



Operational Expenditure



- Central Coast Council's water, sewer and stormwater drainage forecast operational expenditure of \$524M over the period 2022-26 (four years).
- The operational variance over the 2019-22 (three year) regulatory period is expected to be \$37M (\$2021-22). The IPART allowance was \$284M (\$2021-22) and Council's expenditure is estimated to be \$320M (\$2021-22).
- Council is using the 2019-20 actuals as the baseline for forecasting the expenditure for 2022-26. The actual expenditure in 2019-20 was \$118M (\$2021-22) which has been rebased at \$106M (\$2021-22).
- When forecasting the operational expenditure for the 2022 determination, an iterative process was adopted, where each unit was required to:
 - o Review current expenditure in relation service delivery
 - o Identify risks and asset failures in relation to licence conditions and service levels
 - o Understand expected pollution reduction programs

Note: Some figures contained within this paper may have slight variances due to rounding. All actual expenditure is stated as \$nominal and forecast expenditure stated as \$real 2021-22 unless otherwise specified

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1 Overview

Central Coast Council (Council) has always been a low-cost service provider of water, sewer and stormwater drainage services. According to the National Performance Reporting (NPR), since 2016, Council has always been in the lowest percentile for operational expenses per property in both NSW and Australia. In 2019-20, Council had the 2nd lowest cost per property in Australia for water (behind Hunter Water) and the 4th lowest for sewer in NSW.

Over the 2019 determination period, Council has seen an increase in customer calls related to civil infrastructure, SCADA alarms, breaches of EPA licence conditions as well as an increase in Long-Term Injuries (LTI's- which are higher than both Hunter and Sydney Water).

In addition to the escalation of reactive maintenance and environmental issues, there has been pressure from climate issues such as fire and flood as well as operational pressures in response to both the required COVID-19 restrictions and Council's financial crisis.

Over the last 12 months, Council has increased its focus on understanding the risks in its operating environment. Council has a better understanding of the asset condition in both transport and treatment and is developing a Transition Strategy which will correct the current reactive approach to a proactive one.

This will be achieved by engaging resources and enhanced asset lifecycle management strategies that better reflects integrated processes, reporting and data.

During the 2022 determination period, Council expects to incur higher costs which have been forecast relating to both prudency and efficiency, than forecast in 2019 in the following areas:

- Bushfire management (\$2.1M)
- Catchment management (\$2.3M)
- Dam safety (\$1.4M)
- Sewerage Treatment Plant improvement programs (\$14M)
- Long-cycle preventative maintenance strategies (\$3.4M)
- Strategic Planning including Water Security Plan (\$2.6M)
- Stormwater quality management (\$5.1M)
- Floodplain management planning (\$4.5M)

Council will also invest significantly in the safety of its employees as well as asset maintenance such as smoke testing, mains cleaning, leak detection and asset inspections¹.

Council's focus over the 2022 determination period will be developing its business strategy in relation to both inspections and maintenance of its assets which will result in better water quality for the community, better floodplain management, dam safety and a reduction in unplanned outages and environmental incidents. In the long term, this will benefit the community by protecting the assets and reducing costs in future determination periods.

This determination will also include additional expenditure on stormwater quality, floodplain risk management and urban channel maintenance. During the 2019 determination, these services were funded in part by a different Stormwater Levy. This Levy has now ceased, and Council is looking to simplify stormwater management for its customers by including all stormwater management under the single charge.

The requested operational expenditure is based on the 2019-20 actuals (with some adjustments) rather than the 2020-21 actuals (penultimate year). This was requested in response to Council's financial crisis where additional reductions were required to reduce operational costs across Council.

1.1 Performance 2019-2022

Table 1 demonstrates Council's performance over the 2019 determination period against IPART's expenditure allowance.

IPART allowed \$M	2019-20	2020-21	2021-22	Total	Total
	\$nominal	\$nominal	\$nominal		\$2021-22
IPART Determination	91.1	91.7	93.9	276	284
Actual/Forecast	112.6	105.9	93.5	312	320
Variance \$	21.5	14.2	-0.4	36	36
Variance %	19%	14%	0%	13.%	13%

Table 1: IPART allowance versus actuals/forecasts \$M in nominal \$ for \$2021-22 SIP multipliers are used²

Note - 2021-22 \$nominal is forecast expenditure

¹ All forecast costs are supported by operational business cases that define drivers and related to both prudency and efficiency

² \$2017-18 to \$2018-19 = 1.8%, \$2018-19 to \$2019-20 -0.3%, \$2019-20 to \$2020-21 2.4%, \$2020-21 to \$2021-22 2.5%

Because Council is using the 2019-20 actual expenditure as the base year for its pricing proposal, there is more detail regarding the explanation of the variance for this period. In summary, the variance in 2019-20 is attributed to:

- The increase in corporate overheads which exceeded the IPART allowed expenditure for that cost category by \$8.3M (\$2019-20). The IPART allowance was \$20.6M and the actual expenditure was \$28.9M.
- The anticipated increase in plant and fleet costs which exceeded the IPART allowed expenditure for that cost category by \$3.9M (\$2019-20). The IPART allowance was \$3.8M and the actual expenditure was \$7.7M.
- The uncontrolled events due to flooding, fires and COVID expenditure that occurred in 2019-20 which increased the cost categories of Hire and Contracts, Labour and Materials by approximately \$1M.
- The other increases to expenditure were due to uncapitalised labour, an increase in labour expenditure charged to Water and Sewer by other areas of Council, an increase in tipping fees resulting from higher tonnages of sludge collected from the treatment plants and the unrealised efficiencies defined in the IPART 2019 determination.
- The "Other" category appears to have a large variance, however there was a change to the internal budgeting process where tipping fees were charged to "Other" instead of Hire and Contracts.
- Electricity costs were also lower than anticipated resulting from new energy contracts.

For the 2021-22 financial years there is a significant reduction in the forecast expenditure, resulting from the reduction to expenditure from the recent Council financial crisis. Figure 1 and Table 2 shows the actuals/forecast expenditure compared to the IPART allowance in \$nominal over the current regulatory period.



Figure 1: IPART allowance compared to actuals/forecasts 2019-2022

Table 2	Regulated	operating	expenditure	by product	category ((\$Ms	nominal)
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\$M	2019-20	2020-21	2021-22	Total	\$2021-22
					Total
Water	\$Nominal	\$Nominal	\$Nominal		
IPART determination	39.9	40.1	41.0	121	124
Actuals/forecast	51.6	48.9	42.5	143	146
\$ Variance	11.7	8.8	1.4	22	22
% Variance	23%	18%	2%	15%	15%
Sewer	\$Nominal	\$Nominal	\$Nominal		
IPART determination	40.8	40.9	41.9	123	127
Actuals/forecast	48.2	48.4	41.5	138	142
\$ Variance	7.4	7.5	4	15	15
% Variance	15%	15%	0%	10%	10%
Stormwater drainage	\$Nominal	\$Nominal	\$Nominal		
IPART determination	10.4	10.7	10.9	32	33
Actuals/forecast	12.8	8.5	9.4	31	32
\$ Variance	2.4	-2.2	-1.5	-1	-1
% Variance	19%	-0.25%	15%	-0.03%	-0.03%

2 Introduction

This technical paper:

- Establishes Council's position in relation to other water utilities and how it manages risk
- Explains categories that describe Council's expenditure
- Compares current regulatory operating expenditure to the IPART allowance
- Outlines Council's proposed operating expenditure
- Describes Council's planning, budgeting and forecasting processes.

3 Council's operational expenditure for comparison

Council's water, sewer and stormwater drainage is classified as a "major" utility where the number of connections is greater than 100,000.

In comparison with other major utilities in Australia, in 2019-20 Council had the second lowest operational costs per property (behind Hunter Water). Council's sewer operational costs are higher than other utilities due to the Central Coast's unique geography and customer base. The water, sewer and stormwater drainage network servicing the residents of the Central Coast is relatively long for the population served due to the geography of the region and the physical barriers created by the lakes, estuaries and lagoons. In addition, Council treats all sewerage to a secondary and in some instances a tertiary level, where it is used for recycled water.

The amount of sewerage collected compared with other major utilities is higher than utilities of a similar size.



Figure 2: Average volume of sewerage collected per property Major utilities

Customers on the Central Coast currently have the lowest bills for water and sewer in New South Wales as reported to the National Performance Review. The typical bill for

residential customers fell 16% from 2018-19 to 2019-2020 due to the 2019 IPART price determination.



A breakdown of the typical bill is shown in Figure 3.

Figure 3: Water and Sewer components of a typical bill Note: Based on average water and wastewater use within water business Source: Bureau of Meteorology 2021, National performance report 2019–20: urban water utilities, part A, Bureau of Meteorology, Melbourne.

Central Coast customers pay substantially less than the average bill amount for water and sewer services. However, the evidence is that the Central Coast does not have the economies of scale to justify this amount of revenue per property.

Economics of scale

The cost-of-service provision is highly correlated to the size and relative simplicity of the network. Larger customer bases should result in lower bills per property. Council has a customer base that is far smaller than Hunter Water Corporation (HWC) and Sydney Water as shown in Figure 4.



Figure 4: Customer by Water business Source: Bureau of Meteorology 2021, National performance report 2019– 20: urban water utilities, part A, Bureau of Meteorology, Melbourne.

Council has 60% of HWC's population so its water bills should be higher than HWC. Sydney Water has the highest economies of scale so should have the lowest bills. In addition, Council's network, as shown in Figure 5, serves a similar number of customers to HWC per 1km of main which would suggest that the Central Coast has a similar network and similar bills.



Figure 5: Number of properties served by 1km of main 2019-20 Source: Bureau of Meteorology 2021, National performance report 2019–20: urban water utilities, part A, Bureau of Meteorology, Melbourne.

However, Council's low number of customers per 1km of main is within an area that is 25% of the size of HWC's service area. The geography of the Central Coast means that Council operates a network that is highly dispersed and difficult to directly link, meaning that the cost of service provision is higher.

Most of Council's population is located around two major estuarine environments, Tuggerah Lakes and Brisbane Water. Council's water, sewer and stormwater drainage network must travel around these water bodies, meaning that the network is longer and exposed to degrading environments with high salinity. This results in a relatively high number of mains and associated infrastructure. In addition, the geography means that there will be rising community expectations of the quality of environmental discharge given their proximity to waterways.

3.1 Full Time Employees (FTE's)

The number of Full-Time Equivalent Employees (FTE) for the Water, Sewer and Stormwater Drainage business has decreased from 2018 (321 FTE's) 2019 (329 FTE's) to 2020 (266 FTE's). Council currently has one of the lowest labour forces (measured in Full Time Employees - FTE) per 1,000 properties in New South Wales as shown in Figure 6.



Figure 6: Labour workforce in NSW per 1000 connected properties Source: LWU performance monitoring data and reports, Sydney Water and Hunter Water annual reports, Council data

This workforce, while having made significant productivity improvements, needs support to maintain customer service standards into the 2022 determination period for the complex network operated by Council.

3.2 Operational expenditure on billing

Council has one of the lowest expenditure rates in Australia which is a large driver behind having the lowest bills. The operational expenditure makes up a large part of the required revenue in IPART's building block model.



Figures 7 to 11 compare the expenditure in both NSW and Australia.

Figure 7: Total expenditure per property compared to other major utilities. Source BOM NPR reporting 2019-20



Figure 8: Total Operational Expenditure per property NSW water. Source BOM NPR reporting 2019-20



Figure 9: Total Operational Expenditure per property NSW Sewer. Source BOM NPR reporting 2019-20



Figure 10: Total operational expenditure per property Major utilities Australia Water. Source BOM NPR reporting 2019-20



Figure 11: Total operational expenditure per property major utilities Australia Sewer. Source BOM NPR reporting 2019-20

4 Responding to risks

Council has taken a 'top-down' risk-based approach to proposed expenditure, prioritising expenditure on ameliorating critical issues and generating a robust and defensible case for a higher operational expenditure.

Council's Water and Sewer Directorate has experienced an increase in reactive maintenance and a decrease in proactive maintenance over the last decade. Maintenance practices have been driven by a desire to reduce short-term cost by taking a risk position where plant redundancy and spare capacity have been used up. This coupled with lower operational expenditure over the 2019 determination, uncontrollable events such as climate effects, an incomplete Council merge and poorly delivered corporate systems have left the operations at a point where system failure is likely to occur. As a result, a decision has been made by the Directorate to implement strategies to address this inefficient model and to reduce the risks associated with this critical infrastructure.

The principal drivers of the current model have been identified as follows:

- A lower operational allowance (operational expenditure) from the 2019 IPART determination
- A further reduction of operational expenditure due to Council's financial crisis, including a reduction of 63 FTE's
- Ageing infrastructure
- A lack of fully integrated workflows
- Alignment to the Asset Management Plans for Asset maintenance and inspections
- Climate change
- Topography and
- Environmental impacts from failing infrastructure

The impacts over the last six years are resulting in a reduction in operational service delivery. Meeting Council's regulatory requirements such as its Environmental Protection Licenses (EPL) and Drinking Water standards are also being impacted resulting in:

- Environmental Protection Licence (EPL) breaches related to suspended solids, oil and grease and total nitrogen
- An increase in sewer overflows, odour complaints and water quality complaints that are above service level targets
- The highest sewerage service complaints in Australia
- The lowest workforce in NSW per 1000 properties (compared to other Local Water Utilities)
- 30% increase in customer service calls (based on 2018 trends)

• 50% increase in SCADA alarms (based on 2018 trends)

These constraints make it difficult to change the business model and operational processes to move from a reactive model (75:25%) to a proactive one (25:75%). The objective is to reduce Council's risk position.

If Council's water, sewer and stormwater drainage businesses continue to operate within their existing constraints (low operational expenditure and FTE's), the assets' performance will continue to decline and drive upward pressure on both costs and ability to service infrastructure in the future. This will ultimately drive increase pricing for Council's community.

To address the current situation, Council's water, sewer and stormwater drainage businesses are proposing a change to their business model, where all maintenance and inspections schedules will be further aligned to the Asset Management Plans and specific asset class and maintenance plans. The success of good asset management is within the implementation of the asset strategies and the Asset Management Plans (AMP).

The key objectives of the transition strategy are to:

- Reduce unplanned outages and customer complaints
- Improve customer satisfaction
- Extend the life of assets and improve asset performance
- Avoid risks associated with safety
- Reduce operational expenses thus reducing pricing for customers
- Defer capital investment

These objectives will be met by:

- 1. Understanding and implementing asset strategies
- 2. Changing Council's business model with new workflows, processes and reporting
- 3. Improving capability with experienced resourcing (an addition of 66.3 resources)
- 4. Transitioning existing behaviours
- 5. Implementing a series of step changes that will lay the foundations for the transition with an anticipated cost of \$81M over four years (2022-2026)
- 6. Enhancing asset systems, monitoring and reporting
- 7. Developing a mature water utility business

Council has likely challenges, opportunities and risks over the 2022 determination period which include responding to a changing planning environment, climate change and price pressures, as well as meeting the expectations of Council's community.

4.1 Organisational structure

There has been a change in the organisational structure since the 2019 determination. In response to Council's financial crisis, each Directorate was asked to identify savings in relation to resourcing and structure.

The organisational change for Council's Water and Sewer Directorate is detailed in the following table:

Current role	Change	Affected	Expected effects of the change/s on the
	proposed	Staff	function/ duties currently being
			performed
W&S	Removal of	1 employee	Role to be removed with Section Manager
Administration	position		(SM) and Team Leader to do own
Officer	from		administration support moving forward.
	structure		Current additional duties being undertaken
			will be absorbed back across the team
Section Manager	Reduction	2 employees	3 Section Managers reduced to 1 Section
- Minor	from 2 FTE		Manager moving forward. Roles and
Construction	to 1 FTE		responsibility of the SM remain the same
Section Manager	Reduction	2 employees	There is an increase in the functions
Mechanical	from 2 FTE		previously reporting to this role as a result of
Services	to 1 FTE		combining two Section Manager roles.
Section Manager	Reduction	2 employees	3 Section Managers reduced to 1 Section
Network	from 2 FTE		Manager moving forward. Roles and
Operations and	to 1 FTE		responsibility of the SM remain the same.
Quality			
Team Leader	Reduction	7 employees	7 Team Leaders (TL) reduced to 4 with a
Field Services	from 7 FTE		greater span of control underneath each.
	to 4 FTE		
Section Manager	Reduction	2 employees	2 Section Managers with role to be combined
Asset	from 2 FTE		into 1 SM role.
Management	to 1 FTE		
Section	Reduction	2 employees	Currently there are 2 Section Managers with
Management	from 2 FTE		role to be combined into one role.
Water Services	to 1 FTE		
and Design			

Table 3: Water and Sewer Restructure in 2021

Current role	Change	Affected	Expected effects of the change/s on the
	proposed	Staff	function/ duties currently being
			performed
Senior Project	Removal of	1 employee	Reduction of workload due to capital
Engineer	position		reduction no longer sees the requirement for
	from		a Snr Project Engineer
	structure		
Project Engineer	Reduction	2 employees	Reduction in workload due to capital budget
	from 2 FTE		changes only see sufficient work for 1 role at
	to 1 FTE.		this point in time. Services levels and
			deliverables will be managed within available
			resources.
Team Leader	Reduction	1 employee	Combining of two roles into one allowing
Telemetry and	from 2 FTE		synergies across the team. Roles and
Instrumentation	to 1 FTE		responsibilities of the TL remain the same.
			The number of reports may change.
Team Leader	Reduction	2 employees	Combining of two roles into one allowing
Electrical	from 2 FTE		synergies across the team. Roles and
	to 1 FTE		responsibilities of the TL remain the same.
			The number of reports may change.
Asset Engineer	Removal of	1 employee	Role requirements is for Snr Asset Engineers
	position		moving forward with the workload managed
	from		by them. Vacant roles exist to cover this.
	structure		

Differing from Water and Sewer, Council's stormwater drainage management is carried out by two Directorates within Council – Roads and Drainage Infrastructure and Environmental Management. Relatively few positions are fully costed against the Drainage Fund with most positions being charged back to the Drainage Fund via capital project or maintenance activity accounts.

Current role	Change	Affected Staff	Effects of the change on the function / duties currently being performed
Unit Manager	Position	2 employees	Combining two roles into one allowing
Road and	removed		synergies across the Unit. Some functions /
Drainage	from the		duties delegated via line management.
Construction	structure		
Section Manager	Reduction	2 employees	Combining two roles into one in both design
Design	from 2 FTE		and construction to gain efficiencies across
	to 1 FTE		the Sections. Redistribution of some

<i>Table 4: Stormwater drainage restructure in 2021</i>

Current role	Change	Affected Staff	Effects of the change on the function / duties currently being performed
Section Manager	Reduction	2 employees	functions and reduction in workload due to
Construction	from 2 FTE		capital program reduction.
	to 1 FTE		
Construction day	38.6	34 employees	Reduction in workload due to capital
labour staff	positions	(the	program reduction. Staff charged back to
	removed	remainder	Stormwater Drainage via project accounts
	from the	were	
	structure	vacancies)	
Maintenance day	21	4 employees	The overarching objective was to minimise
labour staff	positions	(the	the impact on frontline staff and services.
	removed	remainder	Restructure of teams and redistribution of
	from the	were	work in some areas. Staff charged back to
	structure	vacancies)	Stormwater Drainage via maintenance activity
			accounts

Council's consolidated³ operating loss before capital income for the 2020-21 financial year was forecasted to be \$115.1M. The draft unaudited 2020-21 consolidated financial statements report a consolidated operating loss before capital income of \$60.7M. This is an improvement on the 2020-21 forecast and the consolidated operating loss before capital income for the 2019-20 financial year of \$88.7M. The actions that have been put in place to manage the financial recovery and one of these measures as a reduction in Council's staff numbers, with the aim to return to the level at the time of amalgamation. To reach this reduction in employee costs, Council used a combination of voluntary and targeted redundancies as part of structural redesign.

Following the review of Council's workforce and organisational structure, a decision was made to refine the structure to one which is sustainable as well as meeting the immediate needs of the community. However, it is understood that with less resources and expenditure, some service delivery will be impacted in the 2019 determination period.

³ Information for Council's consolidated performance covers all of Council's operations which includes the Water Supply Authority functions.

5 Operating expenditure by category

5.1 Overview

Council categorises water, sewer and stormwater drainage regulatory operating expenses into 8 cost categories. These categories are:

- Employee costs
- Consultants
- Hire and Contacts
- Materials
- Energy
- Other
- Corporate Overheads
- Plant and Fleet

Regulatory operating expenditure does not include:

- Depreciation
- Interest on loans or
- Unregulated operational expenditure (e.g. rental accommodation)

The proportion of operating expenditure by cost category for the 2019-20 actuals is represented in Figure 12.



Figure 12: Proportion of operational expenditure to cost category 2019-20 actuals

Council forecasts the operating expenditure by cost category for 2022-26 is represented in Figure 13.



FORECAST 2022-26

Figure 13: Estimated expense ratios for forecasting 2022-26

In 2018, the concept of standard costing was introduced by Council's finance department. This meant that if an employee worked in other areas (outside their home costing), then the labour component would be raised against the relevant cost centre where the service was provided. The original expenditure in the home cost centre would be offset by a credit for labour including any on costs (such as phone etc). Most of the labour is offset with a small exception for plant and fleet. This is offset against that cost category and therefore, will always be a small variance to the labour expenditure.

The following is a brief on what costs are allocated to each IPART category.

5.2 Employee costs

The employee cost category is costs associated with employees who are paid by Council and on the payroll. This category includes costs associated with:

- Salaries and wages
- Overtime
- Backpay
- Parental leave
- Public holidays
- Redundancies
- Sick leave
- Worker compensation

- Allowances
- Annual leave
- Long service leave
- Payroll tax
- Superannuation

At times, internal labour is also used for capital works programs, however these costs are capitalised against the project and transferred to the appropriate project costs.

5.3 Consultants

Consultants are required from time to time in response to the provision of services where specific technical knowledge and experience is required. This service can include investigation into strategies that support capital works, asset development plans or future strategies for augmentation. These specialists provide support and advice as required.

5.4 Hire and Contracts

Council's Hire and Contracts category contains a myriad of contractor costs including:

- Effluent collection
- Cleaning services
- External plant hire (as required)
- External contracts
- Security and monitoring
- Garbage collection
- Air conditioning maintenance
- Fire safety

5.5 Materials

The materials category refers to costs associated with maintaining water, sewer and stormwater drainage assets and treating water. The largest costs associated with this category are chemicals:

- Required materials (pipes and other required infrastructure requirements)
- Chemicals (to treat water)
- Equipment
- Cleaning materials
- Fuel
- Oils and lubricants

5.6 Energy

Energy costs are a significant component of operating costs for water, sewer and stormwater drainage functions. This is due to the cost of running the treatment plants and pump stations associated with the network. It has been necessary to predict the costs associated with this category. The current energy contract expires at the end of 2021.

5.7 Other

The Other category contains mostly internal expenses, with the largest being tipping fees and includes:

- Tipping fees (includes sludge and general waste)
- Facilities maintenance
- Software expenses
- Printing
- Audit fees
- Training
- Dam Safety NSW Levy
- Advertising, insurance and phone
- Bulk water purchases (Council sources treated water from Hunter Water under water security sharing arrangements and from Sydney Water to supply to customers in the Mooney Mooney and Cheero Point where this is the most efficient supply option)
- Licence fees (water extraction licences, software, fixed data)

5.8 Corporate Overheads

Corporate overheads for Support Services refers to the costs associated with running the Council but not directly producing or treating water. Total corporate overheads for support service expenses are allocated to the water, sewer and stormwater drainage businesses, based on the operating expenditure, as a percentage of Council's total operational expenditure (Council wide). It includes items such as:

- Organisational development
- Information technology
- Customer contact services
- Human resource management
- Finance management
- Risk management

- Internal auditing
- Legal services
- Councillor governance
- Facilities management
- Workcover self-insurers licence
- Procurement and contract management

5.9 Plant and Fleet

This category includes:

• Plant and Fleet permanent hire and Plant and Fleet hire costs.

6 Operating expenditure 2019-2020

This section describes Council's operating performance in detail over the 2019 determination period 2019-22 compared to the IPART allowance. In the final year of this determination, only forecasts can be provided.

In summary this section:

- Reviews and compares actual/forecast expenditure to the IPART allowance
- Provides explanation of the variances for the four years
- Defines efficiency programs
- Establishes base year (2019-20) actuals that will be used to forecast expenditure from 2022-26

6.1 Expenditure performance against IPART allowance

In the 2019 determination, IPART provided an operating expenditure of \$271M as detailed in the following table.

Service (\$M)	2019-20	2020-21	2021-22	Total
Corporate ⁴	20.3	20.2	20.2	60.7
Water	32.7	32.0	32.1	96.8
Sewerage	31.9	31.3	31.1	94.3
Stormwater	6.5	6.4	6.4	19.2
drainage				
TOTAL	91.4	89.9	89.8	271.1

Table 5: Efficient operating expenditure allowances water, sewer and stormwater drainage (\$million \$2018-19)

This was a significant reduction compared to what was requested by Council as referenced in the following table.

Table 6: Proposed operating expenditure (\$million \$2018-19)

Service (\$M)	2019-20	2020-21	2021-22	Total
Corporate	20.3	20.3	20.3	60.9
Water	36.8	36.4	35.9	109.1
Sewerage	38.1	37.9	37.8	113.8
Stormwater	8	8	8	24
drainage				
TOTAL	103	102.6	102	307.8

⁴ Corporate refers to corporate overheads

This was an overall reduction in allowed expenditure of \$36M (\$2018-19).

IPART in agreement with Atkins Cardno's Central Coast Council Review, recommended pre-efficiency adjustments be made, these are summarised below:

- Corporate overheads: accept Council's proposed reduction
- Stormwater operational expenditure: retain at 2018 levels (in addition to Efficiency Reduction Program (ERP) adjustment))
- Labour (including provisions): accept Council's proposed reduction
- Hire services: recommend no real terms increase relative to average actuals in 2019 determination period. This removes any operational expenditure items (such as desludging) which have been deferred from the 2019 determination period
- Materials: retain 2018 expenditure except for \$0.2M p.a. from 2020 for Mardi Water Treatment Plant (WTP)
- Energy prices: accept Council's proposed increase
- Plant and Fleet: retain 2018 actuals
- Productivity gains from IT transformation e.g. ERP: \$0.8M saving in 2020 and \$1.5M saving from 2021 onwards
- Reduced overtime due to operations centre: \$0.2M in 2020 and \$0.4M from 2021 onwards

These adjustments meant that most of the Water and Sewer forecast expenditure was based on the 2017-18 actuals except for materials, labour, energy and plant and fleet (as indicated), which retained the 2018 actuals. Stormwater drainage was able to retain all the 2018 expenditure levels.

The adjusted expenditure resulted in the following adjustments for the expenditure categories (as referenced in Table 7).

Total (\$M)	Requested 2019-20	New IPART baseline 2019-20
Labour	28.2	28.4
Oncosts	3.9	4.7
Consultants	5.1	0.7
Hire and Contracts	15.2	10.7
Materials	9.6	8.7
Energy	11.1	11.0
Other	3.9	3.1
Support Services Overheads	20.3	20.3

Table 7: Expenditure rebased as per IPART allowance Nominal (\$million \$2018-19)

Plant and Fleet	6.4	3.8
Total	103.5	91.4

Figures may not add due to rounding

Water, Sewer and stormwater drainage exceeded the IPART operational allowance in 2019-20 by \$21.5M (\$nominal).

As shown in the table below most of the operational expenditure variance came from corporate overheads and plant and fleet, totalling \$12.7M and an increase in labour costs of \$4.6M.

Table 8: Actuals to IPART allowance water, sewer, stormwater drainage \$nominal (\$2019-20) The increase in
allowance brings it to \$2019-20 using CPI of 1.30%

Total by category	2019-20	IPART	Variance
(\$M)	actuals	Allowance	(\$2019-20)
	(\$2019-20)	(\$nominal)	
Labour	32.9	28.3	4.6
Oncosts	6.3	4.7	1.6
Consultants	1.9	0.7	1.2
Hire & Contracts	8.3	10.7	-2.4
Materials	9.2	8.7	0.5
Energy	8.9	11.0	-2.0
Other	8.5	3.1	5.4
Corporate overheads	28.9	20.3	8.7
Plant & Fleet	7.8	3.8	4.0
Total (\$nominal)	112.7	91.2	21.5
Total (\$2021-22)	118.3	95.7	22.6

Figures may not add due to rounding

The variances are summarised below:

- 1. Corporate overheads approximately @ \$8.7M over allowance
- 2. Hire and contracts approximately @ \$2.4M under allowance
- 3. Plant and Fleet approximately @ \$4.6M over allowance
- 4. Labour approximately @ \$4.6M over allowance
- 5. Energy approximately @ \$2.0M under allowance and.
- 6. Other approximately @ \$5.4M over allowance⁵

⁵ There was a change to how tipping fees were allocated in GL previously went to Hire and Contracts but then became an internal expense. Also, Bulk water purchases, licence fees and advertising were also bundled into Other category.

6.2 Water and Sewer 2019-20 Uncontrolled events

In the 2019-20 financial year, Council experienced several uncontrollable events such as:

- **Bushfires** -The most devasting bushfire season in the state's history occurred, impacting areas of the Central Coast and more specifically the area around Mangrove Creek Dam from the Three Mile Fire. The damage to infrastructure was limited to the picnic area and the amenities block. However, it caused extensive damage to trees, vegetation and fire trails that needed to be remediated post the fires. Longer term, there are water quality implications caused through sediment movements and erosion that require monitoring and maintenance in order to prevent impacts on the water supply.
- **Flooding** A flooding event occurred between the 8-10 February 2020. This caused water runoff into Mangrove Dam containing higher concentration of carbon and sediment resulting in higher turbidity levels. The high turbidity required additional dosing of both alum and chlorine at the Water Treatment Plants to meet drinking water guidelines. This increased Council's chemical costs to treat the algae bloom. The flooding also caused infiltration at the Sewer Treatment Plants where the holding ponds were at capacity.

In addition,

- Sewer pump stations and sewer related infrastructure was subject to inundation between 20-80 meters in proximity to Tuggerah Lakes. This resulted in overflows and required vacuum trucks to clear the water.
- Flooding of the vacuum pots at Davistown, Tacoma and St Hubert's island. This resulted in having vacuum trucks on standby 24 hours a day as well as hiring temporary toilets to those areas as the systems were offline between 12-21 February.
- A blue green algae event at Mardi Treatment Plant resulted from increased phosphorus levels in rivers and creeks which increased the cell count of blue green algae in the dam, placing the dam offline for 8 months. A new siphon made of poly pipeline was built to keep the dam levels below the licence conditions. This event also required specialist consultants to assist in the management of the event costing approximately \$10,000.
- Workplace Health and Safety a compressor was required to be moved at Mardi WTP due to overheating that was located near the workshop area for the technicians.
- **COVID Impacts-** The COVID-19 restrictions meant that there could only be one employee in a work vehicle, impacting the plant and fleet costs. Additional costs included an increase in materials due to adherence to all COVID-19 safety requirements as well as an increase in Employee Leave Entitlements (ELE) in relation to long service leave and annual leave (employee costs). Employees

deferred their holidays which resulted in an increase in ELE for Water and Sewer of 17% for annual leave accruals from 2018-19 baseline. As the annual leave accrues, it results in leave balance paid out at the current rate of pay.

These events caused upward pressure on the operational budgets for chemicals, hire and contracts, plant and fleet as well as overtime and employee entitlements (employee costs or ELE's) for the 2019-20 years.

Table 9: Additional costs related to uncontrollable events and variance for specific items water, sewer, stormwater drainage (based on real \$2019-20 \$thousand) 000's average compared to monthly trends and project specific covid events

	Other	Labour (excl oncosts)	Plant and Fleet	Corporate Overheads	Energy	Total
Uncontrolled	100	718 ⁶	40	-	-	868
events costs						

⁶ The ELE increased in 2019-20 by 16.4% an additional 16279 hours. Therefore, based on \$30 p.h Increase of \$488,000 approx.



6.3 Water, sewer and stormwater drainage 2019-20 period variances

Figure 14: Water actuals to IPART allowance 2019-20

\$M	Water Fund			
	Actuals	IPART allowance	Variance	
Labour	15.3	12.4	2.9	
Oncosts	3.4	2.2	1.2	
Consultants	1.2	0.2	1.0	
Hire & Contracts	3.4	3.7	-0.3	
Materials	5.3	4.1	1.3	
Energy	3.9	5.5	-1.6	
Plant & Fleet	3.5	1.5	2.0	
Other	3.3	1.7	1.6	
Corporate overheads	12.4	8.6	3.8	
Total (\$nominal)	51.6	39.9	11.7	
Total (\$2021-22)	54.1	41.8	12.3	

Table 10: Water operational expenditure actuals to IPART allowance 000's 2019-20 period \$nominal



Figure 15: Sewer actuals to IPART allowance 2019-20

\$M	Sewer fund				
	Actuals	IPART allowance	Variance		
Labour	15.6	13.6	2.0		
Oncosts	2.8	2.2	0.6		
Consultants	0.2	0.2	0		
Hire and Contracts	3.9	3.7	0.2		
Materials	3.7	4.1	(0.4)		
Energy	5.0	5.5	(0.5)		
Plant and Fleet	2.1	1.5	0.6		
Other	2.3	1.2	1.1		
Corporate	12.4	8.7	3.7		
Overheads					
Total (\$nominal)	48.2	40.8	7.4		
Total (\$2021-22)	50.6	42.8	7.8		

Table 11: Sewer actuals to IPART allowance 000's (\$2019-20) \$nominal



Figure 16: Stormwater drainage actuals to IPART allowance 2019-20

\$M	Drainage Fund			
	Actuals IPART		Variance	
		Allowance		
Labour	2.0	2.3	-0.3	
Oncosts	0.1	0.2	-0.1	
Consultants	0.4	0.3	0.1	
Hire and Contracts	1.0	3.2	-2.2	
Materials	0.2	0.5	-0.3	
Plant and Fleet	2.1	0.8	1.3	
Other	2.9	0.1	2.8	
Corporate Overheads	4.1	3.0	1.1	
Total (\$nominal)	12.8	10.5	2.4	
Total (\$2021-22)	13.5	11.0	2.5	

Table 12: Stormwater drainage actuals to IPART allowance 000's (\$2019-20) \$nominal
6.4 Variance explanation in detail

Most of the variance resulted from an increase in corporate overheads and the increase in plant and fleet costs that are levied on the water, sewer and stormwater drainage businesses. There was also a change to the way tipping fees were allocated in the general ledger, which were previously in Hire and Contracts but categorised as an "Internal Expense – Other."

Below is a summary for each area of variance for the 2019-20 financial year.

6.4.1 Employee costs

For the 2019-20 actuals to the IPART allowance, the labour expenditure was over by approximately \$4.9M (\$2019-20).

There are many expenses that are allocated to employee expenditure. These include:

- Ordinary wages
- Overtime
- Public holidays
- Sick leave
- Allowances
- Workers compensation
- Annual leave
- Payroll tax
- Contract labour hire
- Employee Assistance
- Medical costs
- Training and
- Uniforms and protective clothing

Items such as superannuation, long service leave and workers compensation are included in the oncosts category.

Using the actual 2017-18 operating expenditure level as a baseline, Atkins Cardno recommended adjustments when determining its recommended operating expenditure in this cost category.

This resulted in the labour cost being set at what was requested by Council in the 2019 submission. While this projected an increase in Full Time Employees (FTE) between 2018 and 2019 of 15% (increase from 309-356) it also noted a reduction in labour operational expenditure spend of \$0.3M (\$2018-19). This was mainly due to the high vacancy rates and the higher use of contract labour hire (contingency workers).

Table 13: FTE split between Contract labour and FTE and Capital expenditure v operational expenditure

Water/Sewer	Contract labour	FTE	Totals	Operational expenditure	Capital expenditure	Totals
2019-20						
FTE	39	278.27	317.27	284.96	32.31	317.27
Totals/allocations						
2020-21						
FTE	8	253.49	261.49	236.85	24.64	261.49
Totals/allocations						

There was no significant increase in FTE in 2019-20. The increase in the labour expenses was attributed to:

- Other areas of Council performing work on the Water and Sewer assets
- Increase in ELE's (employee leave entitlements) due to COVID impacts and
- Uncapitalised labour



Figure 17: FTE comparison 2018-2021

As indicated in the Atkins Cardno Central Coast Council Review, the FTE's were predicted to increase from 2019, however this has not been the case due to Council's financial crisis and a request to decrease expenditure.

(for FTE and Head count information from 2018 to 2021 refer Appendix B)



Figure 18: Actual FTE in current determination period for water, sewer and stormwater drainage

In line with FTE growth projections, Water and Sewer has seen a steady growth in actual labour costs since 2017, however has been a downward trend since 2020.

Natural account	Variance	Comment	Total
Salaries and Wages	0.5	Uncapitalised labour (e.g. incorrect	0.5
		cost codes used)	
Increase in 7 FTE's	0.8	Increase in FTE's based on 2018	0.8
based on 2018		actuals/forecast	
actuals			
Increase in ELE	0.7	Employees storing annual and long	0.7
		service leave due to COVID	
Payroll tax	0.2	Higher than expected payroll tax	0.2
Employee provisions	0.4	This is due to higher ELE's during	0.4
(increase A/L and		COVID and additional overtime for	
overtime to		uncontrolled events. Does not	
uncontrolled events		include LSL as included as an oncost	
Other Council areas		Approximated	1.0
charging to W&S			
labour including,			
plant and fleet			
building services,			
Roads, Waterways			
and often the use of			
casual resource pool.			

 Table 14: Labour costing water and sewer variances \$M 2019-20 (\$2019-20) costs are rounded and approximated.

WOC not rolled out	0.4	0.4
for 24*7 no		
efficiency gains		
TOTAL		3.9

Note: table may not add due to rounding

6.4.2 Plant and Fleet

Council has a separate Plant and Fleet business responsible for providing and maintaining vehicles. It operates on a zero-based budgeting basis. 'Plant and Fleet' expenditure is recharged to individual business units based on vehicle use.

Any end of year profit made by the plant and fleet business is offset against corporate overheads, meaning that corporate overhead charges are reduced accordingly, reducing this cost for the water, sewer and stormwater drainage businesses.

In Council's previous IPART submission, the plant and fleet costs were projected to increase from 2018 because of the amalgamation and alignment process. IPART's consultants did not consider that the centralised management of plant and fleet across Council was prudent and commented that it was inefficient and therefore any adjustment was not considered.

Council disagrees that the plant and fleet costs were inefficient and maintain that it is prudent. The expenditure allocated to the water, sewer and stormwater drainage businesses was based on the previous forecast expenditure in the 2018 submission. \$7.7M (real \$2019-20). The variance of \$3.9M was attributed to the difference between the 2018 forecast compared to what the actual expenditure was.

Council's plant and fleet business consists of two sections providing the following services to Council (and in part, to the Rural Fire Service):

Fleet Services:

- Casual loan car / pool car management
- Asset purchase and disposal
- Customer long-term asset leasing
- Asset management
- Customer service / support
- Management of peripherals
- Scheduled / unscheduled mobile and workshop asset maintenance
- Mobile heavy plant refuelling
- Truck and trailer body fabrication

- General metal fabrication
- GPS installation and decommissioning
- Accident Repair coordination
- Panel repairs
- Spray painting
- Vehicle inspections
- Pink slip inspections
- Warranty management
- Vehicle delivery and collection
- Staff transportation
- Dry hired casual and permanent small and miscellaneous plant

Plant Pool Services:

- Machinery transport
- Material transport
- Bulk / minor water cartage
- Labour (driver / operator) hire
- Civil works customer service / support
- Contractor engagement
- Casual wet hired heavy trucks and plant
- Casual dry hired heavy trucks and plant.

Having each of these services delivered by a single business unit under its own funding model, ensures that Council can optimise economies of scale (where it can procure strategically, with visibility into the needs of multiple other units), remove task and responsibility duplication (same job done by multiple departments) and ensure standardised practices and processes in line with industry norms.

The 'simplification' of business delivery removes complication and fosters a more streamlined approach from a customer's perspective. Water, sewer and or stormwater drainage enables a more 'pay as you go' approach to asset ownership and usage where it proactively monitors physical utilisation of assets and makes recommendations to customers on where efficiencies can be gained. From an ownership perspective, the fact that all assets are 'owned' by the General Fund enables us to have one method for determining and reviewing hire rates with like assets across different funds having the same cost components. Council acts as a central point to facilitate more cost-effective use of assets e.g. where it recently introduced the car share scheme as opposed to sole Unit use of under-utilised (pooled) assets. On many occasions Council has intervened to identify more cost-effective opportunities for its customers whether that be for the purchase or hire of assets.

6.4.3 Energy

There was a significant increase in electricity prices in 2017 due to a major coal fire station closure. At that time, electricity futures price of all subsequent years (2018/2019/2020) were anticipated to be impacted. The IPART allowance was set just before 2017 and it considered the steep increase trend of electricity prices. However, from 2018 to 2019, the electricity prices did not increase that significantly. At the end of 2019, Council signed the electricity contract for Calendar year (CY) 2020 and CY2021, where the actual costs came down. This contract is why Council has below-average-level electricity prices in 2020-21.

6.4.4 Other (Tipping Fees)

The "Other" IPART expenditure category in 2019 included advertising, insurance, phones, licence fees, bulk water purchases (Water) and tipping fees. Tipping fees increase the actual expenditure significantly.

The cost of tipping in 2019-20 in total was \$5.8M which created a variance of \$6.3M (\$2019-20) in the "Other" expenditure category:

- Water \$1.4M (\$2019-20) both sludge and general waste
- Sewer \$1.5M (\$2019-20) both sludge and general waste
- Stormwater drainage \$2.9M (\$2019-20) primarily general waste

In 2019, the expenditure for the tipping fees moved from the Hire and Contracts expenditure category to the Internal Tipping Fee "Other" cost allocation. The change was due to a change in process as previously the former Gosford Council would go to market and use a contractor for its sludge removal from the treatment plants. Wyong Shire Council used Australian Native Landscapes (ANL) to collect the sludge and take to Buttondery Waste management facility where it is/was used for resource recovery.

The ANL Contract is managed by Waste and Resource Recovery (not Water and Sewer). There are two methods in which sludge is processed from treatment plants. Some treatment plants have onsite dewatering systems (belt presses) and others that do not have the capacity to house a belt press, are serviced through a dewatering contract. This is to ensure the sludge is dewatered prior to being taken to the waste facility (to reduce the weight significantly). The sludge dewatering contract is managed by the Water and Sewer Directorate with the contract commencing 7 February 2020, at a cost of \$1.7M (2019-20 financial year) over three years.

Stormwater drainage tipping fees are generated via maintenance activities including clearing creeks, opening drains and roadside table drains (this comprises most of the tip

fees), jet clearing drainage pipes and cleaning stormwater quality improvement devices. In general, the waste material is dried out and taken to landfill at General Waste rates. While stormwater drainage service levels remain consistent from year to year, the volume of waste generated varies subject to the season, catchment conditions and the amount of wet weather. On average 5,255 ton is taken to the tip annually.

Water and Sewer waste is normally attributed to broken mains and maintenance (asbestos, ductile steel or concrete pipes). Most of the waste categorised is either general waste or sludge (biosolids) from the treatment plants. On average 26,000 ton of sludge is delivered to the tip annually and charged back at a rate of \$85/ton. The remainder of the waste is attributed to general waste and charged at a rate of \$360/ton. It is not expected that the tonnage for either water, sewer or stormwater drainage will decrease over the 2022 determination period. For Sewer, this cost will increase due to back logs of sludge removal required at the treatment plants proposed from 2022 onwards.

6.4.5 Consultants, Hire and Contracts

The consultant's expenditure was higher in 2019 than the 2018 forecasts due to the re negotiated SCADA contract that increased the expenditure. This increase can be attributed to additional work required for Programming Logic Control (PLC) and the Remote Terminal Unit (RTU) programming. The expenditure allocation in 2018 also lagged due to a delay in receipting due to late invoicing. The true expenditure in 2018 was therefore not a true reflection of total costs.

Hire and Contracts increased due to the engagement of a new dewatering contract at a cost of \$1.7M over three years (or \$566,000 per annum).

6.4.6 Corporate Overheads

In the financial years prior to 2019-20, the corporate overheads allocated to the Water, Sewer and Stormwater Drainage funds has been capped to the IPART corporate overhead allowance. This resulted in more corporate overheads being allocated to the General and Domestic Waste Funds.

In 2019-20 the corporate overheads allocated to the Water, Sewer and Stormwater Drainage funds was not capped.

Table 15: Corporate overheads a	illocation
---------------------------------	------------

Service \$M	2019-20 Full Year Actuals	2019-20 IPART Allowance	Variance
Water	12.40	9.60	(2.81)
Sewer	12.42	9.09	(3.33)
Stormwater	3.81	1.87	(1.94)
WSA Total	28.63	20.55	(8.08)

Expenditure for 2019-20 increased for the following reasons:

- Corporate Affairs Executive significant grant income in 2018-19 which offset costs was not received in 2019-20. The Innovations and Futures Department which was removed during the April 2021 restructure is mapped to Corporate Affairs Executive.
- Communications, Marketing and Customer Engagement increase in employee costs due to additional staff in the engagement, customer experience teams for customer journey mapping and full year of cloud telephone service as well as After Hours Emergency. The cloud telephone service enabled Council to continue to provide assistance to customers during the COVID-19 lock down and provided efficiencies across call centres as all customer staff are now on the one system.
- Facilities and Asset Management Unit manages the corporate contracts for security and monitoring services, essential fire protection, cleaning, air conditioning maintenance, roof safety requirements (fall arrest), lift maintenance, automatic doors and gates, sanitary services, electrical testing, pest control, roof and gutter cleaning, energy management and effluent management. Over the last three years the Unit has been working to consolidate numerous smaller contracts into one for economies of scale. There has also been an increase in resources to manage the staff accommodation project. Consultants have been engaged to develop environmental and stormwater management plans for all depot sites with energy audits conducted to identify the main drivers of costs to make informed decisions on where to invest funds to reduce future costs. During the 2019-20 financial year, additional costs have been incurred to comply with public health orders including hand sanitising stations, touch point cleaning, additional cleaning supplies and COVID-19 signage.
- Finance There was an increase in resources as existing staff are required to support
 organisational IT projects to implement applications and integrations including
 additional reporting requirements with new accounting standards and audit
 requirements. Also, there were increases in the cost of postage for rates and water
 bills in the 2017-18 FY and the cost of postage was reflected in the IT budget within
 Information Management.

- Governance and Risk Increases were seen in insurance premiums and claims from 2018-19 onwards and engagement of consultants to provide reports to Councillors on various matters as resolved by Council. Council engages external service providers for a co-sourced internal audit service.
- Information and Technology There was an increase in resourcing costs to develop a business partnering function and in-house capabilities (resourcing strategy was to reduce reliance on contingent workforce and to retain knowledge). Depreciation increased by \$3M from the capitalisation of projects and there was an increase in internet and network bandwidth which enabled Council staff to work from home during COVID-19 lock downs and increased redundancy to meet disaster recovery (DR) and business continuity plan (BCP) requirements. Phone and communications costs increased as additional devices were purchased as FTE increased within Council and increased mobility for outdoor staff. An Increase was seen in costs for software maintenance and support, consultants engaged for enterprise architecture and licence costs in line with increase in FTE across the organisation. Appendix D Information and Technology 2018 2022 Deliverables.
- Legal There was an increase in costs due to the number of matters and referral of work to external service providers due to unsuccessful recruitment of vacant positions.
- People and Culture (HR) Employee costs have increased during the period with the expansion of the Business Partnering service to support the business. Consultants have been engaged to develop programs and systems including a Cultural Change Development Program and WHS management system. During COVID-19 to continue to be able to provide staff with learning and development opportunities, Council introduced LinkedIn Learning platform.
- Plant and Fleet Any profit that remains in Plant and Fleet after the initial corporate overheads is applied, is off set against the total corporate overheads. Plant and Fleet continue to review their internal charges to reduce any profit as they are a not for profit centre.
- Procurement and Project Management There was an increase in employee costs due to filling vacant position and engagement of consultants for contract management hub, project management framework design, project management dashboard and contract management framework review.
- Strategic Planning Corporate Planning and Reporting There was an engagement of additional resources to work on a service review project to ensure services are appropriate, effective and efficient. Benchmarking was undertaken to identify areas for business improvement and efficiencies.
- Environmental Compliance and Systems Environmental Reporting Increases were seen in employee costs as significant leave was taken by staff in 2018-19 FY and there was successful recruitment of vacant roles increasing costs in 2019-20 FY.

7 Operating expenditure 2020-21 and 2021-22

7.1 Overview

Normally in the IPART framework, the 2020-21 actual expenditure would be used as the base year to set future expenditure. However, Council has asked for an exemption from IPART to instead use the 2019-20 as a base year.

To describe Council's operating performance over the 2020-22 regulatory period it:

- Compares actuals to forecast expenditure
- Explains any variances

The below table shows the 2020-21 actuals and 2021-22 forecasts compared to the IPART allowance (\$nominal).

The 2020-21 actuals show an operational variance of \$14.1(M) while the 2021-22 forecasts are closely aligned to the IPART allowance

\$M	2020-21	2020-21	2021-22	2021-22
	Actuals	Allowance	Forecasts	Allowance
		\$nominal		
Labour	30.1	29.0	23.1	29.7
Oncosts	7.1	4.8	6.1	4.9
Consultants	2.7	.68	1.1	.7
Hire and Contracts	7.1	10.7	7.7	10.8
Materials	8.3	8.9	7.3	9.1
Energy	9.2	10.2	9.0	10.5
Plant and Fleet	5.0	3.9	8.1	4.0
Other	8.1	3.1	7.4	3.2
Corporate Overheads	28.3	20.6	23.6	21.1
Total(\$nominal)	105.9	91.8	93.5	94.0
Total (\$2021-22)	108.6	94.0	93.5	94.0

Table 16: Water, sewer and stormwater drainage actuals v IPART allowance (\$millions nominal \$) 2020-2022

Overall, the variances for 20-21 are attributed to:

- Corporate overheads expenses which are \$8M above IPART allowance
- Other category expenses increasing by \$5M due to the change of cost allocation. Tipping fees no longer go to Hire and Contracts. However, sludge is expected to increase over this regulatory period. The net impact between these two categories is 1.4M.

- Plant and fleet costs having gone down slightly due to lower rates. However, they are still higher than the IPART allowance by \$1.1M. Plant and fleet expenses are an uncontrollable cost borne by the Water, Sewer and Stormwater Drainage businesses.
- Consultant's expenses are higher than the IPART allowance by \$2M which is primarily due to the SCADA contract.

Overall variances for 2021-22 are attributed to:

- Labour costs which have gone down due to the redundancies that have occurred in this financial year. There has been a reduction of 58 FTE's through voluntary redundancies.
- Oncosts which have gone up and are over the IPART allowance due to an increase in Employee Leave entitlements (ELE's) due to COVID-19. It also needs to account for redundancy payments.

The overall expenditure has been reduced in response to the Council Financial crisis.



7.2 Water, sewer and stormwater drainage 2020-21 period variances

Figure 19: Water actuals to IPART allowance 2020-21

\$M	Water Fund 2020-21					
	Actuals	IPART Allowance	Variance			
Labour	13.8	12.7	1.0			
Oncosts	3.6	2.3	1.3			
Consultants	1.9	0.2	1.7			
Hire and Contracts	2.6	3.6	-1.0			
Materials	5.4	4.2	1.3			
Energy	4.1	5.1	-1.1			
Plant and Fleet	2.2	1.6	0.6			
Other	3.4	1.7	1.7			
Corporate Overheads	12.0	8.8	3.2			
TOTAL (\$nominal)	48.9	40.1	8.8			
Total (\$2021-22)	50.1	41.1	9.0			

Table 17: Water actuals v IPART allowance \$millions (\$2020-21)



Figure 20: Sewer actuals to IPART allowance 2020-21

Tahle	18 [.] Sewer	actuals v IPART	allowance	\$millions	(\$2020-21)
rubic	IO. JCWCI		unowunce	<i>p</i> mmuons	(#2020 21)

\$M	Sewer Fund 2020-21				
	Actuals	IPART	Variance		
		Allowance			
Labour	14.8	13.9	0.9		
Oncosts	3.4	2.3	1.1		
Consultants	0.4	0.2	0.2		
Hire and Contracts	4.1	3.6	0.5		
Materials	2.8	4.2	-1.3		
Energy	5.2	5.1	0.0		
Plant and Fleet	1.5	1.6	-0.1		

\$M	Sewer Fund 2020-21			
	Actuals IPART Variance			
		Allowance		
Other	3.7	1.4	2.4	
Corporate Overheads	12.6	8.8	3.8	
Total (\$nominal)	48.5	40.9	7.5	
Total (\$2021-22)	49.7	42.0	7.7	



Figure 21: Stormwater drainage actuals to IPART allowance 2020-21

\$M	Drainage 2020-21				
	Actuals	IPART	Variance		
		Allowance			
Labour	1.5	2.4	-0.9		
Oncosts	0.1	0.2	-0.1		
Consultants	0.4	0.3	0.1		
Hire and Contracts	0.3	3.3	-3.0		
Materials	0.1	0.5	-0.4		
Energy	0.0	0.0	0.0		
Plant and Fleet	1.3	0.8	0.5		
Other	1.0	0.1	0.9		
Corporate Overheads	3.8	3.1	0.7		
Total (\$nominal)	8.5	10.7	-2.2		
Total (\$2021-22)	8.7	11.0	-2.2		

Table 19: Stormwater drainage actuals v IPART allowance \$millions (\$2020-21)



7.3 Water, sewer and stormwater drainage 2021-22 period variances

Figure 22: Water forecasts to IPART allowance 2021-22

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Table 20: Water forecasts v IPART allowance \$millions (\$2021-22)

\$M	Water Fund 2021-22 forecast				
	Forecast	IPART Allowance	Variance		
Labour	10.2	13.1	-2.9		
Oncosts	3.3	2.4	1.0		
Consultants	1.0	0.2	0.8		
Hire and Contracts	3.0	3.7	-0.7		
Materials	4.1	4.2	-0.2		
Energy	4.1	5.2	-1.1		
Plant and Fleet	3.8	1.6	2.2		
Other	2.7	1.7	1.0		
Corporate Overheads	10.4	9.0	1.3		
TOTAL	42.5	41.0	1.4		



Figure 23: Sewer forecasts to IPART allowance 2021-22

\$M	Sewer Fund 2021-22 forecast					
	Forecast	IPART	Variance			
		Allowance				
Labour	11.8	14.3	-2.4			
Oncosts	2.5	2.4	0.0			
Consultants	0.1	0.2	0.4			
Hire and Contracts	4.4	3.7	0.8			
Materials	2.2	4.3	-2.2			
Energy	4.9	5.2	-0.3			
Plant and Fleet	2.6	1.6	1.0			
Other	3.2	1.4	1.8			
Corporate Overheads	9.9	9.0	0.9			
TOTAL	41.6	42.0	0.0			

Table 21: Sewer forecasts to IPART allowance \$millions (\$2021-22)



Figure 24: Stormwater drainage forecasts to IPART allowance 2021-22

\$M	Drainage 2021-22 forecasts					
	Forecast	IPART	Variance			
		Allowance				
Labour	1.1	2.4	-1.3			
Oncosts	0.3	0.2	0.1			
Consultants	0.1	0.3	-0.3			
Hire and Contracts	0.3	3.4	-3.1			
Materials	1.0	0.5	0.5			
Energy	0.0	0.0	0.0			
Plant and Fleet	1.8	0.8	1.0			
Other	1.5	0.1	1.4			
Corporate Overheads	3.4	3.2	0.2			
TOTAL	9.5	11.0	-1.5			

Table 22: Stormwater drainage Forecasts to IPART Allowance \$millions (\$2021-22)

7.4 Efficiency programs

7.4.1 Operating Efficiencies

Council has delivered operational efficiencies in a range of functions. It has moved three dispatch systems into one with the introduction of Council's Asset Management system. In addition, there has been a rollout of a standard template for Sewer Pump Stations (SPS's) to standardise the operations and alarms. This will create efficiencies through reduced alarm generation, particularly in wet weather and thus less callouts.

7.4.2 Alignment of the Fixed Asset Register and Technical Asset Register

Recently, the Fixed Asset Register (FAR) and Technical Asset Register (TAR) have been aligned. The asset information in the TAR (which is now consolidated in the Asset Management System) has full asset condition, useful life, asset criticality and risk programs. This will guide the improvements in the inspections and maintenance regimes and lay the foundations of the proposed transition strategy.

Council is committed to continuous improvement of its systems to enhance reliability and performance and manage safety for its staff and the community. 'Be safe' is a corporate value and is reflected in Council's decision making, driving system improvements and innovation across the business.

7.4.3 SCADA and Telemetry

The Water and Sewer Operations and Maintenance Unit have recently developed a bespoke Electrical Safety Management System (ESMS) made up of two streams being Electrical Service General Safety Standards and an Electrical Services High Voltage Safety Management Plan. Under each stream sits related specifications, standards, procedures, permits and SWMS. This system establishes a framework to capture all aspects of work undertaken by staff in this area and has become a vehicle by which staff collaborate to drive improvement in work practices.

The ESMS has created a common 'language' staff can use and delivered better safety planning and work outcomes. This is evidenced by an increase in discussion of safety by staff both at regular Toolbox Talks and informally as jobs are undertaken, an increase in reporting of near misses and increased input by staff into changes and improvements to processes and documentation within the ESMS. Staff experience tangible improvements to their working environment through innovation which is investigated, trialled and then embedded in ESMS via safety reporting processes.

Council has also identified two key technological improvements that will enhance reliability and performance of the network. Switchboard arc flash analysis will help Council better understand and mitigate the risk associated with switchboard works and alarm rationalisation will deliver significant operational benefits, better safety and security as well as better environmental outcomes associated with more accurate and timely information.

Switchboard Arc Flash Analysis

The Operations and Maintenance Unit have identified switchboard arc flash as a risk which requires detailed analysis so that risk mitigation procedures can be based on an educated assumption of the ratings across the 400+ switchboard fleet.

Arc flash events can generate temperatures as high as 5000°C and can cause life threatening injuries. Implementing analysis of the switchboard fleet and associated risk measures will allow staff to determine whether recently introduced controls overstate the risk, leading to unnecessary and inefficient work practices, or understate the risk, leading to inadequate and potentially unsafe work practices. It will also enhance Council's understanding of the risk to the community associated with outdoor switchboards.

Performing an analysis on the entire fleet is not deemed to be cost efficient, so an assessment of a representative cross section of switchboard types (age, size, connection type, load etc.) is being undertaken. Results of this analysis will inform improvements to switchboard design, protection settings and safety systems to more effectively mitigate the risks associated with performing works on these switchboards. These changes will be embedded into the Electrical Services Management System (ESMS) and will be subject to review as part of continuous improvements to work practices and safety. These improvements will mean staff are better equipped with knowledge relating to risks associated with switchboard types before they commence working on them and can better mitigate known risks. This will ensure improved safety outcomes are delivered as efficiently as possible.

Alarm Rationalisation

Opportunities to improve the reliability and performance of alarms across the network have been identified and a program for sewer pump stations has been developed to reduce unnecessary alarms, harmonise variations in work practices across sites, simplify SCADA templates and reduce double handling of data due to inadequate alarm masking. Rolling out the program will involve visiting over 200 sites to update local code.

A rationalised alarm philosophy will deliver operational efficiencies, reducing double handling and confusion for operators and maintenance staff. It will also allow for easier rotation of staff between sites and a reduction in errors associated with multiple or conflicting processes. Improving 'alarm masking' and 'consequential alarming' will prevent multiple alarms from causing 'alarm flooding' which reduces response efficiency within the Water Operation Centre.

Reduction and harmonisation of SCADA templates will enable quicker and more consistent rollout of changes and system improvements. Efficiencies have been identified in data collection, interpretation and reporting, making reporting against Key Performance Indicators timelier and more robust.

Safety and security will be enhanced by improvements in the interface between Soft starters and the Human/Machine Interface (HMI) enabling electricians to alter and configure 415v Soft starter parameters via Modbus without having to access the active Motor Cubical. Both onsite and network security will be improved with HMI PIN validation to SCADA, auto-acknowledging the intruder alarm with the user's name, thereby reducing nuisance intruder alarms and providing the Water Operation Centre more visibility over each site.

Alarm rationalisation will also deliver better environmental results as timely and accurate monitoring allows Council to respond more quickly and efficiently to the issue and reduce environmental risk.

7.4.4 Leakage Management

Since 25 March 2020, Council has commenced a proactive leak detection program with an annual funding commitment of \$142,000 per year for a total of \$568,000 for four years. The funding was awarded under the 2019 IPART determination. In the absence of limited leakage data, the program was initiated by focusing on the suburbs that had the highest frequency of watermain breaks per 100km. Over the course of the first full year's program of work (i.e. four quarters), 476 leaks were detected across 1205 km of water main. The estimated loss rate prior to repairs being made was 2.5ML/day or 899.4ML/year. Estimated cost of water saved from the leaks identified and repaired for the first year of leak detection equates to \$1,915,637. Estimated loss rates are based on the IWA (International Water Association) Water Loss Taskforce figures and err on the conservative.

7.4.5 Re-structure

As recently as April 2021, both Water and Sewer and Infrastructure Services conducted a restructure that saw four Units in each Directorate combine to three in each Directorate. This created efficiencies in management of the resources as well as reducing a full-time Unit Manager position.

7.4.6 Solar

As part of doing more with less, business efficiencies should be found to continue to deliver benefits back to Council's customers. Council's main capital works projects that relate to ongoing business efficiencies are investment in Solar Power Generation at selected facilities.

Council undertook a feasibility assessment and business case for installations during the 2019 determination. An installation program has commenced and is due to be completed within the 2022 determination period that targets the most cost-effective sites based on an assessment of payback periods.

8 Setting the base year for the price period 2022-2026

For the 2022-26 price period, Council is using 2019-20 for the base year operational expenditure.

8.1 Roll forward the base year

The following table shows rebasing the 2019-20 expenditure categories that will be used as the basis of the 2022-26 forecast expenditure.

IPART expenditure	Base line	Reason adjustments for base line
category	(\$2021-	
	22) cost	
		Water
Labour	15.3	Use 2019 actuals and
		 Reduce baseline for labour hire by\$754,000 (based on
		\$1.57M *48/52% - W/S split)
		 Reduce allowance for un-capitalised labour \$150,000
		 Include allowance for Other areas of Council by
		\$400,000
		 Reduce allowance for overtime by \$420,000 (efficiency
		from the WOC 24x7 only implemented in 2021)
		 Reduce by payroll \$80,000 for underestimation of
		payroll tax
		Remove \$200,000 for uncontrolled events
		• Increase by \$174,000 for increases to ELE's(from COVID
		issues)
Oncosts	2.5	Maintain 2019 actuals
Consultants	1.1	Use 2019 actuals plus
		 \$150,000 IPART consultants
		\$785,000 in additional SCADA contract costs
Hire and Contracts	3.5	Maintain 2019 actuals
Materials	5.7	Maintain 2019 actuals
Energy	4.0	Maintain 2019 actuals
Plant and Fleet	2.6	Use 2020-21 actuals reflecting a lower cost
Other	3.3	Maintain Use 2019 actuals including Tipping fees
Corporate	10.8	Use the 2021-22 forecast as baseline
Overheads		
Total	48.7	

Table 23: Re basing the 2019-20 actuals 2022-2026 actuals \$M's (\$2021-22\$)

IPART expenditure	Base line	ne Reason adjustments for base line			
category	(\$2021-				
	22) cost				
		Sewer			
Labour	14.6	Use 2019 actuals and:			
		• Reduce baseline for labour hire by \$754,000 (based on			
		\$1.57M *48% - W&S split)			
		 Reduce allowance for un-capitalised labour \$150,000 (W&S 50/50 split) 			
		 Include allowance for Other areas of Council by \$400.000 (50/50 split) 			
		Reduce allowance for overtime by \$420,000 (efficiency			
		from the WOC $24x7$ only implemented in 2021)			
		Reduce by payroll \$80,000 for underestimation of			
		payroll tax (50/50 split)			
		• Remove \$200,000 for uncontrolled events (50/50 split)			
		• Increase by \$174,000 for increases to ELE's(from COVID			
		issues) (50/50 split)			
Oncosts	1.6	Maintain 2019 actuals			
Consultants	1.1	Use 2019 actuals plus			
		\$150,000 IPART consultants			
		\$785,000 in an additional SCADA contract costs			
Hire and Contracts	4.6	Maintain 2019 actuals			
		Include Dewatering contract \$566,000 p.a			
Materials	3.7	Maintain 2019 actuals			
Energy	5.3	Maintain 2019 actuals			
Plant and Fleet	1.4	Use 2020-21 actuals reflecting a lower cost			
Other	2.3	Maintain Use 2019 actuals including Tipping fees			
Corporate	10.2	Using the 2020-21 forecasts			
Overheads					
Total	44.8				
	24	Stormwater Drainage			
Labour	2.1	Maintain 2019 actuals			
Oncosts	0.2	Maintain 2019 actuals			
Consultants	0.4	Maintain 2019 actuals			
Hire and Contracts	1.0	Maintain 2019 actuals			
iviaterials	0.5	iviaintain 2019 actuais			
Energy	0	Use 2020 21 estuals reflections - laws set			
Plant and Fleet	1.2	Use 2020-21 actuals reflecting a lower cost			
Other	3.10	Iviaintain Use 2019 actuals including Tipping fees			
Corporate	4.0	Use the 2021-22 torecast as baseline			
Overneads	40 5				
IUIAL	12.5				

9 Next price period (2022-2026)

After establishing the base year's actuals (2019-20), Council has undertaken a review of all operating requirements over the 2022 determination period.

This section details:

- Total operating expenditure requirements 1 July 2022- 30 June 2026 (with additional one year)
- Total operating expenditure by products water, sewer and stormwater drainage
- Details of operating expenditure by category
- Details of forecast operational expenditure
- Details of higher requested operational costs per IPART category
- Forecast methodology
- Detail of core operational expenditure forecasts by categories

9.1 Overview

The impacts over the last six years are resulting in a reduction in operational service delivery. Meeting regulatory requirements i.e. EPL's and Drinking Water standards are also being impacted, resulting in:

- Environmental Protection Licence (EPL) breaches related to suspended solids, oil and grease and total nitrogen
- An increase in sewer overflows, odour complaints and water quality complaints that are above service level targets
- The highest sewerage service complaints in Australia
- The lowest workforce in NSW per 1000 properties (compared to other Local Water Utilities)
- 30% increase in customer service calls (based on 2018-19 trends)
- 50% increase in SCADA alarms (based on 2018 trends) and
- Lost time injury rate is at 16 (2019-20) for water and sewer compared to HWC at 7 and Sydney Water at 5

For the 2022 determination period, Council has requested additional operational expenditure to improve its maintenance regime, re-introduce floodplain risk and stormwater quality management, reduce the current EPL and EPA breaches and address the increase in lost time injuries.

In the Operations and Maintenance unit, the additional funding will be used to:

- Improve Workplace Health and Safety
- Implement transition strategy to improve proactive maintenance and improve risk management planning of critical water and sewer assets
- Improve rectification programs, pump station analysis and reduce SPS overflows
- Increase mains cleaning programs to improve water quality
- Increase sewer inspections and maintenance programs
- Improve workspaces to improve onsite oil storage, part management and cleaning pumps
- Reduce risk for chemical storage and improve and monitor odour and reduce wet weather chemical usage
- Utilise SCADA alarm rationalisation to reduce environmental overflows
- Reduce risk of uncontrolled switchboard failure for ARC flashes (safety)

In the Headworks and Treatment unit, the additional funding will be used to:

- Introduce Sewage Treatment Plant improvement program including clean out of the grit chambers, aeration tanks and digesters, wet weather ponds, as well as improvements in sludge management
- Improve sampling results with a quality database
- Improve Council's bushfire management practices by reducing hazards, reducing water quality risks, maintaining a balanced ecology and protecting water and sewer assets
- Improve catchment management practices by elimination or minimisation of all sources of impurity in the catchments resulting in clean and safe water, reducing the costs of treatment as well as protecting the environment
- Ensure that the standards are met in relation to dam safety
- Improve outfall monitoring thus reducing ecological impacts of effluent to ocean outfalls
- Include additional operational expenditure resulting from the Mardi Treatment Plant upgrade

In the Planning and Delivery unit, the additional funding will be used to:

- Improve Asset Management and Inspection programs
- Conduct water conservation and resilience studies
- Improve strategic management

In the Roads and Drainage Infrastructure unit, the additional funding will be used to:

• Ensure that the standards are met in relation to dam safety

• Undertake critical asset inspections, cleaning and repair to inform forward planning, manage risk, reduce reactive maintenance requirements and prevent catastrophic asset failure

In the Environmental Management unit, the additional funding will be used to:

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

The above functions were deemed prudent in prior (former Council) Determinations but were excluded from the 2019 Determination as they were being funded by a Stormwater Levy under the Local Government Act. This Levy has now ceased, and Council are simplifying the delivery of stormwater management for customers by bringing all functions under the single Stormwater Drainage Charge.

The additional expenditure has been reviewed against the IPART drivers with a focus on prudency and efficiency.

9.2 Capital expenditure delivery impacts on operational expenditure

Investment in infrastructure is associated with an increase in operational expenditure. For the 2022 determination, Council is forecasting operational expenditure from capex programs to be mainly influenced by the Mardi Water Treatment Plant (WTP) upgrade. The Mardi Water Treatment Plant Stage 3 upgrades will allow the plant to maintain production. The approved Capex business case (20799) will see the plant augmentation with additional chemicals and processes. The additional operational expenditure costs have been identified in the Hunter H2O report to effectively operate the upgraded water treatment plant. This is an estimated addition to expenditure of approximately \$1,045,000.

Another consideration to the expenditure is the infrastructure delivered via the Developer Servicing Plans (DSP's). The value of these assets is deducted from the Regulated Asset Base, however the operational expenditure to maintain these assets is included in the revenue.

Most of this capex will be delivered during the 2022 determination period and it is therefore not required to be in this submission for additional expenditure. A summary of these assets is shown below in the following table.

Project Description	Fund	Project Type	Suburb	IPART Driver	Asset Type	Funding
DSP Forecast Sewer Capacity Misc	30	Upgrade	Region wide	Growth - funded by cash capital contributions		DSP
DSP Forecast Sewer Gravity Mains	30	Upgrade	Region wide	Growth - funded by cash capital contributions		DSP
DSP Forecast Sewer Pump Stations	30	Upgrade	Region wide	Growth - funded by cash capital contributions	Sewer Pump Stations	DSP
DSP Forecast Sewer Rising Mains	30	Upgrade	Region wide	Growth - funded by cash capital contributions	Sewer Mains	DSP
DSP Forecast Sewer Treatment Plants	30	Upgrade	Region wide	Growth - funded by cash capital contributions	Sewage Treatm ent Plant	DSP
DSP Forecast Water Capacity Misc	20	Upgrade	Region wide	Growth - funded by cash capital contributions		DSP
DSP Forecast Water Main	20	Upgrade	Region wide	Growth - funded by cash capital contributions	Water Mains	DSP
DSP Forecast Water Reservoir	20	Upgrade	Region wide	Growth - funded by cash capital contributions	Water Reservo irs	DSP

Table 24: DSP CAPEX deliverables

9.3 Operating expenditure by product

The forecast expenditure for Council's water, sewer and stormwater drainage businesses is explained in the follow sections.

9.3.1 Total Forecast 2022-2027

 Table 25: Total forecast operational expenditure 2022-27 (millions (\$2021-22) water, sewer and stormwater

 drainage

Total \$M	2022-23	2023-24	2024-25	2025-26	2026-27
Labour (incl:	43.1	45.9	46.3	46.3	46.4
employee					
provisions)					
Consultants	6.7	5.7	8.0	6.1	9.3
Hire and	16.0	18.0	19.1	18.5	17.3
Contracts					
Materials	10.3	10.5	11.1	11.1	11.1
Energy	9.3	9.3	9.3	9.3	9.3
Corporate	25.0	25.0	25.0	25.0	25.0
Overheads					
Plant and Fleet	5.7	5.7	5.7	5.7	5.7
Other Expenses	9.9	10.2	10.7	10.5	10.4
TOTAL	126.1	130.4	135.1	132.6	134.5

9.3.2 Water Forecast 2022-2027

Table 26: Forecast operational expenditure 2022-27 \$millions (\$2021-2022)

Water \$M	2022-23	2023-24	2024-25	2025-26	2026-27
Labour (incl	20.2	21.9	22.0	22.0	22.0
employee					
provisions)					
Consultants	2.9	1.5	4.2	2.8	6.0
Hire and	5.8	6.7	7.9	7.6	7.2
Contracts					
Materials	5.9	6.0	6.6	6.6	6.6
Energy	4.0	4.0	4.0	4.0	4.0
Corporate	10.8	10.8	10.8	10.8	10.8
Overheads					
Plant and	2.7	2.7	2.7	2.7	2.7
Fleet					
Other	3.4	3.5	3.5	3.5	3.5
Expenses					
TOTAL	55.9	57.2	61.7	60.1	62.8

*Note employee provisions/oncosts can be approximated at 25% of labour

9.3.3 Sewer forecasts 2022-2027

Table 27. Sower	onorational	whonditura	forocasts	2022 2027	¢millione	(¢2021 22)
Tuble 27. Sewer	ορειαποπαι ε	expenditure	jorecusis	2022-2027	<i>printitions</i>	(\$2021-22)

Sewer \$M	2022-23	2023-24	2024-25	2025-26	2026-27
Labour (incl:	18.6	19.6	19.9	19.9	19.9
employee					
provisions					
Consultants	3.0	3.4	3.0	2.4	2.5
Hire and	7.6	8.8	8.7	8.4	7.6
Contracts					
Materials	3.8	3.8	3.9	3.9	3.9
Energy	5.3	5.3	5.3	5.3	5.3
Corporate	10.2	10.2	10.2	10.2	10.2
Overheads					
Plant and	1.6	1.6	1.6	1.6	1.6
Fleet					
Other	3.1	3.3	3.8	3.6	3.5
Expenses					
TOTAL	53.2	56.0	56.4	55.3	54.4

9.3.4 Stormwater drainage forecasts 2022-2027

 Table 28: Stormwater drainage operational expenditure forecasts \$millions (\$2021-2022)

Stormwater \$M	2022-23	2023-24	2024-25	2025-26	2026-27
Labour (incl	4.3	4.3	4.4	4.4	4.5
employee					
provisions)					
Consultants	0.8	0.8	0.8	0.9	0.8
Hire and	2.6	2.6	2.5	2.5	2.5
Contracts					
Materials	0.6	0.6	0.6	0.6	0.6
Energy	0.0	0.0	0.0	0.0	0.0
Corporate	4.0	4.0	4.0	4.0	4.0
Overheads					
Plant and Fleet	1.4	1.4	1.4	1.4	1.4
Other Expenses	3.4	3.4	3.5	3.5	3.5
TOTAL	17.1	17.2	17.1	17.2	17.3

9.4 Operating expenditure by cost category

Operating expenditure by cost categories is expected to increase from 2022 across the determination period. The forecast operational expenditure for Council's water, sewer and stormwater drainage businesses is estimated to be \$524M (\$2021-22) or \$389M (\$2021-

22) for a three-year period. This compares to 2019-20 base operational expenditure using three years of \$300,387,000 (\$real).



Figure 25: Operational expenditure by category 2022-26

The additional water and sewer expenditure is to support the following improvements:

Headworks and Treatment

Water

- Building and supporting a Water Quality database and Quality systems
- Management of bushfire strategies
- Improvements in catchment management
- Supporting Water Treatment Plant (WTP) improvements

Sewer

• Supporting Sewerage Treatment Plant (STP) improvements

Networks Operations and Maintenance

Water

- Supporting transition to proactive maintenance and asset reliability
- Improving WHS learning and development
- Mains cleaning
- Water civil inspections and maintenance

Sewer

• Sewer civil inspections and maintenance

Planning and Delivery

Water and Sewer

- Improvements in customer communications and water resilience
- Asset condition assessments
- Asset management improvements
- Strategic planning

Roads and Drainage Infrastructure

Stormwater Drainage

- Compliance with Dam Safety legislation
- Critical asset condition assessments
- Critical asset cleaning and repairs

Environmental Management

Stormwater Drainage

- Existing stormwater quality management, urban channel maintenance and flood planning services being reintroduced to the drainage fund
- Harmonisation of prudent minimum service levels for the same across the region

9.4.1 Employee costs

The total FTE base line for labour is done using the 2019-20 FTE's of:

• Water and Sewer 284.99 operational expenditure and 39.40 capital expenditure drainage 5 operational expenditure

There is also additional expenditure allowance of \$400,000 where other areas of Council charge to the Water and Sewer labour expenditure account (this is not included in the FTE count).

For 2022-26, the FTE's are forecast to increase by Water, Sewer and Stormwater drainage, 79 FTE's increasing to 88.5 by 2025-26. The forecast growth is shown in the following table. 13.2 FTE's are a result of Environmental Management now being included in the Stormwater drainage fund (previously in the General Fund).

Operational expenditure FTE									
Unit	Change Type	2022-23 Operational expenditure FTE	2023-24 Operational expenditure FTE	2024-25 Operational expenditure FTE	2025-26 Operational expenditure FTE				
Stormwater	Fund	13.2	13.2	13.2	13.2				
drainage	Change								
(including	Step	7.0	7.0	7.0	7.0				
Environmental	Change								
Management)									
Headworks	Step	5.0	8.0	8.0	7.5				
and	Change								
Treatment									
Network	Step	31.0	37.0	39.0	38.0				
Operations	Change								
and									
Maintenance									
Planning and	Step	16.0	16.0	16.0	16.0				
Delivery	Change								
TOTAL		72.2	81.2	83.2	81.7				





Figure 26: FTEs Water, sewer and stormwater drainage 2022-2026

The FTEs also have a component of CAPEX that is not included in the above costings in the following table.

Capex FTE								
Unit	2022-23 2023-24		2024-25	2025-26				
	Capex FTE	Capex FTE	Capex FTE	Capex FTE				
Stormwater drainage	0.8	0.8	0.8	0.8				
(including Environmental								
Management)								
Stormwater drainage	0	0	0	0				
Headworks and Treatment								
Network Operations and								
Maintenance								
Planning and Delivery	4.0	4.0	4.0	4.0				
TOTAL	4.8	4.8	4.8	4.8				

Table 30: CAPEX FTE Forecasts

The total increase in the labour expenditure is estimated to be (including recurring allowances and on costs⁷) \$32.7M (\$2021-22) over four years. The total labour expenditure is shown in the following table.

Table 31: Additional labour expenditure to 2019-20 baseline 000's (\$2021-22) (includes oncosts)

	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Additional	6,962	9,710	10,078	10,145	10,192
Employee					
costs					
2019/20	36,183	36,183	36,183	36,183	36,183
baseline					
TOTAL	43,145	45,893	46,261	46,328	46,375

FTE's Water and Sewer

Water and Sewer's additional head count is on average 65 additional FTEs per annum from 2022-2026. This increase is expected to decrease by 2028 in alignment with resources transitioning to retirement (8-10%) from 2028. These resources will not be replaced. The largest portion of FTE's age currently sits within the 56-65 demographic. Shown in Figure 27 and Figure 28.

⁷ Oncosts are normally calculated at a rate of 54.5% on the base salary



Figure 27: 31 FTE's to maintenance. Source CCC Transition Strategy document



Figure 28: 17 Staff ages

The additional FTEs (shown in the following table) are to support the increase in expenditure to support the transition strategy and are detailed in business cases.⁸

⁸ The business cases for the additional FTE's for Water and Sewer are detailed in the business cases. Separate to this technical paper.

	2022-23	2023-24	2024-25	2025-26	2026-27
Headworks and Treatment	5.0	8.0	8.0	7.5	7.5
Water	3	5	5	4	4
Sewer	2	3	3	3.5	305
Network Operations and	31.0	37.0	39.0	38.0	38.0
Maintenance					
Water	17.2	20.2	21.2	21.2	21.2
Sewer	13.8	16.8	17.8	16.8.	<i>16.8</i> .
Planning and Delivery	16.0	16	16	16	16
Water	10.5	10.5	10.5	10.5	10.5
Sewer	5.5	5.5	5.5	5.5	5.5
TOTAL	52	61	63	61.5	61.4

Table 32: Water and Sewer additional FTE's

The total labour expenditure is forecast to increase by approximately \$6M per annum totalling \$23.5M (\$2021-22) over the determination period, as detailed in the following table.

Table 33: Additional labour expenditure \$millions (\$2021-22 includes on costs) approximate split 48/52water/sewer *total may not add due to rounding

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27	Total
					2022-26		
Headworks and	0.6	0.8	0.8	0.8	3.0	0.8	3.8
Treatment							
Water	0.4	0.5	0.5	0.5	0.19	0.5	.24
Sewer	0.2	0.3	0.3	0.3	0.11	0.3	.14
Network	1.8	3.6	3.9	3.9	13.3	3.9	26.4
Operations and							
Maintenance							
Water	0.10	1.9	2.0	2.0	6.0	2.0	8.0
Sewer	0.8	1.7	1.9	1.9	6.3	1.9	8.2
Planning and	1.64	1.74	1.7	1.8	6.8	1.8	8.6
Delivery							
Water	0.8	0.8	0.8	0.8	0.3	0.8	0.4
Sewer	1.6	1.6	1.6	1.6	6.4	1.6	8.0
Subtotal	4.1	6.2	6.6	6.6	23.5	6.6	30.1
(proposed							
increase)							
2019-20 baseline	33.9	33.9	33.9	33.9	135.6	33.9	169.5
Water	17.8	17.8	17.8	17.8	70.8	17.8	88.5
Sewer	16.2	16.2	16.2	16.2	64.4	16.2	80.5
TOTAL	38.0	40.0	41.0	41.0	160.5	40.5	201.0

FTE's Stormwater Drainage

The number of staff charged directly to Stormwater Drainage will increase by 20.2 full time employees from 2022-26. This increase is due to the reintroduction of flood planning and stormwater quality management in this Determination.

The additional employees comprise 13.2 existing staff previously funded by either Council's general fund or the Stormwater Management Service charge (in accordance with s496A of the Local Government Act 1993) which was applied in the former Wyong Shire Council local government area but ceased to be levied following amalgamation in 2016. The additional employees also comprise of 7 new full-time employees to deliver a prudent and harmonised level of service to support Council's WSUD and Urban Channel operations.

	2022-23	2023-24	2024-25	2025-26	2026-27
Environmental Management	20.2	20.2	20.2	20.2	20.2
Drainage – Fund Change	13.2	13.2	13.2	13.2	13.2
Drainage – Step Change	7.0	7.0	7.0	7.0	7.0
Roads and Drainage	-	-	-	-	-
Infrastructure					
Stormwater Drainage	-	-	-	-	-
TOTAL	20.2	20.2	20.2	20.2	20.2

9.4.2 Consultants

Water and Sewer

Water and Sewer forecast operational expenditure for consultants for the 2022 determination to total \$10.8M (\$2021-22). Similar to labour, this is to support the transition strategy and changes required to satisfy regulatory obligations and maintain service standards.

There is a need to use Consultants to support the Directorate's:

- STP outfalls and benthic ecology strategy
- STP improvements
- Rebuilding of Quality databases
- Odour septicity corrosion

- Workplace Health and Safety
- Water resilience
- Strategic Planning and Asset improvements

The additional expenditure is detailed in the business cases that support the requested expenditure.

The following table details the requested expenditure as well as the 2019-20 base line for this category.

Table 35: Forecast consultants' costs \$millions (\$2021-22) indicative and approx. totals only (indicative spread)

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Headworks and	0.8	0.7	0.3	0.3	2.0	0.8
Treatment						
Network Operations and	0.7	0.4	0.3	0.3	1.65	0.3
Maintenance						
Planning and Delivery	2.1	2.1	4.3	2.5	11.0	2.5
Subtotal (proposed	3.5	3.1	4.8	2.0	13.4	2.3
increase)						
2019-20 baseline	2.4	2.4	2.4	2.4	9.6	2.4
TOTAL	5.8	5.5	7.2	5.2	23.0	8.3

Stormwater drainage

Stormwater Drainage forecast operational expenditure on Consultants for the 2022 determination to total \$3.34M (\$2021-22). This is to support continued delivery of baseline stormwater drainage service levels and ensure compliance with new dam safety requirements as well as support the reintroduction of flood planning and stormwater quality management.

There is a need to use Consultants to support the following functions:

- Specialist stormwater drainage asset inspections
- Dam safety engineering
- Management of environmental risks present with urban channel maintenance
- Flood studies, plans and mitigation activities

The following table details the forecast expenditure as well as the 2019-20 base line for this category.
\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Environmental	0.32	0.33	0.33	0.34	1.32	0.34
Management						
Stormwater Drainage -	0.16	0.16	0.16	0.17	0.65	0.17
Fund Change						
Stormwater Drainage -	0.16	0.17	0.17	0.17	0.68	0.17
Step Change						
Roads and Drainage	0.06	0.06	0.06	0.11	0.27	0.11
Infrastructure						
Stormwater Drainage -	0.06	0.06	0.06	0.11	0.27	0.11
Step Change						
Sub Total (proposed	0.38	0.39	0.39	0.40	1.59	0.40
increase)						
2019-20 baseline						
Stormwater Drainage	0.43	0.43	0.44	0.48	1.75	0.48
TOTAL	0.81	0.82	0.83	0.88	3.34	0.88

Table 36: Forecast consultants' costs (in \$millions) from 2022-23 for Stormwater Drainage (indicative spread)

The Environmental Management costs are attributed to existing consultancy costs and service levels which are currently funded by Council's general rates but are proposed to move across to the drainage fund. The consultancy costs are for Flood Warning Systems as well as an allowance for specialist support in relation to operational activities associated with stormwater quality infrastructure and urban channels, particularly considering they are located in sensitive environments. The expenditure is detailed in supporting business cases.

The Roads and Drainage Infrastructure consultant costs are to maintain existing baseline service levels in relation to stormwater drainage. The additional expenditure is required to meet new legislative requirements associated with the management of declared dams. The additional expenditure is detailed in supporting business cases.

9.4.3 Hire and Contracts

Water and Sewer

Water and Sewer forecast operational expenditure for Hire and Contracts for the 2022 determination to total \$60M (\$2021-22). Similar to labour, this is to support the transition strategy and changes are required to satisfy Council's regulatory obligations and maintain service standards.

There is a need to use Contractors to support:

- Water resilience and community engagement
- Catchment Management
- STP improvements
- Workplace Health and Safety

The additional expenditure is detailed in the business cases that support the requested expenditure.

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Headworks and	1.7	2.7	2.7	2.7	10.0	2.7
Treatment						
Network Operations	1.5	2.4	2.6	2.2	8.7	1.1
and Maintenance						
Planning and	1.9	2.0	3.0	2.9	9.8	2.9
Delivery						
Sub total (proposed	5.1	7.1	8.3	7.8	28.3	6.7
increase)						
2019-20 baseline	8.1	8.1	8.1	8.1	32.4	8.1
TOTAL	13.2	15.2	16.4	15.9	60.7	14.8

Table 37: Hire and Contracts Water and Sewer (\$2021-22) (indicative only)

Stormwater drainage

Stormwater Drainage forecast operational expenditure on Hire and Contracts for the 2022 determination to total \$10.11M (\$2021-22). This is to support continued delivery of baseline stormwater drainage service levels and address critical asset risks as well as support the reintroduction of flood planning and stormwater quality management. The following table details the forecast expenditure as well as the 2019-20 base line for this category.

Table 38: Forecast Hire and Contracts' costs (\$millions) from 2022-23 for Stormwater Drainage

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Environmental	0.64	0.65	0.66	0.68	2.63	0.68
Management						
Fund Change	0.52	0.53	0.54	0.55	2.12	0.55
Step Change	0.12	0.12	0.13	0.13	0.50	0.13

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Roads and Drainage	0.90	0.90	0.75	0.75	3.30	0.75
Infrastructure						
Stormwater Drainage	0.90	0.90	0.75	0.75	0.27	0.75
- Step Change						
Sub Total (proposed	1.54	1.55	1.41	1.43	5.93	1.43
increase)						
2019-20 baseline						
Stormwater Drainage	1.04	1.04	1.04	1.04	4.18	1.04
TOTAL	2.58	2.59	2.45	2.48	10.11	2.5

The Environmental Management step change will support additional telemetry maintenance costs associated with Council's flood and rainfall monitoring network. A 2019 audit found a number of gauges were not operating. To address this matter, an ongoing maintenance contract for these gauges was negotiated in 2020-21 and will be ongoing. The additional expenditure is detailed in supporting business cases.

The Environmental Management fund changes are predominantly contract costs associated with existing gross pollutant trap (GPT) cleaning services that are delivered via external contractors. It also funds specialised contractors engaged to support the urban channel cleaning program as well as bush regenerators who are required to undertake weed management and riparian restoration as part of this program. These costs are currently funded by Council's general rates but are proposed to move to the drainage fund. The expenditure is detailed in supporting business cases.

The Roads and Drainage Infrastructure contract costs are to maintain existing baseline asset inspection and stormwater drainage maintenance services such as pipe relining and repairs. The additional expenditure is required to expand the inspection and pipe cleaning program to address critical assets. A 2020 review of critical stormwater drainage assets identified some of these assets have not been inspected on record. Critical stormwater drainage assets are identified via multi-criteria consideration of asset size, age and location as well as the consequence of failure. The additional expenditure is detailed in supporting business cases.

9.4.4 Materials

Water and Sewer

Water and Sewer forecast expenditure related to Materials as an increase of \$4M over the determination period. This increased expenditure is to support:

- Improved asset maintenance
- Mardi Water Treatment Plant improvements
- Water resilience

The additional expenditure is detailed in the business cases that support the requested expenditure.

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Headworks and	0.21	0.21	0.67	0.67	1.75	0.67
Treatment						
Network Operations	0.16	0.25	0.43	0.43	1.28	0.43
and Maintenance						
Planning and	0.00	0.05	0.05	0.05	0.14	0.05
Delivery						
Subtotal (proposed	0.36	0.51	1.15	1.15	3.16	1.15
increase)						
2019/20 baseline	9.3	9.3	9.3	9.3	37.2	9.3
TOTAL	9.7	9.8	10.4	10.4	40.4	10.4

Table 39: Water and Sewer Materials (\$2021-22) \$millions (indicative only)

Stormwater drainage

Stormwater Drainage forecast operational expenditure on Materials for the 2022 determination to total \$2.33M (\$2021-22). This is to support continued delivery of baseline stormwater drainage service levels and address critical asset risks as well as support the reintroduction of flood planning and stormwater quality management. The following table details the forecast expenditure as well as the 2019-20 base line for this category.

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Environmental	0.05	0.05	0.05	0.05	0.19	0.05
Management						
Fund Change	0.05	0.05	0.05	0.05	0.19	
Step Change	0	0	0	0	0	
Roads and Drainage	0	0	0	0	0	
Infrastructure						
Sub total (proposed	0.05	0.05	0.05	0.05	0.19	0.05
increase)						

Table 40: Forecast Materials costs (in \$millions) from 2022-23 for Stormwater Drainage

2019-20 baseline						
Stormwater Drainage	0.53	0.53	0.53	0.53	2.14	0.53
TOTAL	0.58	0.58	0.58	0.58	2.33	0.60

The Environmental Management material costs are based on current costs to deliver stormwater quality operations. These costs are currently funded via Council's general rates but are proposed to move to the drainage fund. Over the five-year period, this allowance amounts to an average of approximately \$118 per stormwater quality device per year. The expenditure is detailed in supporting business cases.

The Roads and Drainage Infrastructure material costs are to maintain existing baseline asset inspection and stormwater drainage maintenance services.

9.4.5 Energy Water and Sewer

\$M	2022-23	2023-24	2024-25	2025-26	2026-27
Water	4.0	4.0	4.0	4.0	4.0
Sewer	5.3	5.3	5.3	5.3	5.3
TOTAL	9.3	9.3	9.3	9.3	9.3

• Large market sites:

The electricity budget forecast will sum up 54 large market sites' electricity budget forecasts from Council's Water and Sewer Directorate from FY2022 to FY2026.

The price forecast is based on the current electricity retailer contract signed with ERM.

Each charge component involves electricity usage and rates of usage. To achieve a reasonable budget forecast, both electricity usage and rates of usage are assumed accordingly.

• Small market sites:

The electricity budget forecast will sum up 444 small market sites' electricity budget forecasts from Council's Water and Sewer Directorate from FY2022 to FY2026.

The forecast is based on the current electricity retailer contract signed with ERM.

Each charge component involves electricity usage and rates of usage. To achieve a reasonable budget forecast, both electricity usage and rates of usage are assumed accordingly.

9.4.6 Plant and Fleet

Water and Sewer

The increase in plant and fleet costs is a result of the increase in FTE's. The increase in expenditure for the period is expected to be \$1.14M. This is to support the strategies for:

- Bushfire and Catchment management
- Water and Sewer increased maintenance and inspections

The additional expenditure is detailed in the business cases that support the requested expenditure.

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Headworks and	0.11	0.11	0.13	0.11	0.46	0.11
Treatment						
Network Operations	0.17	0.18	0.18	0.18	0.69	0.18
and Maintenance						
Planning and Delivery	-	-	-	-	-	
Water	-	-	-	-	-	
Sewer	-	-	-	-	-	
Subtotal (requested	0.27	0.28	0.31	0.29	1.15	0.29
increase)						
2019-20 baseline	3.90	3.90	3.90	3.90	15.60	3.90
TOTAL	4.17	4.18	4.21	4.19	16.75	4.19

Table 42: Water and Sewer Plant and Fleet costs (\$2021-221) \$millions indicative only

Stormwater drainage

Stormwater Drainage forecast operational expenditure on plant and fleet for the 2022 determination to total \$6.99M (\$2021-22). This is to support continued delivery of baseline stormwater drainage service levels and address critical asset risks as well as support the reintroduction of flood planning and stormwater quality management. The following table details the forecast expenditure as well as the 2019-20 base line for this category.

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Environmental	0.14	0.15	0.16	0.17	0.62	0.17
Management						
Fund Change	0.18	0.19	0.10	0.11		0.11
Step Change	0.06	0.06	0.06	0.06		0.06
Roads and Drainage	0	0	0	0	0	0
Infrastructure						
Subtotal (proposed	0.14	0.15	0.16	0.17	0.62	0.17
increase)						
2019-20 baseline						
Stormwater Drainage	1.29	1.29	1.29	1.29	5.16	1.29
TOTAL	1.33	1.40	1.45	1.46	5.64	1.4

Table 43: Forecast Plant and Fleet costs (in \$millions) from 2022-23 for Stormwater Drainage

The Environmental Management plant and fleet costs are for existing vehicles allocated to flood planning, stormwater quality and urban channel operations. These costs are currently funded by Council's general rates but are proposed to be moved to the drainage fund. Additional plant and fleet costs have been proposed to facilitate the operation of additional work crews required to provide a harmonised level of service for stormwater quality and urban channel assets.

The Roads and Drainage Infrastructure plant and fleet costs are to maintain existing baseline asset inspection and stormwater drainage maintenance services.

9.4.7 Other

Water and Sewer

The "other' category is expected to increase by approximately \$6M due to anticipated increase in sludge from Council's proposed STP improvements program over 2022 determination period.

The additional expenditure is detailed in the business cases that support the requested expenditure.

	2022-23	2023-24	2024-25	2025-	Total	2026-27
				26	2022-26	
Headworks and	0.77	1.00	1.45	1.25	4.47	1.12
Treatment						
Network	0.00	0.00	0.00	0.00	0.00	0.00
Operations and						
Maintenance						
Planning and	0.05	0.09	0.09	0.09	0.32	0.12
Delivery						
Sub total	0.82	1.09	1.54	1.34	4.79	1.24
2019-20 baseline	5.50	5.50	5.50	5.50	22.00	5.50
TOTAL	6.32	6.59	7.04	6.84	26.79	6.74

Stormwater drainage

Stormwater Drainage forecast operational expenditure on other expenses for the 2022 determination to total \$13.8M (\$2021-22). This is to support continued delivery of baseline stormwater drainage service levels and address critical asset risks as well as support the reintroduction of flood planning and stormwater quality management. The following table details the forecast expenditure as well as the 2019-20 base line for this category.

Table 45: Forecast Other costs (in \$millions) from 2022-23 for Stormwater Drainage

\$M	2022-23	2023-24	2024-25	2025-26	Total	2026-27
					2022-26	
Environmental	0.46	0.47	0.48	0.49	1.90	0.49
Management						
Fund Change	0.42	0.43	0.44	0.45	1.73	0.45
Step Change	0.04	0.04	0.04	0.04	0.16	0.04
Roads and Drainage	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure						
Subtotal (proposed	0.46	0.47	0.48	0.49	1.90	0.49
increase)						
2019-20 baseline						
Stormwater Drainage	2.97	2.97	2.97	2.97	11.9	2.97
TOTAL	3.43	3.44	3.45	3.46	13.8	3.46

The majority of the Environmental Management Other costs are to maintain existing service levels for stormwater quality and urban channel operations. These services are currently funded via Council's general rates but are proposed to move to the drainage fund. The major factor in this category is tipping costs associated with pollutants

removed from these assets. An additional allowance of approx. \$40K per annum has also been proposed to support consistent servicing regimes for these assets. The allowance is considered prudent, but conservative.

The Roads and Drainage Infrastructure material costs are to maintain existing baseline stormwater drainage maintenance services. Similar to Environmental Management, the major factor in this category is tipping fees associated with materials cleared from drainage pipes, culverts and table drains.

9.4.8 Corporate overheads

The forecast for corporate overheads below is based on the new organisational structure and operational expenditure caps including reduction in staff costs and materials and contracts:

\$M	2022-23	2023-24	2024-25	2025-26	Total 2022-26	2026-27
Water	10.8	10.8	10.8	10.8	43.1	10.8
Sewer	10.2	10.2	10.2	10.2	41.0	10.2
TOTAL	21.0	21.0	21.0	21.0	84.1	21.0

Table 46: Water and Sewer corporate overheads \$millions (\$2021-22)

\$M	2022-23	2023-24	2024-25	2025-26	Total 2022-26	2026-27
Stormwater	4.0	4.0	4.0	4.0	16.0	4.0
Drainage						

Table 47: Stormwater drainage \$millions (2021-22)

10 Council's water, sewer and stormwater drainage budgeting process

10.1 Forecast methodology

Management of the budgeting process commenced in September 2020, where budget owners were requested to develop forward budgets and develop detailed business cases for the requested expenditure. All requested expenditure had to be non-discretionary, pass a prudency and efficiency test and align to an IPART driver.

IPART regulatory drivers: (requirement, law, standard etc)

- IPART drivers
- Mandatory standards (by law legislation)
- Health
- Safety
- Compliance
- Environmental
- Growth
- Asset reliability

10.1.1 Allocation of operating costs to activities

The general ledger is set up with three funds - water, sewer and stormwater drainage. The general ledger captures both regulated and unregulated expenditure against each fund. The funds are further broken down to Unit and Section and costs are captured via work orders with defined activities (activity-based costing) or Project numbers. These are used when ordering materials, working on a civil asset or ordering plant and fleet (as an example).

The allocation of the forecast expenditure was allocated to these funds and cost categories to understand impacts to the 2019-20 base operational expenditure.

10.1.2 Budget process and internal governance

When forecasting the operational expenditure for the 2022 determination, an iterative process was adopted, where each unit was required to:

- Review current expenditure in relation to service delivery
- Identify risks and asset failures in relation to licence conditions and service levels

• Understand expected pollution reduction programs

Each Unit was then required to evaluate the additional expenditure in relation to the IPART regulatory drivers. The additional expenditure was reviewed by a governing committee (Unit Managers for each Section) to prioritise the requested expenditure and where required, additional information was requested. Each Section Manager was then required to present the request to the Director, and the panel, to assess prudency and efficiency.

10.1.3 Key expenditure assumptions

When setting the forecast operational expenditure, the key assumptions underpinning the forecasts are:

- There will be no further change to the regulatory environment and standards
- The current retail contract for the purchase of energy expires in 2021
- The current forecast takes the 2021 contracted price as a price indication for 2022 to 2026 (Currently this is reasonable considering current electricity market movements. The PPA tenders after September and will not be available at the time of this submission)
- Operating expenditure has been forecast with reference to Asset performance, Asset assessment capital expenditure impacts and risks
- Connection forecasts
- Demand and volume of wastewater
- What are Council's operational plans
- Average weather conditions assumed
- Increase in inflation in relation to cost of goods and
- Wage increases

Forecast methodology



Figure 29: Forecast Methodology

11 Abbreviations

CAPEX	Capital Expenditure
ELE	Employee Leave Entitlements
ESMS	Electrical Services Management System
FAR	Fixed Asset Register
FTE	Full Time Employees
HMI	Human Machine Interface
HWC	Hunter Water Corporation
IWA	International Water Association
LGA	Local Government Area
LRMC	Long Run Marginal Cost
LTI	Long Term Injuries
NPR	National Performance Reporting
OPEX	Operational Expenditure
RAB	Regulated Asset Base
SCADA	Supervisory Control and Data Acquisition
TAR	Technical Asset Register
WACC	Weighted Average Cost of Capital

12 References

- Atkins Cardno, Review of Central Coast Council's Expenditure, March 2019
- Bureau of Meteorology 2021, National performance report 2019–20: urban water utilities, part A, Bureau of Meteorology, Melbourne
- Hunter Water Corporation Annual Reports
- IPART Review of Central Coast Council's water, sewerage and stormwater prices to apply from 1 July 2019, May 2019
- Sydney Water Corporation Annual Reports

13 Appendix A

25.10000	25. WASTE AND RECYCLING							
25.10001	Landfill Waste Disposal Tip Fees Landfill wharges include components to cover Council's liability for the NSW State Government Environment Protection Authority (EPA) Waste Levy of \$141.86 plus GST where applicable							
25.10002	Mixed Waste Including: General waste, food, building and demolifion waste, commercial recyclables, tiles, bricks and car tyres withou rime (maximum 5), FOOD WASTE NOT ACCEPTED AT KINCUMBER	Pertonne	2	\$179.13	\$143.60	\$32.27	\$355.00	NSW Environment Protection Authority
25.10003	Minimum charge for Mixed Waste	Perioad	2	\$11.61	\$9.30	\$2.09	\$23.00	NSW Environment Protection Authority
25.10004	Bricks, Roof Tiles, Pavers and Concrete - must not contain other contaminants - required to must operational requirements	Per tonne	2	\$24.58	\$143.60	\$16.82	\$185.00	NSW Environment Protectio Authorit
25.10005	Minimum charge for Bricks, Root Tiles, Pavers and Concrete	Per load	2	\$3.06	\$17.85	\$2.09	\$23.00	NSW Environment Protection Authorit
25.10006	Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM) - Dear not indude nocks, gavel, wet ally or sandy laws, then nodes or vegetation, or any other contamination - required to meet operational requirements VENM AND ENM NOT ACCEPTED AT KINCUMBER	Pertonne	2	\$24.58	\$143.60	\$16.82	\$185.00	NSW Environment Protectio Authorit
25.10007	Organic Waste							
25.10008	Organic Materials Including trees, garden vegetation, untreated timber and shredded green waste. Excluding tree stumps and trunks greater than 1 metre measured at the widest point and treated timber	Per tonne	2	\$139.09		\$13.91	\$153.00	
25.10009	Minimum Charge for Organic Materials	Perload	2	\$10.91		\$1.09	\$12.00	
25.10010	Recyclables							
25.10011	Recyclable Household teams including aluminum case and foil car and marine batteries, car bodies (not IPO), whitegoods, metalis, cardboard under 200kg, computers and TVs (undamaged), glass bodies and jars (NO FLAT GLASS), HDPE plastic milk bodies, milk and futil juice cardboard carboar, FET plastic bodies, that steel aerosol care, household batteries, motor of (maximum 2015), shorescore trights (maximum 12)	Pertonne	5	No charge	-	\$0.00	No charge	
25.10012	Cardboard loads over 200kg	Pertonne	2	\$123.64		\$12.36	\$136.00	
25.10013	E-waste (1 to 15 items per customer per day)	Peritem	2	No charge		\$0.00	No charge	
25.10014	Scrap Metal Includes ferrous and non-ferrous metals and car tyres with rims (maximum 5)	Per item	2	No charge		\$0.00	No charge	
25.10015	Other waste							
25.10016	Special Wate Special Wate which requires additional handing, including asbestos (see website for details), security and customs, the stumps > fm3, animais (must be wrapped in plastic), food, bufky and dusty waste. Large commercial quantities (> 10m3) is Buttondemy Wate Management Facility only. SPECIAL WASTE NOT ACCEPTED AT KINCIMBER	Pertonne	2	\$286.40	\$143.60	\$43.00	\$473.00	NSW Environment Protectio Authorit
25.10017	Minimum charge for Special Waste	Per load	2	\$18.77	\$9.41	\$2.82	\$31.00	NSW Environment Protectio Authorit
25.10018	Mattress Surcharge Charged in addition to the Mixed Waste fee	Per item	2	\$23.64		\$2.36	\$26.00	
25.10019	Gas Bottle (maximum 9kg) and Fire Extinguisher Surcharge Charged in addition to the Mixed Waste fee	Per item	2	\$5.45		\$0.55	\$6.00	
25.10020	Large Tonnages Waste Disposal for large commercial entities disposing of large commercial tonnages may be determined through contract negotiation, including with reduced rates based on volume	Per tonne	2	10/11 of fee charged		1/11 of fee charged	By Contract Negotiation	
25.10021	Charifies with Environment Protection Authority (EPA) Exemption CHARITY EXEMPTION NOT ACCEPTED AT KINCUMBER Minimum charge \$16.00	Per tonne	5	\$33.64		\$3.36	\$37.00	
25.10022	Security Bond Applicable to all account holders (refundable when accounts are closed and all outstanding debt paid in full)	Per account holder	4	By Contract Negotiation		\$0.00	By Contract Negotiation	
25.10023	Other waste management services							
25.10024	Provision of 240 litre Special Event Waste Bin	Per bin per day	3	\$20.56	\$19.44	\$4.00	\$44.00	NSW Environment Protection Authorit
25.10025	Provision of 240 litre Special Event Recycling Bin	Per bin per day	3	\$33.64		\$3.36	\$37.00	
25.10026	Provision of Commercial Litter Bin - The Entrance Town Centre	Per bin per service	3	\$7.27		\$0.73	\$8.00	
25.10027	Collection of Wasts Collection of wasts (dumped waste or kertiside waste where the number of allocated kertiside collections are exceeded or for properties that are not entitled to kertiside collections). Waste type must be in accordance with legal and contractual guidelines and collection is at request.	Per cubic metre	3	\$73.64	-	\$7.36	\$81.00	
25.10028	Bulk Bin Configurations Modifications to standard bulk bins. For example 'Lids within Lids'	Per application	4	10/11 of fee charged		1/11 of fee charged	By quote	

14 Appendix B

Full time equivalent (FTE) and head count from 2018-19 to 2020-21 as at 30 June for each financial year.

FTE reflects the number of positions based on full-time hours of the position. For a 38 hour per week position if the position is for 38 hours then the position is 1.0 FTE. If the position hours is set to 19 hours then the FTE is 0.5 FTE.

Head count refers to the number of people who fill a position. Where there is 1 person filling a role then the head count for the role is 1. If the position is job shared between 2 people then the head count for the position is 2.

Actual Full Time			2018-19		
Equivalent (FTE)	Employee	Contingent Worker	Actual FTE	Opex FTE	Capex FTE
Water & Sewer Funds	278.27	39.00	317.27	284.96	32.31
Drainage Fund	4.00		4.00	4.00	
Total	282.27	39.00	321.27	288.96	32.31
Actual Head Count			2018-19		
	Employee	Contingent	Actual Head	Opex Head	Capex Head
		Worker	Count	Count	Count
Water & Sewer Funds	282.00	39.00	321.00	287.89	33.11
Drainage Fund	4.00		4.00	4.00	
Total	286.00	39.00	325.00	291.89	33.11

Actual Full Time			2019-20		
Equivalent (FTE)	Employee	Contingent Worker	Actual FTE	Opex FTE	Capex FTE
Water & Sewer Funds	307.29	17.00	324.29	284.99	39.30
Drainage Fund	5.00		5.00	5.00	
Total	312.29	17.00	329.29	289.99	39.30
Actual Head Count			2019-20		
	Employee	Contingent	Actual Head	Opex Head	Capex Head
		Worker	Count	Count	Count
Water & Sewer Funds	310.00	18.00	328.00	288.53	39.47
Drainage Fund	5.00		5.00	5.00	
Total	315.00	18.00	333.00	293.53	39.47

Actual Full Time			2020-21		
Equivalent (FTE)	Employee	Contingent Worker	Actual FTE	Opex FTE	Capex FTE
Water & Sewer Funds	253.49	8.00	261.49	236.85	24.64
Drainage Fund	5.00		5.00	5.00	
Total	258.49	8.00	266.49	241.85	24.64
Actual Head Count			2020-21		
	Employee	Contingent	Actual Head	Opex Head	Capex Head
		Worker	Count	Count	Count
Water & Sewer Funds	258.00	8.00	266.00	241.16	24.84
Drainage Fund	5.00		5.00	5.00	
Total	263.00	8.00	271.00	246.16	24.84

Actual Full Time		Movement i	n Resources	
Equivalent (FTE)	2018-19 to	2018-19 to	2018-19 to	2018-19 to
	2019-20 FTE	2019-20 %	2019-20 FTE	2019-20 %
Water & Sewer Funds	7.02	2.2%	- 62.80	-19.4%
Drainage Fund	1.00	25.0%	-	0.0%
Total	8.02	2.5%	- 62.80	-19.1%
Actual Head Count		Movement i	n Resources	
	2019 10 to	2010 10+-	2010 101-	2010 101
	2010-1910	2018-19 (0	2018-19 to	2018-19 to
	2018-19 to 2019-20 FTE	2018-19 to 2019-20 %	2018-19 to 2019-20 FTE	2018-19 to 2019-20 %
Water & Sewer Funds	2019-20 FTE 7.00	2018-19 to 2019-20 % 2.2% ·	2018-19 to 2019-20 FTE - 62.00	2018-19 to 2019-20 % -18.9%
Water & Sewer Funds Drainage Fund	2018-19 to 2019-20 FTE 7.00 1.00	2018-1910 2019-20 % 2.2% 25.0%	2018-19 to 2019-20 FTE - 62.00 -	2018-19 to 2019-20 % -18.9% 0.0%