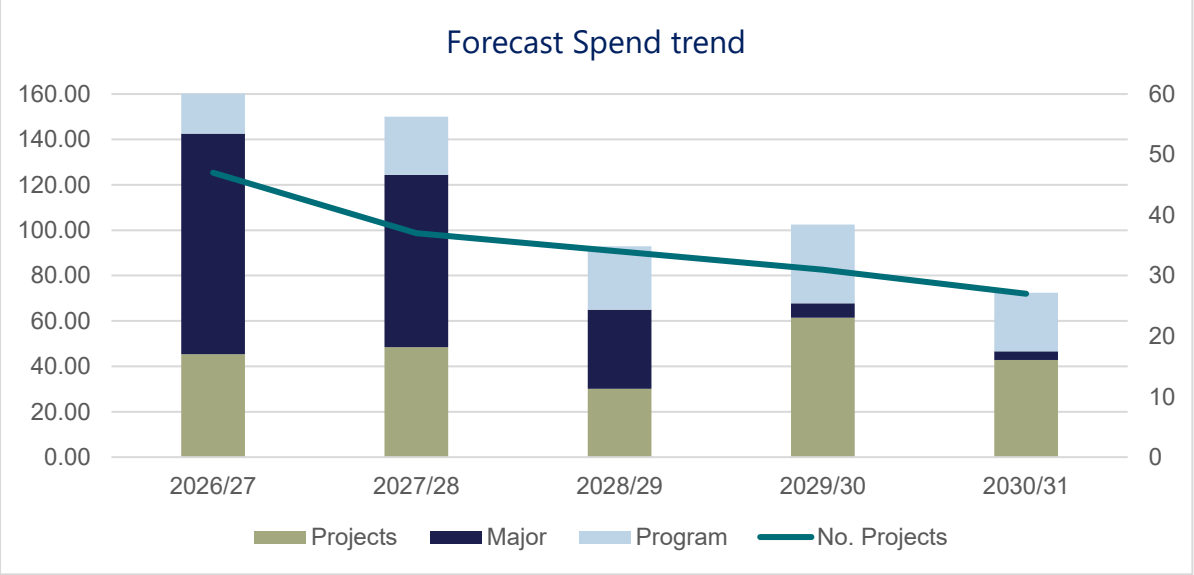


Figure 35: Forecast expenditure by project resourcing type

Major projects are resourced utilising external specifically skilled project and contract management teams, while standard projects (Business As Usual) have been resourced utilising internal staff. Council is investigating further packaging of similar project in similar asset categories to reduce administrating effort in contract review and management as well as utilising panel arrangements to deliver projects to mitigate extensive timeframes in submitting construction works to the open market.

The business has onboarded a programmer to better plan and phase project delivery to ensure timing and phasing of projects through the respective delivery phases is achievable

and has adequate resources available. This allows the business to better manage resources including stakeholders outside of the delivery team who play a key role in the planning and contractual requirements of each project. While the outer years of the proposed delivery program are still in development and will require further risk prioritisation reviews, Council has applied its learnings to its forecast ensuring that forecast delivery commitments are achievable.

Abbreviations

AC	Asbestos Cement
AIF	Accelerated Infrastructure Fund
BAU	Business as Usual
BLER	Bushfire Local Economic Recovery
CAPEX	Capital Expenditure
CCWSMP	Central Coast Water and Sewer Master Plan
CICL	Cast Iron Cement Lined
CPI	Consumer Price Index
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DCWG	Developer Contributions Working Group
DSP	Development Servicing Plans
ECI	Early Contractor Involvement
ELT	Executive Leadership Team
EP	Equivalent Persons
EPA	Environment Protection Authority
EPL	Environment Protection License
HAF	Housing Acceleration Fund
HWC	Hunter Water Corporation
IPART	Independent Pricing and Regulatory Tribunal
LGA	Local Government Area
LWU	Local Water Utility
MLE	Modified Ludzack-Ettinger
ML	Megalitre
OCU	Odour Control Unit
OPEX	Operational Expenditure
PMCA	Pressure Main Criticality Analysis
PMWG	Project Management Working Group
SIC	Strategic Infrastructure Committee
SPS	Sewer Pump Stations
SRM	Sewer Rising Main
STP	Sewage Treatment Plant
TAWG	Technical Assets Working Group
WIKA	Works in Kind Agreement
WIRC	Water Investment Review Committee
WPS	Water Pump Stations
WTP	Water Treatment Plant

References

January 2022 Council resolution -*Minutes of Ordinary Council meeting Tuesday 25 January 2022 – Tender evaluation*

Central Coast Council | Water and Sewer

Technical Paper 4

Central Coast Council
2 Hely Street / PO Box 20 Wyong NSW 2259
P 02 4306 7900
W centralcoast.nsw.gov.au
ABN 73 149 644 001

September 2025