

# **Review of Capital and Operating Expenditure for Gosford City Council**

**Independent Pricing and Review Tribunal  
(IPART)**



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## 1. Executive Summary

IPART has engaged Oakley Greenwood<sup>1</sup> to undertake<sup>2</sup>:

- *a strategic review of Gosford City Council's and Wyong Shire Council's long term investment plans, asset management systems and practices.*
- *a detailed review of Gosford City Council's and Wyong Shire Council's past and proposed operating expenditure and capital expenditure.*

The driver for the review is the fact that IPART is conducting a price path review of the maximum charges for water, sewerage and drainage services to apply from 1 July 2013 for Gosford City Council and Wyong Shire Council. IPART sets prices based, in part, on its estimates of the Councils' revenue requirements over the regulatory period. This in turn is based on projections of efficient operating and capital expenditure, which in turn will be informed by the outcomes of this consultancy.

Our overall sequential approach to undertaking this project has been to:

- Review Gosford City Council's submission to IPART<sup>3</sup>;
- Review Gosford City Council's Annual Information Return (AIR) and Special Information Return (SIR);
- Provide Gosford City Council with an initial list of information that we were seeking from them;
- Provide Gosford City Council with a more detailed list of questions for discussion during the interview stage of the process;
- Undertake interviews with key staff from Gosford City Council;
- Provide Gosford City Council with supplementary questions on an as needs basis following the interview process;
- Develop a draft report for comment; and
- Develop this final report.

In assessing the forecasts that have been provided by the businesses, our threshold test has been to provide a considered opinion as to whether we believe the proposed forecasts put forward are consistent with that which a *prudent* and *efficient* service provider would incur. For the purposes of completeness, we provide the following definitions of these two key terms:

- **Prudent:** In simple terms, this refers to the "need" or "justification" of the program, project or expenditure item. Our threshold test has been to ask ourselves whether or not we consider an efficient water or wastewater service provider, would, given the circumstances faced by Gosford City Council, choose to undertake the project/program in a similar manner, in terms of size, scale or scope, given the opportunity cost of deferring that expenditure; and

<sup>1</sup> Oakley Greenwood has undertaken this project in conjunction with Hunter Water Australia.

<sup>2</sup> RFQ No 12/321 and 12/320 - *Strategic Management Overview and Review of Capital and Operating Expenditure for Gosford City Council and Wyong Shire Council* - Page 13

<sup>3</sup> Wyong Shire Council's Submission to IPART's Review of Prices for Water, Sewerage and Stormwater Services for Wyong Shire Council - Price Path from 1 July 2013 - 30 June 2017 - 14 September 2012



- Efficiency: In simple terms, this refers to the “amount” or “level” of expenditure being proposed to undertake the program, project or expenditure item. Our threshold test has been to ask whether or not we consider an efficient water or wastewater service provider, would, given the circumstances faced by Gosford City Council, have to spend that amount of money, or utilise the chosen procurement method, to undertake that proposed program or project.

In summary:

- We have concerns over the fact Gosford City Council has not met its proposed levels of service.
- However, we do not have enough information to conclude that Gosford City Council's water, wastewater and drainage operating costs, between 2009/10 and 2011/12, are inconsistent with that of a prudent and efficient service provider, given the circumstances faced by Gosford City Council over the period.
- We also note that Gosford City Council's performance is best practice when compared against its peers on a key cost metric (combined operating cost per property) in the National Performance Reporting Statistics.
- Further, outturn service levels do not indicate a systematic decline in service as a result of a trade-off between cost and service, even though they have not met their forecast levels of service in many cases.
- Furthermore, there is no discernible, systematic trend increase in operating costs (excluding 2013) over the regulatory period.

However, our review of Gosford City Council's proposed operating expenditure leads us to consider that it is not consistent with a prudent and efficient water and wastewater service provider. The following table outlines the changes that we recommend be made to Gosford City Council's proposed operating expenditure forecasts.

Table 1: Recommended Changes to Assumptions Underpinning Proposed Operating Expenditure

Operating Expenditure Component	Recommended Change
Corporate overheads	<ul style="list-style-type: none"> <li>■ The 'Directorate' cost driver for each of the regulated water and sewerage businesses be 10%, and that this be adopted immediately (that is, no glide path approach be adopted to phase in this change);</li> <li>■ The allocation percentage for all secondary allocations that are reasonably able to be apportioned to water and wastewater, and which are driven by the number of Directorates, be changed to 10% for each of water and wastewater; and</li> <li>■ That a number of accounts, including: the category of accounts that we have defined as 'Costs related to the election of Council Officials' (excluding the 'Grants Officer') and 'Costs primarily driven by Council Branding', as well as 'Reporting', 'Events' and accounts related to 'Integrated Planning' be removed from the overall corporate cost pool that is in turn allocated back into the water and wastewater business.</li> </ul>
Starting 2013 Costs	<ul style="list-style-type: none"> <li>■ 2012 actual labour costs, inflated by the recommended labour cost escalator, should be used as the basis for setting forecasts of internal labour costs for</li> </ul>

	<p>the forthcoming regulatory control period. This implicitly removes the assumption that vacant positions are filled;</p> <ul style="list-style-type: none"> <li>On-costs be reallocated to employee provisions, and those 2012 on-cost be inflated by the recommended labour cost escalator discussed later in this report; and</li> <li>All non-labour related 2012 costs, except for JWS costs, be converted to 2013 costs using our proposed real cost and growth escalators.</li> </ul>
Real cost escalators	<ul style="list-style-type: none"> <li>Gosford City Council's real cost escalators be rejected, and revised escalators for the following cost components be applied: Labour; Corporate Costs; Materials; Hire &amp; contract services (Plant); Hire &amp; contract services (Other); Other (total of all items smaller than 5% of total operating expenditure) and Electricity.</li> <li>Gosford's City Council's escalators for External Consultants, Carbon Tax and Efficiency Gains be approved.</li> </ul>
Growth Escalators	<ul style="list-style-type: none"> <li>That Gosford City Council's be allowed to apply a growth escalator (based on its forecast of customer numbers) to 'materials' and 'electricity'.</li> </ul>
Step Changes	<ul style="list-style-type: none"> <li>Only the following step changes be approved: Maintain gross pollutant traps; Hawkesbury Bridge Painting - Relocation of Main; Changed sludge management costs; Additional Resource associated with the POEO Act; New High Voltage Contract; and Somersby Sludge Management; and</li> <li>The CCWC Establishment Costs that are allocated back into the water and wastewater business should be reduced to the amount which is outlined in Table 3 of Source document "Agenda Item 5 5 CCWC costs for inclusion in pricing submissions 120702 - PCG Meeting 5", as this figures appears to be based on a robust, beneficiary pays, cost allocation methodology.</li> </ul>

Source: OGW

The estimated impact of adopting the aforementioned assumptions is outlined in the following table.

Table 2: Forecast versus Recommend Operating Expenditure Forecasts (\$'000 real 2013)

Operating Expenditure Component <sup>4</sup>	2013/14	2014/15	2015/16	2016/17	Total
Corporate					
Forecast	14,672	14,483	14,399	14,023	57,577
Recommended	13,231	13,261	13,331	13,053	52,876

<sup>4</sup> All forecast figures have been estimated based on our own modelling, and exclude Hunter Water Purchases on advice from IPART.

<b>Water</b>					
Forecast	18,368	18,579	19,891	19,933	76,771
Recommended	17,342	17,210	18,340	18,242	71,133
<b>Wastewater</b>					
Forecast	20,358	21,154	22,325	22,776	86,613
Recommended	18,925	19,211	19,495	19,821	77,452
<b>Stormwater</b>					
Forecast	5,860	6,107	6,540	6,738	25,246
Recommended	5,647	5,691	5,736	5,782	22,857
<b>Total</b>					
Forecast	59,258	60,324	63,155	63,469	246,206
Recommended	55,146	55,373	56,902	56,898	224,319
<b>% Reduction</b>	(6.939%)	(8.207%)	(9.900%)	(10.354%)	(8.890%)

Source: AIR; OGW ('Gosford Model of Forecasts - Final.xls')

The review of capital expenditure projects in the current price path has found the expenditure to be both prudent and efficient. Whilst individual projects were originally assessed under the Engineering, Procurement, and Construction Management (EPCM), cost comparisons were difficult due to the way costs for different items are reported. The summary of the outcomes of the EPCM however demonstrates that based on the revised scope of work (necessitated by insufficient scope definition and insufficient consideration to operational impacts in the original scope definition), the final delivery of works will be within an acceptable margin of the determined amount. The review also confirmed that the recommendations made by Halcrow from the previous price path review were acted upon by Council with an alternate strategy for the Coastal Carrier Main System being adopted after the review.

It is recommended that the actual expenditures incurred by Council in the 2010-2013 price path including the projected figures for 2013 be rolled into Council's regulatory asset base.

Table 3: Recommendation on Capex to be rolled into RAB (\$'000 real 2013)

	2008/09	2009/10	2010/11	2011/12	2012/13*	Total
Actual/forecast Water Capital Expenditure	21,091	43,445	43,470	12,248	15,742	135,995
Recommended Water Adjustment	-	-	-	-	-	-
<b>Water capital expenditure to be rolled into RAB</b>	<b>21,091</b>	<b>43,445</b>	<b>43,470</b>	<b>12,248</b>	<b>15,742</b>	<b>135,995</b>
Actual/forecast Recycled Water Capital Expenditure	-	-	-	857	3,712	4,569

Recommended Recycled Water Adjustment	-	-	-	-	-	-
<b>Recycled Water capital expenditure to be rolled into RAB</b>	-	-	-	<b>857</b>	<b>3,712</b>	<b>4,569</b>
Actual/forecast Wastewater Capital Expenditure	16,013	17,238	25,988	30,233	58,453	147,926
Recommended Wastewater Adjustment	-	-	-	-	-	-
<b>Wastewater capital expenditure to be rolled into RAB</b>	<b>16,013</b>	<b>17,238</b>	<b>25,988</b>	<b>30,233</b>	<b>58,453</b>	<b>147,926</b>
Actual/forecast Stormwater capital Expenditure	5,534	4,899	5,747	5,192	5,971	27,343
Recommended Stormwater Adjustment	-	-	-	-	-	-
<b>Stormwater capital expenditure to be rolled into RAB</b>	<b>5,534</b>	<b>4,899</b>	<b>5,747</b>	<b>5,192</b>	<b>5,971</b>	<b>27,343</b>
<b>Total recommended capital expenditure to be Rolled into RAB</b>	<b>42,638</b>	<b>65,581</b>	<b>75,205</b>	<b>48,530</b>	<b>83,878</b>	<b>315,832</b>

Source: OGW

The review of the specific forecast water, wastewater and stormwater capital projects revealed some of the expenditure was not prudent. In particular, design and construction of the Mangrove Creek Dam spillway upgrade was shown to be able to be deferred based on Council's own consultant's advice. In addition, the review compared the level of expenditure proposed for SPS renewals with the level proposed by Sydney Water in its last pricing submission and concluded that the forward allowance should be reduced.

For Joint Water Supply projects, the following adjustments to the forward capital expenditure program are proposed:

- Removal of Mangrove Creek Dam Spillway works (Gosford City Council managed) will result in a \$4,000,000 reduction from each Council's 2014/17 price path.
- Removal of the DAF Detailed Design (Wyong Shire Council managed) will result in a \$700,000 reduction from each Council's 2014/17 price path.
- Removal of the Mardi dam curtain (Wyong Shire Council managed) will result in a \$1,000,000 reduction from each Council's 2014/17 price path.

This results in a reduction of \$5,700,000 from each Council's JWS projected budgets over the 2014/17 price path, resulting in Wyong Shire Council's contribution being reduced to \$12,159,000 and Gosford City Council's contribution being reduced to \$12,142,000.

After these adjustments, the majority of the forward capital expenditures are primarily for asset renewal/replacement works. At present, some of these are carried out by Council, with others by contract. Lessons learnt in previous projects should enable efficiency gains to be made in the future procurement of these types of projects by combining individual projects into packages. In addition, testing the Council's own workforce by establishing panels of competent contractors to carry out some of the work currently performed by Council staff should also contribute to efficiency gains.

It is recommended an efficiency improvement target of 5% be applied to the forward estimates to account for these improvements.

Table 4: Recommended Capital Expenditure Adjustments (\$'000 real 2013)

Project		2013/14	2014/15	2015/16	2016/17	Total
JWS - MCD Upgrade for Revised PMF	Proposed	125	125	1,000	2,750	4,000
	Recommended	-	-	-	-	-
	Difference	(125)	(125)	(1,000)	(2,750)	(4,000)
ICT - Major ICT Equipment renewal Program	Proposed	461	461	461	461	1,844
	Recommended	461	461	461	461	1,844
	Difference	-	-	-	-	-
SPS Renewals - Unallocated Budget	Proposed	6,174	6,174	6,174	6,174	24,697
	Recommended	4,322	4,323	4,323	4,322	17,289
	Difference	(1,852)	(1,852)	(1,852)	(1,852)	(7,408)
KSTP - General Works	Proposed	416	416	416	416	1,665
	Recommended	416	416	416	416	1,665
	Difference	-	-	-	-	-
Kincumber Urban Flood Mitigation	Proposed	200	400	300	500	1,400
	Recommended	200	400	300	500	1,400
	Difference	-	-	-	-	-
<b>Sub Total</b>	<b>Proposed</b>	<b>7,376</b>	<b>7,576</b>	<b>8,351</b>	<b>10,301</b>	<b>33,606</b>
	<b>Recommended</b>	<b>5,399</b>	<b>5,600</b>	<b>5,500</b>	<b>5,699</b>	<b>22,198</b>
	<b>Difference</b>	<b>(1,978)</b>	<b>(1,977)</b>	<b>(2,852)</b>	<b>(4,602)</b>	<b>(11,408)</b>

Source: OGW

Table 5: Recommended capital expenditure (\$'000 real 2013)

	2013/14	2014/15	2015/16	2016/17	Total
Proposed water capital expenditure	9,189	13,027	9,155	10,313	41,684
Recommended water adjustment 1 (MDC)	(125)	(125)	(1,000)	(2,750)	(4,000)
Recommended water adjustment 2 (JWS projects delivered by WSC)	(100)	(900)	(350)	(350)	(1,700)
Recommended water efficiency gain (5%)	(448)	(600)	(390)	(361)	(1,799)
<b>Recommended water capital expenditure</b>	<b>8,515</b>	<b>11,402</b>	<b>7,415</b>	<b>6,852</b>	<b>34,185</b>
Proposed wastewater capital expenditure	31,357	28,642	16,997	15,378	92,373
Recommended wastewater adjustment 1 (SPSSs)	(1,852)	(1,852)	(1,852)	(1,852)	(7,408)
Recommended wastewater efficiency gain (5%)	(1,475)	(1,339)	(757)	(676)	(4,248)
<b>Recommended wastewater capital expenditure</b>	<b>28,030</b>	<b>25,450</b>	<b>14,388</b>	<b>12,850</b>	<b>80,717</b>
Proposed stormwater capital expenditure	3,425	3,486	3,146	3,244	13,302
Recommended stormwater efficiency gain (5%)	(171)	(174)	(157)	(162)	(665)
<b>Recommended stormwater capital expenditure</b>	<b>3,254</b>	<b>3,312</b>	<b>2,989</b>	<b>3,082</b>	<b>12,636</b>
<b>Total recommended capital expenditure</b>	<b>39,799</b>	<b>40,164</b>	<b>24,792</b>	<b>22,784</b>	<b>127,539</b>

Source: OGW

With regards to the output measures proposed by Gosford City Council, we consider that the overarching approach to defining the values that are ascribed to each of the service attributes reasonable. In particular, the extrapolation of targets from current levels acknowledges the underlying trade-off between price and service, and is consistent with our underlying approach to the assessment of costs - namely, that Gosford City Council has revealed the efficient costs associated with delivering existing levels of service.

The only query we have is with regard to water quality complaints. In particular, Gosford City Council has proposed some additional operating expenditure (and we have recommend that this be accepted) for improving water quality, yet no material change in service level appears to be being proposed by Gosford City Council, relative to the extrapolation of historic levels. We consider that an explicit improvement should be provided for this, if the explicit increase in costs associated with delivering this improvement is provided for in prices.

Our other observation is that Gosford City Council is not proposing service level measures for attributes such as 'overall customer satisfaction', 'water pressure', nor for any 'retail' (or 'customer experience') attributes (e.g., time taken to answer phone calls). We consider that all are important measures of service for a prudent and efficient water and wastewater service provider, and even if Gosford City Council is currently delivering high levels of service as measured against these service attributes, they should be measured and reported against.

In summary, our final recommendation is that except for water quality, the proposed measures and levels outlined in Table A4 of Gosford City Council's submission, be accepted. In addition, the following services/service levels also be included:

- Minimum water pressure of 12m at property connection, with this being based on the proposed levels of service outlined in the MasterPlan document;
- Customer Satisfaction of no more than 5% of customers dissatisfied with the service (water and wastewater) delivered. We note that based on a review of previous IPART Performance Reports and National Water Commission information, it appears that Gosford City Council has not previously reported publicly on this measure. As such, we are unable to base any metric on historical performance levels. In the absence of this information, we consider the most reasonable basis for setting target levels is to utilise similar sized service providers, obviously, the closest related 'peer' to Gosford City Council is Wyong Shire Council. Therefore, the proposed metric broadly reflects levels previously delivered by Wyong Shire Council<sup>5</sup>; and
- Percentage of telephone calls answered within 30 seconds of no less than 80%. We note that based on a review of previous IPART Performance Reports and National Water Commission information, it is our understanding that Gosford City Council has not previously reported publicly on this measure. We note that the proposed level is consistent with that which has been proposed for Wyong Shire Council. We note that this level is below the national average<sup>6</sup> for utilities of the size of Gosford City Council, and therefore, should be readily achievable by Gosford City Council based on current operating expenditure levels and resources.

We also consider that the proposed number of water quality complaints be adjusted down marginally to reflect the slight increase in resources devoted to improving this service attribute.

A complete list of proposed measures is contained in the table below.

<sup>5</sup> IPART NSW water utilities performance, 2010/11 - page 112

<sup>6</sup> National Water Commission | National Performance Report 2010-11 | Urban water utilities - page 84



Table 6: Recommended Output Measures

Service	Output or activity measure	Indicator of activity by 2015/16*
Water	Water quality complaints per 1000 properties	9.5^
	Average frequency of unplanned interruptions per 1000 properties	151.8
	Water main breaks per 100km main	23.7
	Compliance with Australian Drinking Water Guidelines - microbial guideline values	Yes
	Compliance with Australian Drinking Water Guidelines - chemical guideline values	Yes
	Minimum water pressure at property connection	12m
Wastewater	Wastewater overflows per 100 km main	32.6
	Wastewater overflows reported to the environmental regulator per 100km main	1.6
	Wastewater odour complaints per 1000 properties	1.9
	Wastewater main breaks and chokes per 100km main	35.6
	Compliance with EPL 1802 concentration & load limits	Yes
Retail	Customer Satisfaction	<=5% of dissatisfied customers
	Percentage of telephone calls answered within 30 seconds	80%

\*This is chosen in order to be consistent with the proposal of Gosford City Council

^Slight reduction due to proposed increase in expenditure associated with delivering increased levels of water quality

Source: OGW; Table A4 of Gosford City Council's Submission

## 2. Objective of Report

IPART has engaged Oakley Greenwood<sup>7</sup> to undertake<sup>8</sup>:

- *a strategic review of Gosford City Council's and Wyong Shire Council's long term investment plans, asset management systems and practices.*
- *a detailed review of Gosford City Council's and Wyong Shire Council's past and proposed operating expenditure and capital expenditure.*

The driver for the review is the fact that IPART is conducting a price path review of the maximum charges for water, sewerage and drainage services to apply from 1 July 2013 for Gosford City Council and Wyong Shire Council. IPART sets prices based, in part, on its estimates of the Councils' revenue requirements over the regulatory period. This in turn is based on projections of efficient operating and capital expenditure, which in turn will be informed by the outcomes of this consultancy.

The overall regulatory framework is an important element with regards to the assessment of operating and capital expenditure forecasts. We understand that IPART is required to protect customers from paying for inefficient or unnecessary expenditure, while ensuring each Council raises adequate revenue to deliver the required services. As such, IPART seeks to set prices which do not reward inefficient investment and asset management decisions, or inefficient operations and practices. Furthermore, IPART is required to consider matters set out in section 15 of the Independent Pricing and Regulatory Tribunal Act 1992, which include the standards for quality, reliability, and safety of the services.

IPART is also required to consider how actual and proposed expenditure on services are related to service quality outcomes, and any evidence on customers' willingness to pay for service quality outcomes that exceed minimum standards or where there are no standards.

Finally, for this price review, IPART will be setting prices for each Council individually, despite the imminent establishment of the Central Coast Water Corporation (CCWC). That said, the establishment of the CCWC is an important factor that has been taken into account when determining forecast operating and capital expenditures.

This report pertains exclusively to Gosford City Council.

## 3. Approach to this Review

Our overall sequential approach to undertaking this project has been to:

- Review Gosford City Council's submission to IPART;
- Review Gosford City Council's Annual Information Return (AIR) and Special Information Return (SIR);
- Provide Gosford City Council with an initial list of information that we were seeking from them;
- Provide Gosford City Council with a more detailed list of questions for discussion during the interview stage of the process;

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<sup>7</sup> Oakley Greenwood has undertaken this project in conjunction with Hunter Water Australia,

<sup>8</sup> RFQ No 12/321 and 12/320 - *Strategic Management Overview and Review of Capital and Operating Expenditure for Gosford City Council and Wyong Shire Council* - Page 13

- Undertake interviews with key staff from Gosford City Council;
- Provide Gosford City Council with supplementary questions on an as-needs basis following the interview process;
- Develop a draft report for comment; and
- Develop this final report.

## 4. Caveats on this Report

The primary focus of this report has been to identify and outline our view of the detailed inputs that should be used to derive operating and capital forecasts for Gosford City Council. At all times, our threshold test has been to provide a considered opinion as to whether we believe the proposed forecasts put forward are consistent with that which a *prudent* and *efficient* service provider would incur. For the purposes of completeness, we provide the following definitions of these two key terms:

- **Prudent:** In simple terms, this refers to the “need” or “justification” of the program, project or expenditure item. Our threshold test has been to ask ourselves whether or not we consider an efficient water or wastewater service provider, would, given the circumstances faced by Gosford City Council, choose to undertake the project/program in a similar manner, in terms of size, scale or scope, given the opportunity cost of deferring that expenditure; and
- **Efficiency:** In simple terms, this refers to the “amount” or “level” of expenditure being proposed to undertake the program, project or expenditure item. Our threshold test has been to ask whether or not we consider an efficient water or wastewater service provider, would, given the circumstances faced by Gosford City Council, have to spend that amount of money, or utilise the chosen procurement method, to undertake that proposed program or project.

Whilst we have endeavoured, as much as is reasonably possible, to seek specific answers from the Council to our questions, we have also reverted back to the information that has been provided as part of the submission, the responses to the draft report, as well as the supporting information that was provided in support of the submission. The latter primarily refers to the AIR/SIR templates. In placing significant reliance on these data sources, we are inevitably placing the onus on the regulated business to provide enough information during the submission process to demonstrate the *prudence* and *efficiency* of their proposed expenditure.

Notwithstanding the above, we note there is one key issue that has hampered our ability to undertake this review. This relates to the fact that the SIR Opex worksheet, which the businesses are required to submit to IPART as part of the overall submission has not been completely filled out. This sheet is the only consolidated information source that is designed to capture inputs from the business as to what is driving year-on-year changes in forecasts. This has meant that there are significant unexplained variances in the year-on-year changes in operating expenditure proposed by the businesses. This has made it more difficult for us to clearly understand what assumptions have been made, and how those assumptions flow into forecast operating cost figures.

## 5. Structure of this Report

This report is structured in the following manner:

- Section 6: Provides our opinion and reasoned arguments as to the prudence and efficiency of Gosford City Council's: (a) historical operating expenditure for the current regulatory period; and (b) proposed level of operating expenditure for each year between 2013/14 to 2017/18;
- Section 7: Provides our opinion and reasoned arguments as to the: (a) prudence and efficiency of Gosford City Council's historical capital expenditure for the current regulatory period; and (b) prudence and efficiency of Gosford City Council's proposed level of capital expenditure for each year between 2013/14 to 2017/18; and (c) the robustness of Gosford City Council's policies, procedures and practices in relation to the management of its assets; and (d) strategic review of Gosford City Council's long term investment plan and asset management;
- Section 8: Discusses the output measures that have been proposed by Gosford City Council; and
- Section 9: Summarises our key conclusions in relation to the operating and capital forecasts, as well as the output measures, proposed by Gosford City Council.

## 6. Operating Expenditure

### 6.1. Overview of Approach to Reviewing Operating Expenditure

Our overarching approach entailed us reviewing and critiquing the:

- Efficiency of the business' historical water expenditure;
- Baseline operating expenditure forecasts proposed by the business;
- Real cost escalators applied by the business;
- Growth drivers applied by the business;
- Impact that the business' proposed changed levels of service will have on operating expenditure forecasts; and
- Impact that Step Changes (e.g., 'Non-recurrent' costs; change in obligations) will have on the business' forecast operating expenditure.

These are discussed in more detail below.

### 6.2. Assessment of Historical Water Operating Expenditure

In assessing the prudence and efficiency of Gosford City Council's historical operating expenditure, our normal approach is to generally rely on the underlying incentives contained in the regulatory regime for businesses to minimise costs during the regulatory period, so that they can earn returns that exceed those provided for as part of the regulatory decisions.

This generally allows stakeholders (in particular regulators) to place significant weight on the revealed (actual) costs of a regulated business, such that it can be assumed that they are likely to be a reasonable approximation of efficient costs, given the circumstances faced by that regulated business, and given the outputs produced by that business. The notion that 'incentive based' regulation encourages businesses to 'reveal' their efficient costs is a ubiquitous concept across the field of economic regulation.

Notwithstanding this, it is our understanding that the Gosford City Council does not operate under any form of Efficiency Carryover Scheme, therefore, whilst there is an incentive to reveal efficient costs early in the regulatory period, there is not a continuous, symmetrical incentive for it to reveal its efficient costs throughout the entire regulatory control period. In short, the incentive reduces and potentially inverts towards the end of the regulatory control period, which limits our ability to place any material weight on the forecast 2013 costs, without thoroughly understanding the drivers of the changes between the actual 2012 costs and the forecast 2013 costs.

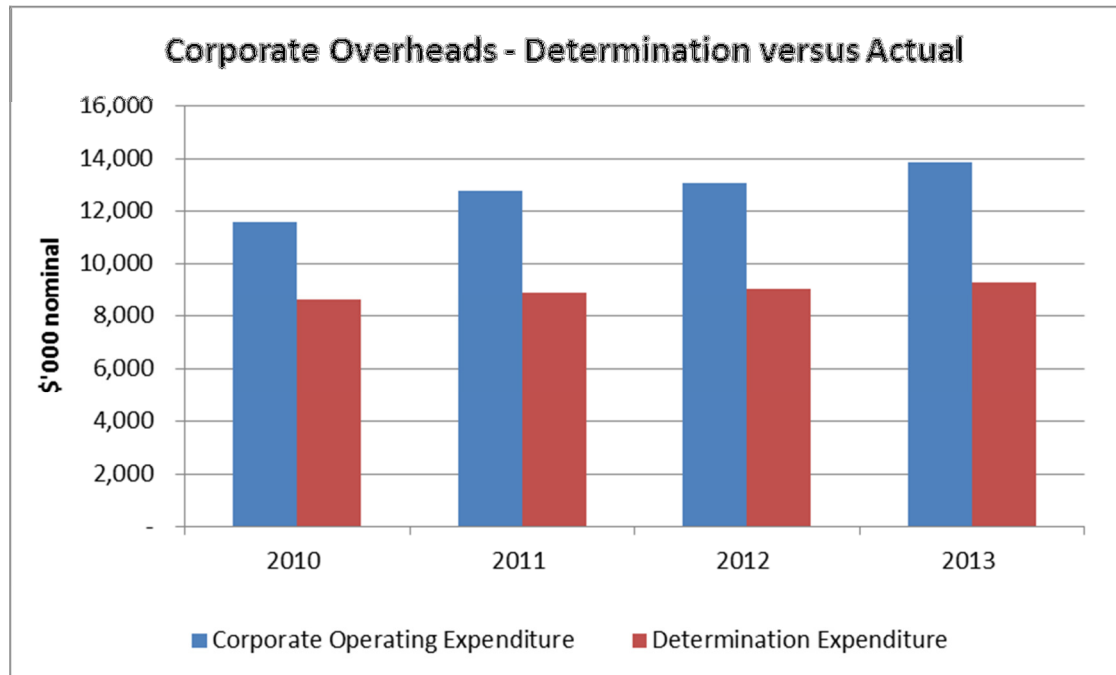
Having regard to this, our approach has been to:

- Assess the overall variance between the previous determination (or 'allowed' expenditure) and actual expenditure;
- Draw upon some high level benchmarking comparing Gosford City Council's outturn expenditure to other service providers of a similar size to assess the extent to which Gosford City Council is likely to be prudent and efficient in the delivery of their water and wastewater services; and
- Assess the extent to which changes in expenditure have occurred over the current regulatory period - particularly towards the end of the regulatory control period - and to seek explanations as to what has driven those changes.

It is noted that the last point is primarily addressed in the next section, which outlines our approach to assessing whether Gosford City Council's proposed baseline operating expenditure levels (meaning, expenditure levels for the 2013 year) are efficient.

In the case of the former, the following high level outcomes are noted by Gosford City Council in their submission.

Figure 1: Corporate Overheads - Determination versus Actual



Source: SIR Opex (Table 1.2); OGW

In its submission, Gosford Shire Council states that<sup>9</sup>:

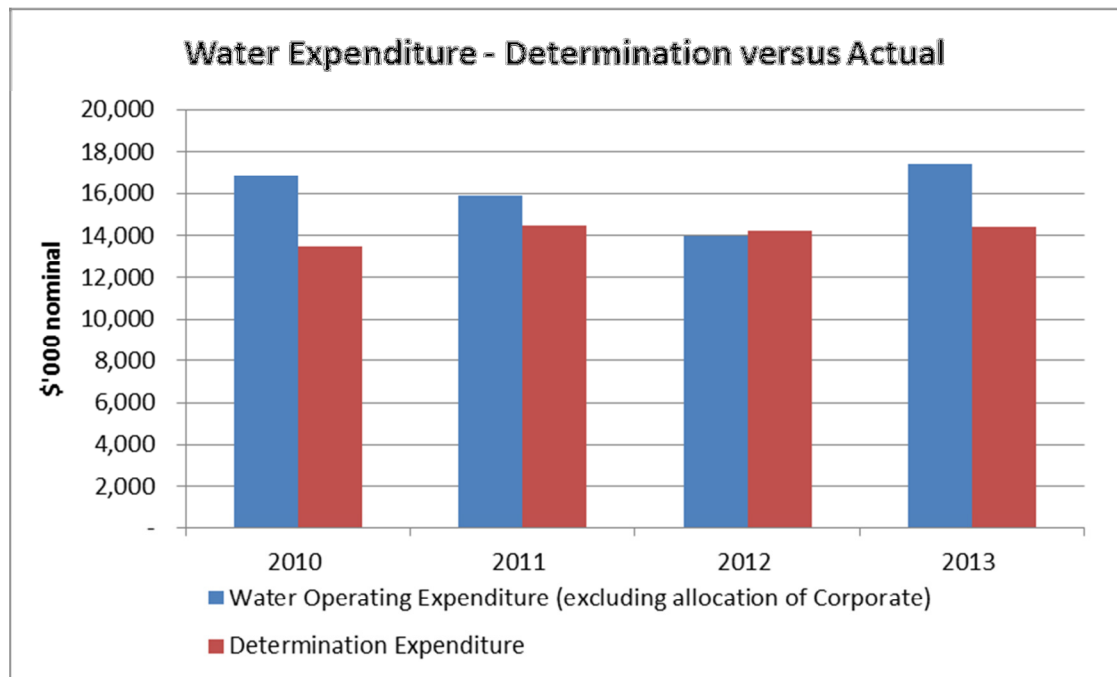
*"The corporate overhead costs presented at the last price review did not include some corporate costs such as: organisational development, risk management, internal auditing, legal services and corporate events. The inclusion of these costs in the actual corporate overheads charged accounts for a significant proportion of the increase...."*

*"additionally, cost increases associated with Information Technology (IT), building improvements and Council's WorkCover Self Insurer's Licence have also been attributed across Council's funds, increasing costs to water, sewerage and stormwater drainage".*

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Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 21

Figure 2: Water Expenditure - Determination versus Actual



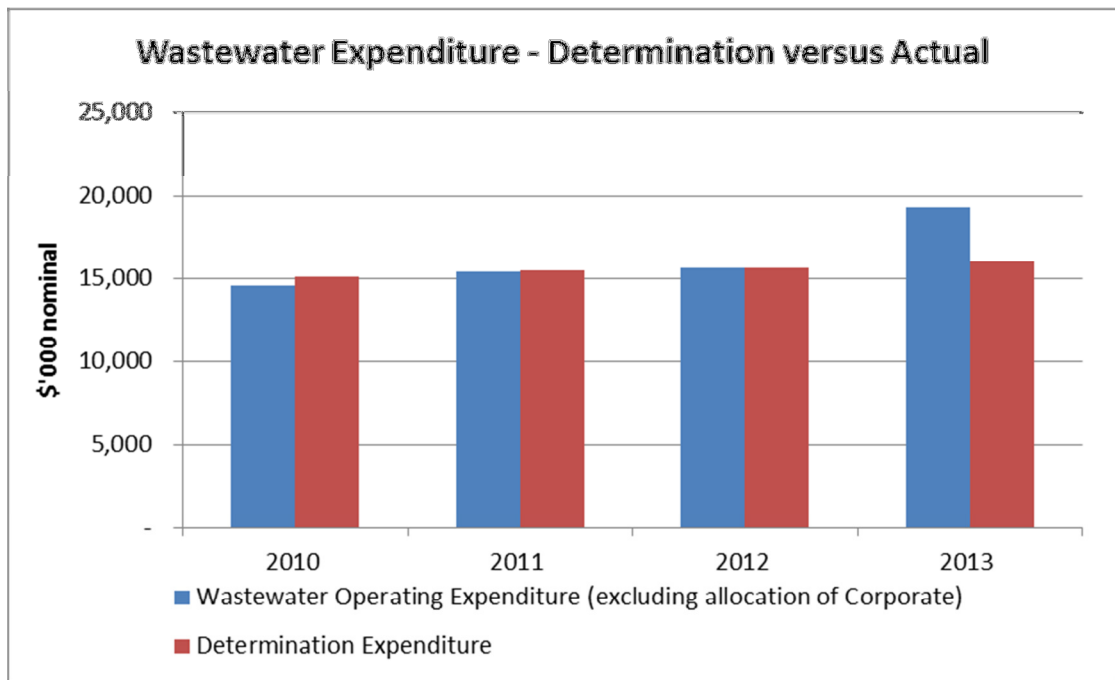
Source: SIR Opex (Table 1.2); OGW

In its submission, it list the following key drivers for the difference between the determination and actual water operating costs<sup>10</sup>:

- Increased electricity costs over and above costs forecasts due to increased electricity consumption and prices
- Joint Water Authority management and administration costs omitted in error from the Determination
- Increased purchases of water from Hunter Water Corporation in 2010.



Figure 3: Wastewater Expenditure - Determination versus Actual.

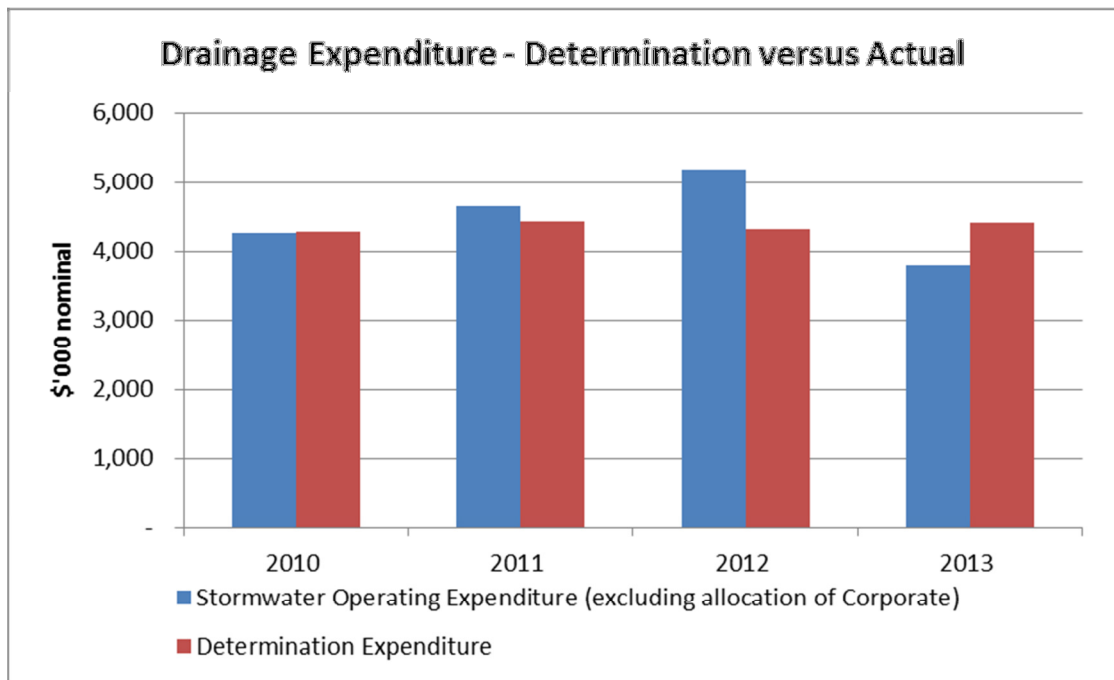


Source: SIR Opex (Table 1.2); OGW

In its submission, it lists the following key drivers for the difference between determination and actual wastewater operating costs<sup>11</sup>:

- *increased electricity costs over and above costs forecasts due to increased electricity consumption and prices*
- *increased sludge management costs following renewal of the biosolids removal contract through a competitive tender process*
- *liquid trade waste management costs omitted in error from the Determination.*

Figure 4: Drainage Expenditure - Determination versus Actual



Source: SIR Opex (Table 1.2); OGW

In its submission, it lists the following key drivers for the difference between determination and actual wastewater operating costs<sup>12</sup>:

- *increased landfill disposal costs associated with increased debris volumes and increased disposal prices*
- *increased reactive maintenance costs associated with wet weather.*

Our initial view is that the reasons provided by Gosford City Council appear reasonable. In particular, electricity prices - which feature as a driver for water and wastewater - have clearly ratcheted up significantly over the last few years. As an indicator, our analysis indicates that the average residential retail price (on a regulated tariff in NSW) has increased by around \$460, or 29%, between 2008/09 and 2010/11. Whilst we are not privy to the detailed assumptions made / accepted by IPART as part of the last determination process in relation to electricity, we consider it reasonable to assume that this has been a real driver of cost increases, over and above what was allowed for in the past determination process.

Moreover, further supporting information has been provided that confirms the increased sludge management costs following renewal of the biosolids removal contract, as well as the omission of a number of key corporate costs from the corporate overhead allocation cost pool.

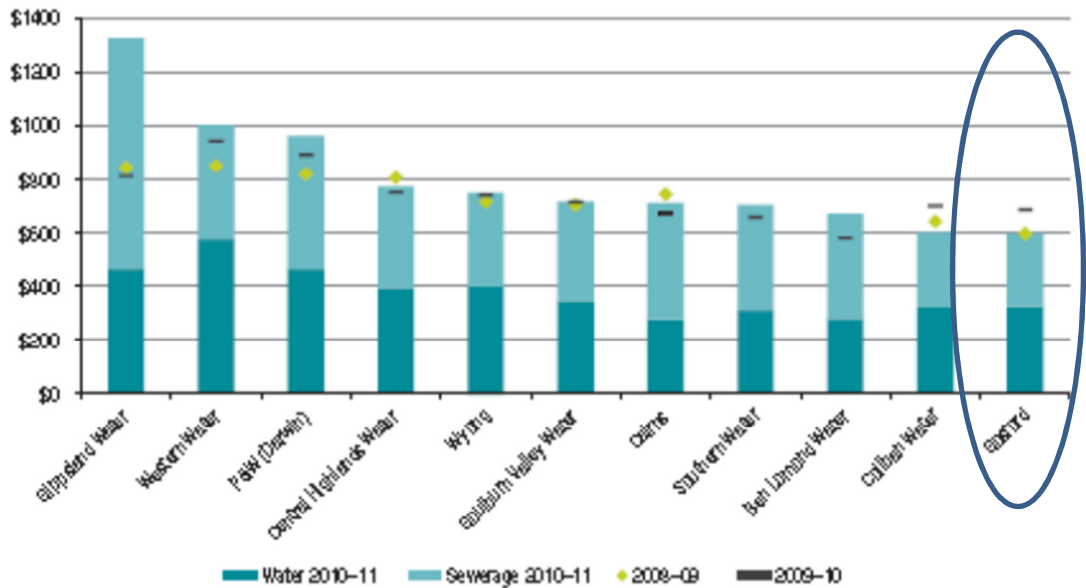
Overall, we consider the explanations provided by Gosford City Council reasonable, in the context of the operating environment that they faced over the current regulatory control period.

Notwithstanding the above, we also sought to compare Gosford City Council's overall performance relative to its peers - specifically, businesses, like Gosford, that provide water and wastewater services to between 50,000 and 100,000 connected properties.

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Ibid, pg 23

Figure 5: National Performance Reporting Statistics - Combined Operating Cost per Property

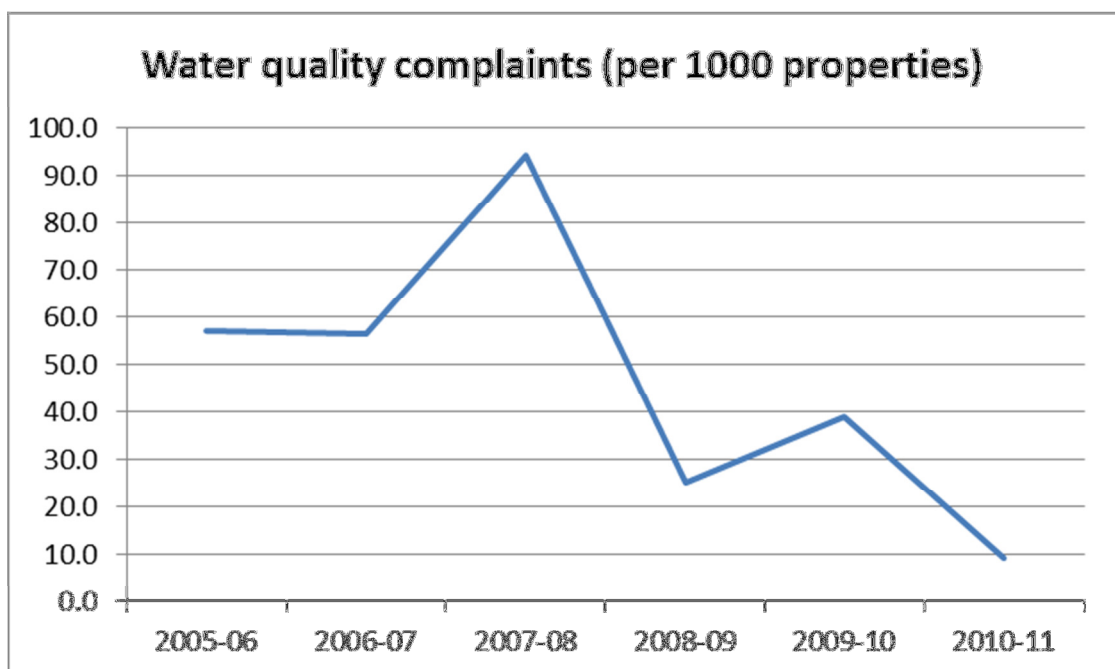


Source: National Water Commission - National Performance Report - 2010/11 - Urban Water Utilities - page 63

The above information indicates that Gosford City Council is an elite performer on the combined operating cost per property indicator, although we note in saying this, that this does not have regard to the level of service provided by the service provider, which is discussed below. This, prima facie reaffirms our previous position that there is no indication that Gosford City Council's historical operating expenditure has been imprudent or not efficient.

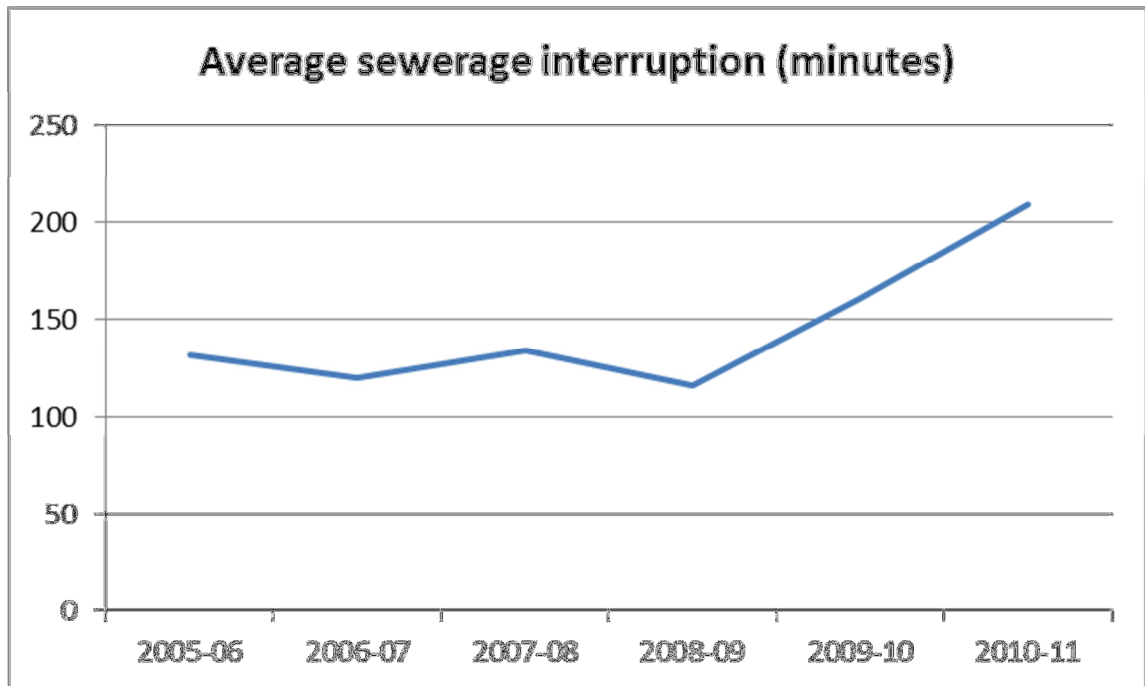
However, we also sought to assess whether there had been any noticeable diminishment in the level of service provided by Gosford City Council, given the ever inherent trade-off between cost and service. The following figures present the results based on information from the National Water Commission.

Figure 6: National Performance Reporting Statistics - Water Quality Complaints



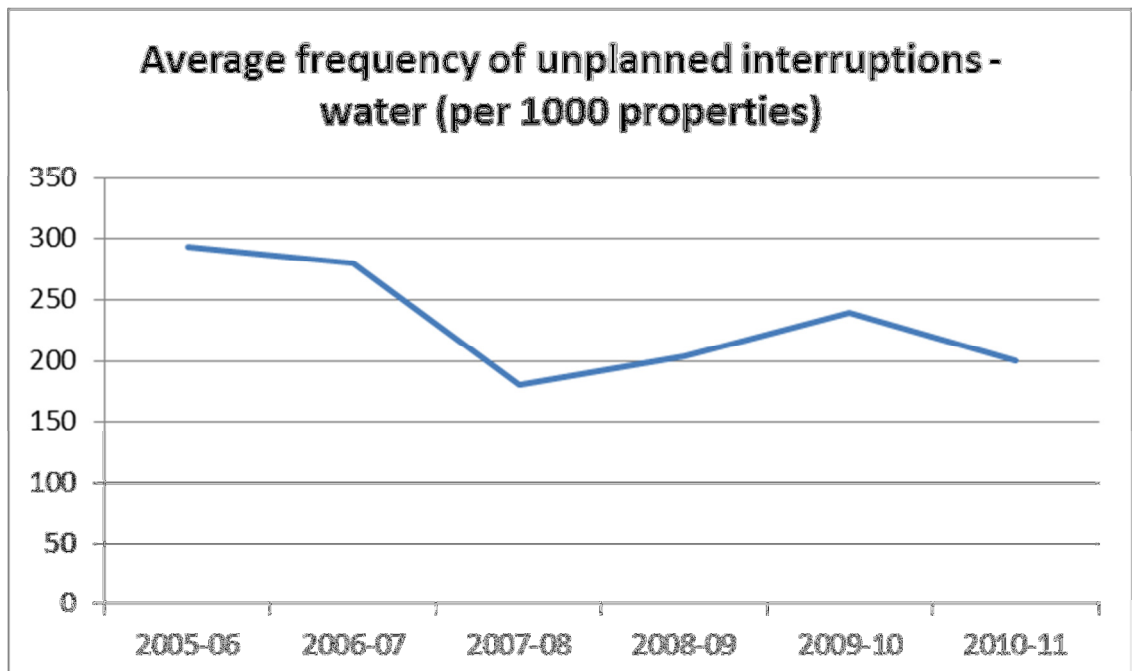
Source: National Water Commission ('Copy of Urban-NPRs-2010-11-Part-B.xls')

Figure 7: National Performance Reporting Statistics - Average Sewerage Interruptions



Source: National Water Commission ('Copy of Urban-NPRs-2010-11-Part-B.xls')

Figure 8: National Performance Reporting Statistics - Sewer Service Complaints



Source: National Water Commission ('Copy of Urban-NPRs-2010-11-Part-B.xls')

With regards to the above, whilst there has been a material increase in average sewerage interruptions over the last 2 years of the evaluation period, the other two measures have declined.

Notwithstanding this, we note that from Appendix A of Gosford City Council's submission, they are currently failing to achieve a number of the proposed levels of service as against the requirements of the 2009 Determination (listed in Appendix B of the 2009 Determination). It is difficult for us to ascertain whether this is a result of over-forecasting improvements in service levels as part of the last determination (e.g., the targets were overly ambitious), or whether this is a result of not spending money that was otherwise provided for to improve levels of service. Given that there has been no significant reduction in costs, relative to the Determination, we deduce that this is unlikely to be as a result of explicit under spending in the current regulatory period in areas where they were otherwise provided funds to improve outcomes.

In summary, whilst we have concerns over the fact Gosford City Council has not met its proposed levels of service, we do not have enough information to conclude that Gosford City Council's water, wastewater and drainage operating costs, between 2009/10 and 2011/12, are not consistent with that of a prudent and efficient service provider, given the circumstances faced by Gosford City Council over the period. In particular, Gosford City Council's performance is best practice when compared against its peers on a key cost metric - combined operating cost per property in the National Performance Reporting Statistics - and further, outturn service levels do not indicate a systematic decline in service as a result of a trade-off between cost and service. Furthermore, there is no discernible, systematic trend increase in operating costs (excluding 2013, which is discussed in more detail below) over the regulatory period.

### 6.3. Assessment of Forecast Water Operating Expenditure

#### 6.3.1. Establish efficient baseline operating expenditure forecasts - Corporate Costs

The following figure represents an extract from Table 5.2 of the AIR that Gosford City Council submitted to IPART as part of its submission.

Figure 9: Original AIR (Table 5.2) - Corporate Costs

	Financial year ending 30 June				2008	2009	2010	2011	2012	2013
	Code	NPR	I/C	Use	Unit	Actual	Actual	Actual	Actual	Actual Projections
<b>Corporate</b>										
Labour (excl employee provisions)	OA62	I	O		\$'000					
Payments to associated unregulated businesses	OA63	I	O		\$'000	9,660	10,554			
External consultants and/or contract(or)s	OA64	I	O		\$'000					
Hire services	OA65	I	O		\$'000					
Materials	OA66	I	O		\$'000					
Energy	OA67	I	O		\$'000					
Licence fees	OA68	I	O		\$'000					
BOO costs	OA69	I	O		\$'000					
Climate change fund payments	OA70	I	O		\$'000					
<agency defined>	OA71	I	O		\$'000	1,130	2,237	-		
<agency defined>	OA72	I	O		\$'000					
<agency defined>	OA73	I	O		\$'000					
<agency defined>	OA74	I	O		\$'000					
Payments to associated unregulated businesses	OA75	I	O		\$'000			11,415	12,540	12,504
Reimbursement from Wyong	OA76	I	O		\$'000					12,514
Central Coast Water Corporation establishment	OA77	I	O		\$'000			147	255	568
Rates and taxes other than income tax	OA78	I	O		\$'000					1,330
Employee provisions	OA79	I	O		\$'000					
Actuarial accruals to defined benefit schemes	OA152	I	O		\$'000					
Other (total of all items smaller than 5% of total operating expenditure)	OA140	I	O		\$'000					
Total operating expenditure		C	O		\$'000	10,790	12,791	11,562	12,795	13,073
										13,844

Source: AIR Table 5.2

As can be seen from the above, the amount of direct corporate overheads that Gosford City Council is proposing to allocate back into the regulated water and wastewater business in 2013 of \$12.514M is very similar to historical levels of \$12.504 in 2012 and \$12.540 in 2011. Further, we note that the increase in overall corporate costs relates to the costs associated with establishing the CCWC. This is discussed in more detail in a later section of this report.

Overall, the movements in corporate costs in 2013 do not provide any indication that it has responded inappropriately to the incentives faced under their regulatory regime when setting those 2013 costs.

That said, this does not mean that these 2013 costs can automatically be deemed to be consistent with the costs that a prudent and efficient service provider would incur. In particular, the extent to which the appropriate corporate costs in 2013 are being allocated back into the water and wastewater business, and the methodology used to undertake that allocation process, need also to be reviewed, particularly given the somewhat subjective nature of the derivation of the overall cost pool, as well as the approach to allocating those costs.

Having regard to this, we have reviewed the detailed accounts that make up the corporate costs that are then subject to allocation, as well as the allocation methodology and percentages, with a view to assessing whether Gosford City Council has:

- Adopted an economically justifiable basis for allocating common (fixed) costs between different business units. For example, has it adopted a methodology for apportioning common costs that is based on a robust, economically reasonable basis for apportionment (i.e., revenue share, activity based costing process; share of asset value; share of staff numbers), given the characteristics of the service provided? This ensures that customers procuring regulated services are not subsidising the provision of non-regulated services; and
- Removed the direct costs associated with providing non-regulated services from its forecast operating costs, with this being based on a 'direct line of sight' approach (i.e., direct nexus between service and cost).

Furthermore, in undertaking this assessment, we probed what the fundamental driver was for the cost to be incurred, and furthermore, would a standalone council (e.g., a General Purpose Council under the Local Government Act) continue to have to incur that cost, once the water and wastewater business was separated out (if not, the cost should be allocated directly to the water business).

Having regard to the above, upon review of the information provided by Gosford City Council, there are a number of aspects of Gosford City Council's cost allocation methodology that are of concern to OGW, given the overarching prudence and efficiency objectives. These include:

- Allocation of Directorate costs;
- Inclusion of costs that do not relate to the water and wastewater business; and
- Reallocation of 'General' costs back into the water and wastewater business.

We have also investigated a number of other issues, including:

- Allocation of corporate costs to each of the three products provided - water, wastewater and drainage;
- Related party transactions; and
- Gosford City Council's capitalisation policy.

Each of these issues is discussed in further detail below.

#### Allocation of Directorate Costs

It is our understanding that Gosford City Council is structured into five main areas (Directorates) of operation under the guidance of the General Manager. These are<sup>13</sup>:

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Gosford City Council Delivery Program 2011/12 - 2015/16 - Bridging Year 2011/12 & Council Electoral Term 2012/13 - 2015/16 - Slides 9-10

- Corporate Services: This Directorate manages finance, information management and technology, supply, contract management, legal services, property services, and the secretariat.
- Environment & Planning: Integrated planning, business services, development, education and compliance, the City Centre Masterplan and the independent development environment panel are managed by this Directorate.
- Community Services & Organisational Development: The responsibilities of this Directorate are community development, library services, arts and culture, customer services and communications, organisational development, the internal auditor, and the Mayor and Councillors' assistants.
- City Services: This Directorate is responsible for waste services, engineering services, construction operations, maintenance services, emergency services, fleet services, and open space and leisure services.
- Water & Sewer: The responsibilities of this Directorate are asset management and planning, regulatory services, operations, the performance management team, and the technical support team.

There is also a General Manager that sits across all Directorates, who is responsible for the efficient and effective operation of the Council's organisation and ensures the implementation, without delay, of decisions of Council.

Some costs, for example, those costs that relate to broader senior management costs (e.g., salaries of the General Manager), are allocated to the broader cost driver of "Directorate". Within the model that underpins the derivation of Gosford Council's forecast costs, an assumption of 12% is used to allocate costs into both water and sewerage. Whilst OGW considers the use of the "Directorate" cost driver as being a reasonable proxy for the allocation of costs that "cut across" all of Council's function, it notes that the 25% (12% water plus 12% sewerage plus 1% stormwater) is not underpinned by any reasoned analysis of endeavour or effort. In the absence of this, we consider that a reasonable approach would be to split these costs based purely on the number of Directorates. This approach would lead to a total allocation of 20% to water and sewerage combined, with a further allocation to Stormwater. It is noted that Gosford has acknowledged this as a potential issue, as they are proposing to reduce this from 12% down to 10% (for each of water and sewerage) over the next regulatory period. The rationale (stated during the meetings) for not doing this immediately was because of the financial impact of such a decision on the broader Council operations.

Despite the concern expressed by Gosford City Council above, our overarching objective is to assess the prudence and efficiency of the water and wastewater costs, not the financial capability of the broader Council to cope with a change to an assumption or financial parameter. Therefore, our draft recommendation pertaining to this issue was that Gosford City Council's corporate overhead expenses that are allocated back into the water and wastewater business are a maximum of 10% of total costs allocated to the 'Directorate' cost driver for each of the regulated water and sewerage businesses, and that this be adopted immediately (that is, no glide path approach be adopted to phase in this change).

In response to the Draft Decision, Gosford City Council stated that<sup>14</sup>:



*'Council does not waiver from its intent to remedy this matter and reduce the "Directorate" allocation back to a total of 20% for Water and Sewer by 2016. Council seeks that the 'glide path approach' to remedy this matter remains.'*

From the above statement, we infer that the Council accepts that the current allocation is inappropriate - their issue is with regards to the timing of the reduction (straight away, or over time). As stated previously, our remit is to assess the prudence and efficiency of the water and wastewater costs, not the financial capability of the broader Council to cope with a change to an assumption or financial parameter, therefore we maintain the position put forward in the Draft Report that, in developing forecasts for the next regulatory period, this change be made immediately.

#### **Inclusion of costs that do not relate to the water business**

We noted in our draft report that there are a number of accounts that are embedded within the Corporate Overhead costs that, prima facie, appear to have no relationship to the delivery of water, wastewater or drainage services. These are:

- Costs related to the election of Council Officials:
  - Grants - Grants Officer
  - Transfer to Elections Reserve
  - Mayoral - Community Group Donations
  - Corp Dev - Mayor/Councillor Support
- Costs primarily driven by Council Branding, not water and wastewater provision<sup>15</sup>:
  - Annual Donation To Cc Kids Day Out
  - Expense - Gosford Festival (081)
  - Sponsorship
  - Youth Week
  - Other Events Sponsored
  - Exhibitions
  - Cc Business Awards-Sponsorship
  - New Years Event Expenses
  - Cultural Badges Expenses
  - Carols Expenses
  - Australia Day Expenses
  - Sister City Cultural Exchange
  - Sister City Cultural/Sporting Exp
  - Local Government Week Expenses
  - Race Day Expenses
  - Flora Festival Expenses

<sup>15</sup> We note for transparency that a number of these account do have zero values in them, and thus, are not contributing to the overall corporate costs that are being allocated into the water and wastewater business.

- Gcc Garden Competition
- Christmas Event Expenses
- Fireworks Expenses
- Misc Awards Expenses
- Keep Australia Beautiful
- Community Newsletter (Qtly)
- Comm Dev - Donation Gosfd Showground

There are a number of reasons why we considered that the aforementioned accounts are not related to the provision of water and sewerage. In relation to the first category of accounts, whilst we understand the Councillors currently have overall corporate governance responsibility for the water and wastewater business, we considered that the specific costs identified above are a function of elections and grants to community groups, not the fulfilment of their corporate governance role. That said, in response to the draft report, Gosford City Council provided further information with regards to the role of the 'Grants Officer' - paraphrasing, the role is not to provide grants to community groups, but rather, the primary role of the Grants Officer is to facilitate funding for Council through various programs, which does relate to the provision of water and sewerage services. We accept this position.

In relation to other election related expenditure, they stated that<sup>16</sup>:

*'The election process is a legitimate and legislated method to select the governing body of the water, sewerage and drainage businesses. It should be likened to the recruitment of a governing board of a corporation. A share of the costs relating to the elections process should be recovered'.*

We are not swayed by this analogy. Whilst the Councillors fulfil the governance role, like an independent board, the process for selecting them is in no way consistent with the selection process that would occur for a stand alone, prudent and efficient water and wastewater service provider. The elections process is a unique process, directly attributable to the Council.

Therefore, except for the costs associated with the 'Grants Officer', we consider the aforementioned costs related to the election of Council Officials to be inconsistent with the roles, responsibilities and financing requirements of a standalone water and wastewater business, therefore, we do not consider that a prudent and efficient service water and wastewater service operator would incur such costs.

In relation to the second category of expenses, prima facie, we did not consider these to be consistent with the expenditure items that would be incurred by a prudent and efficient water and wastewater business. In the main, there is little, if any nexus to the provision of water and wastewater services. This is particularly considering the broader environment within which these costs are incurred (i.e., the Council, as a General Purpose Council). Council did not comment on this in their response to the draft report.

Further to the above, in developing the draft report, we sought further information on a number of other accounts, including<sup>17</sup>:

- 'Finance - Rates'

<sup>16</sup> Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

<sup>17</sup> Email to Michael Ebert on Thu 18/10/2012 9:49 AM

- 'Depreciation chambers/office'
- 'Reporting'
- 'Events'
- 'Operational'
- 'Integrated planning manager salary'
- 'Integrated planning mgr pa salary'
- 'Integrated planning manager vehicles'
- 'Trsfer to integrated planning reserve'

In relation to the first category of costs - 'Finance - Rates' - we asked Gosford City Council for more information on the nexus between this account, and the provision of water and wastewater services, and in particular, how this account compared with the 'Finance - Water Billing' account which is allocated fully to water and wastewater. In response, they stated that<sup>18</sup>:

*"The account 00060.752 FINANCE - RATES relates to costs for the raising of the annual charges to ratepayers. Included in this account are printing and posting costs. The rates section levy the water, wastewater and stormwater annual service charge components on the annual rate notice and answer ratepayer queries concerning these items.*

*The account 00060.749 FINANCE -WATER BILLING relates to the volume driven charges for Water and Wastewater. Included in this account are the meter readers' expenses and the printing and postage of the water (volume driven) charges."*

It appears from the above description that both accounts pertain, to varying degrees, to the provision of regulated water and wastewater services. Therefore, we consider this to be consistent with the costs that a prudent and efficient service provider would incur.

In relation to the second category of expenses - *Depreciation Chambers/Office* - our initial query stemmed from a view that by including this cost category, as well as the accommodation expenses charged to the water and wastewater business for the use of this building, that there was the potential for the double counting of accommodation costs in the forecast operating expenditure forecasts. We sought further information from Gosford City Council on this issue, and in response, they stated<sup>19</sup>:

*"This account does flow through to the opex forecasts as part of the Corporate Overheads Charge.*

*This account covers the Depreciation on the Chambers/Office (49 Mann Street). Water, Wastewater and Stormwater occupy space within this building and utilise various meeting rooms on all levels. The Depreciation costs are utilised to cover major renewal work/repairs and maintenance on the building.*

*Water & Sewer are charged accommodation costs for 49 Mann Street which is based on a rental of the accommodation and funds are utilised to cover minor repairs and operating costs of all the accommodation used by Water, Wastewater and Stormwater."*

<sup>18</sup> Email from Elizabeth Knight on Thu 25/10/2012 8:33 AM

<sup>19</sup> Ibid

Taken on face value, the above statements indicate that there is not a double count of costs, given one covers the funding of minor renewals/works, whilst the other is used to cover major renewals / works, as well as the broader opportunity cost of providing accommodation to the water and wastewater business. Overall, we accept that a prudent and efficient water and wastewater provider must provide appropriate levels of accommodation to its staff. However, we do consider it unusual that the lessee is required to cover the cost of major renewals work (i.e., that this is not, in effect, capitalised into the per month or per annum lease amount). The magnitude of the overall accommodation costs are discussed in a latter section of this report.

In relation to the third category of costs - 'Reporting' - Gosford City Council provided the following response<sup>20</sup>:

*"Generally, this account is used for expensing items relating to the publication of a variety of Council reports - these can include, but are not limited to: media statements, public service announcements, etc.*

*In 2011/12 the following items have been costed to this account: (a) Publishing software; (b) Publications, books and subscriptions; (c) Consultants; (d) Photography; (e) Printing; and (f) Advertising."*

Based on the above information, it would appear that this is predominantly a function of the operations of the Council, acting as a General Purpose Council, not as a water and wastewater service provider. Our draft recommendation was that this be removed from the corporate cost pool that is allocated to the regulated water and wastewater business. Council made no comment when responding to the draft report.

In relation to the fourth category of costs - 'Events' - Gosford City Council provided the following description<sup>21</sup>:

*"This account is used for expensing all items relating to planning and carrying out a variety of Council events. Last financial year this account was used the expense corporate event costs relating to the Australia Day Community Awards, 2012 Christmas Parade, New Years Eve Celebrations to name a few.*

*In 2011/12 the following items have be costed to this account: (a) Catering; (b) Power supply; (c) Signs and traffic guidance devices; (d) Labour costs; (e) Cleaning products; and (f) Publications, books and subscriptions"*

Based on the above information, we drew the conclusion in the draft report that it appeared that this is predominantly a function of the operations of the Council, acting as a General Purpose Council, not as a water and wastewater service provider. Our draft recommendation was that this be removed from the corporate cost pool that is allocated to the regulated water and wastewater business. In response to the draft report, Gosford City Council stated that<sup>22</sup>:

*"Whilst we acknowledge that this service predominantly relates to other general Council services, the predominant amount of this cost is being charged to the General Fund. Council considers an appropriate amount of these costs are being allocated to Water and Sewer to account for representation of the Water and Sewer businesses at community events."*

20 Ibid

21 Ibid

22 Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

We are not convinced by this response. In particular, the response provides no substantive evidence as to why, or how, water and wastewater benefits from the incurring of these costs, therefore, we are unable to recommend that a prudent and efficient water and wastewater service provider would in fact incur such costs.

In relation to the fourth category of costs - 'Operational' - Gosford City Council provided the following description<sup>23</sup>:

*"This account is used for expensing all general costs relating to the general running of the Communications unit.*

*In 2011/12 the following items have been costed to this account: (a) Overtime/Casual Labour; (b) Consultants; (c) Membership fees; (d) Subscription fees; (e) Mobile phone; (f) Publications and books; and (g) Stationary."*

We consider that it is reasonable to assume that a standalone water and wastewater service would incur some costs stemming from the need to communicate with their key stakeholders, therefore, we recommended in our draft report that this be allowed to be retained in the corporate cost pool that is in turn allocated to the regulated water and wastewater business.

In relation to the sixth category of costs - 'Integrated Planning' - Gosford City Council provided the following description<sup>24</sup>:

*"The Integrated Planning area ensures planning and reporting activities are undertaken in accordance with the Local Government Act 1993 and the Local Government (General) Regulation 2005 and manages strategic aspects of the Environmental Planning and Assessment Act e.g. land use planning. Essentially, Integrated Planning's role is to prepare and report on the implementation of plans which outline the community's aspirations, the Council's vision and the delivery of these.*

*To meet the community's aspirations and the Council's vision, Council is required to deliver water and sewer services in a manner which protects the natural environment, uses resources responsibly, meets expected levels of service, future demands and challenges such as the impact of climate change. The Integrated Planning area assists with planning how water and sewer services will be provided in the future by providing population projections/data and the interpretation of census data to assist in identifying growth areas and the timings of development activities.*

*The annual transfer to Integrated Planning Reserve is to fund recurrent projects & special projects that occur on a cycle greater than one year.*

*The Reserve is also used for:*

- Engagement of consultants to undertake high priority specialist & or State Government priority projects.*
- Updating of population and/or other planning data and projections following census and other national or regional updating activities.*
- Upgrades/Updates for essential corporate and/or statutory reporting or planning software.*
- Preparation of Business Plans for new Development contributions Plans or Levies."*

23 OpCit

24 Ibid

There were two reasons for questioning these costs in the first place. The first related to the description of actions that were identified as falling into Integrated Planning in a recent Council Delivery Program document. The actions that were against Integrated Planning included<sup>25</sup>:

- *“Prepare, produce and maintain studies and plans related to social planning, environment planning, coastal & estuary planning, flooding and drainage, landuse planning, climate change adaptation and transport & infrastructure planning matters and guide implementation”*
- *“Undertake research related to economic development, social planning, environment planning, coastal & estuary planning, flooding and drainage planning, landuse planning, climate change adaptation, corporate planning and transport & infrastructure planning matters”*
- *“Participate in and support working groups and stakeholder relationships”*
- *“Prepare and maintain Development Contributions Plans, levies and voluntary planning Agreements”*
- *“Prepare and produce Capital Works Budget”*
- *“Prepare and produce Corporate Planning and reporting documents”*
- *“Facilitate Service Level Reviews”.*
- *“Manage corporate reporting and monitoring systems.”*

Secondly, we noted that there was an apparent inconsistency between the first allocation and secondary allocations that are undertaken by Gosford City Council in the ‘Corporate Overhead Model’. In particular, the first allocation of corporate costs sees the costs associated with Integrated Planning allocated based on the ‘Major Funds’ cost driver, which in turn is based on the proportion of recurrent expenditure budget. This leads to some costs associated with Integrated Planning being allocated to water and wastewater. However, in undertaking the secondary allocation of the “general allocations” that get allocated to Integrated Planning costs, there is no further allocation of those costs into water and wastewater. Prima facie, this appears to be an inconsistent treatment of this expenditure item.

In response to the draft report, Gosford City Council provided the following response:

*“Council acknowledges this inconsistency in allocating secondary allocations for integrated planning and will remedy this during the next annual review of the overheads model. The Integrated Planning costs should remain as the Water and Sewer businesses of Gosford City Council, whilst regulated under the Water Management Act is also subject to compliance with the Local Government Act as part of Gosford City Council. This includes production of the Integrated Planning and Reporting suite of documents. Water, Sewer and Drainage are recognised and reported on in these required documents.”*

25

Gosford City Council Delivery Program 2011/12 - 2015/16 - Bridging Year 2011/12 & Council Electoral Term 2012/13 - 2015/16

Consistent with the recommendation made in our draft report, we have significant reservations with regards to the inclusion of the costs associated with this function in the cost pool that is allocated back into the regulated water and wastewater business. In particular, it is still unclear, even from Gosford City Council's response to the draft report, why we would consider this cost to be a consistent with the expenditures that would be incurred by a prudent and efficient water and wastewater service provider, when the obligation is not a function of the Water Management Act, which are the obligations that specifically relate to the provision of water and wastewater services, and which would clearly be imposed on any water and wastewater service provider (i.e., whether a standalone authority, or a Council run authority). We also note that the secondary allocation of the 'Integrated Planning' costs that are first allocated to 'General' does not include any allocation to water and wastewater.

Based on the above information, we continue to recommend that this inconsistency be rectified by removing the costs associated with this function from the direct allocation to water and wastewater services.

#### Reallocation of 'General' costs back into the water and wastewater business.

Whilst the Cost Allocation Model directly allocates some costs to water and wastewater, many of the costs are allocated into the "General" category of costs. This category then gets reallocated to a raft of business units, for example, 'Finance', 'Contract', 'Legal' and 'Property'. Whilst Gosford has explicitly excluded the reallocation of some of these costs back into the water and wastewater business - for example, costs pertaining to 'Integrated Planning', 'Education' and 'Recreation Natural', it has allocated others such as 'Finance', 'Fleet' and 'Legal' based on the number of Directorates.

In its draft report, OGW outlined two issues that it had with this approach:

- There is an inconsistent allocation % applied, depending on the business unit (e.g., 9% of Finance is allocated to water and wastewater respectively; whilst 12% of 'Legal' and 'Fleet' are allocated to water and wastewater; and it is stated that both are based on Directorates); and
- In many cases, the allocation percentage does not relate back to the number of Directorates, which, as explained previously, would lead to a 10% allocation to both water and sewerage.

In response to the draft report, Gosford City Council stated that<sup>26</sup>:

*'Council acknowledges this inconsistency in allocating secondary allocations and will remedy this during the next annual review of the overheads model'*

Consistent with the recommendation made previously, and with the findings in our draft report, we consider that in the absence of a direct allocation methodology - for example, one that is underpinned by a reasoned analysis of endeavour or effort - the only reasonable approach is to allocate these costs based on the number of Directorates. This would lead to this allocation percentage changing to 10% for all secondary allocations that are reasonably able to be apportioned to water and wastewater, and which are driven by the number of Directorates.

Finally, it is noted that there is one hardcoded figure in the IM&T. Whilst this not ideal, from a transparency perspective, we do not consider this to be material (\$20,000), therefore, no change is proposed.



## Allocation of Corporate Costs to Water, Wastewater and Drainage

As background, it is noted that once the total amount of corporate costs is calculated for 2013, these costs are then allocated to each of the three products being regulated – water, wastewater and drainage. The following table outlines the percentages allocated historically.

Figure 10: Original AIR (Table 5.2) – Corporate Allocations to Water, Wastewater and Drainage

	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Projections
<b>Allocation of corporate opex to:</b>					
- water - conventional	43.0%	46.4%	50.1%	51.3%	49.5%
- desalinated					
- recycled water - Section 16A related					
- other					
- wastewater	50.7%	46.0%	41.5%	40.8%	42.8%
- stormwater	6.2%	7.6%	8.4%	7.9%	7.7%

Source: AIR Table 5.2

We make two observations on the above percentages being allocated to each of the products:

- They are consistent across the last few years; and
- They are broadly consistent with the allocation of costs that is used by Wyong Shire Council.

Overall, we generally consider the allocation percentages proposed for 2013 reasonable, and therefore, consistent with the allocations that would be made by a prudent and efficient service provider.

## Related party transactions

A key related party transaction is the lease of buildings from Council. Notional rents have been calculated, and included in the forecast. Based on the documentation provided in the spreadsheet, the rates that are used as the basis for deriving these rental agreements appear reasonable, and thus, are deemed to be consistent with a prudent and efficient service water and wastewater service provider.

Therefore, no change to 2013 corporate costs is recommended in relation to this issue.

## Capitalisation policy

It is our understanding that Gosford City Council is not proposing to change its capitalisation policy for the forecast regulatory period.

Therefore, this issue does not impact on 2013 corporate costs (or direct water/wastewater/drainage).

## Conclusion - 2013 Corporate Costs

Based on the reasons set out above, we are unable to deem that Gosford City Council's proposed 2013 corporate costs to be consistent with that which a prudent and efficient service provider would incur.

We recommend that three changes be made:

- The 'Directorate' cost driver for each of the regulated water and sewerage businesses be 10%, and that this be adopted immediately (that is, no glide path approach be adopted to phase in this change);
- The allocation percentage for all secondary allocations that are reasonably able to be apportioned to water and wastewater, and which are driven by the number of Directorates, be changed to 10% for each of water and wastewater; and

- That a number of accounts, including: the category of accounts that we have defined as '*Costs related to the election of Council Officials*' (excluding the 'Grants Officer') and '*Costs primarily driven by Council Branding*', as well as '*Reporting*', '*Events*' and accounts related to '*Integrated Planning*' be removed from the overall corporate cost pool that is in turn allocated back into the water and wastewater business.

### 6.3.2. Establish efficient baseline operating expenditure forecasts - Water

The following figure represents an extract from Table 5.2 of the AIR that Gosford City Council submitted to IPART as part of their submission.

Figure 11: Original AIR (Table 5.2) - Water

Table 5.2 - Operating Expenditure of Regulated Business Activities by Item (\$'000)						
Water - conventional	2008	2009	2010	2011	2012	2013
	Actual	Actual	Actual	Actual	Actual	Projections
Labour (excl employee provisions)	4,419	4,928	8,630	7,913	8,910	11,638
Payments to associated unregulated businesses			-	(58)		
External consultants and/or contract(or)s	266	506	543	536	360	471
Hire services	1,931	1,135	2,278	3,166	3,644	4,759
Bulk water purchases / water costs	71	202	1,497	300	128	503
Materials	2,831	3,688	3,871	3,763	2,032	2,356
Energy	856	942	1,303	1,456	1,303	1,999
Licence fees	-	-	-	176	448	462
BOO costs			-			
Climate change fund payments			1,050	1,050	-	
<agency defined>	3,962	3,907	-			
<agency defined>			-			
<agency defined>			-			
<agency defined>			-			
Payments to associated unregulated businesses			-			
Reimbursement from Wyong			(3,096)	(3,274)	(3,433)	(4,750)
Central Coast Water Corporation establishment			-			
Rates and taxes other than income tax	356	391		449	454	
Employee provisions	994	1,397	149	158		
Actuarial accruals to defined benefit schemes						
Other (total of all items smaller than 5% of total operating expenditure)	-	(51)	632	236	159	
Allocated portion of Corporate opex	5,171	5,505	5,364	6,412	6,705	6,854
Total operating expenditure for water - conventional	20,857	22,550	22,221	22,283	20,709	24,292

Source: AIR Table 5.2

As part of the preliminary suite of questions, we sought the following information<sup>27</sup>:

- What is the driver for the ~30% nominal increase in labour costs in 2013, relative to 2012?
- Is the above labour cost increase linked to the ~135% increase in 'Customer/support services' costs in 2013, relative to 2012, outlined in the 'Opex by function' sheet within the AIR? If so, consistent with the above request, please provide details of what is driving this increase?
- What is the reason for the increase in 'Hire services' (Opex by Item):
  - In 2013, relative to 2012, specifically; and
  - More broadly, throughout the current regulatory period.

- *Materials increase: What does the increase in materials costs in 2013, relative to 2012, pertain to?*
- *Licence fees: Can you confirm that this increase in 2012 primarily relates to your comment in the submission that “the costs of water licences issued by the NSW Office of Water have increased significantly over the current Determination period. These increased licensing costs will continue to be incurred by Council in the next Determination period”. If not, can you identify what did drive that increase?*
- *The SIR Opex sheet (related to water) has a broad category devoted to ‘electricity costs’ driving the increase from 2012 to 2013 - can you split this out between the impact that marginal price increases have, versus the impact that consumption increases (say due to more pumping) have (which is consistent with your comments on page 22 that the ‘factors contributing to increased water operating expenditure include... increased electricity costs over and above costs forecasts due to increased electricity consumption and prices’)?*

In order, Gosford City Council provided the following reconciliations in response to the above questions.

Figure 12: Reconciliation of Water Labour Costs

LABOUR - OW62	2012	2013	2014
Labour Costs	8,909,772	11,638,231	12,166,061
Recovery On-Costs included in Labour costs	- 967,317		
Depot Budgets 50% should be in Sewer but 100% in Water		74,520	
Vacant Positions included in Budget but not 2012 actuals		235,474	249,934
	9,877,089	11,328,238	11,916,127
WYONG JWS PAYABLE BY GOS DAMS AND WEIRS	206,668	289,571	284,749
WYONG JWS PAYABLE BY GOS PUMP STATIONS	645,679	753,988	662,113
WYONG JWS PAYABLE BY GOS MAINS			242,085
WYONG JWS PAYABLE BY GOS GROUNDWATER	284,573	202,235	
WYONG JWS PAYABLE BY GOS TREATMENT	968,755	1,144,140	1,982,374
WYONG JWS PAYABLE BY GOS PROGRAM MGT	294,014	435,249	870,913
<b>TOTAL WYONG JWS PAYABLE BY GOSFORD</b>	<b>2,399,690</b>	<b>2,825,183</b>	<b>4,042,234</b>
	7,477,399	8,503,055	7,873,894
Year on Year Increase		13.7%	-7.4%
2014 to 2012			5.30%

Source: Copy of Reconciliation of key opex by item and function categories.xls

Figure 13: Reconciliation of Water Customer Service

WATER CUSTOMER SERVICE - OW36	2012	2013	2014
<b>Cust Services Costs</b>	<b>1,980,955</b>	<b>4,707,991</b>	<b>4,349,531</b>
Recovery On-Costs included in Labour costs	- 533,915		
Loan Equalisation to Wyong	-	841,928	
Depot Costs 50% should be in Sewer but 100% in Water		329,988	
Incorrect inclusion of 38500.862 PLANT/TOOL SURPLUS/DEPREC-BUDGET PURPOSE in 2012	- 435,574		
<b>Adjusted Totals</b>	<b>2,950,444</b>	<b>3,536,075</b>	<b>4,349,531</b>
WYONG JWS PAYABLE BY GOS PROGRAM MGT	294,014	435,249	870,913
Embedded Cost of Carbon Tax			105,730
Vacant Positions included in Budget but not in 2012 actuals		235,473	243,126
additional exp in 38104.600 ASSET MANGT - CONSULTANTS/INVESTIGATION			119,798
Additional expenses for finance improve financial mangement and access price regulation assistance		29,735	36,829
additional training costs		- 42,352	53,835
	<b>2,656,429</b>	<b>2,877,969</b>	<b>2,919,300</b>
Year on Year % Change 2014 to 2012		8%	1%
			9.90%

Source: Copy of Reconciliation of key opex by item and function categories.xls

Figure 14: Reconciliation of Water Hire Services

WATER HIRE SERVICES OW65	2010	2011	2012	2013	2014
		39%	15%	31%	5%
<b>Hire Services</b>	<b>2,277,581</b>	<b>3,165,756</b>	<b>3,643,524</b>	<b>4,759,360</b>	<b>5,000,381</b>
32611.110 WMN RETIC CIVIL MAINT	429,027	1,196,285	1,200,045	2,051,032	1,187,081
33600.430.613 JWS - WTP SOMERSBY - SLUDGE MANAGEMENT	93,485	104,298	124,700	155,521	1,254,877
34615.110.613 WSL METER CIVIL MAINT	117,437	129,459	232,460	804,212	170,378
30617.458.613 JWS GRANT UPPER MANGROVE RIPARIAN(54-65)	-	6,094	95,639		22,126
30628.406 JWS - DAM UMOON - DAM SAFETY REVIEW	-	106	154,037	135,928	60,911
OPERATIONS PLANT HIRE CHANGES	81,045	92,040	33,964		63,238
Accounts where hire services were not specifically budgtd for in 2013 but are in 2014					304,119
	1,556,586	1,637,475	1,802,679	1,612,667	1,937,652
		5%	10%	-11%	20%

Source: Copy of Reconciliation of key opex by item and function categories.xls

Figure 15: Reconciliation of Water Materials

WATER MATERIALS OW66	2010	2011	2012	2013	2014
		-3%	-46%	16%	5%
<b>Materials</b>	<b>3,870,808</b>	<b>3,762,862</b>	<b>2,031,514</b>	<b>2,355,909</b>	<b>2,464,980</b>
Loan Equalisation to Wyong	38970.761 -	1,606,780			
Embedded Cost of Carbon Tax					105,730
		2,156,083	2,031,514	2,355,909	2,464,980

Source: Copy of Reconciliation of key opex by item and function categories.xls

Whilst we appreciate the effort that Gosford City Council has gone to to reconcile this information for the purposes of responding to our initial questions, our first observation is that the overall operating expenditure forecasts are not explained in the format, and to the extent, which OGW was expecting. The reasons for which are not always a result of Gosford City Council (rather, the need to put certain costs into a set number of pre-defined categories). In particular:

- There are costs included in what would generally be considered inappropriate categories (e.g., depots all in water, but should be across water and sewerage; recovery of on-costs in labour; loan equalisation in customer services; inclusion of plant/tools in customer services). The incorrectly categorised costs were discussed with Council who indicated a willingness to correct;
- The 2013 figures seem to be an anomaly in some cases. Take, for example, account “32611.110 - WMN RETIC CIVIL MAINT”, which increases in by 70% in one year, then reduces back to 2012 levels in 2014. Or the “34615.110.613 - WSL METER CIVIL MAINT” amount which increases by 245% in 2013 relative to 2012, but then reduces back down to historical levels in 2014. We note that a similar issue happens in wastewater, and was highlighted as an issue in stormwater as part of the interview process; and
- There are numerous line items which do not appear to be reconcilable with the SIR Opex, for example the following appear to be drivers of increased costs during the regulatory period, yet do not appear to be specifically identified in the SIR Opex or listed in the submission as drivers of increases in year-on-year costs over the forthcoming regulatory period:
  - *Additional exp in 38104.600 ASSET MANGT - CONSULTANTS/ INVESTIGATION*
  - *Additional expenses for finance improve financial management and access price regulation assistance*
  - *additional training costs*

Notwithstanding the above, we made some observations in the draft report on the above reconciliations:

- Increases in labour costs are partially due to the filling of currently vacant positions, although it is unclear what the basis of this budget is, or what benefits consumers will derive, in terms of increased levels of service, from the filling of those positions. It is also inconsistent with our underlying assumption that Gosford City Council has responded to the underlying regulatory incentives and in fact revealed their efficient costs, via their 2012 actual costs; and
- Hire services includes cost in 2014 that are for “*Accounts where hire services were not specifically budgeted for in 2013 but are in 2014*” - it is unclear, from either the submission or the SIR Opex, what these ‘accounts’ are; why additional costs are required in 2014, including the extent to which customer are prepared to pay for any of the enhanced levels of levels of service that may stem from that additional expenditure.

Given the above, we stated in our draft report that we could not conclude that the proposed operating expenditure forecasts for water for 2013 are consistent with a prudent and efficient service provider.

#### Conclusion - 2013 Water Operating Costs

In our draft report, we stated that based on the reasons set out above, we were unable to deem that Gosford City Council’s proposed 2013 costs for water services is consistent with that which a prudent and efficient service provider would incur.

Instead, we considered that:

- 2012 actual labour costs, inflated by the recommended labour cost escalator discussed later in this report, should be used as the basis for setting forecasts of internal labour costs for the forthcoming regulatory control period. This implicitly removes the assumption that vacant positions are filled;
- A portion of depot costs should be reallocated back to wastewater. This apportionment should be 50%, unless Gosford City Council can provide detailed justification for an alternate apportionment;
- On-costs be reallocated to employee provisions, and those 2012 on-costs be inflated by the recommended labour cost escalator discussed later in this report;
- JWS costs be explained and reconciled with Wyong Shire Council's assumptions, and included as a separate line item for 2013; and
- All non-labour related 2012 costs be converted to 2013 costs using our proposed real cost and growth escalators (see later section for details).

In response to the draft report, Gosford City Council made the following comment<sup>28</sup>:

*"It is entirely inappropriate to remove specifically budgeted vacant positions. These positions have been assessed as being required to fulfil legislative responsibilities, and operational requirements.*

*Some vacant positions are existing positions which were temporarily vacant following resignation.*

*The cost of salaries associated with existing vacant positions should be included as they will be filled.*

*There is funding for one new vacant position proposed, associated with changes to the POEO Act and additional regulatory reporting requirements."*

In response, we note that whilst Gosford City Council may consider it "*entirely inappropriate to remove specifically budgeted vacant positions*", our role is to assess the prudence and efficiency of the proposed operating expenditure forecasts. This involves, amongst other things, assessing the drivers for increases in forecast costs relative to current levels, which in turn involves reviewing the evidence that has been presented by the regulated business in support of those cost increases. This evidence will primarily be associated with explaining what the driver for the increased cost is (increased levels of service based on customers' willingness to pay; change in mandatory standards, the costs of which are not in base level operating expenditure forecasts), and how the forecast cost has been derived.

In this case, we note that the only substantiated increase is to do with changes to the POEO Act (which is discussed in the Step Changes section). Otherwise, no substantive increase in levels of service has been proposed, relative to historic levels, hence it is unclear how customers benefit from the increased costs that are proposed to be incurred. Furthermore, no other evidence has been provided that would support the prudence and efficiency of the proposed increase in labour costs, particularly when considered in the context of the overall incentives underpinning the regulatory framework under which Gosford City Council operates. We note that Gosford City Council also provides comment on this assumption<sup>29</sup>:

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28 Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

29 Ibid

*“The underlying assumption is based on economic theory which does not recognise variability in business costs due to external drivers and unavoidable variation in staff levels.”*

In contrast to Gosford City Council's view, we consider that the underlying assumption in fact does recognise the variability in business costs - however it assumes that in any one year, there are likely to be some costs that are higher than business-as-usual and some costs that are lower than business-as-usual. As there are many factors that influence actual operating expenditure in any one year in both directions, we consider that a forecast of total operating expenditure is more likely to include estimation errors if a forecast is not reflective of all operating expenditure incurred a year. Therefore, we consider that actual operating expenditure in 2011/12 would lead to the best estimate of operating expenditure possible in the circumstances.

Further, where it can be demonstrated that there is an explicit external driver of additional costs, the methodology provides for these cost increases to be included, over and above outturn expenditure levels. However, the onus is on the regulated business to demonstrate the underlying driver; why the costs are not in the actual expenditures incurred; and the prudence of those costs. The inclusion of the costs of the POEO Act (see Step Changes section) is an example of this.

There are two other related matters that were addressed by Gosford in its response to the draft report. Firstly, Gosford City Council clarified that the depot costs allocation issue applied to 2013 budgets, not 2012 actuals. That is, they are correctly accounted for in 2012, it is the 2013 budget that incorrectly incorporates all of the costs into water.

Secondly, Gosford provided a further update to its 2012 actual water labour position, based on the proposed starting levels outlined in the draft report.

Figure 16: Revised 2012 Actual Water Labour Costs provided in response to Draft Report

<b>WATER</b>		
<b>\$'000</b>		
\$	6,511	<b>2012 Water Labour</b>
		This credit account was incorrectly included in the Labour charges in the AIR - it should have been an offset to the depreciation account and not part of the Opex at all
-\$	436	
		This credit account was incorrectly included in the Labour charges in the AIR - it should have been an offset an amount included in Misc Income RW12 & is an internal t/fer
-\$	17	
		We have an internal on-cost recovery process and the accruals for on-costs should have been charged to W&S but were charged to General Fund. These are valid expenses & should not artificially reduce the 2012 actual wages
\$	38	
		No adjustment should be made for Depot Costs as these were split 50:50 Water & Sewer for 2012 Actuals & for 2014-2018 budgets. (They were not split for the 2013 budgets but these are being ignored)
\$	-	
<b>\$</b>	<b>7,002</b>	<b>Revised 2012 Water Labour to correctly reflect actual salary/wage costs</b>

Source: Gosford City Council ('2012 adjustments and proposed step changes W&S.xls')

We are not in a position to verify the accuracy of the above adjustments, given the timing of the receipt of this information, and the overall scope of this project. Whilst, for the purposes of this report, we have taken these adjustments on face value, we note the materiality of the overall adjustment means that these adjustments ideally, warrant further investigation.

Having regard to the above, our final recommendation is consistent with the draft report, expect that:



- An allowance for the labour costs stemming from the changes in the POEO Act be included in the forecasts - this is discussed in more detail in the Step Changes section;
- There is no need to remove depot costs from the 2012 actual figures, as this issue only arises in the 2013 budget figures;
- The revised 2012 labour cost estimate provided by Gosford City Council in response to the draft report be used as the starting 2012 labour cost figure; and
- JWS costs be included in "Other", as opposed to labour, but these costs be based on the information provided by Gosford City Council in response to the draft report, not the escalation rates outlined in latter sections of this report.

### 6.3.3. Establish efficient baseline operating expenditure forecasts - Wastewater

The following figure represents an extract from Table 5.2 of the AIR that Gosford City Council submitted to IPART as part of its submission.

Figure 17: Original AIR (Table 5.2) - Wastewater

Table 5.2 - Operating Expenditure of Regulated Business Activities by Item (\$'000)						
Wastewater	2008	2009	2010	2011	2012	2013
	Actual	Actual	Actual	Actual	Actual	Projections
Labour (excl employee provisions)	3,882	4,030	7,291	6,605	6,071	7,755
Payments to associated unregulated businesses			-	(68)		
External consultants and/or contract(or)s	173	364	-	752	443	566
Hire services	3,151	1,398	3,571	3,909	4,328	5,529
Materials	1,246	2,697	1,711	1,745	2,302	2,941
Energy	1,226	1,210	1,426	1,579	1,919	2,451
Licence fees			-	46	49	57
BOO costs			-			
Climate change fund payments			-			
<agency defined>	1,587	1,040	-			
<agency defined>			-			
<agency defined>			-			
<agency defined>			-			
Payments to associated unregulated businesses			-			
Reimbursement from Wyong			-			
Central Coast Water Corporation establishment			-			
Rates and taxes other than income tax	356	391		394	405	
Employee provisions	1,153	1,679	343	217		
Actuarial accruals to defined benefit schemes						
Other (total of all items smaller than 5% of total operating expenditure)	-	-	296	278	140	
Allocated portion of Corporate opex	5,040	6,487	5,324	5,309	5,336	5,923
Total operating expenditure for wastewater	17,814	19,296	19,962	20,766	20,994	25,221

Source: AIR Table 5.2

As part of the preliminary suite of questions, we noted sought the following information<sup>30</sup>:

- *Like for water, can you break down the specific drivers of the ~27% nominal increase in labour costs in 2013, relative to 2012 (Opex by Item), particularly given the 'Non-financial' sheet indicates that there is no expected increase in FTEs over the regulatory period.*
- *Further to the above, is the above labour cost increase linked to the ~115% nominal increase in 'Customer/support services' costs outlined in the 'Opex by function' sheet within the AIR? If so, consistent with the above request, please provide details of what 'Customer/support services' are driving this increase?*



In response to the first questions, we were provided with the following reconciliations.

Figure 18: Reconciliation of Sewer Labour

SEWER - OS62	2012	2013	2014
<b>Labour Costs</b>	<b>6,071,183</b>	<b>7,754,620</b>	<b>8,650,300</b>
Recovery On-Costs included in Labour costs	- 1,345,706		
Depot Budgets 50% should be in Sewer but 100% in Water		74,520	
Vacant Positions included in Budget but not in 2012 actuals		698,134	714,339
	<b>7,416,889</b>	<b>7,131,006</b>	<b>7,935,961</b>
Year on Year Increase		-3.85%	11.29%
2014 to 2012 Increase			7.00%

Source: Copy of Reconciliation of key opex by item and function categories.xls

Figure 19: Reconciliation of Sewer Labour

SEWER CUSTOMER SERVICE - OS59	2012	2013	2014
Customer Svs Costs	<b>1,969,878</b>	<b>4,225,119</b>	<b>4,745,911</b>
Recovery On-Costs included in Labour costs	- 941,253		
Contribution to ATIMS	-	408,750	107,940
Incorrect inclusion of 38500.862 PLANT/TOOL SURPLUS/DEPREC-E	- 505,984		
Embedded Cost of Carbon Tax			121,577
Vacant Positions included in Budget but not in 2012 Actuals		406,464	393,732
additional exp in 48104.600 ASSET MANGT - CONSULTANTS/INVESTIGATION		71,568	373,762
depot management costs			152,851
Additional expenses for finance improve financial mangement and access price i		16,536	47,513
additional training costs		- 36,385	50,000
	<b>3,417,115</b>	<b>3,358,185</b>	<b>3,498,535</b>
Year on Year % Change		-1.72%	4.18%
2014 to 2012			2.38%

Source: Copy of Reconciliation of key opex by item and function categories.xls

Similar issues pertain to the reconciliation of wastewater as they do to water, namely, that there appears to be some incorrect allocation of certain costs, as well as some unexplained increase in cost in future years (e.g., additional training costs of \$50k in 2014). However subsequent to the draft report, we now understand that the SIR Opex could not in fact be relied upon to ascertain fully what increases Gosford City Council proposed.

Given the above, in the draft report, we concluded that the proposed operating expenditure forecasts for wastewater are not consistent with a prudent and efficient service provider.

### Conclusion – 2013 Wastewater Operating Costs

In our draft report, we stated that based on the reasons set out above, we were unable to deem that Gosford City Council's proposed 2013 costs for wastewater services is consistent with that which a prudent and efficient service provider would incur. Instead, we considered that:

- 2012 costs (inflated by the approved labour cost escalator) should be used as the basis for setting forecasts of labour costs for the forthcoming regulatory control period, instead of assuming that all vacant positions are filled; and
- On-costs be reallocated to employee provisions;
- A portion of depot costs should be reallocated back to wastewater. This apportionment should be 50%, unless Gosford City Council can provide detailed justification for an alternate apportionment; and
- All non-labour related 2012 costs be converted to 2013 costs using our proposed growth escalator (see later section for details), which, for the purposes of completeness, means that one-off increases such as 'additional expenses for finance improve financial management' and 'access price regulation assistance' be removed from 2013 costs.

Gosford City Council raised similar issues with regards to wastewater labour costs, as it did for water labour costs, when responding to the draft report<sup>31</sup>:

*"Council does not believe that use of the 2012 actual as a base year for future budgets is optimal.*

*Council's own detailed budgeting method, recognised the variability of water, sewerage and drainage costs (influenced by weather, source water availability, etc), and used the average of the last three years (2010, 2011 and 2012) as a starting point for developing future years budgets.*

*Use of the 2012 budget in isolation does not recognise this cost variability."*

Gosford City Council also provided a further update to its 2012 actual water labour position, based on the proposed starting levels outlined in the draft report.

Figure 20: Revised 2012 Actual Water Labour Costs provided in response to Draft Report

## SEWER

\$'000

\$ 6,071 **2012 Sewer Labour**

- \$ 506 This credit account was incorrectly included in the Labour charges in the AIR - it should have been an offset to the depreciation account and not part of the Opex at all

- \$ 6 This credit account was incorrectly included in the Labour charges in the AIR - it should have been an offset an amount included in Misc Income RW12 & is an internal t/fer

\$ 330 We have an internal on-cost recovery process and the accruals for on-costs should have been charged to W&S but were charged to General Fund. These are valid expenses & should not artificially reduce the 2012 actual wages

\$ - No adjustment should be made for Depot Costs as these were split 50:50 Water & Sewer for 2012 Actuals & for 2014-2018 budgets. (They were not split for the 2013 budgets but these are being ignored)

**\$ 6,914 Revised 2012 Sewer Labour to correctly reflect actual salary/wage costs**

Source: Gosford City Council ('2012 adjustments and proposed step changes W&S.xls')

We are not in a position to verify the accuracy of the above adjustments, given the timing of the receipt of this information, and the overall scope of this project. Whilst, for the purposes of this report, we have taken these adjustments on face value, we note the materiality<sup>32</sup> of the overall adjustment means that these adjustments ideally, warrant further investigation.

Our response is consistent with that which was provided above for water. Therefore, we propose to maintain our draft recommendation, except with regards to:

- Depot costs, which, as stated in the previous section, we now understand was allocated correctly in 2012; and
- Revising the starting labour costs to reflect the revised 2012 labour costs provided by Gosford City Council.

### 6.3.4. Establish efficient baseline operating expenditure forecasts - Drainage

The following figure represents an extract from Table 5.2 of the AIR that Gosford City Council submitted to IPART as part of their submission.

<sup>32</sup> For example, if Gosford City Council's adjustment to 2012 water and sewer labour costs were excluded, their required opex would drop by over \$6m over the regulatory period. This is the predominate driver of the increase in opex costs between the draft report and this final report.

Figure 21: Original AIR (Table 5.2) - Drainage

Table 5.2 - Operating Expenditure of Regulated Business Activities by Item (\$'000)						
Stormwater	2008	2009	2010	2011	2012	2013
	Actual	Actual	Actual	Actual	Actual	Projections
Labour (excl employee provisions)	1,439	2,081	2,271	2,435	2,274	1,660
Payments to associated unregulated businesses			-			
External consultants and/or contract(or)s	373	37	69	396	406	297
Hire services	684	665	1,559	1,370	2,068	1,510
Materials	1,010	1,218	15	431	423	309
Energy			339			
Licence fees			-			
BOO costs			-			
Climate change fund payments			-			
<agency defined>	153	9	-			
<agency defined>						
<agency defined>						
<agency defined>						
Payments to associated unregulated businesses						
Reimbursement from Wyong						
Central Coast Water Corporation establishment						
Rates and taxes other than income tax				3	3	
Employee provisions	343	-		4		
Actuarial accruals to defined benefit schemes						
Other (total of all items smaller than 5% of total operating expenditure)	(0)	(0)	5	6	10	
Allocated portion of Corporate opex	579	799	874	1,074	1,032	1,067
Total operating expenditure for stormwater	4,581	4,809	5,131	5,717	6,216	4,843

Source: AIR Table 5.2

In reviewing the above figures, it is also interesting to note the SIR Opex, which, for drainage, appears to be populated reasonably accurately.

Figure 22: Original SIR Opex (Table 1.4) - Drainage

Table 1.4 - Change in Stormwater operating expenditure (\$'000)			\$ nominal				
Financial Year ending 30 June			2010	2011	2012	2013	2014
	I/C	Unit	Actual	Actual	Actual	Projections	Projections
<b>Operating Expenditure vs. Determination</b>							
Stormwater Operating Expenditure (excluding allocation of Corporate)	I	\$'000	4,257	4,643	5,184	3,775	6,024
Determination Expenditure		\$'000	4,286	4,429	4,311	4,419	
Difference	C	\$'000	(29)	214	873	(643)	
<b>Key factors contributing to change in opex</b>							
Changed maintenance and repair Erina	I	\$'000		247	185	(634)	681
Changed tipping costs Erina	I	\$'000		20	249	(287)	118
Changed maintenance and repair Woy Woy	I	\$'000		121	(150)	(224)	492
Changed maintenance and repair Mangrove Mountain	I	\$'000		(43)	81	(116)	53
Changed Kahibah Creek maintenance	I	\$'000		2	(12)	45	(61)
Drainage reactive maintenance	I	\$'000		(28)	5	(147)	116
Maintain gross pollutant traps	I	\$'000					228
Flooding and Drainage salaries	I	\$'000					160
Drainage service management	I	\$'000					142
Proactive maintenance	I	\$'000					100
Rainfall network monitoring and maintenance	I	\$'000					51
- user defined item	I	\$'000					
- user defined item	I	\$'000					
- user defined item	I	\$'000					
- user defined item	I	\$'000					
Proposed Opex Efficiency Savings	I	\$'000					
Sum of explained differences	C	\$'000		319	358	(1,364)	2,080
Unexplained difference in annual change in opex	C	\$'000		67	183	(45)	168

Source: SIR Opex

As can be seen, there is a significant reduction in the 2013 year projected costs, and then a commensurate increase back up in 2014. The SIR Opex indicates that the contributors to the reduction are also the primary contributors to the increase in 2014. Therefore, as part of the preliminary suite of questions, we sought the following information<sup>33</sup>:

*Can you describe the underlying operational rationale for reducing expenditure significantly in 2013 (particular as it there is effectively similar increase in the following year), for the following projects (as outlined in the SIR): 'Changed maintenance and repair Erina'; 'Changed tipping costs Erina'; 'Changed maintenance and repair Woy Woy'; 'Changed maintenance and repair Mangrove Mountain'; and 'Drainage reactive maintenance'.*

In response, Gosford City Council stated that<sup>34</sup>:

*'The 2013 budget for stormwater drainage accounts are not an accurate reflection of expected actual expenditure in 2013. As observed, the 2012 actuals and 2014 budgets are significantly higher than the 2013 budget. The value of expenditure in 2013 is expected to be generally in line with that of 2012, however, the formal Council budget cannot be adjusted to the expected expenditure value as there is no additional revenue to offset the increase against. This is a technical budget approval issue, and all relevant managers/directors in Council understand that the expenditure will be higher than the budget. The budgets from 2014 reflect the forecast expenditure for the stormwater drainage business.'*

In this case, it is clear that 2013 forecast costs are somewhat of an artefact, and cannot be used to determine future operating costs over the next regulatory control period.

Given the above, we stated in our draft report that we could not conclude that the proposed operating expenditure forecasts for drainage is consistent with a prudent and efficient service provider.

### Conclusion - 2013 Drainage Operating Costs

Based on the reasons set out above, in our draft report, we were unable to deem that Gosford City Council's proposed 2013 costs for drainage services was consistent with that which a prudent and efficient service provider would incur. Instead, we considered that:

- 2012 costs (inflated by the approved labour cost escalator) should be used as the basis for setting forecasts of labour costs for the forthcoming regulatory control period, instead of assuming that all vacant positions are filled; and
- All other actual 2012 costs be converted to 2013 costs using our proposed growth escalators (see next section).

Gosford City Council raised similar issues with regards to drainage costs, as it did for water and wastewater labour costs, when responding to the draft report.

Our response is consistent with that which was provided above for water and wastewater. Therefore, we propose to maintain our draft recommendation.

<sup>33</sup> 'Gosford\_Preliminary Questions.doc' contained in email to Elizabeth Knight sent on Fri 28/09/2012 3:25 PM

<sup>34</sup> 121004 Information requested at IPART consultant review interviews.doc, provided via email from Elizabeth Knight on Tue 9/10/2012 9:06 PM

### 6.3.5. Real Cost escalators and efficiency allowances

Gosford City Council has escalated its 2013 forecast costs by the following real cost escalators to calculate its forecast operating expenditure:

- Labour cost escalators: Gosford City Council has incorporated a 3.25% real labour cost escalator.
- Corporate Costs: Gosford City Council has not assumed any real increase in corporate overheads over the forthcoming regulatory period.
- Materials cost escalators: Gosford City Council has incorporated a 3% real materials cost escalator.
- Hire & contract services (Plant / Other): Gosford City Council has incorporated a 1.5% and 3% real cost escalator for 'plant' and 'other' hire contract services respectively.
- External Consultants: Gosford City Council has incorporated a 0% real cost escalator for external consultants.
- Other (total of all items smaller than 5% of total operating expenditure): Gosford City Council has incorporated a 3% real cost escalator for this cost category.
- Electricity cost escalators: Escalation of 2011 real prices by an average of 15% per annum
- Carbon price impacts: Gosford City Council states that it has included a 0.4% per annum allowance in its operating cost forecasts for the impacts of the carbon tax.
- Efficiency programs: No explicit allowance for efficiency has been incorporated into Gosford City Council's operating expenditure forecasts.

#### Labour Cost Increases

Gosford City Council has incorporated a 3.25% real labour cost escalator. According to Gosford, this includes a<sup>35</sup>:

*"1.80% performance bonus buyout; 0.25% for Award increases above CPI; 0.20% for increased overtime; the remainder (1%) is to address for increases associated with salary alignment between Gosford and Wyong staff roles".*

Gosford also go onto state that<sup>36</sup>:

*"the exact increases are still being defined, but preliminary data indicates that many 'equivalent' roles are paid 1.3-2.3% less than would be paid under an 'equalised' CCWC arrangement. Some of the roles are even higher at 5-8% difference. (Wyong is higher for some positions, while Gosford is higher for others)".*

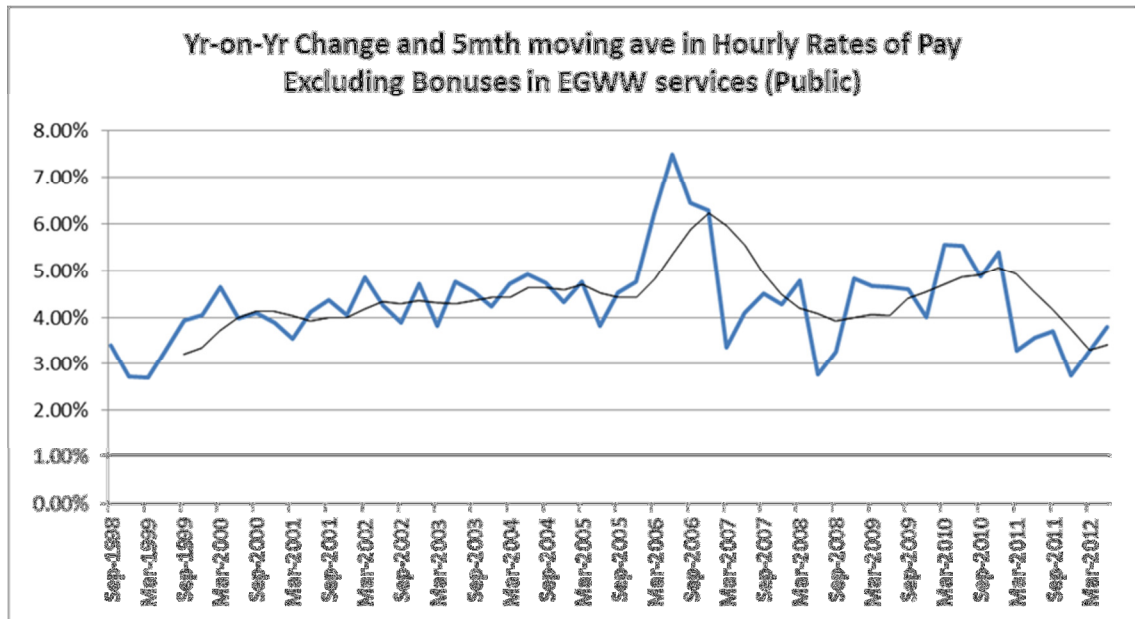
The first observation that we made in our draft report was that the overall magnitude of this labour cost increase - around 6% in nominal terms - is large, when compared with observed labour cost increases across the Utilities sector<sup>37</sup> historically; detailed forecasts of labour costs increases applied to other regulated utility businesses; and Wyong Shire Council's proposed increase. Examples of the first two are outlined below.

35 121004 Information requested at IPART consultant review interviews.doc

36 Ibid

37 Defined as the Electricity, Gas, Water and Waste services

Figure 23: Labour Cost Measures from the ABS for the Electricity, Gas, Water and Waste Services



Source: ABS - 6345.0 Labour Price Index, Australia - Table 5b. Total Hourly Rates of Pay Excluding Bonuses: Sector by Industry, Original (Quarterly Index Numbers)

Table 7: Labour Cost Increases applied to other Regulated Utility Businesses

Year	Regulator	Industry	Period Covered	Range
2012	AER	Gas	2013 - 2018	3.6% pa to 4.0% pa nominal Wage Price Index 1.5%pa to 0.7%pa real Wage Price Index (0.7%) pa to (1.2%) pa real productivity adjusted Wage Price Index
2011	AER	Electricity	2012/13 to 2017/18	2.9% pa to 4.4% pa nominal Wage Price Index 1.6% pa to 0.3% pa real Wage Price Index 1pa to -1.8% pa real productivity adjusted Wage Price Index
2010	AER	Electricity	2011 - 2015	1.1% - 3.3% real (unadjusted for productivity)

NOTE: All measures are for the Utility sector (Electricity, Gas, Water and Waste Services)

Sources: Forecast growth in labour costs in Victoria - Report prepared for the AER 28 May 2012 - Deloitte Access Economics - Pg 56

Forecast growth in labour costs: Queensland and Tasmania Report prepared for the AER 15 August 2011 - Pg 68

Final decision - appendices - Victorian electricity distribution network service providers - Distribution determination 2011-2015 - October 2010 - Pg 255

Whilst we are not stating that any particular one of these measures is necessarily definitive proof that Gosford City Council's proposed labour cost increases are not reasonable, we do consider that taken collectively, they cast significant doubt over the extent to which Gosford City Council's proposed real labour cost escalator is consistent with a prudent and efficient service provider, particularly as it is also proposing no efficiency gains. Further to the above, we note that Gosford's proposed real labour cost escalators are over double Wyong Shire Council's proposed labour cost escalator of 1.45%. Given that the two service providers are in close proximity to one another, one would have thought that the availability of talent that would be drawn upon, and the costs associated with drawing upon that talent, would have been similar.

Further to the above is the underlying theoretical basis for, and consistent treatment of, the performance bonus payouts and the parity issue between Gosford and Wyong.

In relation to the former, based on the statements provided by Gosford, it would appear that this is applied on a per annum basis, so that it in effect, it compounds over the regulatory period (i.e., it is 1.8% in year one; another 1.8% on top of that in year 2). No further information was made available in support of the derivation of the 1.8%, or the extent to which performance bonuses related to productivity (i.e., whether the inclusion of one, without the other, is inconsistent).

In relation to the parity issue with Wyong Shire Council, we understand that this is the estimated impact of having to scale up overall wages so that they are equivalent to Wyong Shire Council's wages. We have no reason to question the validity of this disparity in wages, however we have two broad concerns in relation to this issue:

- Firstly, there appears to be a disconnect between the fact that an uplift in labour costs is provided for in the labour cost escalators as a result of the establishment of the CCWC and having to bring parity to pay rates, yet, Gosford City Council has stated that it has not included any allowance for the productivity improvements that may stem from the establishment of the CCWC in the next regulatory period because only a small proportion of resources will be transferred across in 2014, with the majority transferring across upon completion of the establishment (1 July 2017), which is not in the regulatory period under review; and
- No broader labour productivity allowance has been incorporated into the forecasts as they currently stand.

Finally, we note that Gosford City Council provided a number of examples that were driving increased overtime payments, which is a stated driver of the labour cost escalator. An example was:

*"In response to the POEO Act changes Council is incurring significant amounts of additional overtime for Operations and laboratory staff associated with increased reporting requirements (spending over an hour on the phone compared to the 5 minutes previously taken to report one incident). The changes have also necessitated the establishment of 1 additional position to provide the required environmental advice regarding response and clean up (currently no position with environmental training is allocated as being on call to respond to out of hours incidents). The costs of this position is approximately 120K (including on-costs) per annum from 2013. The additional overtime is one influencing factor in the general labour escalation rate."*

This particular cost driver is discussed in more detail in the Step Changes section.

Considering all of the above, our draft recommendation is that Gosford City Council's forecast real labour cost escalators be revised down to 1.45%, as this is considered to:



- More reasonably reflect the broader indicators of wage cost increases for utility service providers historically, and given this is more aligned with an ex-productivity amount, is consistent Gosford Shire Council's proposal to not apply any productivity factor;
- Reflect an internally consistent approach to the treatment of both Wyong Shire Council and Gosford City Council, given their close proximity and availability of talent that will be drawn upon; and
- Reflect an internally consistent approach to the treatment of the creation of the CCWC, namely, that if limited resources are transitioning across to the CCWC in the regulatory period, then this be reflected in both the level of productivity that will be reaped from its establishment in the next regulatory period as well as the impact on labour costs associated with the transition.

In its response to the Draft Report, Gosford City Council states that it is<sup>38</sup>:

*"willing to accept the revised labour escalators, provided that additional specific allowances are made for vacant positions".*

It is not clear to us why the two are in fact related, as what we have proposed is a price escalator, not a volume escalator (this is covered elsewhere in the report), and the additional staff referred to by Gosford City Council pertains to the volume of work required to be undertaken.

We maintain the recommendation outlined in our draft report, namely, that a real labour cost escalator of 1.45% is consistent with a prudent and efficient service provider.

### Corporate Costs

It is our understanding that Gosford City Council has not included an explicit allowance for real increases in the corporate costs that it will have to incur and subsequently allocate back to regulated water and wastewater business.

Despite the absence of this, we consider that it is reasonable (and internally consistent with other recommendations that we are making) to assume that the starting 2013 corporate overhead cost will increase in real terms over the forthcoming regulatory period. In particular, whilst we do not consider that corporate overheads will be materially impacted by the need to serve additional customers over the forthcoming regulatory period, or for that matter, the need to provide additional volumes of water or wastewater services, because of the nature of the costs that make up this cost category, we do consider that the underlying labour component of the corporate overhead costs will increase in real terms.

Given that we have accepted that a real labour cost escalator of 1.45% is reasonable for other parts of the business, we consider that this should also form the basis of the derivation of the corporate overhead growth escalation rate.

As it is not clear to us the proportion that labour makes of Gosford City Council's overall corporate cost pool, we assume for the purposes of this draft report that it makes up around a third, thus, we consider the adoption of a 0.5% cost escalator for corporate costs is reasonable, reflecting the estimated weighted contribution of labour costs to the overall corporate cost pool allocated back into the water and wastewater business. This is also consistent with the escalator that is proposed for Wyong Shire Council.

It is noted that ideally, Gosford City Council would be able to undertake a more detailed, bottom up construction of the escalator that it applies to its corporate overhead costs.

### Materials Cost Increases

Gosford City Council has incorporated a 3% real materials cost escalator. In comparison, Wyong Shire Council did not propose a real cost driver for materials.

First and foremost, it is noted that there was no evidence provided in Gosford City Council's submission to support the magnitude of this increase, nor the underlying basis for deriving this increase.

Further, our natural starting position for a review such as this is that the CPI, which is a general measure of price inflation and is provided for through the price control mechanism, provides Gosford City Council with an allowance for the actual nominal changes in its costs. This is not to say that in no circumstance can a specific business' costs change at different rates to the CPI (see electricity as an example), because clearly, the CPI is an average basket of goods and may not reflect the types of goods procured by a water and wastewater service provider such as Gosford City Council. However, we would expect that any move away from CPI would be explicitly justified, based on the identification of the key cost drivers of Gosford City Council; a comparison of the proportion of those costs in Gosford City Council's cost pool relative to the broader CPI measure; and then develop a robust underlying forecast for those key cost drivers. This could be further supported by reference to historic changes in the marginal price of the key cost drivers purchased by Gosford City Council, as compared to the CPI index.

We were not provided with any such analysis prior to the draft report.

Having regard to the above, our draft recommendation was that Gosford City Council be provided with no real increase in the cost of materials over the forthcoming regulatory control period. To be clear, this relates to the marginal cost of procuring materials - allowances for procuring increased volume of materials are outlined in the next section.

Gosford City Council provided the following response to the draft report<sup>39</sup>:

*'Council has now been able to collate further data regarding materials costs increases which was not readily available immediately following interviews.*

*Materials costs are increasing due to:*

- *Usage volumes; and*
- *Prices*

#### Usage

*A key area of increased materials usage is chlorine. Following a review of chlorine residuals throughout the supply system Council has commenced additional chlorination to provide a higher disinfection residual in line with NSW Health expectations and the Australian Drinking Water Guidelines. This is occurring by increasing the dose rate of chlorine (Chlorine Gas) at the water treatment plant and dosing of additional chlorine throughout the system at reservoirs (Sodium Hypochlorite).*

*Additionally, the 'new' Woy Woy Bore Water Treatment Plant was not operated at all during 2011/12 (due to a capital failure which needed rectification by the responsible contract under defect liability). This plant is currently being brought on line and chemical costs will be incurred which were not reflected in the 2012 actual.*

### Prices

*During the current price period, a number of key chemicals used for water treatment and sewerage treatment increased significantly.*

*During the current period:*

- *Hydrated lime has increased more than 40%*
- *Fluoride prices increased by over 50%*
- *Sodium hypochlorite increased by more than 10%*

*From the above it is clear that chemical costs are in no way linked to CPI and the proposed 3% escalator should be maintained to capture the likelihood of further price increases and certainly of usage increases.'*

With regards to price, whilst we do not question the extent to which some key costs may have risen over the historic price period, no information has been provided as to the relative contribution of these materials to the overall cost of materials for each of water, wastewater or drainage, nor in totality (i.e., do they make up 1% of total materials costs; or 10%; or 90%). Furthermore, at the time of writing<sup>40</sup>, no information has been provided as to how the costs of other materials are assumed to change in order to obtain a weighted average real price increase of 3%. In summary, no model was provided to show how the 3% escalator has been derived, and therefore why the 3% is efficient.

With regards to usage, as outlined in forthcoming sections, we have recommended that Gosford City Council be provided with an allowance for the increased cost of purchasing a greater volume of materials over the forthcoming regulatory period. That said, we acknowledge that this may not capture the two discrete items that have been identified by Gosford City Council in the response to the Draft Report. However, no information was provided prior to writing this report that would allow us to determine the magnitude of the impact on materials costs that these two key items.

In short, based on the information provided at the time of writing this report, we are not in a position to state with any certainty that a 3% real materials cost escalator is consistent with a prudent and efficient service provider, because we have not been provided with any detail as to how this has been derived; how the aforementioned factors contribute, even broadly, to the derivation of that 3%; nor how the prices of other materials not mentioned are assumed to change over the regulatory period.

### **Hire and Contract Services (Plant)**

Gosford City Council has incorporated a 1.5% real cost escalator for plant hire contract services. In comparison, Wyong Shire Council did not propose a real cost driver for this cost category.

Neither in its submission nor the interview process did Gosford City Council provide detailed documentation in support of the adoption of a real cost escalator for this cost category.

In particular, no evidence was provided to demonstrate that this cost category will increase at a higher rate than the underlying inflation rate, which, as outlined previously, is our natural starting position.

Therefore, in the draft report, we noted that we were not in a position to state that the inclusion of such a real cost escalator is consistent with the costs that a prudent and efficient service provider would incur over the forthcoming regulatory period.

In response to the draft report, Gosford City Council stated that<sup>41</sup>:

*'Plant hire costs are increasing due to two key areas:*

- Fringe benefit tax liability - the Federal Government is progressively phasing out the variable FBT tax rates, which increases the FBT tax liability for Council vehicles*
- Fuel - petrol prices are continuing to increase above inflation*

*Consequently the 1.5 escalator above CPI is required to recover these increasing costs'*

Even based on this response, it is still unclear to us why Gosford City Council has decided upon 1.5%, and not some other rate (e.g., why not 1%, or 2%, or 0%). In particular, the above does not allow us to identify the proportion of overall Hire and Contract Services (Plant) costs that are related to these two items (i.e., the weightings that should be ascribed to them); the magnitude of the expected price increase pertaining to them; and moreover, the magnitude of the price changes that pertain to the other costs that are contained within this cost category.

Given the absence of such information, we are not in a position to state that this proposal is consistent with a prudent and efficient service provider.

#### **Hire and Contract Services (Other)**

Gosford City Council has incorporated a 3% real cost escalator for 'other' hire contract services. In comparison, Wyong Shire Council did not propose a real cost driver for this cost category.

Similar to the previous driver discussed, neither in its submission nor in the interview process did Gosford City Council provide detailed documentation in support of the adoption of a real cost escalator for this cost category.

In particular, no evidence was provided to demonstrate that this cost category will increase at a higher rate than the underlying inflation rate.

Therefore, our draft recommendation was that we were not in a position to state that the inclusion of such a cost real cost escalator is consistent with the costs that a prudent and efficient service provider would incur over the forthcoming regulatory period.

No comment was made by Gosford City Council in response to the draft report.

#### **External Consultants**

Gosford City Council has incorporated a 0% real cost escalator for external consultants.

We consider this is reasonable, and consistent with the likely increase in costs that a prudent and efficient service provider would incur in providing water and wastewater services.

#### Other (total of all items smaller than 5% of total operating expenditure)

We understand that for “*Other (total of all items smaller than 5% of total operating expenditure)*” costs, Gosford City Council has incorporated a 3% real cost escalator for this cost category. We are not privy to the underlying costs that are likely to be included in this cost category. Without this level of detail, and moreover, detailed documentation in support of the assumption that these costs will increase at a rate 3% higher than the underlying inflation rate (e.g., ~5.5% to 6% nominal), we are not in a position to state that the inclusion of such a real cost escalator is consistent with the costs that a prudent and efficient service provider would incur over the forthcoming regulatory period.

No comment was made by Gosford City Council in response to the draft report.

#### Electricity Cost Increases

Gosford City Council states, in its submission, that its<sup>42</sup>:

*‘energy costs will continue to increase over the next Determination period, primarily associated with increased network and usage tariffs charged by electricity suppliers. Council is seeking to reduce the impact of rising electricity costs through detailed consideration of energy usage when undertaking options analysis for capital projects.*

Gosford advised that the basis for their electricity forecasts<sup>43</sup>:

*‘Electricity costs forecast in the submission were not calculated within the file “WandS Electricity Cost forecastV2.xls “. The revised and refined forecasts in the file were finalised after we had finalised the proposed operating budgets for the submission. The forecast costs in the AIR were based on the general indications of the magnitude of the increases that were coming of WSAA guidance. The values used were generally in line with the increase in electricity costs forecast by Sydney water (excluding the carbon tax - Sydney Water pricing submission to IPART p.p. 43 and 50)*

*The following factors were applied to the actual costs of energy in 2010-2011.’*

Table 8: Reproduction of Gosford City Council’s proposed electricity escalation factors

Sum of Estimate 2013	Sum of Estimate 2014	Sum of Estimate 2015	Sum of Estimate 2016	Sum of Estimate 2017	Sum of Estimate 2018
1.38	1.70	1.93	2.00	2.08	2.15

Source: Gosford City Council

For the purposes of completeness, it is noted that the refined model indicates that the costs will increase by the following factors for water and sewerage respectively:

<sup>42</sup> Pricing Submission to IPART 2012 - Gosford City Council’s submission to IPART’s Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 36

<sup>43</sup> Email from Elizabeth Knight on Tue 9/10/2012 9:07 PM

Table 9: Refined forecast escalators provided by Gosford City Council

Sum of Estimate 2013	Sum of Estimate 2014	Sum of Estimate 2015	Sum of Estimate 2016	Sum of Estimate 2017	Sum of Estimate 2018
2.02	2.09	2.37	2.67	3.04	3.51
2.47	2.61	2.84	3.21	3.60	4.12

Source: OGW; Gosford City Council ("WandS Electricity Cost forecastV2.xls")

We would also note that Wyong, which is in the same electricity network area (i.e., AusGrid) as Gosford, has applied a 9% escalation to the forecast 2011-12 costs (including allowances for new loads on their system) and then a blanket annual escalation for energy cost of 10% across the rest of the regulatory period. This adds up to a total escalation factor on 2012 numbers of some 1.60 for the same regulatory period in terms of energy costs.

Using the factors used by Gosford (above) we could broadly replicate the forecasts provided, after account for inflation in the AIR numbers.

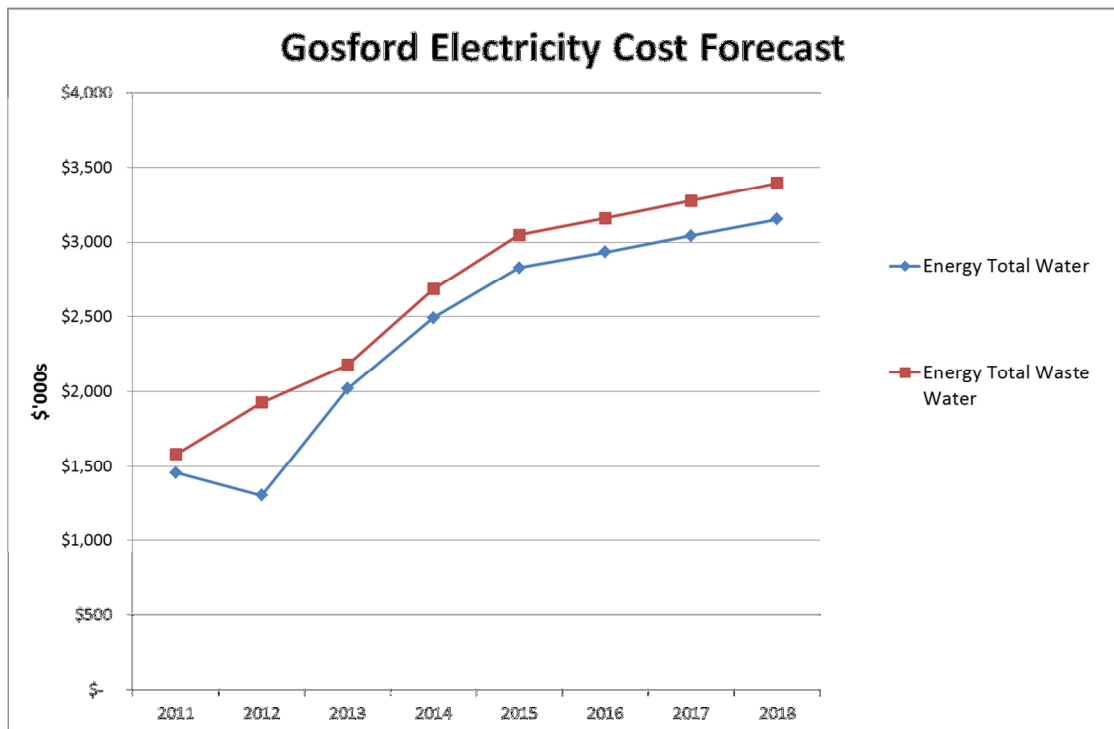
Table 10: Reconciliation of Electricity Costs

Forecast Reconciliation	2011	2012	2013	2014	2015	2016	2017	2018
Applying Factor			1.38	1.7	1.93	2	2.08	2.15
Energy Total Water	\$ 1,456	\$ 1,302	\$ 2,009	\$ 2,475	\$ 2,809	\$ 2,911	\$ 3,028	\$ 3,130
Energy Total Waste Water	\$ 1,579	\$ 1,925	\$ 2,180	\$ 2,685	\$ 3,048	\$ 3,159	\$ 3,285	\$ 3,396
Submission								
Energy Total Water	\$ 1,456	\$ 1,303	\$ 1,999	\$ 2,556	\$ 2,983	\$ 3,178	\$ 3,390	\$ 3,611
Energy Total Waste Water	\$ 1,579	\$ 1,919	\$ 2,451	\$ 2,760	\$ 3,221	\$ 3,432	\$ 3,660	\$ 3,898
Worksheet Provided								
Energy Total Water	\$ 1,456	\$ 1,302	\$ 2,018	\$ 2,493	\$ 2,830	\$ 2,932	\$ 3,042	\$ 3,152
Energy Total Waste Water	\$ 1,579	\$ 1,925	\$ 2,180	\$ 2,685	\$ 3,048	\$ 3,159	\$ 3,277	\$ 3,396

Source: OGW/AIR

Using the worksheet provided (WandS Electricity Cost Forecast V2 - sheet "Current Electricity Costs") the cost trends are demonstrated on the chart below.

Figure 24: Gosford Electricity Cost Forecast



Source: OGW; 'WandS Electricity Cost Forecast V2' - sheet "Current Electricity Costs"

The information supplied has no underlying modelling that builds up from assumptions on tariffs, energy use patterns, number of NMI's, etc. It simply takes the 2011 base year and applies the escalation factors given.

We note that the escalation factors used were<sup>44</sup>:

*"...based on the general indications of the magnitude of the increases that were coming of WSAA guidance."*

The WSAA forecast was prepared by SKM MMA at 21 June 2011 and was based on sound modelling approaches and the stated underlying assumptions at that time, and the resultant upward trend in price as applied by WSAA is quite marked.

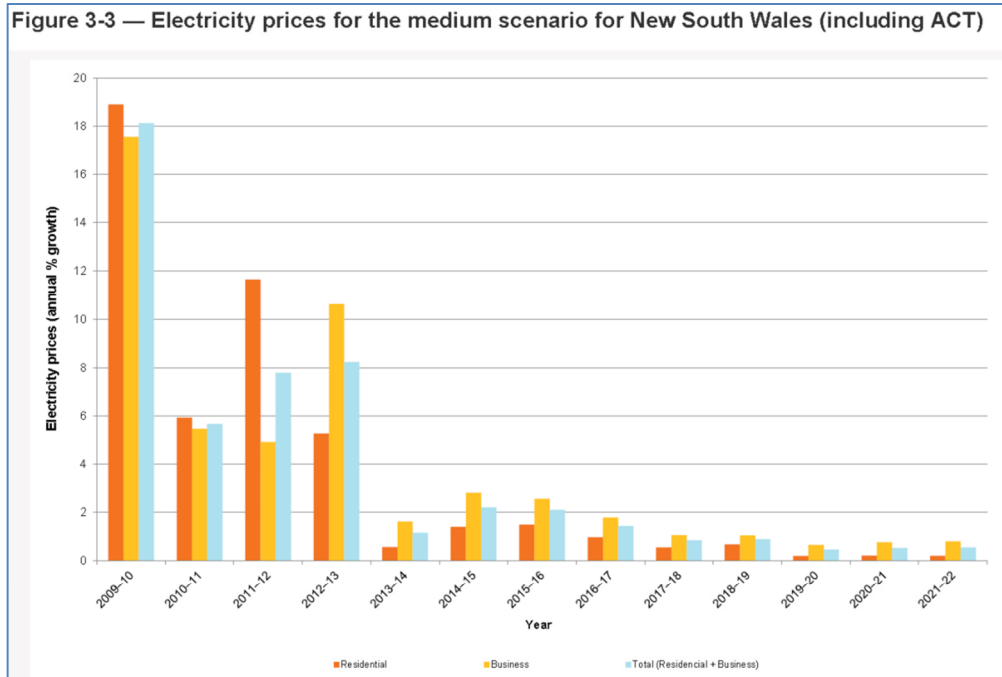
Whilst it is known that distribution costs have been and are rising rapidly in the Ausgrid network area, there has been a distinct down turn in the wholesale electricity market on the East Coast (NEM) and major changes to the underlying assumptions on carbon prices to those used in the WSAA forecasting. We have, for example, seen a slowing in new generation development and some mothballing of existing generation due to this drop in demand.

AEMO has recently published a 2012 forecast of Retail Price<sup>45</sup> annual growth for business customers in NSW through to 2021-22:

<sup>44</sup> Email from Elizabeth Knight on Tue 9/10/2012 9:07 PM

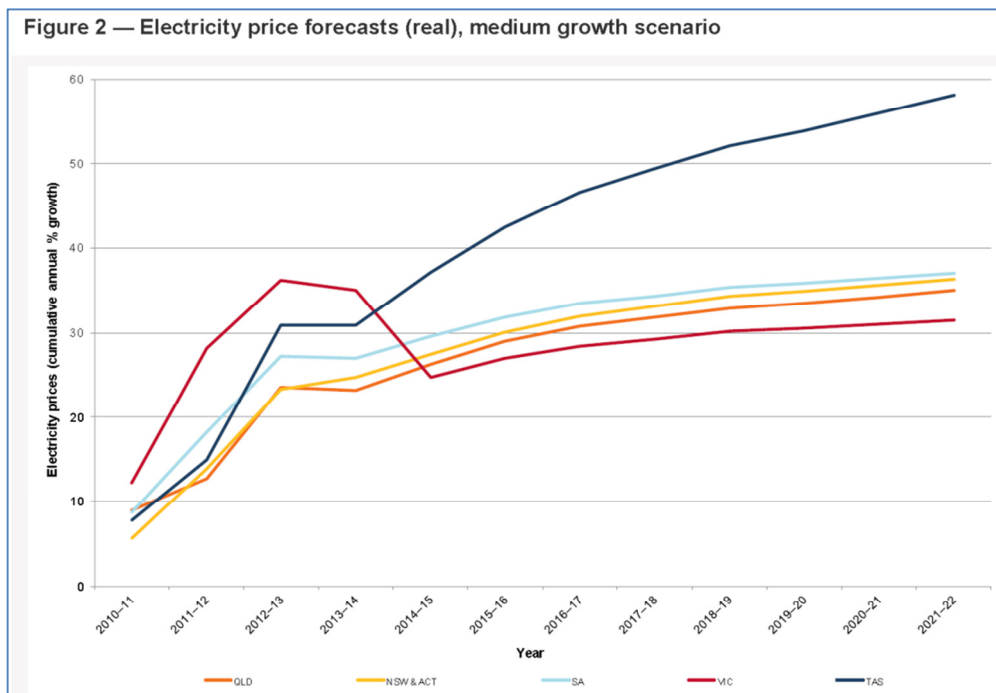
<sup>45</sup> Economic Outlook Information Paper, National Electricity Forecasting, 2012, AEMO: In 2012, AEMO commissioned the National Institute of Economic and Industry Research (NIEIR) to undertake a detailed analysis of Australia's economic growth and electricity prices based on economic scenarios defined by AEMO

Figure 25: AEMO Retail Electricity Price Growth Forecasts 2012 - NSW



Source: AEMO

Figure 26: AEMO Retail Electricity Price Growth Forecasts 2012 Cumulative



Source: AEMO

These forecasts are underpinned by treasury based carbon price forecasts (i.e., they are inclusive of the impact of carbon pricing).



The forecasts indicate (approximated from the curve) the following annual % growth in prices for NSW business users, and cumulatively a total escalation factor on 2012 numbers of some 1.20 for the same regulatory period in terms of energy costs:

Table 11: AEMO Electricity Price Escalators for NSW Business Users

2012-13	2013-14	2014-15	2015-16	2016-17
10.5%	1.5%	2.8%	2.5%	1.7%

Source: AEMO; OGW

This is markedly below the forecasts of Gosford City Council and reflects more recent modelling assumptions about demand growth (or lack of it) and the impacts of carbon policies on the market.

IPART also regulates retail tariffs for small users in NSW and the tariff increases have been for EnergyAustralia an average 20.6% from 1st July 2012. The year prior (1 July 2011) it was 17.9% so the average retail price increase for smaller users in the AusGrid network over those two years was 1.42. This equates functionally to the 1.38 that has been used as an escalator for the same period by Gosford.

However, we would note that Gosford City Council has more of its load in the larger user/business categories and it has a market contract (State Contract) so these escalations are likely to be considerably lower. Further, one of the key issues with the approach taken is that the larger, dominant sites do not have separate worked estimates based on the weighted usage across time periods in the tariffs (with water pumping known to have major off peak skewing). It appears that in water supply the top 4 sites use 95% of the electricity (2011 base year) so it would be beneficial to look at their likely use and cost separately. In waste water this trend is less pronounced but the two major sites still consume 47% and warrant stand-alone forecasts.

It also appears that there is a major discrepancy in the escalation systems used between Gosford and Wyong. But we note that Wyong has also provided additional costs for new installations or intended use of major assets (58% increase in cost within year 2012-13 driven by volume increases) and then applied a lesser price growth forecast to their energy costs, based on 'forward contract values'. They have also adjusted in following years (mostly down) for intended use of assets, adding more credence to their forecasts. Notably the forecast of a 10% initial growth in energy costs in the first year of the regulatory period is in line with the AEMO forecast of growth in NSW for business users.

Without a succinct built up model, we noted in our draft report that it is only possible to comment on the Gosford forecast in an aggregate sense. Our recommended approach, as outlined in the draft report, was to escalate prices in line with the AEMO forecasts.

In response to the draft report, Gosford City Council stated that<sup>46</sup>:

*"AEMO electricity costs forecast are underestimates compared to forecast cost based on actual contracted prices for 2013 and 2014 (see table below).*

*The 2013 and 2014 electricity cost forecasts are based on existing contracts with electricity suppliers and the 2012 year consumption patterns for energy and capacity consumption. It is most appropriate to use the current actual market prices payable by Council for 2013 and 2014, (presented in red in the table below).*

*An updated version of the WSAA report referred to in the interviews is now available (final draft). The criticism of reliance on the WSAA report in the interviews was that it was outdated (a couple of years old) and that industry forecasts had changed since its publication. Now that the new revised report has been recently published this criticism is no longer valid. The green values present in the table below present the price increases based on the latest WSAA report.*

*Suggested change:*

*The values in Table 3 should be changed to the red values below to align with actual existing contract prices.*

*The values in Table 3 should be change to the green values below to align with the best available price forecast indexes produced by the peak industry body WSAA. "*

Annual Electricity Cost Growth	2010	2011	2012	2013*	2014*	2015*	2016*	2017*	2018*
Modelled Electricity Cost Forecast (2012 consumption pattern and contract tariffs to 2014 and updated WSAA index from 2015)	100.0%	7.9%	12.8%	24.2%	4.5%	9.7%	9.4%	10.5%	12.0%
GCC IPART Submission Average Water and Wastewater Growth	100.0%	10.1%	3.1%	23.6%	19.0%	11.9%	3.5%	3.6%	3.5%
AEMO Electricity Price Escalators for NSW Business Users				10.5%	1.5%	2.8%	2.5%	1.7%	
*2013 and 2014 based on actual contract prices and 2012 consumption patterns *2015 - 2018 use the updated WSAA (SKM MMA 1/11/12) price index									

Firstly, we have some concerns about Gosford City Council proposing to amend its original electricity cost forecasts as part of its response to our draft report. This is because the associated modelling and the Final Draft WSAA report cited as evidence for the proposed changes were not provided with the comments for review or validation. The absence of this source information means it is impossible for us to make a definitive statement as to their prudence and efficiency. Moreover:

- It is unclear how the contractual values have been applied to the consumption patterns for 2013 and 2014, other than they were "based on 2012 consumption patterns". This is a material issue in assessing the average annual increase in energy costs and is accentuated by the small number of large loads as outlined in our draft report. Using average tariffs for example applied to average load data can give rise to substantial errors;
- We also note that there has been a material reduction in the GCC IPART Submission for 2014 and the updated forecast now proposed, based on existing contracts (as outlined above in the table provided by Gosford City Council). This highlights the need to be able to analyse in more detail the application methodology before being able to validate such substantive changes being proposed; and
- The WSAA documentation cited references a forecast completed by SKM MMA at 1/11/12 for the WSAA. We were not able to source a copy of this report from the WSAA website (and neither was it provided by GCC) so we could examine in more detail the underlying assumptions used at the time the forecasts were prepared by SKM MMA. Our concern relates to the recent substantial downgrade by AEMO (the national market operator) in mid-2012 of electricity demand forecasts and the impacts this had on price forecasts in the electricity industry. The AEMO report cited by OGW took this renewed forecast into account, along with the latest forecasts for economic growth as of circa March 2012 - June 2012 provided by their consultants. It is unclear if the WSAA report was based on similar assumptions, and if so why there is such disparity.

In the absence of any evidence of how the requested changes have been actually calculated or are being supported by other material we propose to maintain our draft recommendation that the price forecasts based on AEMO data be used to escalate electricity costs.

## Carbon Tax Increases

In its submission, Gosford City Council states that<sup>47</sup>:

*“Increased electricity prices (discussed above) are associated, in part with the carbon tax. Council also expects the costs of other inputs to increase as suppliers pass on the embedded costs of carbon. Council is in the process of finalising detailed estimates of the likely impacts of this cost pass through.*

*Council has forecast costs associated with the carbon tax at 0.4% of operational and capital expenditure. This percentage is in line with the allowance included in the 2011/12 Local Government Cost Increase (IPART, 2011, Effects of the carbon price on local Councils - Local Government Information Paper) and supply chain carbon costs forecast by Sydney Water (Sydney Water, 2011, Sydney Water Submission to IPART) and subsequently allowed in IPART’s Determination for Sydney Water (IPART, 2012, Prices for Sydney Water Corporation’s water, sewerage, stormwater drainage and other services - from 1 July 2012 to 30 June 2016).”*

It was clear from the interviews that we conducted with Gosford City Council that they considered this to represent the embedded cost of carbon in all of the goods and services that they purchase, including electricity. This appears consistent with the IPART report that is referred to in the submission. In particular, it is our understanding that the IPART Information Paper, which underpins the 0.4% per annum, is:

- Making a specific carbon price related advance of 0.4% to the 2012/13 rate peg that will increase councils’ general income and assist in meeting the extra costs they will face from the introduction of the carbon price<sup>48</sup>; and
- That this is essentially a function of a defined set of ‘cost weightings’ which reflects Council’s overall cost structure, multiplied by the expected impact of the carbon price on that particular cost component<sup>49</sup>. It is noted from the IPART Report that around half of the overall impact is due to the impact of the carbon price on electricity costs, and furthermore, IPART’s original calculation indicates that the impact of the Carbon Price on the Council will in fact be less than on the CPI as a whole<sup>50</sup>.

Having regard to the above, we consider that there is, in theory, a risk that there is a double count between the inclusion of the carbon price in electricity price forecasts, as well as the inclusion of the impact on electricity prices in the weighted average impact of the carbon price. This is the case whether or not our proposed electricity price forecasts are used (see previous section), or Gosford City Council’s proposed forecasts are used - because both are assumed to be inclusive of the Carbon Price. We say this because the proportion of Council’s overall costs that electricity makes up is included in the calculation of the index, therefore, Council is already being compensated for the electricity price increases stemming from the Carbon Price. Notwithstanding this potential double count, we note that the impact that is calculated from first principles in the report is in fact 0.6%, not 0.4%. The reason for IPART reducing this amount appears to be to take account of opportunities for Council’s to offset the impact of the Carbon Price<sup>51</sup>:

47 Ibid

48 Effects of the carbon price on local councils Local Government – Information Paper December 2011 - page 2

49 Ibid, pg 12

50 Ibid, pg 12

51 OpCit pg 12 and 13

*'Further, the 0.6% calculation takes no account of the opportunities councils may have to offset the effect of the carbon price on the volumes of various goods and services that they buy in 2012/13.....'*

*'As we cannot be certain of the size of the pass-through and the size of the offsets councils as a whole are likely to gain, as a matter of judgement we decided to set the carbon price advance in the rate peg for 2012/13 at 0.4%.'*

Given the 0.4% is a reduction on the first principles assessment, and this reduced amount broadly reflects the impact of the carbon price on Councils, excluding the electricity impact, we do not consider it reasonable to further reduce this to reflect the potential for a double count. Therefore, in these circumstances, for the purposes of this draft decision, we consider it reasonable for a per annum increase in total water and wastewater costs of 0.4% to be included, on the proviso that the CPI that is applied in the future is exclusive of the carbon price impact (because this has already been reflected in Gosford City Council's year-on-year operating costs). The latter is consistent with the advice that was received by Gosford City Council from the 'Carbon and Energy Management office' that it was reasonable to use the 0.4%, in conjunction with the application of a carbon exclusive CPI for pricing adjustments.

### Efficiency Programs

Gosford City Council states in its submission that<sup>52</sup>:

*'Increasing regulatory requirements, system extensions and an aging asset base are counteracting other potential operating efficiency savings. These additional costs are associated with many small changes (e.g. laboratory analysis costs associated with the change of standard faecal contamination indicator in recreation waters from E.coli to Enterococci), moderate changes (e.g. becoming an EWON member), and larger changes (e.g. operating additional sewerage schemes such as the Mooney Mooney Cheero Point Sewerage Scheme). These changes collectively add up to values commensurate to the levels of efficiency savings that would have been otherwise achieved.'*

*'Council continues to explore opportunities to increase the efficiency of its operations, through trials of new technology and its improved asset management capabilities. However, Council expects that ongoing increases in regulatory requirements, further system expansions, and its aging asset base will continue to impact its ability to realise efficiency gains.'*

Subsequent to this, we sought further information from Gosford City Council as to their rationale for not including any efficiency gains, particular given the implementation of the CCWC, which was underpinned by, amongst other things, the drive to obtain efficiencies.

In summary, like Wyong Shire Council, Gosford City Council's rationale for not including any efficiency gains stemming from the creation of the CCWC, is primarily because they consider that no material gains will be realised until full operation occurs (1 July 2017). In particular, Gosford City Council stated that<sup>53</sup>:

<sup>52</sup> Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 33

<sup>53</sup> 121004 Information requested at IPART consultant review interviews.doc

*'The material economic benefits arising from the transition to the Central Coast Water Corporation (CCWC) are associated with the establishment of the Joint Services Business (JSB). As the Joint Services Business is not scheduled to commence until 1 July 2017, no efficiencies are expected to flow to the Councils in the next four year regulatory period. Additionally, operation and maintenance of water and sewerage the systems will remain separate (continue to be managed by each Council) over this regulatory period.'*

Having regard to the above, we consider it reasonable to assume that there will be few opportunities created in the early stages of the transition to the CCWC, to reap efficiencies, particularly given the small number of functions that are said to be moving across during the forthcoming regulatory period. As such, we accept that it is reasonable to assume, for the purposes of developing up long term operating expenditure forecasts, that no material efficiency improvements can be reasonably forecast to be obtained.

On the broader question of efficiency gains, Gosford City Council noted that the *'cost of increased regulatory requirements, system extensions and an aging asset base are counteracting other potential operating efficiency savings'*. We agree with this, and moreover, this is a key reason why we are not overly inclined to consider for inclusion, small, incremental changes in year on year expenditure that are not driven by underlying growth / cost escalators, or material changes in exogenous factors ('Step Changes'). In particular, we consider that it is reasonable to assume that these natural fluctuations in costs will be off-set by a natural improvement in productivity.

Further to the above, OGW has had regard to the extent to which the CPI embeds into water and wastewater prices, economy wide gains in productivity, therefore, by deduction, any further gains in productivity explicitly included in Gosford City Council's operating expenditure forecasts must reflect its differing ability to derive productivity improvements relative to the broader economy. We have no evidence to suggest this is the case. We also note that the labour cost escalator utilised to derive the comparator rates for electricity and gas decisions is a Labour Price Index, which is a price index, rather than a cost index. More specifically, it does not reflect the costs associated with changing the composition of a workforce (e.g., hiring more skilled workforce), which is the predominate driver of efficiency gains. In the absence of such funding for compositional changes, we do not consider it reasonable to apply an efficiency adjustment.

Once the one off driver of establishing the CCWC is excluded, we accept Gosford City Council's position that no explicit productivity gains should be incorporated into the operating expenditure forecasts.

### Conclusion - Real Cost Escalators and Efficiency Improvements

The following table outlines the real cost escalators and efficiency improvements that we recommend applying to Gosford City Council's operating expenditure forecasts.

Table 12: Recommended Real Cost Escalators

Real Cost Escalator	2012-13	2013-14	2014-15	2015-16	2016-17
Labour	1.45%	1.45%	1.45%	1.45%	1.45%
Corporate Costs	0.5%	0.5%	0.5%	0.5%	0.5%
Materials	0%	0%	0%	0%	0%

Hire & contract services (Plant)	0%	0%	0%	0%	0%
Hire & contract services (Other)	0%	0%	0%	0%	0%
External Consultants	0%	0%	0%	0%	0%
Other (total of all items smaller than 5% of total operating expenditure)	0%	0%	0%	0%	0%
Electricity	10.5%	1.5%	2.8%	2.5%	1.7%
Carbon Tax	0.4%	0.4%	0.4%	0.4%	0.4%
Efficiency Gains	0%	0%	0%	0%	0%

Source: OGW

### 6.3.6. Growth drivers

Based on our understanding of Gosford City Council's submission, and the detailed discussions that took place with Gosford City Council, no explicit allowance has been made for growth drivers. These include, amongst other things, the impact that additional customer numbers and volumes may have on their underlying costs, and the impact that ageing assets may have on their underlying costs.

More specifically, in relation to the former, it is our understanding that Gosford City Council's view (as expressed during the interview process) is that the growth in their overall cost base is not materially driven by customer numbers nor volume. Further, we understood Gosford City Council's position to be that "*no allowance has been made for ageing infrastructure*" despite the stated position on page 1 of their submission, that "*key drivers of increasing operating costs include electricity prices and usage, new regulatory requirements, and maintenance of aging infrastructure*". The rationale provided for this was that this was already embedded within actuals 2012 figures, therefore, no further (explicit) allowance has been made in the forecasts.

We consider Gosford City Council's underlying logic to be broadly reasonable, although we consider there to be isolated cost components where there will be some relationship between costs and volumes/customers, namely, in materials costs and electricity costs. In particular, we note that there is likely to be some relationship between the volume of materials required and electricity consumed, and both the volume of water and wastewater collected and conveyed and treated, as well as the number of customer numbers provided with water and wastewater services. We also note that there is clearly a linkage between the two as well. In the absence of any other detailed information, we consider that the number of customers is a reasonable proxy for the increased volume of materials and electricity consumed (except for one off fluctuations associated with, for example, Hunter purchases) that will be consumed over the forthcoming regulatory control period.

Therefore, we consider that such an allowance is likely to reasonably reflect the efficient costs that a prudent service provider would incur to provide water and wastewater services over the forthcoming regulatory control period. This should be based on growth in customer numbers, which, based on Gosford City Council's submission, is 0.6%. Finally, we note that this is broadly consistent with what Wyong Shire Council has proposed.



## Conclusion - Growth Drivers

The following table outlines the growth drivers that we recommend be applied to Gosford City Council's 2013 recommended materials and electricity operating expenditure forecasts, to obtain forecasts for the forthcoming regulatory control period.

Table 13: Growth Drivers Escalators

Growth Driver	2012-13	2013-14	2014-15	2015-16	2016-17
Materials volume	0.6%	0.6%	0.6%	0.6%	0.6%
Electricity volume	0.6%	0.6%	0.6%	0.6%	0.6%

Source: OGW, based on information in "Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 53 and page 20"

### 6.3.1. Changes in levels of service

Gosford City Council's submission states that<sup>54</sup>:

*'Council's operating and cost forecasts have been developed to maintain current performance standards and improve performance standards in key areas where current performance levels are below that of other commensurate water utilities. ....Key areas for further improvement include water quality complaints, water main breaks, odour complaints and sewage overflows. Council's forecast operating and capital programs include costs to improve performance in these areas.'*

When asked about this statement during the interview process, it was noted that out of the four areas for further improvement ('water quality complaints', 'water main breaks', 'odour complaints' and 'sewage overflows') identified in the submission, actually only one was driving additional operating expenditure over the forthcoming regulatory period, this being 'water quality complaints'. Based on what was stated during the interviews, this driver increases forecast operating costs by \$65k per annum over the forthcoming regulatory period.

Conceptually, unless this increase is to meet a mandatory standard, this increased cost should be clearly assessed against customers' willingness to pay for increased levels of water quality, to ensure that allocatively efficient outcomes are occurring. This would allow water quality to be improved up to the point where the marginal benefit of increased water quality equals the marginal cost to society of providing that enhanced water quality to customers.

Earlier in our report, we noted National Water Commission statistics on water quality complaints, and these statistics showed that there had been a large reduction in water quality complaints per 1000 properties over the last 5 years. This is further supported by Table A1 in Gosford City Council's submission, an extract of which is provided below.

54

Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 32

Figure 27: Water Quality Improvements in the last 3 years

Table A1 Activity against output measures 2011/12

Output or activity measure	Indicator of activity by 2011/12	Activity 2009/10	Activity 2010/11	Activity 2011/12
<b>Water</b>				
1. Water quality complaints	No more than 10 per 1000 properties	36.9	9.3	13.8

Source: Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 71

We further note that despite the proposed increase in expenditure, Gosford City Council has not sought to achieve significant improvements in its service levels pertaining to this parameter, relative to its current levels. An extract of Table A4 of Gosford City Council's submission is provided below.

Figure 28: Proposed Water Quality Level of Service

Table A4 Proposed output measures for next Determination period

NWI ref	Output or activity measure	Indicator of activity by 2015/16	Comments
<b>Water</b>			
C8	1. Water quality complaints per 1 000 properties	9.9	Target extrapolated from current levels of service and 2021 target in Master Plan. Level of service by 2021 is within 50 percentile band of the peer data set

Source: Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 76

Notwithstanding this, in correspondence on this issue, Gosford City Council stated that<sup>55</sup>:

*'The 'improvements' in service levels aim only to bring Council's performance closer to that of other similar water utilities (see appendix A for Council's recent performance data). Although significant improvements in water quality complaints have been made in recent years, Council remains in the bottom 20% of utilities in NSW. (Statewide median in 2010/11 was 4 per 1000 properties). The NSW Office of Water requires Council to have an action plan to address this.'*

They further state that<sup>56</sup>:

*'No formal 'willingness to pay' studies have been undertaken as the expenditure is not discretionary'*

<sup>55</sup> 120928 Gosford Council response to Oakley Greenwood request for additional information.doc

<sup>56</sup> Ibid



Having regard to the above, we take on face value the mandatory nature of this standard, and therefore, despite the absence of a formal willingness to pay study, we consider that Gosford City Council's proposed expenditure on water quality improvement is consistent with that which would be incurred by a prudent and efficient service provider. However, as is discussed in the outputs section of this report, we consider that an explicit allowance for improvements in water quality should be proposed, given that an explicit cost allowance is being provided for.

### 6.3.1. Step Changes

Gosford City Council has included forecasts for a number of what we call Step Changes. We define a Step Change as a change to the way in which a business will be operated over the forthcoming regulatory control period, relative to how it is now currently operated. This is primarily driven by changes in exogenous conditions or events, for example, changes in mandatory standards affecting the operation of the system, or changes in the expected supply / demand conditions that in turn impact on a business' overall cost of supply.

Whilst the draft report utilised the submission and the 'SIR Opex' to obtain information with regard to the Step Changes that Gosford City Council was proposing, in its response to the draft report, it indicated that the values proposed as step increase in the SIR Opex sheet were not really what Council intended as proposed step increases in many cases. More specifically, Gosford City Council stated that<sup>57</sup>:

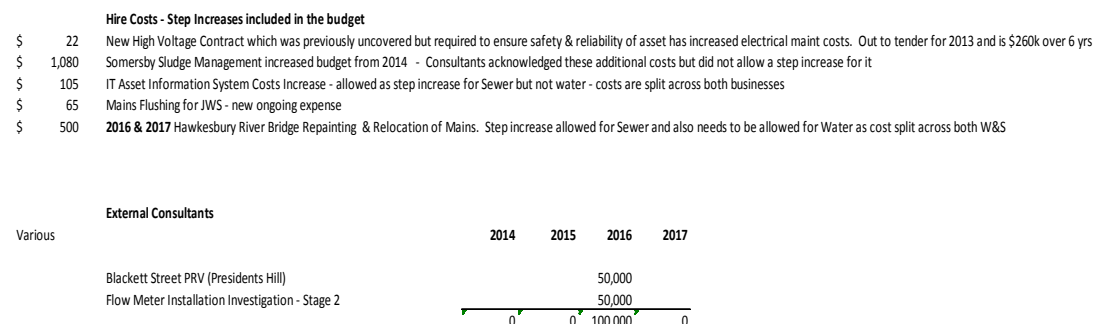
*'OGW's reliance on the SIR OPEX sheet within the AIR was not known at the time of populating this data sheet. Had Council been aware of the approach to be used, and the relative importance of the SIR OPEX (over other sheets) the content of the SIR OPEX would have been tailored to better facilitate the review method. The population of the SIR OPEX focused on identifying major cost variances in the current period. These items were then carried into future year's columns for completeness, not because they were 'proposed step changes' as assumed by OGW and stated in the report.'*

Instead, in response to the draft report, Council stated that<sup>58</sup>:

*'The proposed step increases should be as per the tables provide in attached files.'*

The following represents the information provided by Gosford City Council for water step changes and wastewater step changes respectively.

Figure 29: Proposed Water Step Changes from Response to Draft Report



Source: Gosford City Council's Response to Draft Report

<sup>57</sup> Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

<sup>58</sup> Ibid

**Figure 30: Proposed Wastewater Step Changes from Response to Draft Report**

Additional Labour Budget Increases that should be Allowed						
\$	72	Salary Positions where full years position not charged in 2012 - people starting or leaving part way thru the year but their replacement will incur full year costs				
\$	144	Existing Salary Positions where vacant for 2012 . Job Share Strategic Investigation Engineer (Asset Mgmt & Planning), Special Proj Officer EMS (Reg Svcs -pos filled 1/7/12)				
\$	291	Salary Position for new future positions - Pollution Reporting to Authorities (Reg Svcs) & Asset Officer to capture asset inf into Hansen & Systems Implementation Officer for proj governance systems, planning & reporting(Perf Improvement of Assets				
Hire Costs - Step Increases included in the budget						
\$	22	New High Voltage Contract which was previously uncovered but required to ensure safety & reliability of asset has increased electrical maint costs. Out to tender for 2013 and is \$260k over 6 yrs				
		IT Asset Management Information System - Increases are total, not year on year. Should be reduced?				
\$	82	Bud only for 2014 & 2015 to assist with setting up advanced asset mgmt systems GIS Data Capture				
External Consultants						
\$	35	Allowance for assistance with setting up Advanced Asset Management systems				
Variable		New Costs proposed by Asset Mgmt				
		2014	2015	2016	2017	
		SPS Supplementary Duty - Risk Assessment	25,000	25,000		
		Overflow Strategic Planning Study		100,000	100,000	
		Detailed Assessment of Woy Woy STP Decommissioning	100,000			
		Transition to WSSA Risk Based Management		40,000	80,000	80,000
		Effluent Management (EPL 1802 - Upgrade Discharge Limit	125,000	125,000	125,000	125,000
		Hydraulic Models - Development and Calibration	100,000	100,000	100,000	100,000
		Investigation of Vacuum Costs (alternative LPSS ? )			50,000	
			350,000	390,000	455,000	305,000

*Source: Gosford City Council's Response to Draft Report*

Our general comment is that in the main, Gosford City Council has not provided enough information for us to make an informed assessment as to whether the proposed expenditures are prudent and efficient. This is not to say that those expenditures may not be prudent and efficient, however, given that the only new information provided was the table itself, and the majority of these costs are not mentioned in the submission, nor were they brought up during the interview process, all we have available to assess the prudence and efficiency of the expenditure is the title of the row (e.g., 'SPS Supplementary Duty - Risk Assessment'; 'Overflow Strategic Planning Study').

This does not provide enough information for us to identify and review:

- What the overall project will entail (i.e., the scope of the project);
- The underlying driver for the cost to be incurred (i.e. the prudence of the scope);
- How the overall cost has been derived (i.e., the efficiency of the expenditure); and
- Why the specific timing has been chosen.

Given the timing of the receipt of this information, we were not in a position to seek more detailed information, and therefore, we are not in a position at this time to make a statement as to the validity of any of the proposed increases in operating expenditure where there is a single descriptor, and no further background information to understand the aforementioned issues.

For the purposes of this report, the only additional expenditure items that we consider we have enough information to make any definitive statements, over and above what we discussed in our draft report are:

- **Pollution Reporting to Authorities under the POEO Act** - We note that this is specifically related to a change in obligation, namely the POEO Act, which requires, amongst other things, additional reporting to regulatory authorities. Comments provided in response to other sections of the draft report state that only *“one component of the legislative changes was introduced during the 2011/12 year. The reporting to various other ‘regulatory authorities’ commenced in February, so two thirds of the year do not include any impact of this additional requirement and over time hours. Other components of the legislation did not commence until the 2012/13 financial year. The additional position is required to assist crews report in accordance with the new legislation. Without this position Council has a significant risk of not being able to comply with the legislation including detailed situation assessment, notification of appropriate parties including the community”*. We have reverted back to previous information provided by Gosford City Council, that stated that the *“costs of this position is approximately 120K (including on-costs) per annum from 2013”*. We consider this expenditure to be both prudent and efficient, as the labour cost associated with the position is reasonable, and moreover, there has been a definitive change in the required outputs of Gosford City Council, therefore it is reasonable that they be funded to delivery these outputs; and
- **New High Voltage Contract** - \$22k for each of Water and Sewerage: Whilst ideally, we would have liked to have investigated the basis for this step change in further detail, the timing of the receipt of this information has precluded that. Notwithstanding this, we have taken on face value the comments outlined in Gosford City Council's spreadsheet, which states that this is based on tender prices, hence the procurement method would appear to be robust. Furthermore, based on the comment in the spreadsheet, the primary driver is safety & reliability, which are reasonable, and moreover, there has been a change in circumstance which has meant that it is prudent to now incur these costs, relative to historical level. We consider, based on this information, that this expenditure is likely to be both prudent and efficient; and
- **Somersby Sludge Management** - Despite not being mentioned in the submission, or the templates accompanying the submission, we noted in our Draft Report that some background information was provided on this that supported the prudence of this expenditure, however there was a lack of underlying justification around the costs that were included in the submission. We now consider this to be reasonable, based on the information provided in response to the draft report. For completeness, it is noted that we have increased the reimbursements that Gosford City Council is expected to receive from Wyong Shire Council by 50% of the costs associated with this project, as per comments contained in the spreadsheet accompanying Gosford City Council's response to the draft report.

Table 14: Supplementary Step Changes Accepted

Step Change	2013-14	2014-15	2015-16	2016-17
POEO Act (100% Wastewater)	120,000	120,000	120,000	120,000
High Voltage Contract (Water)	22,000	22,000	22,000	22,000
High Voltage Contract (Wastewater)	22,000	22,000	22,000	22,000
Somersby Sludge (100% water)	1,080,000	1,080,000	1,080,000	1,080,000

\$real

Source: OGW

In addition, our draft report discussed a number of other Step Changes. However, as a result of us basing our analysis of Step Changes on the submission and SIR Opex sheet, which, we now understand was not filled out in a manner that was consistent with it being used in this manner in all cases, we have removed many of those Step Changes that we consider to not be relevant. We have also removed the discussion as to the Hunter Water Purchases, on advice from IPART.

The following Step Changes, however, are still considered to be relevant, and discussed in further detail below:

- CCWC establishment;
- Changed sludge management costs;
- IT Asset Management Information System
- Hawksbury Bridge Relocation;
- Changed maintenance and repair Erina;
- Changed tipping costs Erina;
- Changed maintenance and repair Woy Woy;
- Changed maintenance and repair Mangrove Mountain;
- Changed Kahibah Creek maintenance;
- Drainage reactive maintenance;
- Maintain gross pollutant traps;
- Flooding and Drainage salaries;
- Drainage service management;
- Proactive maintenance; and
- Rainfall network monitoring and maintenance.

These are discussed below.

Table 15: Proposed Step Changes - Corporate

Step Change*	2013-14	2014-15	2015-16	2016-17
CCWC Establishment Fees	2,104	2,096	2,169	1,504

\$nominal

Source: OGW, based on AIR

Table 16: Proposed Step Changes - Wastewater

Step Change*	2012-13	2013-14	2014-15	2015-16	2016-17
Changed sludge management costs	609	652	92	96	163
IT Asset Management Information System	409	(301)	111	114	9
Hawkesbury Bridge Painting - Relocation of				652	18

Main					
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*\*nominal change compared to previous year*

*Source: SIR Opex*

**Table 17: Proposed Step Changes - Drainage**

Step Change*	2012-13	2013-14	2014-15	2015-16	2016-17
Changed maintenance and repair Erina	(634)	681	51	55	58
Changed tipping costs Erina	(287)	118	6	6	7
Changed maintenance and repair Woy Woy	(224)	492	46	48	51
Changed maintenance and repair Mangrove Mountain	(116)	53	7	7	7
Changed Kahibah Creek maintenance	45	(61)	0	0	0
Drainage reactive maintenance	(147)	116	4	4	4
Maintain gross pollutant traps		228	7	7	8
Flooding and Drainage salaries		160	17	18	19
Drainage service management		142	4	5	5
Proactive maintenance		100	3	3	3
Rainfall network monitoring and maintenance		51	2	2	2

*\*nominal change compared to previous year*

*Source: SIR Opex*

### CCWC Establishment Costs

In its submission, Gosford City Council states that<sup>59</sup>:

*'The forecast cost to transition to the CCWC and JSB is expected to be \$24.7M (12/13) over the next Determination period. The Councils are developing a detailed implementation plan for the establishment of the CCWC and JSB. As part of that, the Councils are undertaking detailed analysis to validate implementation costs.'*

<sup>59</sup> Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 34

*The Councils will equally share the costs and seek to recover 50% of the total costs (\$12.3M, 12/13) from water and sewerage customers (over two Determination periods, discussed further in section 5.1). The remainder of the costs will be funded from Council's general fund operations, in recognition that some of the benefits of the JSB will flow back to the Councils' general funds. The cost forecasts in this submission include CCWC costs of \$7.4M (12/13), comprising transition costs of \$6.2M (12/13) (Gosford Council's 50% share of the CCWC transition costs to be recovered from water and sewerage customers) and CCWC Board operating costs of \$1.2M (12/13).'*

We note that Gosford City Council has provided additional documentation that breaks down the \$24.7M total costs over the regulatory period<sup>60</sup>. The size, nature and timeframe underpinning this review means that we are not in a position to undertake a detailed review of these figures. However, budgets for large projects such as this have a tendency to be volatile, and the regulatory treatment should be commensurate with the level of uncertainty that is likely to pertain to such a forecast.

The other issue pertains to the allocation of costs. Whilst the overall cost of establishing the CCWC and JSB is estimated to be \$24.7M over the regulatory period, the extent to which this is split between Council and the water and wastewater business is of utmost importance for this review. As stated previously, Gosford City Council has stated that the costs include its "50% share of the CCWC transition costs to be recovered from water and sewerage customers". However, there appears to be documentation from the Cost Benefit Analysis and the Central Coast Joint Services Program Control Group that indicates that a different split may be appropriate, if the split were to be based on the beneficiary pays principle. In particular, Agenda Item 5.5 from the meeting on the 2 July 2012, indicates that based on a beneficiary pays principle, "each Council would include 50% of the costs in Table 3 in their pricing submissions, AIRs and budgets". Table 3 is reproduced below.

Figure 31: Costs associated with Transition to CCWC

Table 3 proportion of CCWC/JSB costs based on the relative expected benefit to the CCWC

Item	Total	Current IPART period (2010-2013)		Next IPART period (2014-2017)			
		Actual	Budget	Forecast	Forecast	Forecast	Forecast
		Oct 2010 to June 2012	2012/13	2013/14	2014/15	2015/16	2016/17
CCWC establishment/transfer %		100%	25%	25%	25%	25%	25%
CCWC establishment/transfer \$	9,197,025	1,625,000 <sup>a</sup>	1,104,324	1,635,473	1,753,997	1,777,092	1,095,140
Contribution to CCWC (Board) %		100%	100%	100%	100%	100%	100%
Contribution to CCWC (Board) \$	2,900,000	250,000	250,000	600,000	600,000	600,000	600,000
Total CCWC costs for recovery	12,097,025	1,875,000 <sup>a</sup>	1,354,324	2,425,473	2,353,997	2,377,092	1,695,140

<sup>a</sup> pending finalisation of 2011/12 actual expenditure

Source: Agenda Item 5.5 CCWC costs for inclusion in pricing submissions 120702 - PCG Meeting 5

It is noted that 50% of the above establishment/transfer costs over the forthcoming regulatory period are \$3.23M - and this does not include a 50% deduction for this period (with this being held over until next period).

In our draft report, we considered that a beneficiary pays approach to be an entirely reasonable allocation approach, and that the figures outlined in the Figure above should underpin the forecast allowance, unless Gosford City Council could provide adequate evidence to the contrary.

Gosford City Council stated in response to the draft report that<sup>61</sup>:

*“50% cost allocation was a formal decision made by the PCG which was seen as striking an appropriate balance between a standalone water corp. which would it was expected incur costs similar to 100% CCWC/JSB costs, and recognising that some benefits flowed to the Councils”.*

Gosford City Council also stated in its response to the draft report that it was<sup>62</sup>:

*“highly inappropriate to include only one option presented in the internal report, without including the other options described in the report”.*

In response, we note that the act of making a decision - in this case, a “*formal decision by the PCG*” - is not the threshold test against which we can judge whether the allocation of costs is prudent and efficient. Rather it is the justification for the making of that decision (i.e., the rationale for the decision, and in this case, why another allocation approach was not adopted) that we must have regard for when assessing the prudence and efficiency of this allocation approach. With regards to that, we do not consider that the correspondence from Gosford City Council provides any further underlying justification as to why a 50:50 split was reasonable, fair to water consumers, or consistent with the expenditure that a prudent and efficient service provider, nor why the alternative beneficiary pays approach is an inappropriate cost allocation approach. For example, it does not suggest that the beneficiary pays approach leads to costs that are less than the avoidable cost of not including the CCWC in the overall project, which would be reason to reject this approach. Further, the reference to “*some benefits*” flowing to Councils seems to understate the extent to which the Council’s benefit from the establishment of the JSB, and the extent to which the creation of the JSB drives the overall cost. More specifically, the source document indicates that over 75% of the benefits accrue to Council<sup>63</sup>.

In relation to the second issue, we note that the only other option mentioned in the source document referred to (and provided to us) was the 100% recovery of the costs of CCWC and JSB from water and wastewater customers. We did not consider this a reasonable alternative, given the extent to which the Council benefits from the creation of the CCWC and JSB, hence why it was not mentioned in the draft report. The reason for relying on an option that is underpinned by a beneficiary pays allocation methodology was because it was the one that was considered to be the most appropriate of the options either mentioned, or proposed - more appropriate than a simple 50:50 allocation split, and more appropriate than a 100% allocation of costs to water and wastewater businesses, and no evidence has been presented that it would lead to inefficient outcomes.

61 Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

62 Ibid

63 Agenda Item 5 5 CCWC costs for inclusion in pricing submissions 120702 - PCG Meeting 5



In summary, we consider that given the detailed analysis underpinning the decisions to create the CCWC and the JSB, in particular, the cost benefit analysis undertaken by PWC, we cannot but deem that the inclusion of some costs associated with the transition to the new CCWC as being consistent with a prudent and efficient water and wastewater service provider. However, we do not consider the amount included in the submission to be prudent or efficient, given the lack of underlying support for the 50:50 split, and moreover, the fact that other supporting documentation indicates that a smaller amount than what is mentioned in the submission would be included, if a beneficiary pays approach were adopted. Most importantly, subject to exceeding the avoidable cost of not including the CCWC in the project, we consider that a beneficiary pays approach is an entirely reasonable and robust methodology to use when apportioning the costs of an expenditure that will confer benefits on multiple parties.

#### Changed sludge management costs

Gosford City Council's submission states that<sup>64</sup>:

*'Services for the removal and beneficial reuse of biosolids from Council's two sewage treatment plants have been sourced from the market through a competitive tender process.'*

*'The costs of biosolids disposal increased significantly due to the location of suitable disposal sites and haulage distances. The new contract is managed to ensure Council complies with the requirements of its sewerage system licence issued by the EPA.'*

During the interview process, it was explained that Gosford City Council used to store sludge on site, however there have been both capacity and odour issues. Gosford City Council has previously gone to tender to procure these services. In support of the overall tender process, Gosford City Council provided the Tender Assessment Matrix for the removal of biosolids<sup>65</sup>. It was noted that the a key driver of the increased costs both historically, and into the forthcoming regulatory control period, has been the significant increase in the market rates for these services - going from \$30 / tonne to around \$63 / tonne.

Further to the above, Gosford Shire Council were able to provide further documentation with regards to the approval of the successful tenderer - in particular, a '*tender report pursuant to Regulation 177 of the Local Government (General) Regulation 2005*' as well as a '*Notice Of Council Resolution*'. The latter confirms the price of \$63 per tonne.

Overall, we consider that a prudent and efficient service provider would ensure that they comply with their EPA licence requirements. Furthermore, we are comfortable that an efficient service provider would market test the provision of these services, as was undertaken by Gosford City Council. The only concern that we had with Gosford City Council's proposed expenditure related to the timing of the expenditure. In particular, we sought the following further information<sup>66</sup>:

*'The SIR Opex indicates that following year-on-year nominal increases occur in the following years \$914k (2012); \$609k (2013); \$652k (2014); \$92k (2015); \$96k (2016); \$163k (2017). We are particularly interested in the timing of these cost increase, particular, why the competitive tender process didn't led to a one-off increase in costs (say in 2012), and then small increases after that, as opposed to the material increases over multiple years (2012-2014)?'*

64 Ibid, pg 38

65 Tender Assessment Matrix Removal of Biosolids.pdf

66 'Gosford\_Preliminary Questions.doc' contained in email to Elizabeth Knight sent on Fri 28/09/2012 3:25 PM



In response, Gosford City Council stated at the interviews that the 2013 figure was an artificially low figure, due to budget constraints. In actuality, the expenditure would be higher than this. This again, highlights issues with placing any reliance on 2013 figures for the purposes of developing forecasts.

Overall, we consider the inclusion of these forecast costs is consistent with that which a prudent and efficient service provider would incur. In particular, we note that these costs are driven by an underlying legislative requirement (EPA licence); have been market tested; and the increase in 2013 and again in 2014, relative to 2011/2012 actuals appears reasonable, given the timing of the tender process (Council resolution was in November 2011), and the issues with the 2013 budget figures.

### IT Asset Management Information System

We note in Gosford Shire Council's submission that<sup>67</sup>:

*Over the next Determination period Council will continue to build upon the asset management improvements that have been completed to date. This next stage of the asset management improvement program will involve:*

- *condition assessment programs for each asset class*
- *development and refinement of a risk/criticality assessment program for each asset class*
- *improved capital project delivery management, including - governance processes, gateway reviews and capital works approval process*
- *development and implementation of a framework for consistent business cases, project tracking and project reporting*
- *continued Asset Management Information Systems (AMIS) integration.*

Furthermore, in discussions with Gosford City Council, it is understood that this relates to the implementation of the Hansen asset management system. Whilst this has been occurring for a while, the costs relate to the further integration of Hansen with other business systems. It also involves the full integration of data into the Hansen system.

We noted in our draft report that we were awaiting further information with regards to the basis for the derivation of costs, and that subject to the veracity of the supporting documentation pertaining to the cost associated with this initiative, we consider that the expenditure is reasonable, and consistent with the expenditure that a prudent and efficient service provider would incur.

In response to the draft report, Gosford City Council stated that<sup>68</sup>:

*'Council was not aware that any such information had been requested. An indicative timeframe for the project was requested and provided. Please clarify whether there is still an outstanding request and if so, what exactly is required.'*

In response, we put in writing exactly what we were seeking, with regards to information<sup>69</sup>. In particular, we sought information with regards to:

<sup>67</sup> Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 31

<sup>68</sup> Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

<sup>69</sup> Email to Elizabeth Knight and Alex Kelty on Fri 16/11/2012 at 3:22 PM.

- How much will be spent on this Step Change in each year, and
- How have those costs been derived ('what is the basis for the derivation of the costs').

At the time of writing<sup>70</sup>, we had yet to receive a response. As a result, we have no basis for assessing the extent to which the proposed costs associated with this Step Change are consistent with the costs that a prudent and efficient service provider would incur.

#### Hawkesbury Bridge Painting - Relocation of Main

There is no information in Gosford City Council's submission on this expenditure item. However, during the interview process, the overall project was described. In short, it involves the potential relocation of the water main that currently runs across the bridge, to allow the painting of the bridge. As it was described to us, a temporary pipe would be required to be put on the deck above; the existing pipe would then need to be removed; the bridge painted; and then the pipe would need to be put back onto the bridge.

The driver for this is the Road Transport Authority of NSW, which has provided preliminary advice to Gosford City Council with regards to the timing of this project. Furthermore, we sought information with regards to the basis for deriving the costs associated with this project. Gosford City Council stated during the interviews that this was based on their experience in constructing and locating the pipes in that position in the first place - which we note was estimated to be only 5-7 years ago.

Whilst we haven't sought specific documentation from the RTA with regards to the timing of this program of works, we take Gosford City Council's comments on face value.

We stated in our draft report that we considered the basis for their cost estimate reasonable, given the similarity in the work relative to the last time this was done, and also the short time lag since those costs were incurred.

Overall, we stated in our draft report that we considered that Gosford City Council has provided enough information for us to deem that this expenditure would be likely to be incurred by a prudent and efficient service provider faced with the same exogenous driver as Gosford City Council.

Whilst no specific comment was made by Gosford City Council in the Draft Report, there is a comment in the Step Changes spreadsheet pertaining to this issue<sup>71</sup>:

*'2016 & 2017 Hawkesbury River Bridge Repainting & Relocation of Mains. Step increase allowed for Sewer and also needs to be allowed for Water as cost split across both W&S'*

In that same spreadsheet, \$500k is listed against this item. The comment has raised additional questions which we have not had time to resolve prior to the completion of this report. In particular:

- It is unclear, now, whether this relates to a water main (which was mentioned in the interviews); a sewer main (which was listed in the SIR Opex), or both (which is implied by the comment in the Step Changes spreadsheet provided as part of the overall response to the draft report); and

<sup>70</sup> 9am, Friday 23<sup>rd</sup> of November.

<sup>71</sup> Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

- There are apparent inconsistencies in the proposed cost of completing these works (\$500k in Step Change spreadsheet accompanying the response to the draft report) and \$652k (nominal) in 2016.

For the purposes of the report, we have only assumed that this cost pertain to the water main, as per the discussions during the interview process.

#### Various Cost Items - Drainage

The SIR Opex indicates that the following costs are to be reduced in 2013, and then increased in 2014 and beyond. These costs are:

- Changed maintenance and repair Erina
- Changed tipping costs Erina
- Changed maintenance and repair Woy Woy
- Changed maintenance and repair Mangrove Mountain
- Changed Kahibah Creek maintenance
- Drainage reactive maintenance

The following is an excerpt from the SIR Opex, showing the fluctuations in costs for these items.

Figure 32: SIR Opex for Drainage

Table 1.4 - Change in Stormwater operating expenditure (\$'000)			\$ nominal				\$2013 real					
Financial Year ending 30 June			2010	2011	2012	2013	2014	2015	2016	2017	2018	
	I/C	Unit	Actual	Actual	Actual	Projections	Projections	Projections	Projections	Projections	Projections	
Key factors contributing to change in opex												
Changed maintenance and repair Erina	I	\$'000		247	185	(634)	681	51	55	58	61	
Changed tipping costs Erina	I	\$'000		20	249	(287)	118	6	6	7	7	
Changed maintenance and repair Woy Woy	I	\$'000		121	(150)	(224)	492	46	48	51	54	
Changed maintenance and repair Mangrove Mountain	I	\$'000		(43)	81	(116)	53	7	7	7	8	
Changed Kahibah Creek maintenance	I	\$'000		2	(12)	45	(61)	0	0	0	0	
Drainage reactive maintenance	I	\$'000		(28)	5	(147)	116	4	4	4	4	
Maintain gross pollutant traps	I	\$'000					228	7	7	8	8	
Flooding and Drainage salaries	I	\$'000					160	17	18	19	20	
Drainage service management	I	\$'000					142	4	5	5	5	
Proactive maintenance	I	\$'000					100	3	3	3	4	
Rainfall network monitoring and maintenance	I	\$'000					51	2	2	2	2	
- user defined item	I	\$'000										
- user defined item	I	\$'000										
- user defined item	I	\$'000										
- user defined item	I	\$'000										
Proposed Opex Efficiency Savings	I	\$'000										
Sum of explained differences	C	\$'000		319	358	(1,364)	2,080	146	155	164	174	
Unexplained difference in annual change in opex	C	\$'000		67	183	(45)	168	284	496	257	358	

Source: SIR Opex

Consistent with our previously discussed approach to determining the baseline 2013 figures that should be used as the basis for deriving operating expenditure forecasts for 2014 and beyond, we recommend that the cost increase in 2014 associated with the aforementioned costs be removed, and that instead, the 2012 actuals be adopted, inflated for the real cost and growth escalators outlined in this report.

We note that this also circumvents the issues that we have with drainage in particular, with regards to the overall veracity of the proposed 2013 expenditure.

Further, we note that we were not provided with any information in support of the relative change, year on year, of any of these specific costs, and also, the submission provides no detailed information on this change at all.

Therefore, in our draft report, we were not in a position to state that any of these proposed costs increases - including any real increases proposed in 2015 and beyond, are reasonable and consistent with a prudent and efficient service provider. Our final position has not changed.

### Maintain Gross Pollutant Traps

Gosford City Council has provided detailed internal documentation in support of this proposed expenditure. In summary, internal documentation notes that<sup>72</sup>:

*Failure to carry out more frequent maintenance will increase the likelihood of pollutants entering the water bodies posing a risk to flora and fauna. Council may also be in breach of its obligations under the Protection of the Environment Operations Act, 1997...*

*With increasing developments in the City and new subdivisions being created, Council will inadvertently own and manage many more water quality control structures. This will in turn put pressure for Council to increase its allocation for the maintenance of these GPTs.*

The recommendation that was put to Council in that report was that additional funds of \$200k for initial and on-going maintenance works of gross pollutant traps, with minimum frequency of cleaning being at least 3 monthly intervals.

Conceptually, we accept the position stated in the internal documentation with regards to the problem that these additional funds are attempting to solve. Further, the internal documentation and request for funding indicates a well developed, coherent and comprehensive strategy for dealing with this issue. Finally, the funds sought appear reasonable, and further, are consistent with what has been sought as part of Gosford City Council's IPART submission.

Overall, we considered, in our Draft Report, and still consider, that the operating expenditure forecast related to the maintenance of gross pollutant traps is reasonable, and consistent with that which a prudent and efficient drainage service provider would require.

### Flooding and Drainage Salaries

Based on the interviews, it was our understanding that the proposed increase in the forthcoming regulatory control period is required as there has been a change in how City Services staff salaries' - who provide drainage services amongst other things - are allocated. In particular, a new allocation methodology will be adopted, based on a detailed evaluation of each and every position within City Services, and how much of their time is allocated to drainage.

Apart from the description that was provided as part of the interview process, no other description of this step change was provided as part of the submission, nor in further follow up documentation prior to the Draft Report. In fact, the submission simply states that<sup>73</sup>:

*'Stormwater drainage costs continue to be driven by increasing reactive maintenance and increased landfill disposal fees.'*

We stated in our draft report that because of this, we were not in a position to confirm that the proposed expenditure was reasonable, or consistent with a prudent drainage provider, based on the information provided to date.

Subsequent to the draft report, Gosford City Council provided significantly more detail on the proposal, including a spreadsheet that<sup>74</sup>:

<sup>72</sup> CIT Report - page 2

<sup>73</sup> Gosford Council Pricing Submission to IPART 2012 - page 39

<sup>74</sup> Drainage Opex.docx

*'contains all the salaried staff that work for City Services and Drainage funds. It contains the original salary split and the change in allocation of the salary and plant charges across City Services and Drainage.'*

Whilst we appreciate the effort that Gosford City Council has gone to - we have two overall concerns. The first is that none of the documentation provides a clear indication of the allocation process. That is, it is still unclear to us what exact methodology or approach was used to undertake the new allocation; how this differed from the existing allocation approach, and why the new allocation approach leads to allocations in the drainage business that is consistent with a prudent and efficient service provider. This concern is exacerbated by the overall magnitude of the change that appears to be indicated to be required in the model - namely, a move from allocating \$335k out of a total labour charge of \$4.05m to drainage, to allocating \$1.42M to drainage. This move represents a change from allocating ~8% of total labour costs to ~35%. Further, it is not clear how the outputs from the spreadsheet provided relate to the figures that are contained in the SIR Opex sheet, which contains a figure of around \$160k in 2014 for this Step Change, with marginal increases in the following years.

Overall, given these uncertainties, we are not in a position to deem this increase in labour costs allocated to drainage services to be prudent or efficient.

#### Drainage Service Management

During the interview process, it was noted that this increase was related to the normalisation of drainage cost for the average of the last three years (i.e. the difference between the 2012 actuals, and the average of the last three years). It was further noted that this was mainly to cover off the wages of workers.

Apart from the description that was provided as part of the interview process, no other description of this step change is provided as part of the submission, nor in further follow up documentation prior to the draft report<sup>75</sup>.

In our draft report, we stated that given the above, as well as the fact that we are proposing that actual 2012 cost be used to derive forecasts, we do not consider that this step change is consistent with a prudent and efficient service provider.

In response to the draft report, Gosford City Council provided no comment under the title, "Drainage Service Management", however it did provide comment under the title "Drainage Service Maintenance". However, this response pertained to the "reallocation of salaries between City Services and Drainage funds", which is inconsistent with our understanding of the scope of this step change, as described in the interview process, and therefore, we have not had regard for these comments.

Overall, we continue to maintain our recommendation that as we are proposing that actual 2012 cost be used to derive forecasts, we do not consider that this step change is consistent with a prudent and efficient service provider.

#### Proactive Maintenance

Similar to "Drainage Service Management", during the interview process, it was noted that this increase in proactive maintenance was related to the normalisation of drainage cost for the average of the last three years (i.e. the difference between the 2012 actuals, and the average of the last three years). It was further noted that this was mainly to cover off the wages of workers.

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We note that this was asked for, but at the time of writing the draft report, this has not been provided.

However, we raised at the time our concern with regards to ‘normalising’ proactive maintenance. In particular, we would have expected that proactive maintenance would be driven based on condition, and set maintenance schedules, and therefore, would not need to be normalised. In the event that resources were in fact diverted away from proactive to reactive maintenance in 2012, due to exogenous events such as weather, then we note that those costs would be incorporated into Gosford City Council’s baseline level of expenditure anyway, therefore, normalisation to account for the reduction in costs, but not for the increase, would lead to a double count. We note that in saying this, our proposed treatment of other drainage costs, in particular, reactive maintenance, means that actual 2012 costs are used to determine forecasts (i.e., these costs are not normalised either).

Overall, we stated in our draft report that based on the above, we do not consider that this step change to be consistent with a prudent and efficient service provider.

In response to the draft report, Gosford City Council stated that<sup>76</sup>:

*‘This represents the percentage of the annual proactive maintenance program that is expended to the drainage fund from Road maintenance City Services. The budget has been averaged as the expenditure has a proven trend of being within the same amount.’*

Consistent with the previously discussed step change, we continue to maintain the recommendation outlined in our draft report, namely, that as our proposed treatment of other drainage costs, in particular, reactive maintenance, means that actual 2012 costs are used to determine forecasts (i.e., these costs are not normalised either), we do not consider that this step change to be consistent with a prudent and efficient service provider.

### Rainfall Network Modelling

Based on the interviews, it is our understanding that the costs associated with this proposed Step Change are already in the actual year (2011/12) costs. The rationale for its inclusion as a Step Change is that there is an unfilled position that would otherwise have been filled (an Environmental and Planning position).

Again, it is noted that we sought further information on drainage step changes prior to finalising the draft report<sup>77</sup>. At the time of writing that report, no further information had been received.

Overall, whilst we understand the dilemma facing regulated businesses when such a situation occurs, and a position is being backfilled from another position, our threshold test is whether a prudent and efficient drainage service provider would need to increase expenditure, above historically incurred levels. Given that it has been confirmed that the expenditure is known to be in base expenditure levels, we do not consider it reasonable to assume that a prudent and efficient provider of drainage services would need to incur additional costs to undertake rainfall network modelling.

Gosford City Council did not provide any further information, or comment, in relation to this Step Change, in response to the draft report.

### Conclusion - Step Changes

The following table outlines the step changes that we consider to be consistent with that which a prudent and efficient service provider would incur.

<sup>76</sup> Response to OGW Review of Capital and Operating Expenditure for Gosford City Council.doc

<sup>77</sup> 121004 Information requested at IPART consultant review interviews.doc

Table 18: Recommended Step Changes - Corporate

Step Change	2013-14	2014-15	2015-16	2016-17
CCWC Establishment Fees	914,737	881,999	888,546	548,070

*\$real 2012/13*

*Source: OGW; Based on 50% of Table 3 of Agenda Item 5.5 CCWC Costs For Inclusion In Pricing Submissions.*

Table 19: Recommended Step Changes - Water

Step Change	2013-14	2014-15	2015-16	2016-17
High Voltage Contract (Water)	22,000	22,000	22,000	22,000
Somersby Sludge	1,080,000	1,080,000	1,080,000	1,080,000
Hawkesbury Bridge Painting - Relocation of Main*			600,000	616,000

*\*NOTE: Whilst this is listed in the SIR Opex as wastewater, we have moved this to water, based on our understanding of the project, as outlined in the interview process.*

*\$real 2012/13*

*Source: SIR Opex; Response to Draft Report (2012 adjustments and proposed step changes W&S.xls)*

Table 20: Recommended Step Changes - Wastewater

Step Change*	2013-14	2014-15	2015-16	2016-17
POEO Act (100% Wastewater)	120,000	120,000	120,000	120,000
Changed sludge management costs	1,243,000	1,330,000	1,419,000	1,565,000
High Voltage Contract (Wastewater)	22,000	22,000	22,000	22,000

*\$real 2012/13*

*Source: SIR Opex; Response to Draft Report (2012 adjustments and proposed step changes W&S.xls)*

Table 21: Recommended Step Changes - Drainage

Step Change*	2013-14	2014-15	2015-16	2016-17
Maintain gross pollutant traps	222,000	228,000	235,000	242,000

*\$real 2012/13*

*Source: SIR Opex*



## 6.4. Prudence and Efficiency of Operating Expenditure in Current Price Path

In summary:

- We have concerns over the fact that Gosford City Council has not met its proposed levels of service,
- However, we do not have enough information to conclude that Gosford City Council's water, wastewater and drainage operating costs, between 2009/10 and 2011/12, are not consistent with that of a prudent and efficient service provider, given the circumstances faced by Gosford City Council over the period.
- In addition, Gosford City Council's performance is best practice when compared against its peers on a key cost metric (combined operating cost per property in the National Performance Reporting Statistics)
- Outturn service levels do not indicate a systematic decline in service as a result of a trade-off between cost and service, although, as stated above, they have not met their forecast levels of service in many cases.
- Furthermore, there is no discernible, systematic trend increase in operating costs (excluding 2013) over the regulatory period.

## 6.5. Prudence and Efficiency of Operating Expenditure in Future Price Path

Our review of Gosford City Council's proposed operating expenditures leads us to consider that they are not consistent with a prudent and efficient water and wastewater service provider. The following tables outlines that the changes that we recommend be made to Gosford City Council's proposed operating expenditure forecasts.

Table 22: Recommended Changes to Assumptions Underpinning Proposed Operating Expenditure

Operating Expenditure Component	Recommended Change
Corporate overheads	<ul style="list-style-type: none"> <li>■ The 'Directorate' cost driver for each of the regulated water and sewerage businesses be 10%, and that this be adopted immediately (that is, no glide path approach be adopted to phase in this change);</li> <li>■ The allocation percentage for all secondary allocations that are reasonably able to be apportioned to water and wastewater, and which are driven by the number of Directorates, be changed to 10% for each of water and wastewater; and</li> <li>■ That a number of accounts, including: the category of accounts that we have defined as 'Costs related to the election of Council Officials' (excluding the 'Grants Officer') and 'Costs primarily driven by Council Branding', as well as 'Reporting', 'Events' and accounts related to 'Integrated Planning' be removed from the overall corporate cost pool that is in turn allocated back into the water and wastewater business.</li> </ul>
Starting 2013 Costs	<ul style="list-style-type: none"> <li>■ 2012 actual labour costs, inflated by the recommended labour cost escalator, should be used as the basis for setting forecasts of internal labour costs for the forthcoming regulatory control period. This implicitly removes the assumption that vacant positions are filled;</li> <li>■ On-costs be reallocated to employee provisions, and those 2012 on-cost be</li> </ul>



	<p>inflated by the recommended labour cost escalator discussed later in this report; and</p> <ul style="list-style-type: none"> <li>■ All non-labour related 2012 costs, except for JWS costs, be converted to 2013 costs using our proposed real cost and growth escalators.</li> </ul>
Real cost escalators	<ul style="list-style-type: none"> <li>■ Gosford City Council's real cost escalators be rejected, and revised escalators for the following cost components be applied: Labour; Corporate Costs; Materials; Hire &amp; contract services (Plant); Hire &amp; contract services (Other); Other (total of all items smaller than 5% of total operating expenditure) and Electricity.</li> <li>■ Gosford's City Council's escalators for External Consultants, Carbon Tax and Efficiency Gains be approved.</li> </ul>
Growth Escalators	<ul style="list-style-type: none"> <li>■ That Gosford City Council's be allowed to apply a growth escalator (based on its forecast of customer numbers) to 'materials' and 'electricity'.</li> </ul>
Step Changes	<ul style="list-style-type: none"> <li>■ Only the following step changes be approved: Maintain gross pollutant traps; Hawkesbury Bridge Painting - Relocation of Main; Changed sludge management costs; Additional Resource associated with the POEO Act; New High Voltage Contract; and Somersby Sludge Management; and</li> <li>■ The CCWC Establishment Costs that are allocated back into the water and wastewater business should be reduced to the amount which is outlined in Table 3 of Source document "Agenda Item 5 5 CCWC costs for inclusion in pricing submissions 120702 - PCG Meeting 5", as this figures appears to be based on a robust, beneficiary pays, cost allocation methodology.</li> </ul>

Source: OGW

Table 23: Forecast versus Recommend Operating Expenditure Forecasts (\$'000 real 2013)

Operating Expenditure Component <sup>78</sup>	2013/14	2014/15	2015/16	2016/17	Total
Corporate					
■ Forecast	14,672	14,483	14,399	14,023	57,577
■ Recommended	13,231	13,261	13,331	13,053	52,876
Water					
■ Forecast	18,368	18,579	19,891	19,933	76,771
■ Recommended	17,342	17,210	18,340	18,242	71,133
Wastewater					
■ Forecast	20,358	21,154	22,325	22,776	86,613
■ Recommended	18,925	19,211	19,495	19,821	77,452
Drainage					
■ Forecast	5,860	6,107	6,540	6,738	25,246
■ Recommended	5,647	5,691	5,736	5,782	22,857
<b>Total</b>					
■ Forecast	<b>59,258</b>	<b>60,324</b>	<b>63,155</b>	<b>63,469</b>	<b>246,206</b>
■ Recommended	<b>55,146</b>	<b>55,373</b>	<b>56,902</b>	<b>56,898</b>	<b>224,319</b>
<b>% Reduction</b>	<b>(6.939%)</b>	<b>(8.207%)</b>	<b>(9.900%)</b>	<b>(10.354%)</b>	<b>(8.890%)</b>

Source: AIR; OGW ('Gosford Model of Forecasts - Final.xls')

<sup>78</sup> All forecast figures have been estimated based on our own modelling, and exclude Hunter Water Purchases on advice from IPART.

## 7. Capital Expenditure

### 7.1. Asset Management Framework

In its submission, Gosford City Council makes the following statements with respect to asset management<sup>79</sup>:

#### **'Master planning'**

*Council has developed a long-term strategic plan for water and sewerage service needs to 2050 - the Water and Sewerage Master Plan. The Master Plan is wide-ranging and provides direction and guidance for the future development, expansion and operation of water and sewerage systems (including impacts of climate change) and asset management systems. The project has been undertaken in collaboration with Wyong Council's water business to ensure regional and coordinated planning for service delivery into the future. The risk management and criticality framework developed as part of the Master Plan has been utilised in the preparation of the capital expenditure program presented in this submission.*

#### **'Asset management maturity audit and development program'**

*In August 2010, Council performed an asset management maturity assessment audit against 35 key asset management practice areas, benchmarked against the International Infrastructure Management Manual 2006 (IIMM). This Maturity Assessment identified the current strengths in the water and sewerage asset management practices, and also highlighted areas for improvement, in order to demonstrate a core level of asset management competence.*

*Improvements have also been made to capital works governance and approval Council has subsequently implemented a four-year asset management development program. The primary goal and outcome from the first year of this program has been to successfully establish and validate a materially-correct asset register for each asset class at component level, to establish materially-correct estimated useful lives for each component, and to update or establish reliable unit rates, to enable a robust and comprehensive fair value assessment of water and sewerage assets. This has been successfully achieved, providing a robust assessment of gross replacement cost, annual depreciation, fair value (current written down value), and long term capital renewal profiles for water and sewerage assets.*

*Improvements have also been made to capital works governance and approval processes. Further enhancements will continue into the next Determination.*

*Council has commenced condition assessment programs for various asset classes. The work to date has demonstrated a high correlation between age and condition, indicating that, in the absence of more sophisticated models, asset renewal strategies based on age are materially correct.*

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Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012

#### **'Asset management information system - Hansen'**

*Council has populated its asset management information system, Hansen, with a significant proportion of its asset data enabling increased application of the system's capabilities. Council has also established a link between Hansen and its corporate record system, ECM Dataworks, which allows the linking of investigation reports, photographs, operations manuals and other documents to individual assets in the asset register.*

*Work orders are now issued from Hansen for a number of operational processes, allowing Council to better record the costs and resource requirements of different assets.'*

#### **'Asset management improvements'**

*Over the next Determination period Council will continue to build upon the asset management improvements that have been completed to date. This next stage of the asset management improvement program will involve:*

- *condition assessment programs for each asset class*
- *development and refinement of a risk/criticality assessment program for each asset class*
- *improved capital project delivery management, including - governance processes, gateway reviews and capital works approval process*
- *development and implementation of a framework for consistent business cases, project tracking and project reporting*
- *continued Asset Management Information Systems (AMIS) integration.'*

#### **'Asset management improvement program'**

*Council has a targeted rolling capital renewal program for each asset class, with particular emphasis on mechanical and electrical asset components. In the short term, these capital renewals are not anticipated to have a material impact on reducing operating expenditure, due to the large number of assets that currently require renewal due to age, condition and performance.'*

Further to the submission itself, a range of documents were provided during the review to substantiate the statements made by Council. These included:

- Water and Sewerage Master plan 2051 Draft Master Plan October 2012
- TM24 Technical Memorandum - Risk Management\_Rev5\_20120222
- TM25 Technical Memorandum - Asset Management Guidelines v3
- TM27 Technical Memorandum - Asset Planning Tools v1 3-9-2012
- JRA Schematic Flowchart
- Sewerage Asset Management Plan - RevIPART
- Gravity Sewer Mains Risk Analysis Condition Assessment Methodology
- 2011 GCC Fair Value Report V1.1\_Water & Sewer - August 2011

Whilst the Master Plan is still in draft form, it is noted that a range of Technical Memorandums have been produced as part of the preparation of the Master Plan. In particular, the technical memorandums supporting the development of Council's asset management framework have been completed and are being used by Council.

Asset management plans have been developed, with the sewerage asset management plan being provided for review.

The documentation provided supports Council's statement made in their submission. The review concluded based on the information provided that Council has made considerable progress in implementing its asset management strategy. The asset management plans and strategies put in place have been used to support the capital works proposed for replacement of assets.

One area where the review identified room for improvement is in the prioritisation of replacement works. The present asset management strategy identifies assets potentially requiring replacement/renewal (based on age) with a risk and condition assessment then carried out on these assets. Assets are then ranked on a priority basis for replacement. There is no evidence that a benefit/cost analysis is carried out to confirm that replacement/renewal is the best option. Whilst there is no doubt that some of the high ranked assets will require replacement/renewal, it is not possible, other than on a subjective basis, to know where the appropriate cut-off exists between assets that should be replaced/renewed and those that should continue to be maintained.

It is recommended Council assess other models such as those used by other authorities that enable their decisions on replacing assets to be<sup>80</sup> "*assets as they are identified as reaching the end of their life and the cost to renew is less than the cost to continue to maintain*" such as stated by Sydney Water. Such an approach will enable Council to better determine the trade-off between capital and operating expenditure and demonstrate that Council is making the best whole of life costs decisions for its assets.

At present, the one parameter, 'age', appears to be the dominant driver of the replacement program especially for electrical/mechanical assets.

#### 7.1.1. Asset Classification

This review has confirmed that Council has used the following asset classes: Civil, Electrical power, Electrical control (electronic or ICT), Mechanical and non-depreciating assets.

The recent revaluation (2011) was reviewed and found to be industry accepted practice with respect to valuation and assessment of residual asset life and allocation of expected lives for new assets.

Council has populated its asset management information system, Hansen, with a significant proportion of its asset data, with assets being broken down to maintainable components in the asset classes listed above.

It is noted that both Gosford and Wyong have utilised the same valuation methodology and asset classification in preparation for the transition to the Central Coast Water Corporation.

## 7.2. Capital Planning and Project Prioritisation

Gosford City Council, in collaboration with Wyong Shire Council, has recently developed a long term plan for water and sewerage needs to 2050 - the Water and Sewerage Master Plan ('Master Plan'). This document will provide direction and guidance for the future development, expansion and operation of water and sewerage systems and asset management systems. The Master Plan will ensure regional and co-ordinated planning for service delivery into the future and will provide the Master Plan for the CCWC.

The risk management and criticality framework developed as part of the Master Plan was used in the preparation of Gosford's capital expenditure program. As stated previously this framework is a ranking process which requires further development to enable asset replacement/renewal decisions to be made based on a benefit/cost basis. The Master Plan also includes a prioritisation process including gateways that is to be implemented by both Councils.

Council uses population forecasts to plan for new growth related assets. This review identified that for the Mardi Dam Spillway project, this process needs to be improved, with Council's own reports suggesting works could be deferred without risking drought security. A similar finding has been made for growth related projects in Wyong Shire Council.

In response to the draft report Council has provided comment on the timing of the Mardi Dam Spillway project with the comment and response spelt out in Section 7.6.1.

### 7.3. Procurement and Delivery Systems

Council's procurement and delivery systems are specified by Council and generally are as follows:

- A minimum of three selective tenders are called for projects less than \$150,000,
- Open tenders are called for projects estimated at more than \$150,000.

These processes are applied to both consultant procurement and project delivery procurement.

Historically, Council has used the traditional design then construct model. A combination of in-house resources and engagement of contractors is used for project delivery management.

Due to the scale of works required for the Coastal Carrier System upgrade and the wastewater treatment plant upgrades, Council elected to use an Engineering Procurement and Construction Management (EPCM) model for the design and delivery of these upgrades. Whilst this project is running behind the original schedule and is over the original cost estimate, use of this procurement approach by Council is considered to be an efficient way of delivering these works. (Time issues occurred due to delays in engaging an EPCM contractor and obtaining environmental approvals for works. The increased cost is primarily due to insufficient scope definition early in the project and insufficient attention to operational impacts of the works related to the scoping issues).

Some replacements, small extensions and relocations are carried out by day labour (when operational work load is low). A substantial amount of electrical replacements are also carried out by day labour.

A tender has been awarded for SCAD and Control for a period of up to 6 years in 2 x 2 x 2 year periods. Council will be going to tender to establish the following electrical panels in 2013:

1. Electrical Switchboard suppliers
2. Electrical Installers
3. Electrical Designers

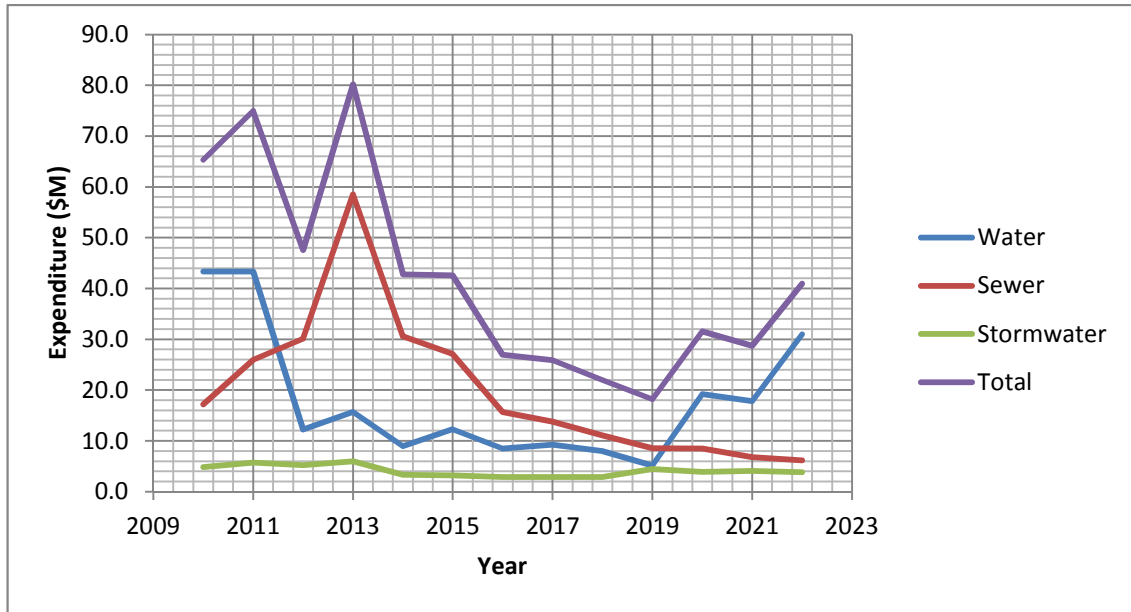
In addition a joint panel has been established with Wyong Shire Council to facilitate selective tenders for pumps and pipes engineering consultancies.

The procurement and delivery systems used by Council are all in accordance with normal industry approaches except for the use of day labour. This remains an area where there is limited evidence of benchmarking.

#### 7.4. Long-Term (10 year) Investment Plan

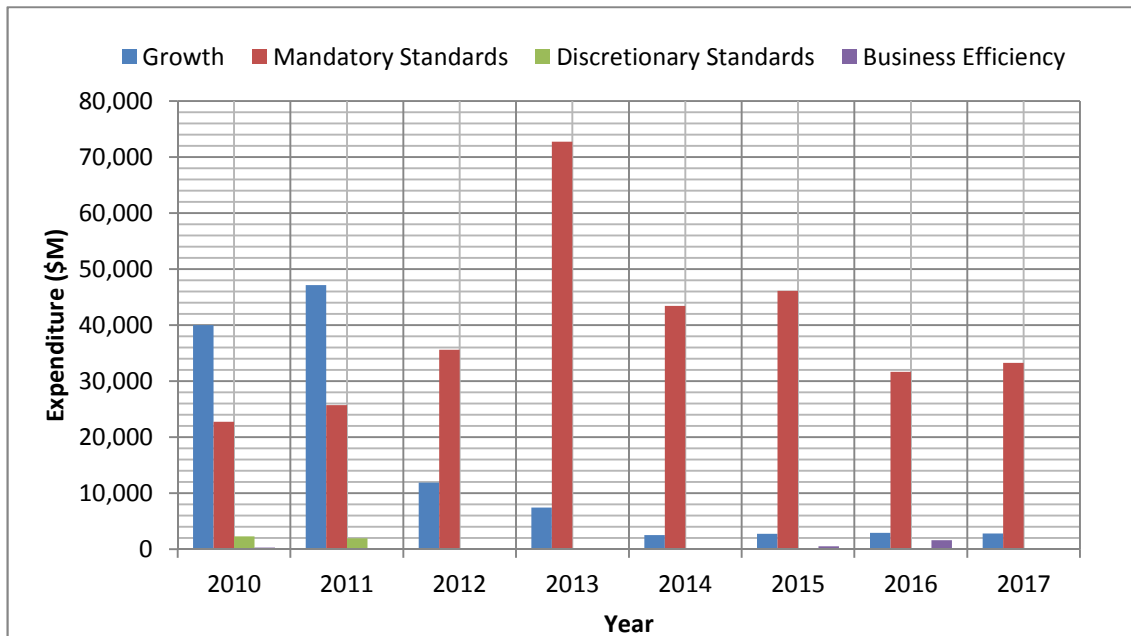
The following figures show the long term investment plan for Gosford City Council.

Figure 33: Long Term Capital Expenditure (GCC) (\$'000 real 2013)



Source: OGW sourced from SIR

Figure 34: Expenditure by driver 2010-2017 (\$'000 real 2013)



Source: OGW sourced from SIR

In the current price path the elevated levels of capital expenditure are related to the Coastal Carrier Main System and Wastewater treatment upgrades. For the 2014-2018 price path and subsequent years, the capital expenditure is being driven by asset replacements based on age of assets and regulatory requirements. A similar trend is noted for Wyong Shire Council.

For both Councils and the CCWC in the future, this reinforces the need to improve the assessment process for capital renewal/replacements to ensure a robust benefit/cost assessment is carried out to ensure renewal/replacement is carried out only when the cost to renew is less than the cost to maintain. Implementing such processes will also enable both Councils and the CCWC to quantify operational cost trade-offs that will result from capital renewal/replacement projects.

## 7.5. Assessment of Historical Water Capital Expenditure

The table below provides an overview of water expenditure including comparison between the previous determination and actual expenditure over previous price path.

Table 24: Historical Water Expenditure (\$'000 real 2013)

Driver	2009/10	2010/11	2011/12	2012/13	Total
<b>Joint Water Supply Projects</b>					
Growth	36,100	36,155	6,456	-	78,712
Mandatory Standards	2,005	396	88	5,982	8,472
Discretionary Standards	-	-	-	-	-
Business Efficiency	-	-	-	-	-
<b>Sub Total</b>	<b>38,106</b>	<b>36,551</b>	<b>6,545</b>	<b>5,982</b>	<b>87,184</b>
<b>Council Specific Projects</b>					
Growth	1,206	1,812	1,863	2,945	7,826
Mandatory Standards	1,780	3,248	3,805	6,814	15,646
Discretionary Standards	2,088	1,701	-	-	3,789
Business Efficiency	139	20	-	-	158
<b>Sub Total</b>	<b>5,212</b>	<b>6,781</b>	<b>5,668</b>	<b>9,759</b>	<b>27,420</b>
<b>Comparison with Determination</b>					
<b>Total Water Expenditure</b>	<b>43,318</b>	<b>43,332</b>	<b>12,213</b>	<b>15,741</b>	<b>114,604</b>
Determination	59,623	21,440	4,439	9,792	95,295
Difference	(16,306)	21,892	7,774	5,949	19,309

Source: OGW sourced from SIR

Council have attributed the variations in expenditure to<sup>81</sup>:

- Variations in project timing of the Mardi Mangrove link

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Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 24



- *Variations of project timing and costs savings for the Mardi High Lift Pump Station Associated Works*
- *Deferment of the Porters Creek Stormwater Harvesting project to better align with actual growth rates*
- *Deferment of the Mardi Dam pre-treatment project until after commissioning of the Mardi-Mangrove Link in order to validate the design based on the actual change in water quality.'*

The variations in timing for the Mardi to Mangrove link explain the big variations in 2009/10 and 2010/11. The explanations in themselves do not explain the increase in expenditure. From the SIR the main increase in expenditure relates to the increased costs for the Mardi to Mangrove link.

To assist in the assessment of the prudence and efficiency of the historical water capital expenditure, two projects were chosen for review, being 'Watermain Replacements' and 'CBD Reticulation Upgrade - Gosford'. The first is a replacement project based on the asset management strategy, whilst the second is predominantly a growth related project.

### 7.5.1. Watermain Replacements

#### Description of Project

Council's 'Watermain Replacement' program is targeted at replacing poorly performing watermain. Watermains are assessed for replacement based primarily on failure history.

Council, in their asset management system, have assigned lives to watermain assets which are consistent with industry standards. At this point in time, Council's mains have not reached their nominal end of life but they still have mains that are performing poorly due to ground conditions (e.g., acid sulphate soils). Council do have a high average pressure in their reticulation system (77m), which could account for the relatively high failure rate experienced in recent years.

#### Drivers/Justification

The key driver for this replacement program is a mandatory standard - water discontinuity. Council's performance against the output measure in the 2009 determination of no more than 10 watermain breaks per 100km of main has been as follows:

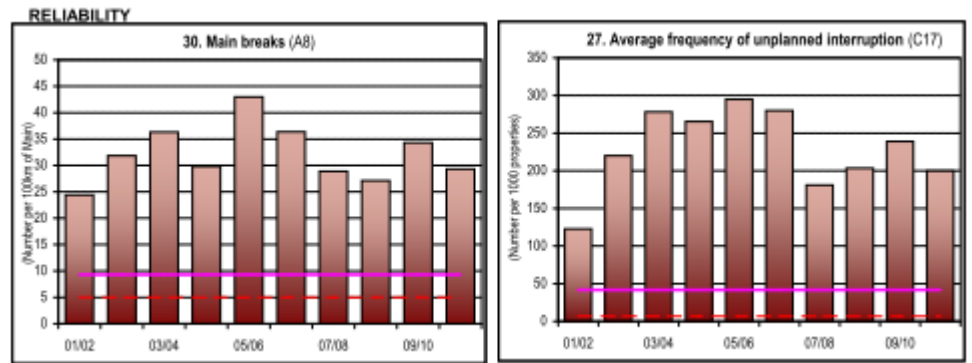
Table 25: Watermain breaks

Indicator of activity by 2011/12	Activity 2009/10	Activity 2010/11	Activity 2011/12
No more than 10 per 100km of main	34.0	27.8	26.7

Source: OGW sourced from SIR

Council's performance from benchmarking against their peers is shown in the following tables from the TBL performance report.

Figure 35: GCC's Water Main Break and Average Frequency of Unplanned Interruption



Source: Gosford City Council TBL Water supply Performance 2010-11

Our review has noted more realistic targets for output measures have been proposed for this submission.

### Option Assessment/Solution Development

Water mains are considered for replacement based on failure history. Where a main has a history of failure, a benefit/cost analysis over 30 years is carried out using known replacement costs and repair costs. The rate of main failure is based on the average rate of failure over the preceding three years and is assumed to be constant (i.e., no escalation of break rate is assumed in the analysis).

Projects are ranked on other factors such as social, environmental and risk according to the following formula:

Figure 36: Weighting Criteria for Water Main Replacements

	Weighting	Criteria
+	2x	Benefit Cost Ratio
+	1x	3 yr annual break rate average
+	0.5x	7 yr annual break rate average
+	1x	Customer Impacts
+	1x	Operational Risk
+	1x	Environmental Impacts
=	Priority Score	

Source: Gosford City Council Watermain Replacement Program Prioritisation Criteria

In utilising this formula, it is noted that projects can be included on the priority list with benefit/cost ratios substantially less than 1 (e.g., one water main with a benefit/cost of 0.38 was on the 2010/11 priority list).

### Project Delivery

Council reported that these mains are replaced utilising day labour when resources are available. It is noted that a recommendation of the previous review was for a panel to be established for this work. There is no evidence that this has occurred. A concern with work being performed by day labour is that work will be generated to keep the labour force occupied. By having a panel arrangement and only issuing work under this arrangement, it removes any doubt as to whether work is being generated to keep a workforce employed and as such, it is again recommended that this work should be sourced under a contract arrangement.

### Cost Comparison (Actual expenditure vs. Determination)

From the 2009 determination, an allowance of \$11,398,000 (\$'000 real 2013) was provided for this work. New account numbers are generated for each work identified and as such there are a multitude of individual costs that make up the final expenditure. Gosford City Council have advised the total expenditure is anticipated to be \$10,000,000 (nominal \$ for 2010-2013).

### Assessment of Prudence and Efficiency

At this point in time it is not possible to assess the efficiency of the delivery of these works as comparative costs for performing this work under contract are not available.

We do not believe that the ranking method that appears to have a major influence on the priority selection of water mains for replacement is prudent. A much more defensible method of prioritising water main replacements would be to assign dollar values to the social, environmental and operational impacts and include this in the benefit/cost analysis. It is difficult to accept that the social, environmental and operational costs for a small diameter watermain failure could raise a straight repair/replace financial assessment from a benefit/cost of 0.38 to over 1.00 (except in exceptional circumstances). We recommend that Gosford City Council investigate a more robust financial assessment of watermain replacements by considering the models used by Hunter Water Corporation and Sydney Water Corporation.

The following is a summary of the 2010/11 priority list.

Table 26: Priority List for Watermain Replacements

Location	Estimated Cost	BCR
Mirreen Avenue	\$35,000	5.17
Ash St/Henley Ave	\$138,200	1.37
Henderson Road/Colin St	\$160,000	0.93
Grove Rd	\$158,000	0.87
Benwerrin St	\$122,000	0.86
Central Coast H'way	\$172,100	0.78
Victory Pde	\$228,000	0.59
Pine Ave	\$269,000	0.55
High St	\$513,400	0.45
Steyne SRd (East)/View parade	\$475,400	0.38

<b>Total</b>	<b>\$2,271,100</b>	<b>-</b>
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*Source: OGW based on email from Mark Lee 12/10/2012*

It is difficult to see that social, environmental and operational costs could dramatically change the benefit/cost ratio from say 0.75 to more than 1.00 unless there were critical users such as schools or hospitals serviced by these mains. On this basis, out of the priority list valued at \$2,271,100 only \$785,300, or 35%, of the total amount, would have been justified on a straight benefit/cost assessment.

Whilst we do not agree with the methodology used to substantiate the replacements, the information provided verifies that the methodology has been consistently applied. Without the detailed information related to each individual replacement decision there is insufficient information to say that these works were not justified and as such, no recommendation is made to not include the full expenditure in the RAB.

The review has noted that the allowance in the 2014-2017 submission for Watermain Renewals - Unallocated Budget is \$5,124,000 (\$ real 2013) (approximately 50% of the allowance for 2010-2013). We note that this is above the 35% figure determined above but consider the 35% should be increased to allow for further ageing of Council's mains, and therefore, the 50% reduction is considered appropriate.

## 7.5.2. CBD Reticulation Upgrade - Gosford

### Description of Project

The Gosford CBD water reticulation upgrade was reviewed for the 2009 determination.

Works are proposed to be carried out progressively as redevelopment of the CBD occurs. Redevelopment will result in both height and density increases with population increasing from 7,142 in 2011 to 17,942 in 2041. Both water and sewer works are required to ensure servicing of the redevelopment.

A Development Servicing Plan (DSP) was prepared for this CBD upgrade in 2006. Reviews of this plan are undertaken to ensure works are carried out at the most appropriate time, with the most recent revision to the DSP being prepared in June 2012.

### Drivers/Justification

Works are required due to growth. Modelling has been carried out to determine the required works.

### Option Assessment/Solution Development

The key issue with constructing the works identified as being required in the DSP is the rate of development. Council revises DSPs on a regular basis to confirm/change the timing of works with a copy of the most recent revision dated June 2012 being provided as part of the review. Other Council activities (other than development) can also result in works proceeding e.g. Gosford Challenge - Gosford City Centre Master Plan.

The timing and justification of the works is robust and gives confidence that works are being implemented in an efficient manner.

## Project Delivery

Works are predominantly carried out by day labour. Similar comments with respect to the efficiency of this work apply as to those made under watermain replacement but there is less scope for these works to be generated to suit workforce needs as a result of the revision of the DSPs.

## Cost Comparison (Actual expenditure vs. Determination)

From the 2009 determination, an allowance of \$9,096,000 (\$ real 2013) was provided for this work. An amount of \$1,126,000 was expended.

## Assessment of Prudence and Efficiency

Based on the information provided by Council, which demonstrates that the DSPs are revised to account for actual development take up rates, and the fact other Council activities such as the Gosford Challenge and Gosford City Centre Master Plan can result in works being required, we consider that the work carried out was both efficient and prudent.

## 7.6. Assessment of Historical Wastewater Capital Expenditure

The table below provides an overview of wastewater expenditure including a comparison between the previous determination and actual expenditure over previous price path.

Table 27: Historical Wastewater Expenditure (\$'000 real 2013)

Driver	2009/10	2010/11	2011/12	2012/13	Total
Growth	2,717	8,912	3,410	4,243	19,282
Mandatory Standards	14,110	16,602	26,735	54,210	111,657
Discretionary Standards	199	272	-	-	471
Business Efficiency	162	127	-	-	289
<b>Total</b>	<b>17,188</b>	<b>25,913</b>	<b>30,145</b>	<b>58,453</b>	<b>131,699</b>
<b>Comparison with Determination</b>					
<b>Total Expenditure</b>	<b>17,188</b>	<b>25,913</b>	<b>30,145</b>	<b>58,453</b>	<b>131,699</b>
Determination	27,755	18,917	16,811	10,644	74,127
Difference	(10,567)	6,996	13,334	47,809	57,572

Source: OGW sourced from SIR

In its 2009 determination, Council was provided a wastewater capital budget to deliver a range of defined projects over the four year price path as shown above. Council is forecasting an increase in spending of 81% over the determined amount. All amounts are in \$'000 real 2013.

Council have attributed the variations in expenditure to:

- *'increased expenditure on the Mooney Mooney Cheero Point Sewerage Scheme associated with major redesign and associated changes to the scope of works for the Hawkesbury River bridge crossing*

- *Variations in project timing, scope of work and expenditure projections for the Coastal Carrier system upgrade due to*
  - *Re-analysis of options,*
  - *Environmental approvals,*
  - *Establishment of an Engineering Procurement and Construction management contract.*
- *Variations in project timing, scope of work and expenditure projections for the Kincumber and Woy Woy sewage treatment plant upgrades, including*
  - *Establishment of an Engineering Procurement and Construction Management contract requiring additional set up time*
  - *Detailed risk assessment and options analysis for the refurbishment of the anaerobic digesters requiring a change to the refurbishment strategy*
  - *Detailed condition assessment of the existing high voltage supply controls servicing the aeration system requiring additional work and postponement of aeration upgrades*
  - *Major electrical upgrades required to a standard greater than allowed for in original cost forecasts*
  - *Poorer than expected condition of inlet works requiring greater costs to bring to an appropriate standard'*

These however do not adequately explain the overall increase in themselves. From the SIR the main increases in expenditure relate to:

- Changes in EPCM timing and value - an increase in cost of \$28,669,000
- Sewage treatment upgrade costs (non EPCM) - a reduction in expenditure of \$6,205,000
- SPS timing and value - an increase in cost of \$5,456,000
- Main changes in timing and value - an increase of \$2,045,000
- Hawkesbury Villages Stage 1 - Mooney Cheero Sewerage Scheme - an increase of \$1,931,000
- Asset assessment - an increase of \$1,241,000
- Septicity control optimisation - an increase of \$1,166,000

To assist in the assessment of the prudence and efficiency of the historical wastewater capital expenditure, three projects were chosen for review, being the EPCM - KSTP Aeration; EPCM - Dewatering Facility; and the EPCM Kincumber RM Upgrade. The first two are basically upgrades/renewals of existing systems while the third is a growth related project.

#### 7.6.1. EPCM - KSTP Aeration

##### Description of Project

Gosford City Council is undertaking a capital works improvement program at its Kincumber and Woy Woy Sewage Treatment Plants to meet the objectives of improved plant performance and odour reduction. Council is undertaking this work under licence condition 'U1 PRP 3 - Implementation of Sewage Treatment Plant Upgrade Works'.

At Kincumber, this Pollution Reduction Program (PRP) requires<sup>82</sup>:

*'Upgrade and refurbishment of three (3) aeration tanks at Kincumber STP to Fine Bubble Diffused Aeration.*

The PRP originally required commissioning of these works in December 2011. The aeration upgrade has been delayed by a number of factors including<sup>83</sup>:

- *'condition assessment of the existing high voltage supply controls servicing the existing aeration system.*
- *additional blower capacity requirements to accommodate future capacity of the STP.*
- *the detailed risk assessment and options analysis undertaken for the anaerobic digesters'.*

*'A tender for the Aeration upgrade was let in February 2012. The delivery program will involve refurbishing one aeration tank at a time, commencing with Tank No.3 first, and Tank No.2 second. It is now proposed to convert the existing Aeration Tank No.1 into a temporary aerobic (WAS) digester for the interim period while both anaerobic digesters are cleaned out and refurbished.*

*This will allow the anaerobic digesters to be taken off line progressively. The conversion of Aeration Tank No.1 to an aerobic digester will utilise the existing surface aerators, plus two additional surface aerators, to meet the required oxygen input and mixing requirements for this aerobic digestion process.*

*It is expected that the aeration upgrade with fine bubble diffusers will be completed by February 2013 for Aeration Tanks 2 & 3. With Aeration Tank 1 being upgraded to fine bubble diffusers after the completion of the Anaerobic Digesters upgrades, providing further redundancy / standby aeration capacity for the treatment plant.'*

#### Drivers/Justification

The key driver is an existing mandatory standard. The performance of Gosford City Council's sewage treatment system is regulated by Environment Protection Licence (EPL) 1802, in accordance with the Protection of the Environment Operations Act 1997. Gosford City Council has committed to carrying out a PRP under the current Licence. The aeration upgrade at Kincumber is specified under this PRP.

#### Option Assessment/Solution Development

In 2006, MWH Australia conducted a strategic process review of wastewater treatment for Gosford City Council.

This review identified that the existing surface aerators in Number 1 and 2 reactors were nearing the end of their typical useful life and would require either replacement or major overhaul in the short term.

The review identified two possible options for aeration in both these reactors (replace existing surface aerators or fine bubble diffused aeration) and recommended fine bubble diffused aeration (FBDA) using silicon diffusers based on a net present value basis.

<sup>82</sup> Licence EPL 1802-U1PRP2

<sup>83</sup> GCC submission to Office of Environment & heritage April 2012

Aeration tank 3 already utilised a FBDA system utilising ceramic diffusers which were also identified as approaching the end of their useful life. The review identified three possible options for aeration (surface aerators, replace the ceramic diffusers and replace the ceramic diffusers with silicon diffusers). A FBDA system using silicon diffusers was selected based on a net present value basis.

It is considered that the options assessment was comprehensive; the solution selected was based on a sound case and is consistent with industry practice.

### Project Delivery

The project is being delivered under an EPCM contract. Under this contract, the EPCM contractor manages the engagement of the designers, the construction contractors and manages the construction. Council still actually engages the designers and contractors. Procurement of designers and contractors is carried out following Council's normal procurement guidelines, being at least three quotes for works under \$150,000 and open tenders for works over \$150,000.

As this project is being delivered with other major upgrade works being carried out in the sewage treatment plants as well as a major carrier upgrade from Terrigal to Kincumber, use of an EPCM contract by Council is considered to be an efficient method of delivering such a large work load.

### Cost Comparison (Actual expenditure vs. Determination)

From the 2009 determination, an allowance of \$6,356,000 (\$ real 2013) was provided for this work. An amount of \$9,530,000 is expected to be expended on this item. It is noted however that the amount of \$9,530,000 appears to be for the aeration upgrade contract only and does not include project management costs. These appear under separate line items in the SIR:

- EPCM - Salaries & Consultants - STP - 42305.907
- EPCM - Services Contracts - 45308.932

It is obvious this project will cost more than the determination. Key reasons provided for the increased costs are as follows:

- Inadequate original scope definition. The EPCM contractor required concepts to be reworked before proceeding to detailed design.
- The original concept was at too high a level and did not identify key operational constraints and issues with the existing sewage treatment plant that required resolution and contributed to the increased costs (e.g., one aeration tank could not be taken off-line due to the inability to redirect flow; the need to integrate the digester upgrade with the aeration upgrade to ensure continued operation of the plant to comply with its licence conditions).

Whilst the overall costs have increased it appears that once the scope issues were resolved and a revised budget was set around the revised scope that works will be completed within that revised budget.

### Assessment of Prudence and Efficiency

As stated above, it is considered that this project has been delivered in an efficient manner. Whilst the final cost is above the determination amount the key reason for this is the inadequate scope definition for the works when the submission was made. One of the first tasks under the EPCM contract was to better define the scope of works and adjust the budget accordingly. The EPCM will deliver the works within the revised budget set after the scope was defined. It is considered that the works carried out were prudent.



## 7.6.2. EPCM - Dewatering Facility

### Description of Project

Gosford City Council is undertaking a capital works improvement program at its Kincumber and Woy Woy Sewage Treatment Plants to meet the objectives of improved plant performance and odour reduction. Council is undertaking this work under licence condition 'U1 PRP 3 - Implementation of Sewage Treatment Plant Upgrade Works'.

This PRP requires<sup>84</sup>:

*'Upgrades to Kincumber and Woy Woy STP Biosolids systems.'*

As part of the PRP, Gosford City Council proposed to upgrade the dewatering facilities at both sites to improve biosolids handling practices.

Kincumber STP had an existing dewatering facility with a single belt filter press. Woy Woy STP had a trailer mounted belt filter press. At both sites there was no redundant dewatering capacity. Both sites dewatered directly from sludge lagoons with the sludge pumped via pontoon with pump/mixer arrangement.

This dewatering project was to replace the existing dewatering facilities and provide redundant capacity for the future to 2051. It was also to have sufficient capacity to process the backlog of biosolids.

Tenders were called including the following works:

- Belt filter press dewatering plant at Kincumber STP.
- Belt filter press dewatering plant at Woy Woy STP.
- Pontoon based mixer and pump at Kincumber and Woy Woy STP's.
- Liquid waste receival facility at Kincumber STP.
- Access roadworks at Kincumber and Woy Woy STP's.
- Service pipelines at Kincumber and Woy Woy STP's.
- Electrical switchgear and instrumentation.

The PRP required the new dewatering facilities to be completed for Kincumber by February 2011 and for Woy Woy by March 2011.

### Drivers/Justification

The key driver is an existing mandatory standard. The performance of Gosford City Council's sewage treatment system is regulated by Environment Protection Licence (EPL) 1802, in accordance with the Protection of the Environment Operations Act 1997. Gosford City Council has committed to carrying out a PRP under the current Licence. The dewatering facilities at Kincumber and Woy Woy are required as part of the PRP requirement to upgrade the biosolids systems.

### Option Assessment/Solution Development

In 2006, MWH Australia conducted a strategic process review of wastewater treatment for Gosford City Council. The works proposed were identified as part of this review.

### Project Delivery

The project was delivered primarily by contract as part of the EPCM management contract. Tenders received for the work were higher than the pre-tender estimate. The scope of the contract was amended following a review of the tendered amount with some of the works being carried out by Council.

Use of the EPCM contract is considered good practice for the scope of works being undertaken by Council at the time. Reassessing the scope of work to be delivered under the contract is also considered good practice when tendered sums are higher than the pre-tender estimate.

### Cost Comparison (Actual expenditure vs Determination)

From the 2009 determination, an allowance of \$12,334,000 (\$ real 2013) and \$2,828,000 (\$ real 2013) was provided for this work. An amount of \$7,058,000 is expected to be expended on this item. It is noted however that the amount of \$7,058,000 appears to be for the dewatering contract only and does not include project management costs. These appear under separate line items in the SIR:

■ EPCM - Salaries & Consultants - STP - 42305.907

■ EPCM - Services Contracts - 45308.932

### Assessment of Prudence and Efficiency

The project was delivered primarily by contract as part of the EPCM management contract. Tenders received for the work were higher than the pre-tender estimate. The scope of the contract was amended following a review of the tendered amount with some of the works being carried out by Council.

Use of the EPCM contract is considered good practice for the scope of works being undertaken by Council at the time. Reassessing the scope of work to be delivered under the contract is also considered good practice when tendered sums are higher than the pre-tender estimate.

As stated above, it is considered that this project has been delivered in an efficient manner. It is also considered that the works carried out were prudent.

## 7.6.3. EPCM Kincumber RM Upgrade

### Description of Project

The Coastal Carrier Main System (CCMS) services the coastal areas from Avoca Beach to Forrester's Beach through Kincumber to the Kincumber Sewage Treatment Plant. The works were commissioned in 1980 and required upgrade due to population growth and the need for asset renewals (primarily mechanical and electrical equipment).

The Kincumber SPS and rising main are the final leg of the coastal carrier system and both required upgrading as part of these works.

Studies commissioned by Council had identified that Kincumber SPS was undersized to deliver current and future storm flows.

### Drivers/Justification

Mandatory/growth

### Option Assessment/Solution Development

Council has commissioned a range of reports that considered upgrades of the CCMS including the Kincumber rising main upgrade. Kincumber was integral to all option reviews. Some of the key reports are as follows:

- Jan 2007 GHD 'Coastal Carrier System Upgrade Final Investigations Report'
- Nov 2008 Maunsell/Aecom 'Gosford Coastal Carrier System Augmentation Preferred to Adopted Option'
- Nov 2008 Halcrow 'Review of Capital and Operating Expenditure for Gosford City Council'
- May 2009 Water Directorate 'Review of Upgrade Strategies'
- Nov 2009 Aecom 'Adopted Option Development Report'
- Feb 2010 Aecom 'Kincumber Delivery System Upgrade by Single Rising Main'

The early reports were recommending two rising mains be constructed as part of the upgrade works. The final report recommended a single DN1000 rising main be constructed based on a least cost capital solution.

### Project Delivery

Consultant reports have been commissioned under normal Council purchasing procedures. Construction works are being delivered under a contract called by open tender with the process being managed under the EPCM contract.

### Cost Comparison (Actual expenditure vs Determination)

From the 2009 determination, an allowance of \$41,923,000 (\$ real 2013) was provided for the Terrigal to Kincumber Augmentation. Of this, the original estimate for the Kincumber rising main (construction cost only) as advised by Council was \$2,500,000. An amount of \$6,039,000 is expected to be expended on this item. It is noted, however, that the amount of \$6,039,000 appears to be for the rising main contract only and does not include project management costs. These appear under separate line items in the SIR -

- EPCM - Salaries & Consultants - STP - 42305.907
- EPCM - Services Contracts - 45308.932

As with the other items constructed under the EPCM contract, the main increase in costs is due to insufficient scope definition and insufficient consideration to operational impacts in the original scope definition. Once the scope was correctly defined under the EPCM with appropriate adjustment to estimated costs contract delivery of the works has been within the revised scope and budget.

This assessment confirms the comments made by Halcrow in their 'Review of Capital and Operating Expenditure for Gosford City Council Final Report 2008' -

*'Given the complexity of this scheme, the high level of uncertainty and significant variance to date, we are concerned that costs will continue to escalate as the scheme definition improves.'*

### Assessment of Prudence and Efficiency

The project was delivered primarily by contract as part of the EPCM management contract which as stated for previous items is considered to be an efficient delivery method. The actual works carried out were subject to detailed review both from a capacity perspective as well as determining the most appropriate solution and are considered to be prudent.

#### 7.6.4. EPCM Project

As can be seen from the discussion of the previous three projects, there are substantial variations between the amounts approved in the previous determination and actual costs. This is compounded by the management and consultant costs being separately reported.

Whilst the intent was to review the three individual projects, it is considered more appropriate to consider the EPCM project as a whole.

The 2009 determination provided for the following capital projects which were all delivered under the EPCM model:

- KSTP - Biosolids Treatment Area - \$12,334,000 (\$ 2013)
- KSTP - Secondary Treatment Area - \$6,356,000 (\$ 2013)
- WWST - Biosolids Treatment Area - \$2,829,000 (\$ 2013)
- KSTP - General Works - \$2,188,000 (\$ 2013)
- Terrigal to Kincumber - \$41,923,000 (\$ 2013)

A total of \$65,630 +/-20% (\$000 2013) was provided for these works.

The EPCM specification (November 2009) included the following:

- A. The Coastal Carrier Main Upgrade Project, comprising pumping station and pipeline upgrades to the Coastal Carrier Main System (CCMS) and Kincumber PS/RM which form part of the Gosford Regional Sewerage Scheme (GRSS). Current estimated project cost is \$25M.*
- B. The STP Upgrade Project, comprising various process unit upgrades at both Kincumber and Woy Woy STPs. Current estimated project cost is \$40M.'*

The SIR has total expenditure on this project of \$64,068,000 (\$ real 2013) in the 2009/13 price path with an estimated expenditure to complete the project by 2015 of \$7,268,000 giving a total of \$71,337 (\$'000 real 2013 confirming that this project in total has been delivered efficiently and the changes in scope identified were prudent.

#### 7.7. Assessment of Historical Stormwater Capital Expenditure

The table below provides an overview of stormwater expenditure, including comparison between the previous determination and actual expenditure over previous price path.

Table 28: Historical Stormwater Expenditure (\$'000 real 2013)

Driver	2009/10	2010/11	2011/12	2012/13	Total
Growth	-	251	190	265	706
Mandatory Standards	4,884	5,479	4,988	5,706	21,057
Discretionary Standards	-	-	-	-	-
Business Efficiency	-	-	-	-	-
<b>Total</b>	<b>4,884</b>	<b>5,730</b>	<b>5,177</b>	<b>5,971</b>	<b>21,763</b>
<b>Comparison with Determination</b>					
<b>Total Expenditure</b>	<b>4,884</b>	<b>5,730</b>	<b>5,177</b>	<b>5,971</b>	<b>21,763</b>

Determination	5,914	5,525	5,045	5,842	22,325
Difference	(1,369)	205	132	129	(902)

Source: OGW sourced from SIR

Council has attributed the variations in expenditure to a range of individual projects where actual costs were both above the estimated cost and others where actual costs were below. However, overall expenditure was within the normally expected variances for a well-managed capital program where there are a lot of unspecified works when the overall program is established.

To assist in the assessment of the prudence and efficiency of the historical stormwater capital expenditure, one project was chosen for review, being the Henley Avenue, Terrigal CBD project. This is an on-going project to alleviate flooding.

### 7.7.1. Henley Avenue, Terrigal CBD

#### Description of Project

The Henley Avenue, Terrigal CBD flood mitigation project forms part of the Kincumber urban flood mitigation project. This is an on-going project aimed at alleviating flooding in the Terrigal catchment. The project was initiated following flooding and drainage problems experienced in Gosford Council area in January 1989, February 1990 and February 1992.

Council commissioned a study in 1995 which produced the 'Terrigal Trunk Drainage Management Study and Management Plan'. The study involved the preparation of a flood study to firstly define the extent of the flood problem, a floodplain management study to identify options for mitigation measures, and then a floodplain management plan to adopt flood mitigation works and to set development controls to prevent future disaster flooding and damage and risk to life.

Having prepared a floodplain management study and a floodplain management plan Council is able to receive Government funding for implementing the plan.

#### Drivers/Justification

The key driver for this project is compliance with a mandatory standard. The works are to maintain and renew the drainage system and reduce the large capital works backlog.

#### Option Assessment/Solution Development

The Terrigal Trunk Drainage Study, Management Study and Management Plan considered a range of mitigation measures in developing their final recommendations. These included:

- Pipe, culvert, and channel amplification,
- Extension of drainage lines,
- Additional stormwater pits,
- Upgrading existing pits,
- Kerb and guttering,
- Road regarding,
- Purchase of flood liable properties,
- Retarding basins,

- New drainage lines,
- Minimum floor levels for new developments.

The priority and ranking of the recommended drainage works was based on the need to:

- Maximise the number of houses or properties that would be made flood free up the 1 in 100 AEP flood, and
- Ensure that the proposed drainage works do not worsen the flooding situation elsewhere.

#### Project Delivery

Project delivery is carried out in accordance with Council's procurement policies:

- Detailed design is carried out by consultants with a minimum 3 quotes being obtained,
- Construction is carried out by contract with open tenders being called,
- Construction management is by Council.

#### Cost Comparison (Actual expenditure vs Determination)

From the 2009 determination, an allowance of \$1,313,000 (\$ real 2013) was provided for this work. An amount of \$1,076,000 was expended.

#### Assessment of Prudence and Efficiency

Council's approach to the delivery of these works is to implement the floodplain plan of management progressively to maximise the contribution received from Government. Their procurement processes are efficient and their approach to maximising the government contribution demonstrates prudence in their implementation of the floodplain management plan.

## 7.8. Assessment of Proposed Water Capital Expenditure

The table below provides an overview of proposed water expenditure over the forthcoming regulatory period.

Table 29: Proposed Water Expenditure (\$'000 real 2013)

Driver	2013/14	2014/15	2015/16	2016/17	Total
<b>Joint Water Supply Projects</b>					
Growth	-	-	-	-	-
Mandatory Standards	2,885	6,315	3,233	5,410	17,843
Discretionary Standards	-	-	-	-	-
Business Efficiency	-	-	-	-	-
<b>Total</b>	<b>2,885</b>	<b>6,315</b>	<b>3,233</b>	<b>5,410</b>	<b>17,843</b>
<b>Council Specific Projects</b>					
Growth	796	796	796	796	3,184
Mandatory Standards	5,508	5,916	5,127	4,106	20,657
Discretionary Standards	-	-	-	-	-

Business Efficiency	-	-	-	-	-
<b>Total</b>	<b>6,304</b>	<b>6,712</b>	<b>5,923</b>	<b>4,902</b>	<b>23,841</b>
<b>Total Water Expenditure</b>	<b>9,189</b>	<b>13,027</b>	<b>9,156</b>	<b>10,312</b>	<b>41,684</b>

Source: OGW sourced from SIR

Council in its submission states:

*'Water capital expenditure is being increasingly driven by renewal of aging assets, and regulatory requirements.'*

Mangrove Creek Dam Spillway Upgrade, Somersby Water Treatment Plant, Major water pump station renewals, Mardi Dam Curtain pre-treatment works and sludge disposal system are the main works planned for the Joint Water Supply system.

Council specific projects are predominantly for renewals involving water main renewals, Davistown trunk main renewal, Woy Woy PRV facility upgrade and water meter replacement program are the major contributors to the Council specific program.

To assist in the assessment of the prudence and efficiency of the proposed water capital expenditure, two projects were chosen for review, being the JWS - MCD Upgrade for Revised PMF and ICT - Major ICT Equipment Renewal Program. The first is a planned work, with the second being a replacement project based on the asset management strategy.

#### 7.8.1. JWS - MCD Upgrade for Revised PMF

##### Description of Project

Mangrove Creek Dam is classified by the NSW Dams Safety Committee (DSC) as a High A Consequence Category dam. Under this classification the dam must be capable of:

- Catering for the critical-height Probable Maximum Flood (PMF) event at its full supply level with a 0.6m minimum freeboard, and
- Safely convey the PMF dam outflows downstream of the dam via its spillway.

If Mangrove Creek Dam was to be operated at its full supply level it would not meet these requirements. This project is intended to address this deficiency by providing an enlarged spillway to discharge PMF flows in accordance with DSC's requirements.

##### Drivers/Justification

The key driver is mandatory standards specified by the DSC.

##### Option Assessment/Solution Development

A review of options was carried out by the Dams and Civil Section of NSW Public Works in October 2010. Whilst this review was primarily intended to develop an interim PMF Management Plan, it assessed relevant information related to the need and timing of a spillway upgrade.

It should be noted that the DSC's requirement to pass a PMF is based on the dam being operated at its full supply level. An alternate option to achieve DSC compliance is to operate the dam storage at a lower level so that in the event of a PMF occurring some of the flood is stored in the dam with only a portion being required to be discharged. This is a valid option but needs to be balanced against the requirement to achieve drought security, noting that drought security is high on Council's agenda following the recent drought.

The review in 2010 recommended that the interim solution for operation of Mangrove Creek Dam is to operate the dam up to a maximum 80% storage level to allow the storage to sufficiently mitigate the PMF to allow the existing spillway to remain within its current capacity.

The review concluded<sup>85</sup>:

*'On the basis of current water usage patterns, the above management options would not compromise the security of the Joint Water Supply Scheme (JWSS) for the next 20 years or so.*

*Although MCD would be storing 9,499 ML less water at 80% of its FSL than at 85%, it has been concluded that MCD's satisfactory water yield to maintain normal operations through to 2015 would already be fulfilled at 60%. In addition depending on GCC's future assessments, the current forecasted water usage requirements would allow MCD's storages to be maintained at 80% until 2035. This analysis indicates that drought security and target yield would not be adversely affected by the interim plan in the short term.*

*Gosford-Wyong Council's Water Authority understands the necessity to upgrade MCD to accommodate the revised PMF at its FSL. This Interim PMF Management Plan would allow suitable time for the Water Authority to proceed with the investigation, design, budget, funding and upgrade-construction of MCD to achieve DCS's requests.'*

### Project Delivery

If this project were to proceed, Council advised their normal procurement requirements would apply. Consultants would be engaged by either open tender or select invitation (if the amount was less than \$150,000) to finalise investigations. Detailed design would be undertaken by a consultant engaged in an open tender arrangement due to the value of the works. Construction would be by contract called by an open tender process.

### Costs

The SIR has the following amounts for the spillway upgrade:

Table 30: Summary of proposed expenditure for Mangrove Creek Dam upgrade (\$'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
JWS - MCD UPGRADE FOR REVISED PMF	125	125	1,000	2,750	4,000

Source: OGW sourced from SIR

### Assessment of Prudence and Efficiency

Timing is the key issue in making an assessment of the prudence of this project. Whilst Council's recent history with reaching 12% storage is fresh in their minds, the timing for the need to utilise the full storage level in Mangrove Creek Dam (as referenced above) clearly confirms that the spillway upgrade is not required to be delivered in the 2014-2018 price path period. Deferring the decision to further investigate and then design and construct the spillway upgrade can be made in the knowledge that:



- Council can continue to comply with the DSC's requirements provided the dam is operated at 80% of its FSL, and
- Drought security and target yields will not be adversely affected in the short term.

For these reasons the review concluded that delivery of this project in the next price path is not prudent and therefore recommends that this project be deferred.

In response to the draft report Council have provided comment on the timing of the Mardi Dam Spillway project as follows:

*“The report prepared by the Dams and Civil Section of NSW Public Works (October 2010) was prepared prior to the NSW governments decision to not proceed with Tillegra Dam.*

*The analysis undertaken for the Public Works Report incorporated utilisation of the Hunter / Central Coast link beyond the term of the Hunter pipeline Agreement which expires in 2026.*

*It was assumed that a favourable renegotiation of the agreement and use of the link in conjunction with Tillegra Dam would enable the deferral of the spillway upgrade.*

*Hunter Water in conjunction with the Metropolitan Water Directorate is currently developing a new water strategy for the Lower Hunter in response with the decision not to proceed with Tillegra Dam. As such there is currently significant uncertainty as to the role that the Hunter link will play in the future water supply strategies of both the Hunter and Central Coast.*

*Given this uncertainty it is considered prudent to work towards rectifying the spillway constraint on the full utilisation of Mangrove Creek Dam. It is considered that as a minimum, provision be made during the 2014-2018 pricing path for the preparation and completion of preconstruction activities for the resolution of the spillway constraints to enable a rapid implementation of necessary works early in the next price path.*

*Thus the required minimum values are:*

*Year 1- 250K*

*Year 2- 250K*

*Year 3 - 350*

*Year 4 - 100*

*Real 2012/13 dollars, 100% cost, to be split 50/50 between each Council*

*A preconstruction budget is required to enable progression of the required works (work options study, concept study, detailed design and Tender, Assessment & Selection of Construction Contractor).”*

There is nothing in this response that leads us to change our recommendations. The response states that the Hunter Pipeline Agreement expires in 2026. With this timeframe, it is still not prudent to proceed with preconstruction activities in the current price path as sufficient time will be available to have the spillway works carried out if preconstruction work does not commence until the next price path.

The review therefore maintains its recommendation that the delivery of this project in the next price path is not prudent and recommends that this project be deferred.

## 7.8.2. ICT - Major ICT Equipment Renewal Program

### Description of Project

The asset management plan for these assets states:

*'This asset class encompasses the backbone of the W&S Information and Communication Technology (ICT) assets that enable remote monitoring, sensors & alarms, and remote control of water and sewer assets. The reliable functioning of these ICT assets is one critical aspect to maintain the Water Authority Operating Licence. This Asset Management Plan includes Telemetry, IT Systems, Treatment Plant Control Systems and Instrumentation at Major Valve sites & other structures (eg reservoirs).*

The technical complexity of ICT infrastructure and the interconnectedness of the many hundreds of components mean that ICT life cycle management needs to be holistic in its approach, and focus on appropriate asset renewal strategies to cater for physical consumption of assets, technological obsolescence of existing assets, and realising the opportunities arising from technology advances.

Due to the nature of ICT equipment and the environments in which they operate in, many of these components have very short asset lives. These estimated useful lives will vary depending upon the environment in which they operate - for example, ICT equipment in a SPS Electrical cabinet will have a much harsher operating environment than at a water reservoir, and therefore a much shorter expected life.

### Drivers/Justification

The key driver for this project is existing mandatory standards. The justification for the project is included in the asset management plan - GCC Major W&S Information, Communications technology (ICT) infrastructure Assets Asset Management Plan.

### Option Assessment/Solution Development

This type of equipment is normally purchased with a four (4) year warranty. To obtain a five year warranty the cost of the equipment increases by an additional 75%.

The equipment is critical to the operation and monitoring of the water and sewer facilities and needs to be reliable. Maintenance is not an option with the equipment either being operational or failed. Failed equipment is replaced not repaired.

### Project Delivery

In-house resources are used to replace equipment, with the equipment being sourced under Local Government Purchasing Guidelines.

### Costs

The SIR proposes the following costs for the ICT - Major ICT equipment renewal Program:

Table 31: Summary of proposed expenditure for the major ICT renewal program (\$'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
ICT - MAJOR ICT EQUIPMENT RENEWAL PROGRAM	461	461	461	461	1,844

Source: OGW sourced from SIR

## Assessment of Prudence and Efficiency

Replacement of major ICT equipment is an essential on-going activity to ensure the correct operation of water and sewer assets as well as ensuring that the correct monitoring of the operations is in place. The data collected by this equipment is essential for an effective asset management program.

It is considered that this expenditure is prudent and the proposed method of procurement is efficient.

## 7.9. Assessment of Proposed Wastewater Capital Expenditure

The table below provides an overview of proposed wastewater expenditure over the 2014/17 determination period.

Table 32: Proposed Wastewater Expenditure (\$'000 real 2013)

Driver	2013/14	2014/15	2015/16	2016/17	Total
Growth	1,372	1,371	1,371	1,371	5,485
Mandatory Standards	29,482	25,868	15,621	14,001	84,972
Discretionary Standards	-	-	-	-	-
Business Efficiency	500	1,396	-	-	1,896
<b>Total</b>	<b>31,354</b>	<b>28,635</b>	<b>16,992</b>	<b>15,372</b>	<b>92,353</b>

Source: OGW sourced from SIR

Wastewater capital expenditure is being increasingly driven by renewal of aging assets. Some funds are also provided for priority sewer programs (e.g., Empire Bay, Kincumber South, Bensville).

To assist in the assessment of the prudence and efficiency of the proposed wastewater capital expenditure, two projects were chosen for review, being the 'SPS renewals - Unallocated Budget' and 'KSTP - General Works'. Both are replacement/renewal projects.

### 7.9.1. SPS renewals - Unallocated Budget

#### Description of Project

Gosford City Council manages 181 Sewer Pump Stations (SPS), 3 vacuum stations and 1 syphon to transport sewage for treatment. Many of the pump stations were installed in the 1980s and thus some of the components are reaching the end of their nominal life. As examples, pumps are given a nominal life of 25 years, electrical power 30 years and electrical control 25 years.

Council in the current price path has carried out renewals at 40 SPS. Expenditure on these works is \$5,456,000 over the 2009 determination.

Council is proposing to renew another 40 SPS over the period from 2014 to 2018.

#### Drivers/Justification

Existing mandatory standards

#### Option Assessment/Solution Development

Council's asset management plan states<sup>86</sup>:

*"The current risk management plan has been based on some very simple criteria to prioritise the order of renewal and upgrade works for sewage and vacuum pump stations."*

and

*"Council currently ranks pumps stations based on risk. Current prioritisation rules consider the following:*

- *Ratings previously given in the Hunter Water audits (2007) of all pump station visual inspections;*
- *Pump stations that have more than 100 starts per day (information obtained from the telemetry system);*
- *Pump stations with run times greater than four hours per day (information obtained from the telemetry system);*
- *Pump stations with low retention times of less than four hours for average dry weather flows;*
- *Other problems identified by operational staff; and*
- *Age of assets and equipment associated with the pump station.*

*The priority rating scores range from one to five (1 = new station, 5 = urgent works required)"*

Based on this initial desktop assessment, pump stations that are ranked high on risk are then inspected and a condition assessment is carried out. Guidance is provided on performing the condition assessments in a document titled "SPS Condition Assessment & Upgrade Project Selection Criteria".

It is noted that age is used to guide the condition assessment with the following guidance provided<sup>87</sup>:

*"For pumps and valves with an age from 15 to 20 years, a minimum condition score of 3 should be assigned.*

*For pumps and valves with an age greater than 20 years, a minimum condition score of 4 should be assigned.*

*For pipes and other ancillary mechanical equipment with an age greater than 35 years, a minimum condition score of 3 should be assigned."*

Pump stations are then ranked for renewal based on the result of the actual condition assessment. The rankings derived are then used to guide the level of expenditure required, with priority given to mandatory projects and projects ranking high for strategic objectives and extreme or high risk. Projects which are ranked high for either strategic objectives or extreme or high for risk are then assessed further by the Capital investment Committee or Executive Team. It could be argued that this implies these are more discretionary.

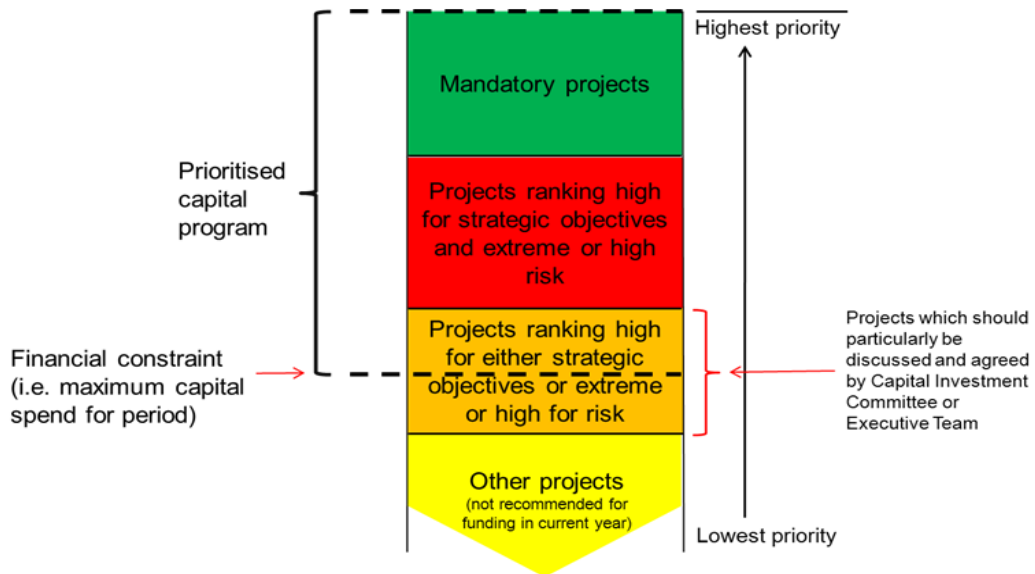
This is shown in Council's figures below:

<sup>86</sup> Sewerage Asset Management Plan - RevIPART

<sup>87</sup> SPS Condition Assessment & Upgrade Project Selection Criteria

Figure 37: Capital Program Prioritisation - Project Ranking

Figure 11 Capital Program Prioritisation – Project Ranking



Source: Figure 11 from GCC W&S - IPART Presentation

Figure 38: Risk Rating Evaluation

**Table 7 Risk Rating Evaluation**

		Consequences				
		Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	Almost Certain	Medium	Medium	High	Extreme	Extreme
	Likely	Medium	Medium	High	High	Extreme
	Possible	Low	Medium	Medium	High	High
	Unlikely	Low	Low	Medium	Medium	High
	Rare	Low	Low	Low	Medium	Medium

Extreme	(Not tolerable, reduce to medium or low)
High	(Unacceptable, reduce to medium or low)
Moderate	(Undesirable - consider opportunity to reduce to low, but otherwise tolerable)
Low	(tolerable)

Source: Table 7 from GCC W&S - IPART Presentation

### Project Delivery

Council has an established process in place to manage delivery of these works with 40 stations renewed or programmed for renewal in the current price path. Procurement panels are in place for switchboard supply and installation. Pumping equipment is provided to the contractor as Principal supplied equipment to ensure best whole of life decisions are made on pump purchases. Pump stations are to be tendered in small packages of 3-4 SPS to minimise the number of contracts and make the packages large enough to encourage tender competitiveness.

### Costs

The SIR has the following amounts for SPS renewals.

Table 33: Proposed expenditure for SPS renewals (\$'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
SPS Renewals - unallocated Budget	6,174	6,174	6,174	6,174	24,697

Source: OGW sourced from SIR

### Assessment of Prudence and Efficiency

Council has advised that the original budget for this work included funds to provide retention tanks. The original budget was \$21,337,611. This was reduced by approximately 20% to allow for deferral of the detention tanks to the next price path. This resulted in the SPS renewal budget being reduced to \$17,548,000. An additional \$1,025,000 was added to purchase four mobile generators to reduce the risk of environmental damage in the event of a failure caused by not building the retention tanks. An additional \$5,330,000 was added to renew electrical control and supply assets and \$410,000 added to renew vacuum pumps. A further amount of \$384,375 was provided for the Kincumber SPS overflow and associated works giving a total amount of \$24,697,375.

The major issue with the assessments carried out to develop the priority list is that it is a ranking process, and it is substantially driven by age. There is no benefit/cost assessment that provides confidence that efficient outcomes are being achieved. Whilst it is acknowledged that some SPS renewals will need to be carried out that would provide a positive benefit/cost, if assessed, there is nothing in the current process carried out by Gosford City Council that shows where the cut-off for projects with a positive benefit/cost occurs. Their own diagram - shown above - confirms that there is some subjectivity in their assessment.

By comparison, Sydney Water has 675 SPS. Sydney Water renewed 100 out of its 675 SPS's in the period 2008-2012 based on "*assets as they are identified as reaching the end of their life and the cost to renew is less than the cost to continue to maintain*"<sup>88</sup>.

Wyong Shire Council, in their 2014-2017 submission, has allowed for renewal of 4 SPS per year out of their total 143 stations. We would assume that Wyong Shire Council's age profile for SPS's would be similar to Gosford City Council's.

Hunter Water does not separately identify the SPS's to be renewed, however it includes allowances for replacement of SPS assets. Their current submission has a total amount of \$11,710,824 for this work. Hunter Water has a total of 428 SPSs.

Table 34: Comparison of SPS renewals between GCC and WSC

	Total No of SPS	SPS to be renewed	% to be renewed
Gosford City Council	181	40	22
Wyong Shire Council	143	16	11
Sydney Water	675	100	15

Source: OGW sourced from SIR

Based on the above information, we do not believe a budget allowance of \$24,697,375 is prudent.

In assessing an amount that is considered to be prudent, we have used the comparative information above to make an assessment. Sydney Water's decision to renew is based on the renewal costs being less than future maintenance costs. They can substantiate only 15 % of their stations requiring renewal. If we apply the same ratio to Gosford City Council's SPSs then only 27 SPSs would require renewal from 2103 to 2017.

An alternate assessment is to use Gosford City Council's own rankings. Allowing for all stations rated at 5 or 4 (extreme or high) and excluding stations rated as 3 (moderate - consider opportunity to reduce to low, but otherwise tolerable), including detention tanks, costs of \$12,715,000 would be incurred in renewals in the period 2014-2017. If this was reduced by 20% for removal of the detention tanks this would reduce to \$10,200,000. Adding Council's own allowances of \$5,330,000 for renewal of electrical control and supply assets, \$410,000 for vacuum pumps and \$384,375 for Kincumber overflow and associated works gives a total in the order of \$16,300,000, which is consistent with the comparison for Sydney Water.

Whilst we accept that this assessment is subjective, we consider the allowance for SPS renewal should be reduced to approximately \$17,000,000, until Gosford City Council can move from their current ranking system to one which can demonstrate that the costs of renewal are less than the on-going costs of maintenance including quantitative assessment of risk costs, environmental and social costs (Pro-rata reduction based on 7 stations per year compared to proposed 10 per year.)

Gosford City Council has provided a detailed response to this recommendation in the draft report with their full response attached as Appendix 1. The key issues raised by Council are this report's emphasis on age being a key criteria, Council's high emphasis on the condition assessment, the asset management plan indicating an increasing level of expenditure on SPSs and the inability to compare budgets and numbers of pump stations due for renewal with other authorities.

There is nothing in Council's response however that provides additional evidence that their full proposed budget is prudent. Our revised recommended budget was not just based on a pro-rata comparison with Sydney Water. In particular we considered Gosford City Council's own ratings and made an assessment of renewing just those stations with ratings of 5 and 4 (extreme or high) and excluded those with ratings of 3. We consider this is consistent with Council's own ratings which describe 3 as "moderate - consider opportunity to reduce to low, but otherwise tolerable".

We have noted the EPA on-line submission and consider our draft recommendation is consistent with the submission of the EPA.

We maintain our recommendation that the budget for SPS renewal be reduced to \$17,000,000.

### 7.9.2. KSTP - General Works

#### Description of Project

This project is to deliver a range of small (<\$150,000) projects identified as being required either by operational staff or following the EPCM works being carried out at the treatment plant. Due to the major works being carried out as part of the EPCM contract these minor works have been held to be carried out once the EPCM contract is finished.

A list of works that have been identified as being required has been developed with budget estimates and was provided as part of this review.

### Drivers/Justification

The key driver for this work is mandatory standards. Most of the items are replacement/renewal of existing equipment. Project funding requests are submitted for each item.

### Option Assessment/Solution Development

Each sub project has its own funding request submitted. Options are required to be considered in the funding request.

### Project Delivery

As the items are less than \$150,000, a minimum of 3 quotes will be obtained as per Council's normal purchasing requirements.

### Costs

The SIR has the following amounts for KSTP General Works.

Table 35: Proposed expenditure for the KSTP General Works (\$'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
KSTP-General Works	416	416	416	416	1,665

Source: OGW sourced from SIR

### Assessment of Prudence and Efficiency

As these works have already been identified, project funding requests have been made for each item and a minimum of 3 quotes will be obtained for the works it is considered that the project is both prudent and the procurement will be efficient.

## 7.10. Assessment of Proposed Stormwater Capital Expenditure

The table below provides an overview of proposed stormwater expenditure over the 2014/17 determination period.

Table 36: Proposed Stormwater Expenditure (\$'000 real 2013)

Driver	2013/14	2014/15	2015/16	2016/17	Total
Growth	200	300	300	100	900
Mandatory Standards	3,225	3,186	2,846	3,144	12,401
Discretionary Standards	-	-	-	-	-
Business Efficiency	-	-	-	-	-
<b>Total</b>	<b>3,425</b>	<b>3,486</b>	<b>3,146</b>	<b>3,244</b>	<b>13,301</b>

Source: OGW sourced from SIR

Gosford City Council's submission states<sup>89</sup>:

89

Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 45



*“Stormwater drainage capital expenditure is being driven by the renewal and upgrade of existing stormwater drainage systems and provision of stormwater drainage systems where formalised systems do not currently exist in order to dispose of stormwater in a safe and environmentally sound manner, reduce risk to life and damage to property.*

*The stormwater drainage capital works program is informed by a range of flooding and stormwater drainage studies and risk management plans. Capital improvements from these plans are implemented on a priority basis.”*

To assist in the assessment of the prudence and efficiency of the proposed stormwater capital expenditure, one project was chosen for review being the Kincumber Urban Flood Mitigation project. This is an on-going project to alleviate flooding.

### 7.10.1. Kincumber Urban Flood Mitigation

#### Description of Project

The Kincumber urban flood mitigation project is an on-going project aimed at alleviating flooding in the Kincumber catchment. The project was initiated following flooding and drainage problems experienced in Gosford Council area in January 1989, February 1990 and February 1992. In 1996, Gosford City Council undertook to investigate the extent of stormwater flooding and to develop a Drainage Management Plan to mitigate flooding problems in the Kincumber catchment.

A Kincumber Catchment Drainage Investigation was commissioned by Council in 1999. This study effectively addressed the following three issues which enabled Council to seek financial support from the government for the implementation of the works identified as needed to alleviate flooding:

1. Flood Study - Determined the nature and extent of the flood problem
2. Floodplain Management Study - Evaluated management options for the catchment in respect of both existing and proposed development.
3. Floodplain Management Plan - Involved formal adoption by Council of a plan of management for the catchment.

Works have been progressively carried out as funding support from Government is obtained.

#### Drivers/Justification

The key driver is an existing mandatory standard - to alleviate existing flooding and drainage problems.

#### Option Assessment/Solution Development

The Kincumber Catchment Drainage Investigation considered a range of options before deciding on a preferred approach. Options considered included:

- Pipe, culvert and channel amplification,
- Extension of drainage lines,
- Additional stormwater pits,
- Kerb and guttering
- Retarding basins
- New drainage lines,
- Minimum floor levels for new developments.

When detailed designs are commissioned for components of the work the designers also review the selected options and will recommend alternatives if an alternative appears more viable. On this project, this was evidenced by the following recommendation made by a designer:

*'The Davies Road and Joalah Road trunk drainage strategy as detailed in the Kincumber Catchment Urban Flood Mitigation Study be amended to include retarding basins subject to approval by the affected property owners.'*

### Project Delivery

Project delivery is carried out in accordance with Council's procurement policies:

- Detailed design is carried out by consultants with a minimum 3 quotes being obtained,
- Construction is carried out by contract with open tenders being called,
- Construction management is by Council

### Cost

The SIR proposes the following costs for the Kincumber Urban Flood mitigation project.

Table 37: Proposed expenditure for the Kincumber urban flood mitigation (\$'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
Kincumber Urban Flood Mitigation	200	400	300	500	1,400

Source: OGW sourced from SIR

### Assessment of Prudence and Efficiency

Council's approach to the delivery of these works is to implement the floodplain plan of management progressively to maximise the contribution received from Government. Their procurement processes are efficient and their approach to maximising the government contribution demonstrates a prudent implementation of the floodplain management plan.

#### 7.11. Prudence and Efficiency of Capital Expenditure in Current Price Path

The review of capital expenditure projects in the current price path has found the expenditure to be both prudent and efficient. Whilst individual projects were originally assessed under the EPCM, cost comparisons were difficult due to the way costs for different items are reported. The summary of the outcomes of the EPCM however demonstrates that based on the revised scope of work (necessitated by insufficient scope definition and insufficient consideration to operational impacts in the original scope definition), the final delivery of works will be within an acceptable margin of the determined amount. The review also confirmed that the recommendations made by Halcrow from the previous price path review were acted upon by Council with an alternate strategy for the CCMS being adopted after the review.

The review also confirmed that the concerns expressed by Halcrow in their 'Review of Capital and Operating Expenditure for Gosford City Council Final Report 2008' were well founded.

*'Given the complexity of this scheme, the high level of uncertainty and significant variance to date, we are concerned that costs will continue to escalate as the scheme definition improves.'*

Whilst total capital expenditure of \$268,076,000 (\$ 2013) in the 2009-2013 price path exceeds the determined amount of \$201,080,000 by over 30% the review has concluded the key factors in this overspend have been the lack of scope definition and insufficient consideration to operational impacts when planning new works on existing assets. This has occurred primarily in the wastewater area where large projects were required to be constructed whilst still maintaining operation of the systems to meet regulatory requirements.

It is recommended that the actual expenditures incurred by Council in the 2010-2013 price path including the projected figures for 2013 be rolled into Council's regulatory asset base.

Table 38: Recommendation on Capex to be rolled into RAB (\$'000 real 2013)

	2008/09	2009/10	2010/11	2011/12	2012/13*	Total
Actual/forecast Water Capital Expenditure	21,091	43,445	43,470	12,248	15,742	135,995
Recommended Water Adjustment	-	-	-	-	-	-
<b>Water capital expenditure to be rolled into RAB</b>	<b>21,091</b>	<b>43,445</b>	<b>43,470</b>	<b>12,248</b>	<b>15,742</b>	<b>135,995</b>
Actual/forecast Recycled Water Capital Expenditure	-	-	-	857	3,712	4,569
Recommended Recycled Water Adjustment	-	-	-	-	-	-
<b>Recycled Water capital expenditure to be rolled into RAB</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>857</b>	<b>3,712</b>	<b>4,569</b>
Actual/forecast Wastewater Capital Expenditure	16,013	17,238	25,988	30,233	58,453	147,926
Recommended Wastewater Adjustment	-	-	-	-	-	-
<b>Wastewater capital expenditure to be rolled into RAB</b>	<b>16,013</b>	<b>17,238</b>	<b>25,988</b>	<b>30,233</b>	<b>58,453</b>	<b>147,926</b>
Actual/forecast Stormwater capital Expenditure	5,534	4,899	5,747	5,192	5,971	27,343
Recommended Stormwater Adjustment	-	-	-	-	-	-
<b>Stormwater capital expenditure to be rolled into RAB</b>	<b>5,534</b>	<b>4,899</b>	<b>5,747</b>	<b>5,192</b>	<b>5,971</b>	<b>27,343</b>
<b>Total recommended capital expenditure to be Rolled into RAB</b>	<b>42,638</b>	<b>65,581</b>	<b>75,205</b>	<b>48,530</b>	<b>83,878</b>	<b>315,832</b>

\*Projected

## 7.12. Prudence and Efficiency of Capital Expenditure in Future Price Path

The review of the specific water, wastewater and stormwater projects revealed some of the expenditure was not prudent. In particular, design and construction of the Mangrove Creek Dam spillway upgrade was shown to be able to be deferred based on Council's own consultant's advice. In addition, the review compared the level of expenditure proposed for SPS renewals with the level proposed by Sydney Water in its last pricing submission and the ranking levels determined by Gosford City Council and concluded that the forward allowance should be reduced. OGW note the submission by the EPA with respect to surveillance and renewal of wastewater assets and consider the reduced allowance for SPS renewals is consistent with EPA's submission. OGW also note that Council has allowed for surveillance of its wastewater assets.

For Joint Water Supply projects, the following adjustments to the forward capital expenditure program are proposed:

- Removal of Mangrove Creek Dam Spillway works (Gosford City Council managed) will result in a \$4,000,000 reduction from each Council's 2014/17 price path.
- Removal of the DAF Detailed Design (Wyong Shire Council managed) will result in a \$700,000 reduction from each Council's 2014/17 price path.
- Removal of the Mardi dam curtain (Wyong Shire Council managed) will result in a \$1,000,000 reduction from each Council's 2014/17 price path.

This results in a reduction of \$5,700,000 from each Council's JWS projected budgets over the 2014/17 price path, resulting in Wyong Shire Council's contribution being reduced to \$12,159,000 and Gosford City Council's contribution being reduced to \$12,142,000.

After these adjustments, the majority of the forward capital expenditures are primarily for asset renewal/replacement works. At present, some of these are carried out by Council, with others by contract. Lessons learnt in previous projects should enable efficiency gains to be made in the future procurement of these types of projects by combining individual projects into packages. In addition, testing the Council's own workforce by establishing panels of competent contractors to carry out some of the work currently performed by Council staff should also contribute to efficiency gains.

It is recommended an efficiency improvement target of 5% be applied to the forward estimates to account for these improvements.

Table 39: Recommended Capital Expenditure Adjustments (\$'000 real 2013)

Project		2013/14	2014/15	2015/16	2016/17	Total
JWS - MCD Upgrade for Revised PMF	Proposed	125	125	1,000	2,750	4,000
	Recommended	-	-	-	-	-
	Difference	(125)	(125)	(1,000)	(2,750)	(4,000)
ICT - Major ICT Equipment renewal Program	Proposed	461	461	461	461	1,844
	Recommended	461	461	461	461	1,844
	Difference	-	-	-	-	-
SPS	Proposed	6,174	6,174	6,174	6,174	24,697

Renewals - Unallocated Budget	Recommended	4,322	4,323	4,323	4,322	17,289
	Difference	(1,852)	(1,852)	(1,852)	(1,852)	(7,408)
KSTP - General Works	Proposed	416	416	416	416	1,665
	Recommended	416	416	416	416	1,665
	Difference	-	-	-	-	-
Kincumber Urban Flood Mitigation	Proposed	200	400	300	500	1,400
	Recommended	200	400	300	500	1,400
	Difference	-	-	-	-	-
<b>Sub Total</b>	<b>Proposed</b>	<b>7,376</b>	<b>7,576</b>	<b>8,351</b>	<b>10,301</b>	<b>33,606</b>
	<b>Recommended</b>	<b>5,399</b>	<b>5,600</b>	<b>5,500</b>	<b>5,699</b>	<b>22,198</b>
	<b>Difference</b>	<b>(1,978)</b>	<b>(1,977)</b>	<b>(2,852)</b>	<b>(4,602)</b>	<b>(11,408)</b>

Source: OGW

Table 40: Recommended capital expenditure (\$'000 real 2013)

	2013/14	2014/15	2015/16	2016/17	Total
Adjustment to GCC projects	(1,978)	(1,977)	(2,852)	(4,602)	(11,408)
Adjustment to JWS projects (delivered by WSC)	(100)	(900)	(350)	(350)	(1,700)
Total Adjustment	(2,078)	(2,877)	(3,202)	(4,952)	(13,108)
Total adjusted capital program	41,893	42,278	26,097	23,983	134,251
Recommended Efficiency Gain	5%	5%	5%	5%	5%
Recommended Efficiency Gain	(2,095)	(2,114)	(1,305)	(1,199)	(6,713)
<b>Recommended Capital Program</b>	<b>39,799</b>	<b>40,164</b>	<b>24,792</b>	<b>22,784</b>	<b>127,539</b>

Source: OGW

## 8. Outputs measures

The following sections outline the performance of Gosford City Council against output measures from the current determination and proposed output measures for the forthcoming determination period.

### 8.1. Performance against output measures from the current determination

As part of the last determination, a number of output measures were defined and quantified.

These, as well as actual performance against those output measures, were outlined in Appendix A of Gosford City Council's submission.

Figure 39: Output measures from Current Determination

**Table A1 Activity against output measures 2011/12**

Output or activity measure	Indicator of activity by 2011/12	Activity 2009/10	Activity 2010/11	Activity 2011/12
<b>Water</b>				
1. Water quality complaints	No more than 10 per 1000 properties	38.9	9.3	13.8
2. Water main breaks	No more than 10 per 100 km of main	34.0	27.8	26.7
3. Average leakage	ML/d	3.1	3.6	1.1
4. Renewal of water mains	Km.	2.4	2.3	3.6
<b>Wastewater</b>				
5. Wastewater odour complaints	No more than 2 per 1000 properties	1.6	1.9	2.6
6. Wastewater main breaks and chokes	No more than 12 per 100 km of main	39.9	41.5	36.0
7. Wastewater overflows	No more than 9.5 per 100 km of main	35.5	38.8	34.8
8. Kincumber and Woy Woy STP upgrade	Complete	Progressing in accordance with revised Pollution Reduction Program as agreed with the EPA. Completion will be in the next Determination period.		
9. Coastal Carrier wastewater system upgrade	Complete	Completion will be in the next Determination period.		
10. Comply with DECC effluent standards	All STP's	No	No	No

Source: Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 71

We note that from the above, that based on the 2011/12 outputs, Gosford City Council has not met a number of its proposed service level outputs. These include:

- Water quality complaints;
- Water main breaks;
- Wastewater odour complaints;

- Wastewater main breaks and chokes;
- Wastewater overflows; and
- The provision of the key capital projects.

Gosford City Council provides explanations for a number of the outcomes listed above, including<sup>90</sup>:

*Water main breaks: High pressures in the water distribution system (due to the topography of the area) increase the likelihood of main breaks. Gosford is implementing an enhanced pressure reduction program to reduce the incidence of main breaks. Gosford also has expanded its water main replacement program in an effort to reduce water main breaks.*

*Wastewater odour complaints: New odour control facilities installed at the KSTP inlet works, as part of the KSTP upgrade and renewal program will reduce complaints for the STP area. Council is developing an enhanced septicity and odour management program to reduce odour complaints across the sewerage system.*

*Wastewater main breaks and chokes: Gosford Council believes that recording a high number of chokes is not necessarily a reflection of poor performance (as increasing proactive maintenance is likely to increase the number of chokes identified).*

*Wastewater overflows: Proactive inspection, maintenance and refurbishment program is being implemented. This includes the use of a jetter/vacuum truck to provide enhanced maintenance capability and Closed Circuit Television (CCTV) to provide asset data. This will ensure capital works refurbishment programs return the optimal cost/benefit outcomes.*

*Comply with DECC (EPA) effluent standards: A concentration limit prescribed for total suspended solids was exceeded on one occasion. This was the result of a storm causing power outages and a temporary failure of the treatment plant control systems. The load of nitrogen (total) discharged in effluent was greater than permitted by the licence. The programmed capital improvements at Kincumber STP are expected to reduce the nitrogen load discharged. The load of oil and grease discharged in effluent was greater than permitted by the licence. The elevated load is associated with an increase of oil and grease entering Kincumber STP. An audit is being undertaken to identify and rectify possible sources (liquid trade waste customers). Additionally, tanker receipt area upgrades at Kincumber STP are expected to reduce the oil and grease load entering the plant.*

Whilst we will not comment on the details of each individual measure mentioned, our overarching comment is that many of these factors would have been known when setting the underlying measures (e.g., water main breaks are partly a function of water pressure). Notwithstanding this, Gosford City Council appears to have a clearer understanding of the trade-off between inputs and outputs (e.g. pressure and breaks; proactive inspection and overflows) than perhaps it did during the last determination process.

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Pricing Submission to IPART 2012 - Gosford City Council's submission to IPART's Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 71-72



## 8.2. Proposed output measures for the forthcoming determination period

In Section 4.2.5 of its submission, Gosford City Council states that<sup>91</sup>:

*“Appendix A presents Council’s proposed output measures for the next Determination period. The proposed output measures have been guided by the Master Plan and set with reference to the National and State Performance Reports.”*

An extract of the table contained in Appendix A of their submission is reproduced below.

Figure 40: Proposed output measures from Forthcoming Determination

**Table A4 Proposed output measures for next Determination period**

NWI ref	Output or activity measure	Indicator of activity by 2015/16	Comments
<b>Water</b>			
C9	1. Water quality complaints per 1 000 properties	9.9	Target extrapolated from current levels of service and 2021 target in Master Plan. Level of service by 2021 is within 50 percentile band of the peer data set
C17	2. Average frequency of unplanned interruptions per 1 000 properties	151.8	Target extrapolated from current levels of service and 2021 target in Master Plan
A8	3. Water main breaks per 100km main	23.7	Target extrapolated from current levels of service and 2021 target in Master Plan
	4. Compliance with Australian Drinking Water Guidelines – microbial guideline values	Yes	Nationally recognised indicator of safe water quality
	5. Compliance with Australian Drinking Water Guidelines – chemical guideline values	Yes	Nationally recognised indicator of safe and aesthetically appropriate water quality
<b>Sewerage</b>			
	6. Wastewater overflows per 100 km main	32.6	Target extrapolated from current levels of service and 2021 target in Master Plan
E13	7. Wastewater overflows reported to the environmental regulator per 100km main	1.6	Target extrapolated from current levels of service and 2021 target in Master Plan
C11	8. Wastewater odour complaints per 1000 properties	1.9	Target extrapolated from current levels of service and 2021 target in Master Plan
A14	9. Wastewater main breaks and chokes per 100km main	35.6	Target extrapolated from current levels of service and 2021 target in Master Plan
E7 (Part of)	10. Compliance with EPL 1802 concentration & load limits	Yes	Indicator of regulatory compliance, specifically effluent quality

Source: Pricing Submission to IPART 2012 - Gosford City Council’s submission to IPART’s Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 76

<sup>91</sup> Pricing Submission to IPART 2012 - Gosford City Council’s submission to IPART’s Review of prices for water sewerage and stormwater services for Gosford City Council and Wyong Shire Council - 14 September 2012 - page 33



Broadly, we consider that the overarching approach to defining the values that are ascribed to each of that service attributes is reasonable. In particular, the extrapolation of targets from current levels acknowledges the underlying trade-off between price and service, and is consistent with our underlying approach to the assessment of costs - namely, that Gosford City Council has revealed the efficient costs associated with delivering existing levels of service. The only query we have is with regards to water quality complaints. As noted in previous sections, some additional operating expenditure is proposed (and we have recommend that this be accepted) for improving water quality, yet no material change in service level appears to be being proposed by Gosford City Council, relative to the extrapolation of historic levels. We consider that an explicit improvement should be provided for, if the explicit increase in costs associated with delivering this improvement is provided for in prices. We stated in our draft report that, ideally, Gosford City Council should model this incremental improvement using the same assumptions that were used to justify the increased expenditure in the first place.

The other observation that we made in our draft report was that, taken on face value, the above table indicates that Gosford City Council is not proposing service level measures for attributes such as 'overall customer satisfaction', 'water pressure', nor for any 'retail' (or 'customer experience') attributes (e.g., time taken to answer phone calls)<sup>92</sup>. It is unclear to us why such an important component of the service that is provided by a water and wastewater business would not be measured and reported against.

We stated in our draft report that we considered that all are important measures of service for a prudent and efficient water and wastewater service provider, and even if Gosford City Council is currently delivering high levels of service as measured against these service attributes, they should be measured and reported against.

Gosford City Council provided no comment with regards to the proposed outputs in its response to our draft report.

In summary, our final recommendation is that except for water quality, the proposed measures and levels outlined in Table A4 of Gosford City Council's submission, and reproduced above, be accepted. In addition, the following services/service levels also be included:

- Minimum water pressure of 12m at property connection, with this being based on the proposed levels of service outlined in the Master Plan document;
- Customer Satisfaction of no more than 5% of customers dissatisfied with the service (water and wastewater) delivered. We note that based on a review of previous IPART Performance Reports and National Water Commission information, it appears that Gosford City Council has not previously reported publicly on this measure. As such, we are unable to base any metric on historical performance levels. In the absence of this information, we consider the most reasonable basis for setting target levels is to utilise similar sized service providers, obviously, the closest related 'peer' to Gosford City Council is Wyong Shire Council. Therefore, the proposed metric broadly reflects levels previously delivered by Wyong Shire Council<sup>93</sup>; and

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92 See a recent paper report by the Essential Service Commission with regards to measures that could be introduced ("Essential Services Commission - Review Of Water Performance Report Indicators Final Report - August 2012")

93 IPART NSW water utilities performance, 2010/11 - page 112

- Percentage of telephone calls answered within 30 seconds of no less than 80%. We note that based on a review of previous IPART Performance Reports and National Water Commission information, it is our understanding that Gosford City Council has not previously reported publicly on this measure. We note that the proposed level is consistent with that which has been proposed for Wyong Shire Council. We note that this level is below the national average<sup>94</sup> for utilities of the size of Gosford City Council, and therefore, should be achievable by Gosford City Council based on current operating expenditure levels and resources.

We also consider that the proposed number of water quality complaints be adjusted down marginally to reflect the slight increase in resources devoted to improving this service attribute.

A complete list of proposed measures is contained in the table below.

Table 41: Recommended Output Measures

Service	Output or activity measure	Indicator of activity by 2015/16*
Water	Water quality complaints per 1000 properties	9.5^
	Average frequency of unplanned interruptions per 1000 properties	151.8
	Water main breaks per 100km main	23.7
	Compliance with Australian Drinking Water Guidelines - microbial guideline values	Yes
	Compliance with Australian Drinking Water Guidelines - chemical guideline values	Yes
	Minimum water pressure at property connection	12m
Wastewater	Wastewater overflows per 100 km main	32.6
	Wastewater overflows reported to the environmental regulator per 100km main	1.6
	Wastewater odour complaints per 1000 properties	1.9
	Wastewater main breaks and chokes per 100km main	35.6
	Compliance with EPL 1802 concentration & load limits	Yes

Retail	Customer Satisfaction	<=5% of dissatisfied customers
	Percentage of telephone calls answered within 30 seconds	80%

*\*This is chosen in order to be consistent with the proposal of Gosford City Council*

*^Slight reduction due to proposed increase in expenditure associated with delivering increased levels of water quality*

*Source: OGW; Table A4 of Gosford City Council's Submission*

## 9. Conclusions

In assessing the forecasts that have been provided by the businesses, our threshold test has been to provide a considered opinion as to whether we believe the proposed forecasts put forward are consistent with that which a *prudent* and *efficient* service provider would incur. The following sections outline our conclusions.

### 9.1. Operating Expenditure

In summary:

- There is no data that would lead us to conclude that Gosford City Council's historical water, wastewater and drainage operating costs - between 2009/10 and 2011/12 - are not consistent with that of a prudent and efficient service provider, given the circumstances faced by Gosford City Council over the period.
- Gosford City Council's performance matches best practice when compared against its peers on a key cost metric - combined operating cost per property in the National Performance Reporting Statistics.
- Outturn service levels do not indicate a systematic decline in service as a result of a trade-off between cost and service. Furthermore, there is no discernible, systematic trend increase in operating costs over the regulatory period, particularly after excluding forecast 2013 costs.

However, our review of Gosford City Council's proposed operating expenditure forecasts leads us to consider that they are not consistent with a prudent and efficient water and wastewater service provider. The following table outlines that the changes that we recommend be made to Gosford City Council's proposed operating expenditure forecasts.

Table 42: Recommended Changes to Assumptions Underpinning Proposed Operating Expenditures

Operating Expenditure Component	Recommended Change
Corporate overheads	<ul style="list-style-type: none"> <li>■ The 'Directorate' cost driver for each of the regulated water and sewerage businesses be 10%, and that this be adopted immediately (that is, no glide path approach be adopted to phase in this change);</li> <li>■ The allocation percentage for all secondary allocations that are reasonably able to be apportioned to water and wastewater, and which are driven by the number of Directorates, be changed to 10% for each of water and wastewater; and</li> <li>■ That a number of accounts, including: the category of accounts that we have defined as 'Costs related to the election of Council Officials' (excluding the 'Grants Officer') and 'Costs primarily driven by Council Branding', as well as 'Reporting', 'Events' and accounts related to 'Integrated Planning' be removed from the overall corporate cost pool that is in turn allocated back into the water and wastewater business.</li> </ul>
Starting 2013 Costs	<ul style="list-style-type: none"> <li>■ 2012 actual labour costs (excluding JWS costs), inflated by the recommended labour cost escalator discussed later in this report, should be used as the basis for setting forecasts of internal labour costs for the forthcoming regulatory control period. This implicitly removes the assumption that vacant</li> </ul>

	<p>positions are filled;</p> <ul style="list-style-type: none"> <li>On-costs be reallocated to employee provisions, and those 2012 on-cost be inflated by the recommended labour cost escalator discussed later in this report; and</li> <li>All non-labour related 2012 costs, except for JWS costs, be converted to 2013 costs using our proposed real cost and growth escalators.</li> </ul>
Real cost escalators	<ul style="list-style-type: none"> <li>Gosford City Council's real cost escalators be rejected, and revised escalators for the following cost components be applied: Labour; Corporate Costs; Materials; Hire &amp; contract services (Plant); Hire &amp; contract services (Other); Other (total of all items smaller than 5% of total operating expenditure) and Electricity.</li> <li>Gosford's City Council's escalators for External Consultants, Carbon Tax and Efficiency Gains be approved.</li> </ul>
Growth Escalators	<ul style="list-style-type: none"> <li>That Gosford City Council's be allowed to apply a growth escalator (based on its forecast of customer numbers) to 'materials' and 'electricity'.</li> </ul>
Step Changes	<ul style="list-style-type: none"> <li>Only the following step changes be approved: Maintain gross pollutant traps; Hawkesbury Bridge Painting - Relocation of Main; Changed sludge management costs; Additional Resource associated with the POEO Act; New High Voltage Contract; and Somersby Sludge Management; and</li> <li>The CCWC Establishment Costs that are allocated back into the water and wastewater business should be reduced to the amount which is outlined in Table 3 of Source document "Agenda Item 5 5 CCWC costs for inclusion in pricing submissions 120702 - PCG Meeting 5", as this figures appears to be based on a robust, beneficiary pays, cost allocation methodology.</li> </ul>

Source: OGW

The estimated impact of adopting the aforementioned assumptions is outlined in the following table.

Table 43: Forecast versus Recommend Operating Expenditure Forecasts (\$'000 real 2013)

Operating Expenditure Component <sup>95</sup>	2013/14	2014/15	2015/16	2016/17	Total
Corporate					
Forecast	14,672	14,483	14,399	14,023	57,577
Recommended	13,231	13,261	13,331	13,053	52,876
Water					

<sup>95</sup> All forecast figures have been estimated based on our own modelling, and exclude Hunter Water Purchases on advice from IPART.

Forecast	18,368	18,579	19,891	19,933	76,771
Recommended	17,342	17,210	18,340	18,242	71,133
Wastewater					
Forecast	20,358	21,154	22,325	22,776	86,613
Recommended	18,925	19,211	19,495	19,821	77,452
Drainage					
Forecast	5,860	6,107	6,540	6,738	25,246
Recommended	5,647	5,691	5,736	5,782	22,857
Total					
Forecast	59,258	60,324	63,155	63,469	246,206
Recommended	55,146	55,373	56,902	56,898	224,319
% Reduction	(6.939%)	(8.207%)	(9.900%)	(10.354%)	(8.890%)

Source: AIR; OGW ('Gosford Model of Forecasts - Final.xls')

## 9.2. Capital Expenditure

The review of capital expenditure projects in the current price path has found the expenditure to be both prudent and efficient. Whilst individual projects were originally assessed under the EPCM, cost comparisons were difficult due to the way costs for different items are reported. The summary of the outcomes of the EPCM however demonstrates that based on the revised scope of work (necessitated by insufficient scope definition and insufficient consideration to operational impacts in the original scope definition), the final delivery of works will be within an acceptable margin of the determined amount. The review also confirmed that the recommendations made by Halcrow from the previous price path review were acted upon by Council with an alternate strategy for the Coastal Carrier Main System being adopted after the review.

It is recommended that the actual expenditures incurred by Council in the 2010-2013 price path including the projected figures for 2013 be rolled into Council's regulatory asset base.

Table 44: Recommendation on Capex to be rolled into RAB (\$'000 real 2013)

	2008/09	2009/10	2010/11	2011/12	2012/13*	Total
Actual/forecast Water Capital Expenditure	21,091	43,445	43,470	12,248	15,742	135,995
Recommended Water Adjustment	-	-	-	-	-	-
<b>Water capital expenditure to be rolled into RAB</b>	<b>21,091</b>	<b>43,445</b>	<b>43,470</b>	<b>12,248</b>	<b>15,742</b>	<b>135,995</b>
Actual/forecast Recycled Water Capital Expenditure	-	-	-	857	3,712	4,569

Recommended Recycled Water Adjustment	-	-	-	-	-	-
<b>Recycled Water capital expenditure to be rolled into RAB</b>	-	-	-	<b>857</b>	<b>3,712</b>	<b>4,569</b>
Actual/forecast Wastewater Capital Expenditure	16,013	17,238	25,988	30,233	58,453	147,926
Recommended Wastewater Adjustment	-	-	-	-	-	-
<b>Wastewater capital expenditure to be rolled into RAB</b>	<b>16,013</b>	<b>17,238</b>	<b>25,988</b>	<b>30,233</b>	<b>58,453</b>	<b>147,926</b>
Actual/forecast Stormwater capital Expenditure	5,534	4,899	5,747	5,192	5,971	27,343
Recommended Stormwater Adjustment	-	-	-	-	-	-
<b>Stormwater capital expenditure to be rolled into RAB</b>	<b>5,534</b>	<b>4,899</b>	<b>5,747</b>	<b>5,192</b>	<b>5,971</b>	<b>27,343</b>
<b>Total recommended capital expenditure to be Rolled into RAB</b>	<b>42,638</b>	<b>65,581</b>	<b>75,205</b>	<b>48,530</b>	<b>83,878</b>	<b>315,832</b>

Source: OGW

The review of the specific forecast water, wastewater and stormwater capital projects revealed some of the expenditure was not prudent. In particular, design and construction of the Mangrove Creek Dam spillway upgrade was shown to be able to be deferred based on Council's own consultant's advice. In addition, the review compared the level of expenditure proposed for SPS renewals with the level proposed by Sydney Water in its last pricing submission and concluded that the forward allowance should be reduced.

For Joint Water Supply projects, the following adjustments to the forward capital expenditure program are proposed:

- Removal of Mangrove Creek Dam Spillway works (Gosford City Council managed) will result in a \$4,000,000 reduction from each Council's 2014/17 price path.
- Removal of the DAF Detailed Design (Wyong Shire Council managed) will result in a \$700,000 reduction from each Council's 2014/17 price path.
- Removal of the Mardi dam curtain (Wyong Shire Council managed) will result in a \$1,000,000 reduction from each Council's 2014/17 price path.

This results in a reduction of \$5,700,000 from each Council's JWS projected budgets over the 2014/17 price path, resulting in Wyong Shire Council's contribution being reduced to \$12,159,000 and Gosford City Council's contribution being reduced to \$12,142,000.

After these adjustments, the majority of the forward capital expenditures are primarily for asset renewal/replacement works. At present, some of these are carried out by Council, with others by contract. Lessons learnt in previous projects should enable efficiency gains to be made in the future procurement of these types of projects by combining individual projects into packages. In addition, testing the Council's own workforce by establishing panels of competent contractors to carry out some of the work currently performed by Council staff should also contribute to efficiency gains.

It is recommended an efficiency improvement target of 5% be applied to the forward estimates to account for these improvements.

Table 45: Recommended Capital Expenditure Adjustments (\$'000 real 2013)

Project		2013/14	2014/15	2015/16	2016/17	Total
JWS - MCD Upgrade for Revised PMF	Proposed	125	125	1,000	2,750	4,000
	Recommended	-	-	-	-	-
	Difference	(125)	(125)	(1,000)	(2,750)	(4,000)
ICT - Major ICT Equipment renewal Program	Proposed	461	461	461	461	1,844
	Recommended	461	461	461	461	1,844
	Difference	-	-	-	-	-
SPS Renewals - Unallocated Budget	Proposed	6,174	6,174	6,174	6,174	24,697
	Recommended	4,322	4,323	4,323	4,322	17,289
	Difference	(1,852)	(1,852)	(1,852)	(1,852)	(7,408)
KSTP - General Works	Proposed	416	416	416	416	1,665
	Recommended	416	416	416	416	1,665
	Difference	-	-	-	-	-
Kincumber Urban Flood Mitigation	Proposed	200	400	300	500	1,400
	Recommended	200	400	300	500	1,400
	Difference	-	-	-	-	-
<b>Sub Total</b>	<b>Proposed</b>	<b>7,376</b>	<b>7,576</b>	<b>8,351</b>	<b>10,301</b>	<b>33,606</b>
	<b>Recommended</b>	<b>5,399</b>	<b>5,600</b>	<b>5,500</b>	<b>5,699</b>	<b>22,198</b>
	<b>Difference</b>	<b>(1,978)</b>	<b>(1,977)</b>	<b>(2,851)</b>	<b>(4,602)</b>	<b>(11,408)</b>

Source: OGW



Table 46: Recommended capital expenditure (\$'000 real 2013)

	2013/14	2014/15	2015/16	2016/17	Total
Proposed water capital expenditure	9,189	13,027	9,155	10,313	41,684
Recommended water adjustment 1 (MDC)	(125)	(125)	(1,000)	(2,750)	(4,000)
Recommended water adjustment 2 (JWS projects delivered by WSC)	(100)	(900)	(350)	(350)	(1,700)
Recommended water efficiency gain (5%)	(448)	(600)	(390)	(361)	(1,799)
<b>Recommended water capital expenditure</b>	<b>8,515</b>	<b>11,402</b>	<b>7,415</b>	<b>6,852</b>	<b>34,185</b>
Proposed wastewater capital expenditure	31,357	28,642	16,997	15,378	92,373
Recommended wastewater adjustment 1 (SPSSs)	(1,852)	(1,852)	(1,852)	(1,852)	(7,408)
Recommended wastewater efficiency gain (5%)	(1,475)	(1,399)	(757)	(676)	(4,248)
<b>Recommended wastewater capital expenditure</b>	<b>28,030</b>	<b>25,450</b>	<b>14,388</b>	<b>12,850</b>	<b>80,717</b>
Proposed stormwater capital expenditure	3,425	3,486	3,146	3,244	13,302
Recommended stormwater efficiency gain (5%)	(171)	(174)	(157)	(162)	(665)
<b>Recommended stormwater capital expenditure</b>	<b>3,254</b>	<b>3,312</b>	<b>2,989</b>	<b>3,082</b>	<b>12,636</b>
<b>Total recommended capital expenditure</b>	<b>39,799</b>	<b>40,164</b>	<b>24,792</b>	<b>22,784</b>	<b>127,539</b>

Source: OGW

### 9.3. Output Measures

With regards to the output measures proposed by Gosford City Council, we consider that the overarching approach to defining the values that are ascribed to each of that service attributes is reasonable. In particular, the extrapolation of targets from current levels acknowledges the underlying trade-off between price and service, and is consistent with our underlying approach to the assessment of costs - namely, that Gosford City Council has revealed the efficient costs associated with delivering existing levels of service. The only query we have is with regards to water quality complaints.

As noted in previous sections, some additional operating expenditure is proposed (and we have recommend that this be accepted) for improving water quality, yet no material change in service level appears to be being proposed by Gosford City Council, relative to the extrapolation of historic levels. We consider that an explicit improvement should be provided for this, if the increase in costs associated with delivering this improvement is provided for in prices.

Our other observation is that, taken on face value, the Gosford City Council is not proposing service level measures for attributes such as 'overall customer satisfaction', 'water pressure', nor for any 'retail' (or 'customer experience') attributes (e.g., time taken to answer phone calls). We consider that such important components of the service that is provided by a water and wastewater business should be measured and reported against, as all are important measures of service for a prudent and efficient water and wastewater service provider. Even if Gosford City Council is currently delivering high levels of service as measured against these service attributes, they should be measured and reported against.

In summary, our final recommendation is that except for water quality, the proposed measures and levels outlined in Table A4 of Gosford City Council's submission, and reproduced above, be accepted. In addition, the following services/service levels also be included:

- Minimum water pressure of 12m at property connection, with this being based on the proposed levels of service outlined in the MasterPlan document;
- Customer Satisfaction of no more than 5% of customers dissatisfied with the service (water and wastewater) delivered; and
- Percentage of telephone calls answered within 30 seconds of no less than 80%.

We also consider that the proposed number of water quality complaints be adjusted down marginally to reflect the slight increase in resources devoted to improving this service attribute.

A complete list of proposed measures is contained in the table below.

Table 47: Recommended Output Measures

Service	Output or activity measure	Indicator of activity by 2015/16*
Water	Water quality complaints per 1000 properties	9.5^
	Average frequency of unplanned interruptions per 1000 properties	151.8
	Water main breaks per 100km main	23.7
	Compliance with Australian Drinking Water Guidelines - microbial guideline values	Yes
	Compliance with Australian Drinking Water Guidelines - chemical guideline values	Yes
	Minimum water pressure at property connection	12m
Wastewater	Wastewater overflows per 100 km main	32.6
	Wastewater overflows reported to	1.6

	the environmental regulator per 100km main	
	Wastewater odour complaints per 1000 properties	1.9
	Wastewater main breaks and chokes per 100km main	35.6
	Compliance with EPL 1802 concentration & load limits	Yes
Retail	Customer Satisfaction	<=5% of dissatisfied customers
	Percentage of telephone calls answered within 30 seconds	80%

*\*This is chosen in order to be consistent with the proposal of Gosford City Council*

*^Slight reduction due to proposed increase in expenditure associated with delivering increased levels of water quality*

*Source: OGW; Table A4 of Gosford City Council's Submission*

## Appendix A: Comments by Gosford City Council - SPS Renewals

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<b>Capital costs</b>				
1.	P.94 (new version)	7.8.1. SPS renewals – Unallocated Budget	<p>"Gosford City Council manages 181 Sewer Pump Stations (SPS), 3 vacuum stations and 1 syphon to transport sewage for treatment. Many of the pump stations were installed in the 1980's and thus some of the components are reaching the end of their nominal life. As examples, pumps are given a nominal life of 25 years, electrical power 30 years and electrical control 25 years.</p> <p>Council - in the current price path - have carried out renewals at 40 SPS.</p>	<p>Council considers the reduction of funding for SPS Renewals / Upgrades as unjustified.</p> <p>The works have been clearly defined and substantiated through rigorous analysis which included an extensive condition assessment of all SPS's followed by a review of both methodology and risk.</p> <p>The assumption that GCC is expending funds unnecessarily based on measuring percentage of station refurbishments compared to other water utilities is not a valid comment.</p>
2.	P.95	7.8.1. SPS renewals – Description of Project	Council for 2014 to 2018 are proposing to re-new another 40 SPS	<p><b>Consider adding:</b> Works involved in these 40 renewals have varied from construction of new wet wells and retention tanks down to replacement of valves and pumps depending on the most cost effective way of ensuring safe and environmentally friendly sewage transfer at each SPS.</p>
3.	P.95 &	7.8.1. SPS renewals – Option Assessment / Solution Development	The current risk management plan has been based on some very simple criteria to prioritise the order of renewal and upgrade works for	The process of prioritisation and ranking which incorporated the condition assessment was well documented in the asset management plan

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	P.96		<p>sewage and vacuum pump stations.'</p> <p>And</p> <p>'Council currently ranks pumps stations based on risk. Current prioritisation rules consider the following:</p> <ul style="list-style-type: none"><li>• Ratings previously given in the Hunter Water audits (2007) of all pump station</li><li>• visual inspections;</li><li>• Pump stations that have more than 100 starts per day (information obtained from the telemetry system);</li><li>• Pump stations with run times greater than four hours per day (information obtained from the telemetry system);</li><li>• Pump stations with low retention times of less than four hours for average dry weather flows;</li><li>• Other problems identified be operational staff; and</li><li>• Age of assets and equipment associated with the pump station.</li></ul> <p>The priority rating scores range from one to five (1 = new station, 5 = urgent works required)"</p> <p>Based on this initial assessment, pump sta-</p>	<p>for SPSs (of which a draft copy was provided to the auditors on the day). Furthermore the extensive desktop evaluation of all 181 SPSs indicates the ramping up of SPS renewals. This is further highlighted in Figure 5 of the Sewer Asset Management Plan provided to the auditors on the day. IPART need to consider the highs and lows of figure 5 when comparing GCCs program with other authorities.</p> <p>Note * This refers to Hunters Condition Ratings. It would appear IPART have obtained this information directly from GCCs Sewer AMP (Ref. 56). The Table directly after these dot points identify that GCC weight the condition very highly.</p> <p>Note: The following data is based on the year SPSs were constructed. It was used to determine which stations required a rigorous evaluation and was not used solely to determine which stations required upgrade. 81% of all Gosford SPSs were constructed in a 15 year period.</p> <table><tr><th>Period constructed</th><th>% of SPS</th><th>Age Bracket</th></tr><tr><td>1975-1979</td><td>12%</td><td>34-38 years old</td></tr><tr><td>1980-1989</td><td>38%</td><td>24-33 years old</td></tr><tr><td>1990-1995</td><td>43%</td><td>19-23 years old</td></tr><tr><td>1996-2004</td><td>7%</td><td>9-18 years old</td></tr><tr><td>TOTAL</td><td>100%</td><td></td></tr></table> <p>Current average age of all SPS stations 24 years old</p> <p>Should read: Based on this initial desktop assessment, pump stations that are ranked high on risk are then inspected and a detailed condition assessment is carried out. Guidance is provided on performing the</p>	Period constructed	% of SPS	Age Bracket	1975-1979	12%	34-38 years old	1980-1989	38%	24-33 years old	1990-1995	43%	19-23 years old	1996-2004	7%	9-18 years old	TOTAL	100%	
Period constructed	% of SPS	Age Bracket																				
1975-1979	12%	34-38 years old																				
1980-1989	38%	24-33 years old																				
1990-1995	43%	19-23 years old																				
1996-2004	7%	9-18 years old																				
TOTAL	100%																					

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			tions that ranked high on risk then inspected and a detailed condition assessment is carried out. Guidance is provided on performing the condition assessments in a document titled “SPS Condition Assessment & Upgrade Project Selection Criteria”.	condition assessments in a document titled “SPS Condition Assessment & Upgrade Project Selection Criteria”.										
4.	P.95	7.8.1. SPS renewals – Option Assessment/Solution Development (cont).	<p>It is noted that age is used to guide the condition assessment with the following guidance provided<sup>57</sup>:</p> <ul style="list-style-type: none"><li>For pumps and valves with an age from 15 to 20 years, a minimum condition score of 3 should be assigned.</li><li>For pumps and valves with an age greater than 20 years, a minimum condition score of 4 should be assigned.</li><li>For pipes and other ancillary mechanical equipment with an age greater than 35 years, a minimum condition score of 3 should be assigned.”</li></ul> <p>60 - Sewerage Asset Management Plan RevIPART 61 - SPS Condition Assessment &amp; Upgrade Project Selection Criteria.</p>	<p>Consider section regarding age be rewritten or deleted as age is only one criterion considered in the initial desktop assessment to aid in prioritising those SPS that need inspection.</p> <p>Note: There are 60 stations with FORRERS pumps, with the following age profile:</p> <table><tr><th>Age Bracket</th><th>% of SPS</th></tr><tr><td>14-20 years old</td><td>25%</td></tr><tr><td>21-25 years old</td><td>55%</td></tr><tr><td>26-36 years old</td><td>20%</td></tr><tr><td>Average age</td><td>24.4</td></tr></table> <p>GCC are unable to get parts to effectively guarantee operation of the pumps at these stations.</p>	Age Bracket	% of SPS	14-20 years old	25%	21-25 years old	55%	26-36 years old	20%	Average age	24.4
Age Bracket	% of SPS													
14-20 years old	25%													
21-25 years old	55%													
26-36 years old	20%													
Average age	24.4													
5.	P.96	7.8.1. SPS renewals – Option Assessment/Solution Development (cont).	“Stations are ranked based on the result of the condition assessment. The rankings derived are then used to guide the level of expenditure required with mandatory projects and projects ranking high for strategic objectives and extreme or high risk being given priority. Projects	Consider: Stations are then ranked for renewal based on the result of the actual condition assessment. The rankings derived are then used to guide the level of expenditure required with mandatory projects and projects ranking high for strategic objectives and extreme or high risk being given priority. Projects which are ranked high for either strategic objectives or extreme or high for risk are then assessed further by the										

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			<p>which are ranked high for either strategic objectives or extreme or high for risk are then assessed further by the Capital investment Committee or Executive Team.</p> <p><i>It could be argued that this implies these are more discretionary."</i></p>	<p>Capital investment Committee or Executive Team.</p> <p><i>It could also be argued that this exemplifies the rigorous approach that GCC applies to the process of developing its SPS Upgrade Program.</i></p>
6.	P.97	7.8.1. SPS renewals Assessment of Prudence and Efficiency	<p>Council have advised that the original budget for this work included funds to provide retention tanks.</p> <p>The original budget was \$21,337,611. This was reduced by approximately 20% to allow for deferral of the detention tanks to the next price path. This resulted in the SPS renewal budget being reduced to \$17,548,000.</p> <p>An additional \$1,025,000 was added to purchase four mobile generators to reduce the risk of environmental damage in the event of a failure caused by not building the retention tanks. An additional \$5,330,000 was added to renew electrical control and supply assets and \$410,000 added to renew vacuum pumps. A further amount of \$384,375 was provided for the Kincumber SPS overflow and associated works giving a total amount of \$24,697,375.</p> <p>The major issue with the assessments carried out to develop the priority list is that it is a ranking process, and it is substantially driven by age. There is no benefit/cost assessment that provides confidence that efficient outcomes</p>	<p>Capital Investment Committee did reduce the expenditure by 20% by taking out a number of retention tanks. It was decided GCC could mitigate the risk without the tanks by using \$1M to buy 4 mobile sewer pumps. Tanks will go into next IPART determination.</p> <p><i>(However, OGW has further reduced expenditure from approx \$17 to \$10 million based on percentage of stations re Sydney Water. \$5 million added for Electrical).</i></p> <p>The reference indicating development of the priority list is mainly being driven by age is incorrect. (Refer Comment in 7.8.1 SPS Renewals - Option Assessment/Solution Development. In addition Hunter Waters Condition Assessment also has an influence in the prioritisation process.</p> <p>Additionally, pumps in a considerable number of the SPSs are of a brand Council is now unable to obtain parts to repair.</p>

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			<p>are being achieved. Whilst it is acknowledged that there will be SPS renewals that need to be carried out and would provide a positive benefit/cost, if assessed, there is nothing in the current process carried out by Gosford City Council that shows where the cut-off for projects with a positive benefit/cost occurs. Their own diagram - shown above - confirms that there is some subjectivity in their assessment.</p> <p>By comparison, Sydney Water has 675 SPS. Sydney Water renewed 100 out of its 675 SPS's in the period 2008-2012 based on "assets as they are identified as reaching the end of their life and the cost to renew is less than the cost to continue to maintain - 62".</p> <p>Wyang Shire Council, in their 2014-2017 submission, have allowed for renewal of 4 SPS per year out of their total 143 stations. We would assume that Wyong Shire Council's age profile for SPS's would be similar to Gosford City Councils.</p>	<p>Has this assumption been checked?</p>
7.	P.97 & P. 98	7.8.1. SPS renewals Assessment of Prudence and Efficiency (continued)	<p>Hunter Water does not separately identify the SPS's to be renewed, however it includes allowances for replacement of SPS assets. Their current submission has a total amount of \$11,710,824 for this work. Hunter Water has a total of 428 SPS's.</p> <p>62- Sydney Water – Submission to IPART</p>	<p><i>Comment:</i> It is not possible to compare GCC with WSC, SWC or HWC as delivery timeframes and circumstances surrounding the SPS renewal program are relative to the circumstance within each authority's area. Age profiles of SPSs are significantly different to that of the two major water authorities. WSC may be ramping up their renewal program at the next review. 81% (147) of GCC SPSs were built over 3.75 IPART (4 year) determination periods (15 years). 55% of all GCC</p>



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			<p>2012 pricing determination Review of Capital and Operating Expenditure for Gosford City Council 26th October, 2012 Draft Report Table 30: Comparison of SPS renewals between GCC and WSC Total No of SPS to be renewed % to be renewed Gosford City Council SPS-181 R40 22% Wyong Shire Council SPS-143 R16 11% Sydney Water SPS-675 R100 15% Source: OGW Based on the above, we do not believe a budget allowance of \$24,697,375 is prudent. In assessing an amount that is considered to be prudent, we have used the comparative information above to make an assessment. Only Sydney Water provides an indication that renewal is based on an assessment of renewal costs being less than maintenance costs and they can substantiate only 15 % of their stations requiring renewal. If we apply the same ratio to Gosford City Council's SPS's then only 27 SPS would require renewal from 2103 to 2017. An alternate assessment is to use Gosford City Council's own rankings. Allowing for all stations rated at 5 or 4 (extreme or high) and excluding stations rated as 3 (moderate – consider opportunity to reduce to low, but other-</p>	<p>pumps were installed over a five year period.</p>

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			<p>wise tolerable) an amount, including detention tanks, of \$12,715,000 would be renewed in the period 2014-2017. If this was reduced by 20% for removal of the detention tanks this would reduce to \$10,200,000. Adding Council's own allowances of \$5,330,000 for renewal of electrical control and supply assets, \$410,000 for vacuum pumps and \$384,375 for Kincumber overflow and associated works gives a total in the order of \$16,300,000 which is consistent with the comparison for Sydney Water.</p> <p>Whilst we accept that this assessment is subjective, until Gosford City Council can move from their current ranking system to one which can demonstrate that the costs of renewal are less than the on-going costs of maintenance including quantitative assessment of risk costs, environmental and social costs, we consider the allowance for SPS renewal should be reduced to approximately \$17,000,000. (Pro-rata reduction based on 7 stations per year compared to proposed 10 per year.)</p>	<p>Previously implied GCC methodology is subjective therefore wrong.</p> <p>This has been likened to SWC situation with SPS at the moment. If OGW read all of the Sewer AMP for SPSs supplied to them (Ref. 56) they would notice in Figure 5 "Projected Capital Renewal Expenditure" that Gosford is climbing into a peak for renewals and after 8 years this will decline. SWC may be in a decline at the moment or have a constant renewals policy with little regard to condition. Without have a detailed knowledge of the renewal cycles of these other utilities, meaningful comparisons are not possible.</p>
8.			<p>"...we consider the allowance for SPS renewal should be reduced to approximately \$17,000,000."</p>	<p>The full value of the proposed SPS program be included in the 'allowed' capital expenditure as it has been demonstrated to be prudent and efficient.</p> <p>Arbitrarily reducing the value of the 'allowed' spend on the program, will increase risk above that what other businesses and our environ-</p>

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				mental regulator will accept.