Oakley Greenwood

Review of Capital and Operating Expenditure for Wyong Shire Council

Independent Pricing and Review Tribunal (IPART)

Melbourne +613 9486 0897 Sydney +612 8006 8107 Adelaide +618 8331 1358 Brisbane +617 3263 7612

DISCLAIMER

This draft document is supplied for the purposes of facilitating discussions with IPART. It is not to be further reproduced or distributed without express permission from Oakley Greenwood (OGW).

The analysis and information provided in this report is derived in whole or in part from information prepared by a range of parties other than OGW, and OGW explicitly disclaims liability for any errors or omissions in that information, or any other aspect of the validity of that information. We also disclaim liability for the use of any information in this report by any party for any purpose other than the intended purpose.

DOCUMENT INFORMATION

Project	Review of Capital and Operating Expenditure for Wyong Shire Council
Client	IPART
Status	Final Report
Report prepared by	rharris@oakleygreenwood.com.au jsnow@oakleygreenwood.com.au Alan.Thornton@hwa.com.au Angus.Sharpe@hwa.com.au matthewt@rmcg.com.au
Date	26th November, 2012

Table of CONTENTS

Table of FIGURES

Table of TABLES

1. Executive Summary

IPART has engaged Oakley Greenwood[1] to undertake[2]:

- *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 Wyong Shire Council's submission to IPART[3];
- Review Wyong Shire Council's Annual Information Return (AIR) and Special Information Return (SIR);
- Provide Wyong Shire Council with an initial list of information that we were seeking from them;
- Provide Wyong Shire Council with a more detailed list of questions for discussion during the interview stage of the process;
- Undertake interviews with key staff from Wyong Shire Council;
- Provide Wyong Shire 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 historical expenditure and forecasts expenditure that have been provided by the businesses, our threshold test has been to provide a considered opinion as to whether we believe the proposed expenditures 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 Wyong Shire 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

1 Oakley Greenwood has undertaken this project in conjunction with Hunter Water Australia.

2 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

3 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 Wyong Shire Council, have to spend that amount of money, or utilise the chosen procurement method, to undertake that proposed program or project.

Having regard to the above, there is no data that would lead us to conclude that Wyong Shire Council's historical water and wastewater 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 Wyong Shire Council over the period. In particular, Wyong Shire Council performs reasonably well 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.

However, our review of Wyong Shire Council's 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 Wyong Shire Council's proposed operating expenditure forecasts.

Table 1: Recommended Changes to Assumptions Underpinning Proposed Operating Expenditures

Operating Expenditure Component	Recommended Change
Corporate overheads	- The allocation methodology that is used to derive 2013 corporate costs revert back from the proposed "proportion of operating expenditure" approach to the current approach. - The proposed increase in corporate costs between 2012 and 2013, which is primarily driven by the assumption that currently vacant positions will be filled, be removed, and instead, the labour component of the 2013 corporate costs be based on 2012 labour costs, inflated by the recommended labour cost escalator. In the absence of the detailed derivation of this cost escalator, a cost escalation rate should be estimated based on customer growth. - That a number of specific accounts be removed from the overall corporate cost pool that is in turn allocated back into the water and wastewater business, as they do not relate to the provision of water and wastewater services.
Starting 2013 Costs	- The proposed increase in water and drainage labour costs between 2012 and 2013, which is primarily driven by the assumption that currently vacant positions will be filled, be removed, and instead, 2012 water and drainage labour 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; - All other categories of drainage costs incurred in 2012 should also be inflated the cost and growth escalators recommended in this report; - Expenditure on Road Opening Fees be reduced to $100k per annum, from $350k that is currently contained in the AIR, consistent with Wyong Shire

	Council's historic expenditure; ■ The amount of Licence Fees for 2013 and 2014 be reduced to reflect the figures contained in the Figure 17 (converted to real $2012/13), and the same growth percentage growth rate as is currently assumed be used to obtain forecasts for the remainder of the forthcoming regulatory period.
Real cost escalators	■ The magnitude of Wyong Shire Council's real cost escalators be accepted, except for the electricity price rise. Instead, this should reflect the most recent forecasts provided by AEMO;
Growth Escalators	■ That Wyong Shire Councils proposed growth escalator be rejected, rather, we recommend that instead of applying this escalator to all costs other than labour, electricity and 'one off' items, this escalator should only be applied to 'materials' and 'electricity'.
Step Changes	■ That the step changes pertaining to 'Bushfire & boundary clearing - Mannering Park'; 'Bushfire & boundary clearing - Charmhaven'; 'Bushfire & boundary clearing - Gwandalan'; and 'Site Preventative Maintenance' be removed; ■ That an additional Step Change pertaining to changes in the POE Act be included; and ■ The CCWC Establishment Costs that are allocated back into the water and wastewater business should revert back to that 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.

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[4]	2013/14	2014/15	2015/16	2016/17	Total
Corporate					
■ Forecast	13,689	13,715	13,835	13,910	55,150
■ Recommended	10,661	10,715	10,768	10,822	42,966
Water					
■ Forecast	16,665	16,136	16,268	16,151	65,221

4 All forecast figures have been estimated based on our own modelling, and exclude water purchases from Hunter Water. All forecasts also exclude any additional reimbursements that may be required to be paid to Gosford City Council under the JWS which have not otherwise been forecast as part of the original submission.

Recommended	14,948	14,363	14,450	14,566	58,327
Wastewater					
Forecast	15,554	16,112	16,503	16,577	64,746
Recommended	15,099	15,364	15,666	15,603	61,732
Drainage					
Forecast	2,601	2,532	2,465	2,417	10,015
Recommended	2,355	2,367	2,380	2,392	9,494
Total					
Forecast	**48,509**	**48,495**	**49,071**	**49,056**	**195,131**
Recommended	**43,064**	**42,808**	**43,264**	**43,383**	**172,519**
% Reduction	(11.225%)	(11.728%)	(11.835%)	(11.564%)	(11.588%)

Source: AIR; 'Wyong Model of Forecasts - FInal.xls'

The review of capital water and wastewater expenditure projects in the current price path has found the expenditure to be generally prudent and efficient. However, it is recommended that the actual expenditures incurred by Council in the 2009-2013 price path including the projected figures for 2013 be rolled into Council's regulatory asset base apart from:

- $1.7M of the Warnervale Town Centre trunk gravity main
- The full value of the Minnesota road culverts (2.8M est.)

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	9,382	39,599	40,958	12,158	8,660	110,757
Recommended Water Adjustment	-	-	-	-	-	-
Water capital expenditure to be rolled into RAB	**9,382**	**39,599**	**40,958**	**12,158**	**8,660**	**110,757**
Actual/forecast Wastewater Capital Expenditure	3,887	6,412	5,894	5,213	14,730	36,136
Recommended Wastewater Adjustment	-	-	-	-	-1,700	-1,700
Wastewater capital expenditure to be rolled into RAB	**3,887**	**6,412**	**5,894**	**5,213**	**13,030**	**34,436**
Actual/forecast Stormwater capital Expenditure	6,314	5,818	5,989	5,155	9,432	32,708
Recommended Stormwater Adjustment	-	-255	-1	-134	-2,443	-2,833
Stormwater capital expenditure to be rolled into RAB	**6,314**	**5,562**	**5,988**	**5,022**	**6,989**	**29,875**
Total growth capital expenditure to be Rolled into RAB	15,876	41,335	39,612	11,666	17,667	126,155
Total recommended capital expenditure to be Rolled into RAB	**19,583**	**51,573**	**52,840**	**22,393**	**28,679**	**175,068**

**Projected*

Further to the above, the review of the specific water and wastewater projects revealed that a large portion of the expenditure was not prudent. In particular, growth driven projects are able to be deferred based on Council's own population projections. The apparent systemic nature of this issue indicates that there may be a material risk to the prudency around all growth related projects.

The review of specific stormwater projects has revealed that significant expenditure is not prudent and has highlighted several areas for improvement, including the development of a funding attribution policy and a more robust project justification process.

At present, a significant portion of renewal/replacement works are carried out by Council. 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. The following table summarises the recommendations on capital expenditure for the 2014/17 price path.

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

- Removal of the DAF Detailed Design (WSC managed), which will result in a $700,000 reduction from each Council's 2014/17 price path.
- Removal of the Mardi dam curtain (WSC managed), which will result in a $1,000,000 reduction from each Council's 2014/17 price path.
- Removal of Mangrove Creek Dam Spillway works (GCC managed), which will result in a $4,000,000 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 WSC's contribution being reduced to $12,159,000 and GCC's contribution being reduced to $12,142,000.

The following tables outline the changes that we recommend be made to Wyong Shire Council's capital expenditure forecasts.

Table 4: Recommended capital expenditure adjustments ($'000 real 2013)

Project		2013/14	2014/15	2015/16	2016/17	Total
Kiar Ridge Reservoir	Proposed	100	200	200	7,300	7,800
	Recommended	-	-	-	-	-
	Difference	(100)	(200)	(200)	(7,300)	(7,800)
Dissolved Air Flotation Plant	Proposed	-	-	350	350	700
	Recommended	-	-	-	-	-
	Difference	-	-	(350)	(350)	(700)
Modifications to Mardi Dam inlet	Proposed	100	900	-	-	1,000
	Recommended	-	-	-	-	-
	Difference	(100)	(900)	-	-	(1,000)
Mardi to Warnervale Trunk Main	Proposed	500	500	1,000	23,000	25,000
	Recommended	-	-	-	-	-
	Difference	(500)	(500)	(1,000)	(23,000)	(25,000)
Charmhaven STP	Proposed	-	-	5,500	7,000	12,500
	Recommended	-	-	-	-	-
	Difference	-	-	(5,500)	(7,000)	(12,500)

Toukley Sludge Lagoons	Proposed	-	800	200	-	1,000
	Recommended	-	800	200	-	1,000
	Difference	-	-	-	-	-
Unallocated Projects - To be Confirmed	Proposed	-	6,000	6,000	6,500	18,500
	Recommended	-	-	-	-	-
	Difference	-	(6,000)	(6,000,)	(6,500)	(18,500)
Total	**Difference**	**(700)**	**(7,600)**	**(13,050)**	**(44,150)**	**(65,500)**

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

	2013/14	2014/15	2015/16	2016/17	Total
Proposed water capital expenditure	7,249	10,965	8,105	39,457	65,776
Recommended water adjustment 1 (Kiar Ridge)	(100)	(200)	(200)	(7,300)	(7,800)
Recommended water adjustment 2 (DAF)	-	-	(350)	(350)	(700)
Recommended water adjustment 3 (Mardi inlet)	(100)	(900)	-	-	(1,000)
Recommended water adjustment 4 (Warnervale Trunk Main)	(500)	(500)	(1,000)	(23,000)	(25,000)
Recommended water adjustment 5 (JWS projects delivered by GCC)	(125)	(125)	(1,000)	(2,750)	(4,000)
Recommended water efficiency gain (5%)	(321)	(462)	(278)	(303)	(1,364)
Recommended water capital expenditure	**6,102**	**8,778**	**5,278**	**5,754**	**25,912**
Proposed wastewater capital expenditure	15,581	16,063	14,281	13,156	59,081
Recommended wastewater adjustment 1 (Charmhaven STP)	-	-	(5,500)	(7,000)	(12,500)
Recommended wastewater efficiency gain (5%)	(779)	(803)	(439)	(308)	(2,329)
Recommended wastewater capital expenditure	**14,802**	**15,260**	**8,342**	**5,848**	**44,252**

Proposed stormwater capital expenditure	8,534	11,844	9,135	12,573	42,086
Recommended stormwater adjustment 1 (unallocated projects)	-	(6,000)	(6,000)	(6,500)	(18,500)
Recommended stormwater efficiency gain (5%)	(427)	(292)	(157)	(304)	(1,179)
Recommended stormwater capital expenditure	**8,107**	**5,552**	**2,978**	**5,769**	**22,407**
Total recommended capital expenditure	**29,012**	**29,590**	**16,598**	**17,372**	**92,571**

With regards to the output measures that have been proposed by Wyong Shire Council for the forthcoming regulatory period, 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 Wyong Shire Council has revealed the efficient costs associated with delivering existing levels of service. We also note that no material change in costs is being proposed by Wyong Shire Council to provide enhanced levels of service, which again reinforces the reasonableness of extrapolating current levels of service.

Notwithstanding the above, it appears that Wyong Shire Council is proposing to remove a number of service level measures that have previously been reported against. In particular, measures of 'customer satisfaction' and 'water pressure' have not been proposed in their submission. We further note that there is no proposed measure for the 'retail' (or 'customer experience') component of service delivery (e.g., percentage of calls answered within 30 seconds). 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.

We consider that all are important measures of service for a prudent and efficient water and wastewater service provider, and even if Wyong Shire Council is currently delivering high levels of service as measured against these service attributes, they should be either reinstated ('Customer Satisfaction'; 'Water Pressure') or installed (e.g., measures of retail service).

In summary, we recommend that in addition to the measures proposed by Wyong Shire Council in Table 1 of Appendix 13 of their submission, the following services and service levels be used to assess Wyong Shire Council's performance over the forthcoming regulatory period:

- 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, with this metric broadly reflecting current levels of service[5];

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

- Percentage of telephone calls answered within 30 seconds of no less than 80%, which is below the national average[6] for utilities of the size of Wyong Shire Council, but slightly above Wyong Shire Council's near term historic performance[7], but within the range that is has achieved in the current regulatory control period.

Table 6: Recommended Output Measures

Service	Output or activity measure	Indicator of activity by 2015/16*
Water	Water quality complaints per 1000 properties	9.9
	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 Wyong Shire Council*

6 National Water Commission | National Performance Report 2010-11 | Urban water utilities - page 84

7 For example, IPART Performance of NSW metropolitan water utilities, 2009/10 page 50 notes that 2008/09 performance was 92%, however this reduced to 65% in the following year.

2. Objective of Report

IPART has engaged Oakley Greenwood[8] to undertake[9]:

- *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 Wyong Shire Council.

3. Approach to this Review

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

- Review Wyong Shire Council's submission to IPART[10];
- Review Wyong Shire Council's Annual Information Return (AIR) and Special Information Return (SIR);
- Provide Wyong Shire Council with an initial list of information that we were seeking from them;

8 Oakley Greenwood has undertaken this project in conjunction with Hunter Water Australia.

9 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

10 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

- Provide Wyong Shire Council with a more detailed list of questions for discussion during the interview stage of the process;
- Undertake interviews with key staff from Wyong Shire Council;
- Provide Wyong Shire Council with supplementary questions on an as needs basis following the interview process;
- Develop a draft report for comment; and
- Develop this final report.

We would like up-front to thank the key staff members of Wyong Shire Council that we have interacted with during this process. Our engagement with them has, we believe, been very positive, and moreover, the level of detail that has been provided has assisted us in our review.

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 forecast operating and capital forecast for Wyong Shire Council. It has relied on information and data provided to us by Wyong Shire Council up to 14th November 2012. 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 Wyong Shire 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 Wyong Shire 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 to, as much as is reasonably possible, 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 prudency and efficiency of their proposed expenditure.

5. Structure of this Report

This report is structured in the following manner:

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

These are discussed in more detail below.

6.2. Assessment of Historical Operating Expenditure

In assessing the prudency and efficiency of Wyong Shire 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 the efficient costs, given the circumstances faced by that regulated business, and given the outputs produced by that business at that time. 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 Wyong Shire 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.

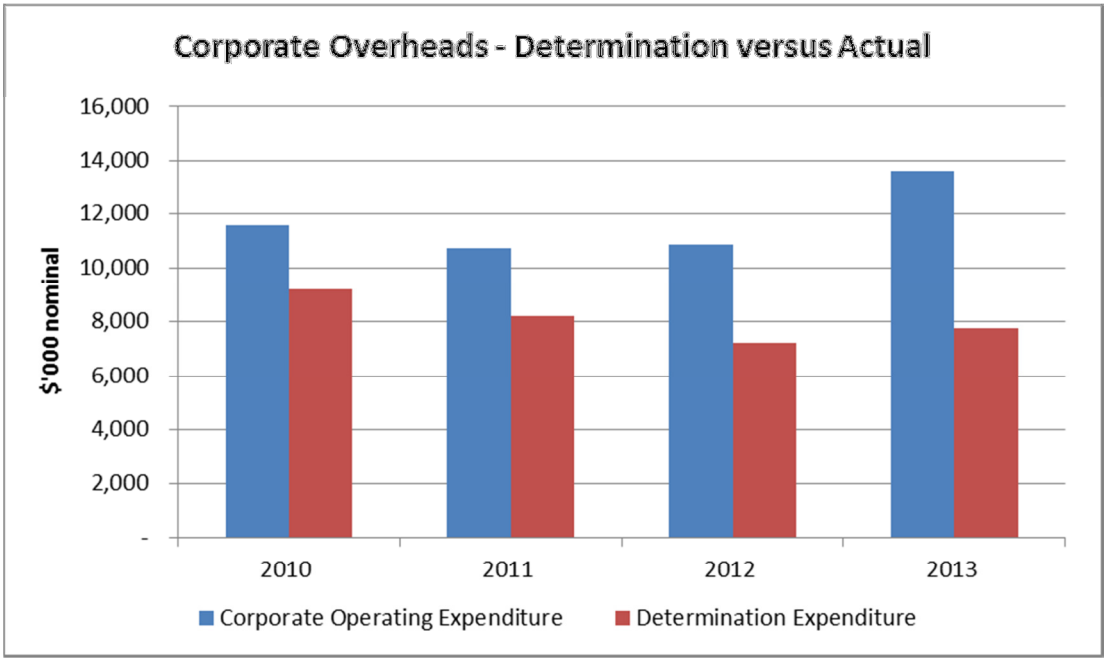
Having regard to this, our approach has been to:

- Assess the overall variance between the previous determination (or 'allowed' expenditure) and actual expenditure;
- Draw upon some high level benchmarking comparing Wyong Shire Council's outturn expenditure to other service providers of a similar size to assess the extent to which Wyong Shire 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 period - and to seek explanations as to what has driven those changes.

It is noted that the last issue is primarily addressed in the next section, which outlines our approach to assessing whether or not Wyong Shire Council's proposed baseline operating expenditure levels (meaning, expenditure levels for the 2013 year) are efficient.

In the case of the first issue, we note from Wyong Shire Council's submission that they have overspent their allowance by around 8%, or $15M[11]. The breakdown of this is graphically represented below.

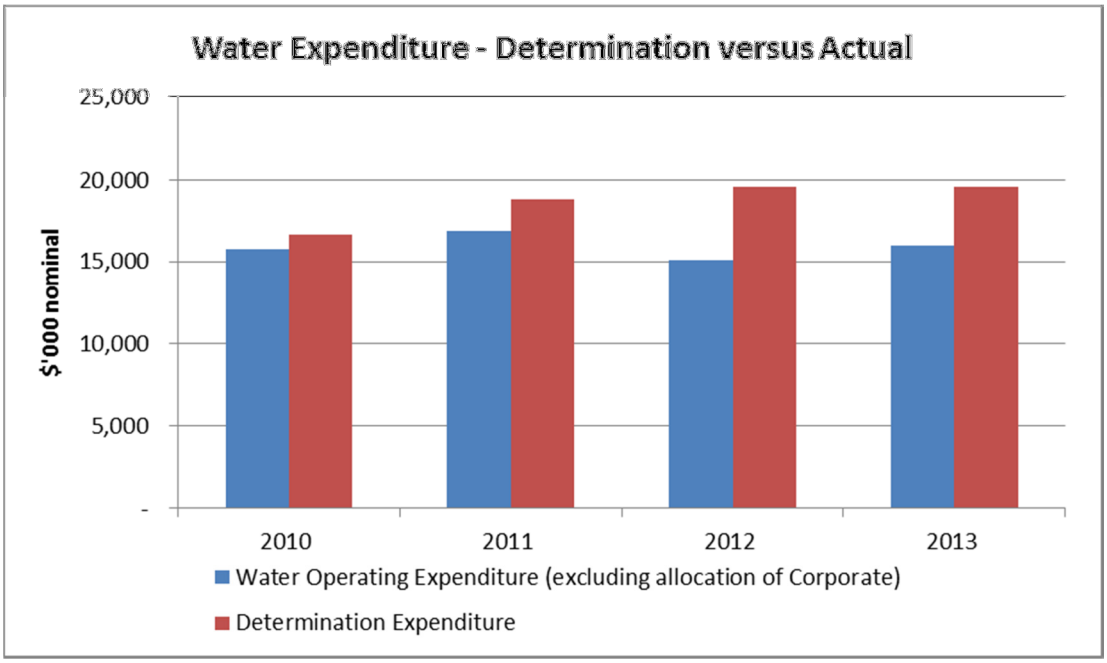
Figure 1: Corporate Overheads – Determination versus Actual



Source: SIR Opex (Table 1.2)

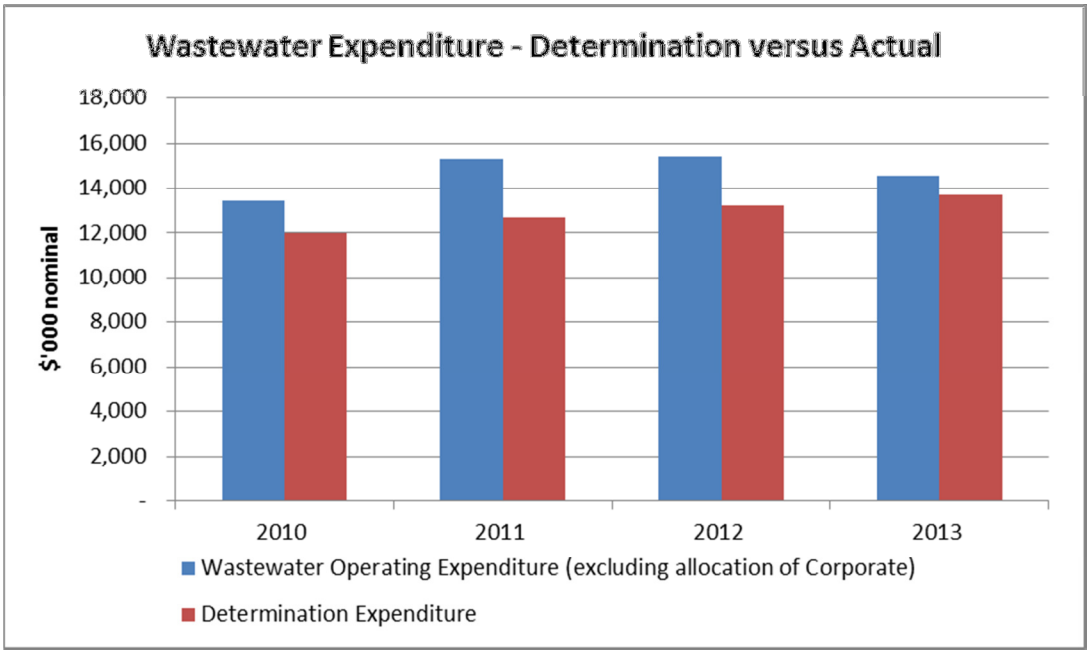
11 Wyong Council - Submission to IPART 2013 - 2017 - page 17

Figure 2: Water Expenditure – Determination versus Actual



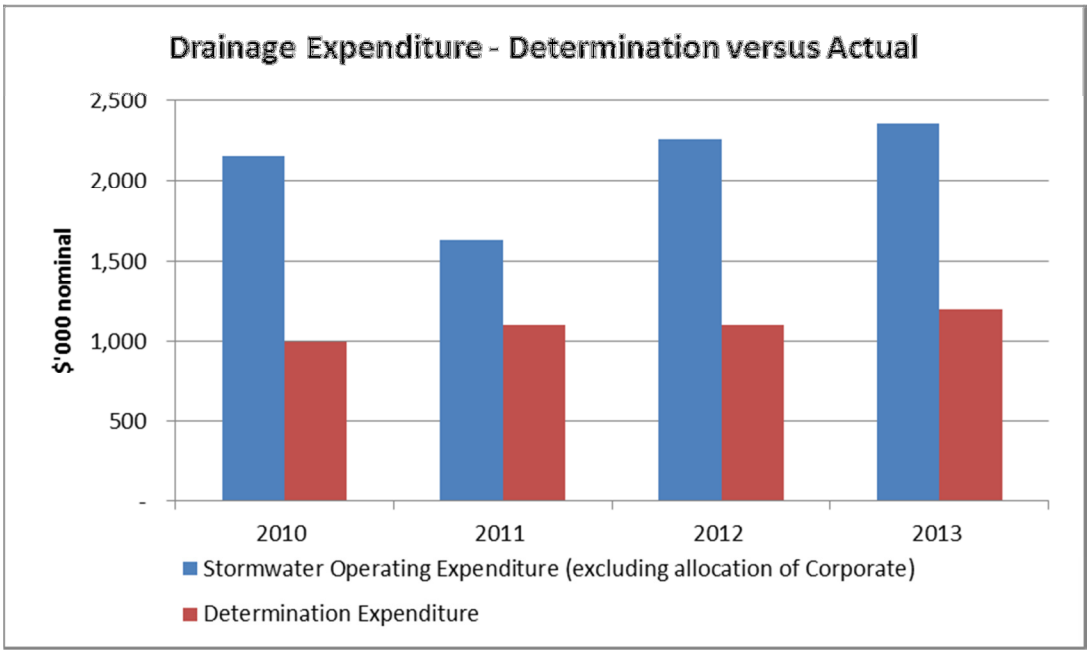
Source: SIR Opex (Table 1.2)

Figure 3: Wastewater Expenditure – Determination versus Actual



Source: SIR Opex (Table 1.2)

Figure 4: Drainage Expenditure – Determination versus Actual



Source: SIR Opex (Table 1.2)

It is clear from the above analysis that the majority of the over expenditure has been in the corporate overheads area. Wyong Shire Council's submission confirms this by stating that[12]:

> *'The comparison of historical operating expenditure to IPART's allowed expenditure in Table 2.9 above shows an overall over-expenditure of $15.1m or approx 8%.....The majority of the over-expenditure relates to Councils allocation of Corporate overheads, accounting for $14.8m.'*

Notwithstanding the above, we noted in our correspondence with Wyong Shire Council that the materiality of some of the other differences in expenditure between forecast versus actual is not insignificant. We therefore sought further information (quantitative and qualitative) on the drivers of those over-expenditures.

In response, Wyong Shire Council reaffirmed the statements made in its original submission with regards to the veracity of IPART's original expenditure forecasts - which were based on the same level of operating expenditure per property as it allowed for Gosford Council – and that this was the primary reason why actual expenditure differed to the Determination. Wyong Shire Council states in its submission that[13]:

> '*at the time Wyong disagreed with this methodology and continues to do so.*'

Furthermore, Wyong Shire Council provided the following table as support for its position that its outturn expenditure was broadly similar to what it had proposed.

12 Ibid

13 Ibid, pg 18.

Figure 5: IPART's Determination; Wyong Shire Council's Original Submission and Actual Costs

WSC SUBMISSION	2009/10	2010/11	2011/12	2012/13	Total
In 12/13 $M					
Corporate	20.8	19.7	19.4	19.0	**78.9**
Water	14.9	16.2	16.7	16.3	**64.1**
Sewerage	10.5	10.7	11.0	11.2	**43.4**
Stormwater drainage	1.5	18.8	2.1	2.3	**24.8**
Total Determination	**47.8**	**65.4**	**49.2**	**48.8**	**211.2**

IPART DETERMINATION	2009/10	2010/11	2011/12	2012/13	Total
In 12/13 $M					
Corporate	9.9	8.5	7.4	7.7	**33.5**
Water	17.8	19.5	20.1	19.6	**77.0**
Sewerage	12.8	13.2	13.5	13.7	**53.2**
Stormwater drainage	1.1	1.1	1.1	1.2	**4.6**
Total Determination	**41.6**	**42.3**	**42.1**	**42.3**	**168.3**

ACTUAL EXPENDITURE	2009/10	2010/11	2011/12	2012/13	Total
In 12/13 $M					
Corporate	12.4	11.1	11.1	13.6	**48.3**
Water	16.9	17.4	15.5	16.0	**65.8**
Sewerage	14.4	15.9	15.8	14.6	**60.7**
Stormwater drainage	2.3	1.7	2.3	2.4	**8.7**
Total Determination	**46.1**	**46.1**	**44.7**	**46.5**	**183.4**

Variance (Actual less Determination)	2009/10	2010/11	2011/12	2012/13	Total
Corporate	2.6	2.6	3.7	5.9	**14.8**
Water	(0.9)	(2.0)	(4.6)	(3.6)	**(11.2)**
Sewerage	1.6	2.7	2.3	0.8	**7.4**
Stormwater drainage	1.2	0.6	1.2	1.1	**4.1**
Total Variance	**4.4**	**3.9**	**2.6**	**4.2**	**15.1**

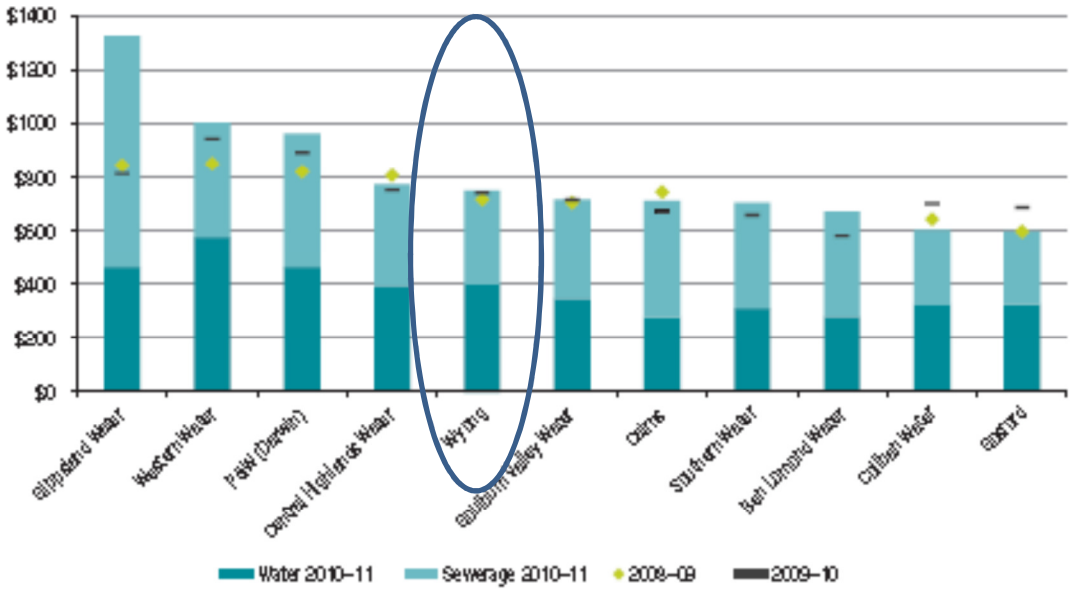
Source: Based on email from Ian Johnson on Thu 4/10/2012 2:28 PM

Overall, the extent to which we are able to draw definitive conclusions from the existence of differences between the Determination operating expenditure and actual operating expenditure is limited in the case of Wyong Shire Council, given the methodology used to set the final decision figures. Furthermore, the fact that the overall fluctuation in the variance between the Determination and actual figures is fairly constant over the period, except for Corporate, whose negative variance increases materially in 2012/13 relative to previous years and water, whose positive variance increases improve even further after 2009/10.

In the case of the former, we discuss this issue in more detail in the following section. In the case of the latter, it appears that the increasing (positive) variance is as much about the material increase in the IPART determination figure in 2010/11, relative to the 2009/10 figures, as opposed to any change in the underlying actual costs incurred by Wyong Shire Council in each of those two years.

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

Figure 6: National Performance Reporting Statistics – Combined Operating Cost per Property

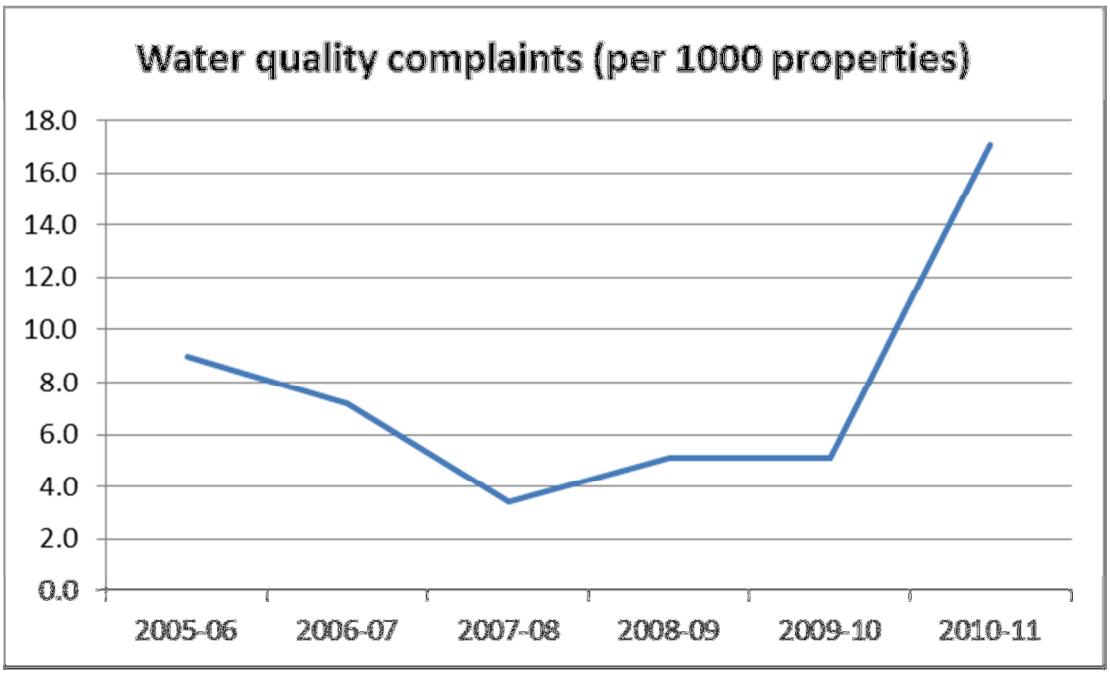


Source: National Water Commission - National Performance Report - 2010/11 - Urban Water Utilities - page 63

Whilst not an elite performer, these comparison statistics indicate that Wyong Shire Council is a mid-range performer on this indicator.

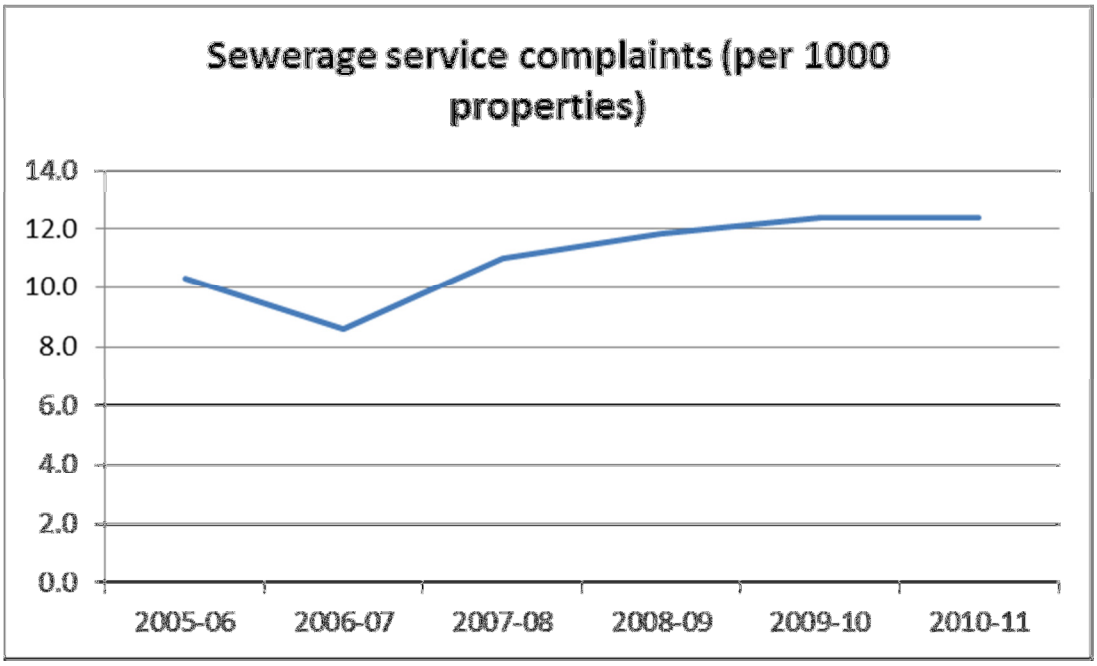
We also sought to assess whether there had been any noticeable reduction in the level of service provided by Wyong Shire Council, given the ever inherent trade-off between cost and service. The following figures present the results based on information from the National Water Commission on customer complaints and interruption to supply.

Figure 7: National Performance Reporting Statistics – Water Quality Complaints



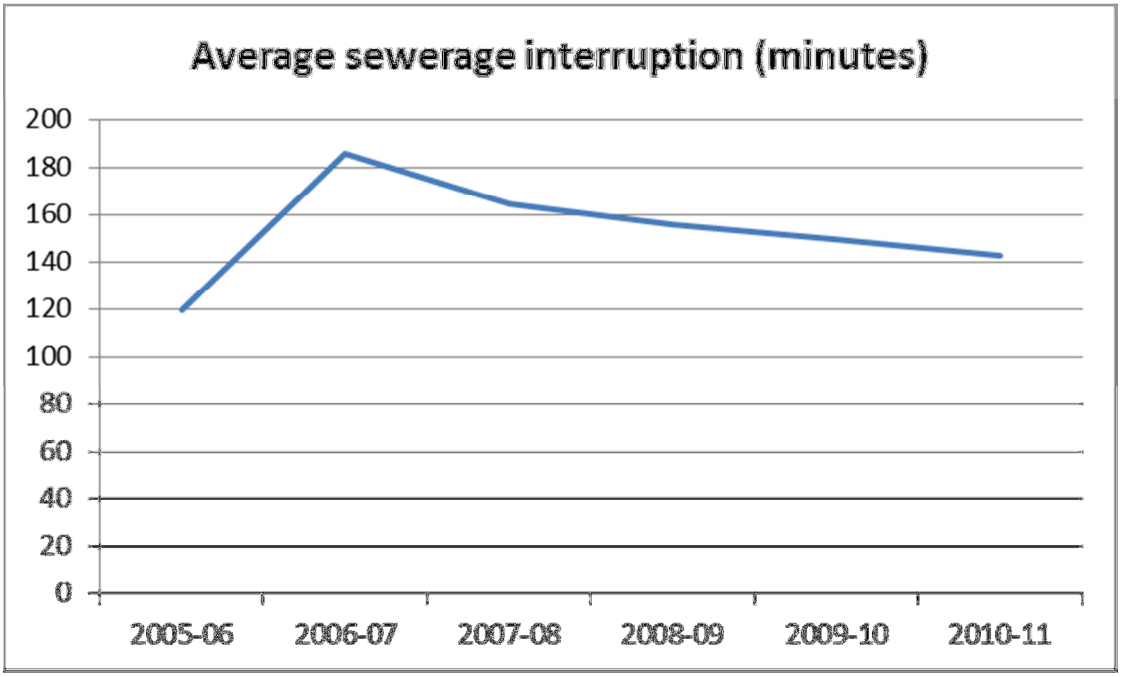
Source: National Water Commission ('Copy of Urban-NPRs-2010-11-Part-B.xls')

Figure 8: National Performance Reporting Statistics – Sewer Service Complaints



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

Figure 9: National Performance Reporting Statistics – Average Sewerage Interruption (Minutes)



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

With regards to the above, it is noted that water quality complaints increased materially in 2010-11. Wyong Shire Council discusses this in their submission[14]:

14 Ibid, pg 14

'The high level of water quality complaints in 2010/11 and the first half of 2011/12 was due to elevated iron and manganese levels. This situation arose during a period when major capital (raw water based) works were being undertaken at, and adjacent to, Mardi Dam.

These works necessitated the temporary draw down of Mardi Dam which resulted in higher than usual levels of iron and manganese in the raw water which the Mardi Water Treatment subsequently had difficulty in effectively treating with consequent "pass through" of poor quality water into the distribution system.'

Apart from this increase in water quality complaints - which appears to be driven by a discrete exogenous factor - trend service levels for the two other indicators chosen for analysis appear to have either plateaued or improved in the last few years of the analysis period.

In summary, there is no data that would lead us to conclude that Wyong Shire Council's water and wastewater 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 Wyong Shire Council over the period. In particular, Wyong Shire Council performs reasonably well 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 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 Wyong Shire Council submitted to IPART as part of their submission.

Figure 10: Original AIR (Table 5.2) – Corporate Costs

Table 5.2 - Operating Expenditure of Regulated Business Activities by Item ($'000)

						Financial year ending 30 June	2008	2009	2010	2011	2012	2013
	Code	NPR	I/C	Use	Unit		Actual	Actual	Actual	Actual	Actual	Projections
Corporate												
Labour (excl employee provisions)	OA62		I	O	$'000		2,504	7,834	5,792	5,371		
Payments to associated unregulated businesses	OA63		I	O	$'000							
External consultants and/or contract(or)s	OA64		I	O	$'000		123	1,567	1,158	1,074		
Hire services	OA65		I	O	$'000		281	627	463	430		
Materials	OA66		I	O	$'000		162	501	695	645		
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							
Corporate overheads	OA71		I	O	$'000		16,448	2,005	1,158	1,074	10,863	13,607
Advertising, phone, tipping fees, insurance	OA72		I	O	$'000							
Loss on disposal of assets	OA73		I	O	$'000							
Central Coast Water corp directors fees	OA74		I	O	$'000							
Road Opening Fees	OA75		I	O	$'000							
<agency defined>	OA76		I	O	$'000							
<agency defined>	OA77		I	O	$'000							
Rates and taxes other than income tax	OA78		I	O	$'000							
Employee provisions	OA79		I	O	$'000		1,075	3,134	2,317	2,149		
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		20,593	15,668	11,583	10,743	10,863	13,607
Allocation of corporate opex to:												
- water - conventional	OW29		I	O	%		45.1%	59.5%	47.8%	49.8%	50.6%	50.8%
- desalinated	OW30		I	O	%							
- recycled water - Section 16A related	OR159		I	O	%							
- other	OR160		I	O	%							
- wastewater	OS32		I	O	%		36.6%	26.5%	34.3%	37.0%	37.5%	38.6%
- stormwater	OD33		I	O	%		18.3%	14.0%	17.9%	13.2%	11.9%	10.6%
- non-regulated businesses (excluding all recycled water)			C	O	%		-	-	-	(0.0%)	-	0.0%

Source: AIR Table 5.2

It is noted that there is a significant increase in the value of corporate overheads that are to be allocated to the water and wastewater business in 2013, relative to 2012 and the prior two years. More specifically, in nominal terms, the Corporate Costs increase from $10.863M in 2012 to $13.607M in 2013. The two main factors driving this are:

- A change in the cost allocation methodology, which is reflected in the 2013 figure, but not the 2012 or prior figures[15];
- An overall increase in the level of cost assumed to be incurred at the corporate level in 2013[16].

A significant amount of information was provided by the Council on this issue. In assessing this information, and the underlying corporate cost allocation methodology, we have assessed whether Wyong Shire Council has:

- Adopted an economically justifiable basis for allocating common (fixed) costs between different regulated 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 purchasing 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 continually probed into what was the fundamental driver 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).

Upon review of this information, and having regard to the above principles, there are a number of aspects of Wyong Shire Council's cost allocation methodology that are still of concern, given the overarching prudency and efficiency objectives. These include the:

- Rationale for changing the cost allocation approach;
- Material increase in corporate costs in 2013, which in turn flows through to the next regulatory control period; and
- Inclusion of costs that do not relate to the water business.

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

- Inconsistent numbers as to what is the proposed corporate cost in 2013;
- Allocation of corporate costs to each of the three products provided – water, wastewater and drainage;
- Related party transactions; and
- Wyong Shire Council's capitalisation policy.

15 As per email from Ian Johnson on Thu 4/10/2012 2:28 PM

16 Ibid

All of these issues are discussed in further detail below.

Allocation Approach Adopted

It is noted that Wyong Shire Council was very transparent about the fact that they had changed their approach to allocating corporate costs for the purposes of developing their operating expenditure forecasts. Specifically, they stated in their submission that[17]:

> *'At the instigation of IPART, Council has reviewed its approach to overheads during the current pricing path. The revised approach now distributes overheads across Council activities on a proportionate basis according to the percentage of total operating expenditure borne by each activity. Council believes that this approach is more comprehensive than the previous distributive mechanism which was based on a complex matrix of cost drivers'*

They also state that[18]:

> *'Council operates a full corporate costs distribution model, whereby corporate costs are allocated across the entire organisation; and has recently adopted a new overhead distribution model which allocates corporate costs based on each businesses proportion of total expenditure. Council believes this is a simpler and more transparent mechanism for cost allocation.'*

Further to the above, we were provided, via email, comments as to the drivers of the change. These included[19]:

- *Improved accuracy of product costing - this was the main reason the opex allocation was chosen as the focus of the organisation is on improved understanding of product costs and drivers and given the nature of Council services, many of the units are cost centres (rather than profit centres) with the key driver being operating costs.*
- *Simplicity - the previous model was based on a complex set of cost drivers (this can be provided on request if necessary) that was not well understood by managers and also took finance a great deal of time and effort when processing the recharge as it was quite a manual model.*
- *Transparency (internally and externally) - in the current price determination IPART expressed concern regarding the level of corporate overheads being allocated to the water business and as such a far simpler and easy to understand model was needed and subsequently developed.*

That said, we asked for more information, including[20]:

> *'Any internal documentation/approvals outlining Wyong Shire Council's assessment of each allocation methodology against a defined set of criteria (e.g., simplicity, transparency, cost reflectivity), which in turn will provide greater insight as to why the 'operating expenditure' methodology was preferred over the myriad of other potential allocation methodologies?'*

In response, we received[21]:

---

17 Wyong Council - Submission to IPART 2013 - 2017 - page 32

18 Ibid, pg 17

19 Email from Ian Johnson on Tue 2/10/2012 11:04 AM.

20 'Wyong_Preliminary Questions.doc' contained in email to Ian Johnson sent on Fri 28/09/2012 3:28 PM

'The approvals that occurred were from Director - Corporate Services, General Manager and then the Councillors as part of the Strategic Planning process for 2012/13.'

We also note that Wyong Shire Council also provided supporting emails documenting the internal approval.

Based on previous correspondence, we noted in the draft report that the impact on the 2012/13 Corporate Cost allocation is around $900k[22]. That is, the change in the allocation approach increases the costs that are allocated to the water and wastewater business in 2012/13 by $900k, which in turn flows into future years' corporate costs.

In our draft report, we expressed significant reservations about the change in methodology adopted by Wyong Shire Council for the purposes of calculating 2013 corporate costs, which in turn drives the amount of corporate costs that are allocated to the water and wastewater business in the forthcoming regulatory period. In particular, we noted that we had not received any information that clearly articulated that there is a net benefit (i.e., the benefits outweigh the costs) in support of the move. Further, whilst the rationale stated in the submission that the changed approach is '*simpler and more transparent*' is reasonable, we noted that these are not the only criteria that should be utilised in making such a substantial change to the allocation methodology. The third criterion identified in the email – '*improved accuracy of product costing*' – is also fundamentally important. We did not see how the changed methodology would lead to more accurate product costing, when the alternative was to continue to use the matrix based allocation approach, which, if done robustly, should almost always be a more accurate allocator of costs, when compared to the more rudimentary "proportion of opex" approach.

Further, we questioned the extent to which the changed methodology would lead to a reduction in costs within the Corporate area of the Council, given that systems have already been set up to cater for the matrix based allocation approach. This query was further reinforced by the fact that no documentation presented demonstrated, or estimated, the cost reductions that would stem from this change.

Overall, our draft recommendation was that a prudent and efficient service provider would not adopt a corporate allocation approach that is based solely on the proportion of opex, particularly where they have already in existence a more sophisticated, and conceptually, more accurate method for allocating costs to the regulated water and wastewater business.

In response to the draft report, Wyong Shire Council stated that[23]:

21 Email from Ian Johnson on Wed 24/10/2012 12:11 PM

22 Email from Ian Johnson received on Thu 4/10/2012 2:28 PM.

23 OGW Report - Response_v2_141112.doc

'We challenge the recommendation that for 2012-13 corporate costs be allocated on the old methodology. One of the reasons for the change to the methodology was due to creating a simpler, transparent, understandable model. The assertion that the previous method of corporate overhead allocation was more sophisticated and accurate is only true if the model is regularly updated to reflect changes in the myriad of allocation drivers. One example can be demonstrated where IT costs are allocated on a PC user basis creating the need for user changes to be updated in the model at least monthly. This is not feasible and would require inefficient manual data manipulation in a team that does not have the capacity. Also, actual corporate overheads were historically recharged on an annual basis due to the time required for the process - approximately 2 days for a finance officer. Therefore the benefit in implementing the new methodology has already been realised. Council now allocates actual corporate overheads on a monthly basis with the task taking approximately 1 hour and this simple methodology has already been well received and more easily understood by management.

It is recognised that ideally a model would provide a direct nexus between service and cost, and the focus on improved product costing across the organisation will assist this idea for future methodology reviews.'

There is nothing in the above response that leads us to change our position that the adoption of a simple, proportion of opex, approach to allocating corporate costs is reasonable, or consistent with a prudent and efficient service provider. We note that the new allocation methodology takes approximately 1 hour per month, or 12 hours per year, relative to 2 days per year, if undertaken on an annual basis. We consider that the difference in time is immaterial, and moreover, even if done on an annual basis, the matrix approach is still likely to be a more robust and accurate approach to allocated corporate costs back into the regulated business, given the fairly static nature of many of the drivers (e.g., the number of users in a water/wastewater, relative to the whole of Council).

Therefore, we recommend that for the purposes of deriving 2013 corporate costs, Wyong Shire Council revert back to their existing allocation approach.

Material increase in corporate costs in 2013

As part of the interview process and subsequent correspondence between Wyong Shire Council and OGW, it was identified that the largest driver of the increase in corporate costs between 2012 and 2013 was not the change in the allocation approach, but rather, the underlying corporate costs that are assumed to be subject to allocation in 2013.

For example, in $12/13, the increase is $1.7m from 2012 to 2013 (the table excludes the change in methodology, therefore, only focuses on the underlying real change in costs).

Figure 11: Corporate Costs Using Old Methodology

ACTUAL EXPENDITURE In 12/13 $	2009/10	2010/11	2011/12	2012/13	Total
Corporate	12.4	11.1	11.1	12.8	**47.5**

Source: Email from Ian Johnson on Thu 4/10/2012 2:28 PM

When asked directly about this Wyong Shire Council provided the following information[24]:

24 Email from Ian Johnson on Wed 24/10/2012 12:11 PM

'In simplistic terms, consistent with the comments I made in the meeting, the increase is due to a combination of the re-definition of corporate overheads as a result of re-defining products, and cost increases related to specific initiatives and new FTE.'

Wyong Shire Council also provided the following tables in support.

Figure 12: Move in Corporate Overheads in 2012/13 relative to 2011/12

Underlying Corporate Overheads 2011/12	**(36,100,618)**
Underlying Corporate Overheads 2012/13	**(39,630,601)**
Movement	**(3,529,983)**

CPI at 2.5%	(902,515)	2.5 % CPI
Major Projects (GM Office)	(1,046,730)	Iconic Sites Development - Consulting and New Staff Costs (refer below)
Councillor Support - Election Costs	(780,000)	Specific Costs related to FY12 Election
Finance/Integrated Planning Projects and new staff	(508,000)	New Fin Controller for Systems; Project Consultants; Software; In Field Technology, Changes in FBT Legislation etc.
Other New Staff	(292,738)	New/Higher Grade FTE in Other areas (e.g. Property and Economic Development) (e.g. GM Executive Officer; Property and Economic Development)
Variance Explained	**(3,529,983)**	
Remaining	(0)	

Source: Email from Ian Johnson on Wed 24/10/2012 12:11 PM

Upon reviewing this information, we noted in our draft report that a portion of this is related to '*Councillor Support - Election Costs*', which we considered to have no nexus with the provision of water and wastewater services by a prudent and efficient service provider. Further, the majority of the remainder of the increase appears to be labour related – which is consistent with what we were told during the interview process (that this was primarily driven by increased labour costs associated with the filling of vacant positions).

In response to the draft report, Wyong Shire Council stated that[25]:

'Due to the nature of Wyong Water Supply Authority being consolidated with Council there are a number of governance and regional activities that are associated with such a relationship resulting in both costs and benefits to the customers of the Water Supply Authority. Specific examples include Councillor Support, such as election costs and as Iconic Site developments.

The governance model of Council is not something under Council's control and hence it is reasonable that costs affecting all of the organisation are shared across all of the organisation. Councillors are the ultimate decision making body for the water business, and indeed the size of the water business is material in the context of the overall Council business. As such it is reasonable that the water business contributes to Councillor and other whole of business corporate costs.

25 OGW Report - Response_v2_141112.doc

> *When the water and sewerage services are transitioned to the Central Coast Water Corporation these costs will no longer apply, however other corporate costs will still be relevant to operating costs for the delivery of the water and sewerage services such as Board of Director fees and also legal and governance costs.'*

Whilst we acknowledge that costs such as Board of Director fees and also legal and governance costs will still be required to be incurred once the CCWC is created, the subject of discussion here is the costs of Council elections. There is nothing here that changes our view that the election costs are not consistent with the costs that a prudent and efficient water and wastewater service provider would incur.

In relation to the increase in costs driven by increased staffing levels, given the consistent historical corporate expenditure in real terms over the last 2 years, and our underlying premise that the regulatory regime encourages businesses to reveal their efficient costs of supply, it is difficult to accept that a $1.7m increase on a $11.1m base expenditure (i.e., a >15% real increase in costs) is consistent with the requirements of a prudent and efficient service provider.

We recommend that Wyong Shire Council should base its 2013 corporate costs on 2012 costs, with the labour component of this cost being escalated by the recommended labour escalation rate outlined in later sections of this report to determine the final 2013 corporate costs (or, in the absence of enough detail to undertake this, 0.5%, as recommended in section 6.3.6).

Inclusion of costs that do not relate to the water / wastewater business

We have reviewed the detailed accounts that are used to derive the corporate costs that are in turn allocated to the water and wastewater business units. Whilst generally, they appear reasonable, there are a number of accounts that we sought further information on prior to developing our draft report. These are outlined below:

Category 1:

- *1163.Excellence in Aged Living - Phase 2*
- *1166.Iconic Sites #32 - Warnervale Airport*
- *1167.Iconic Sites #4 - Denning/Short St Carpark*
- *1168.Iconic Sites #12 - Toukley Council Carpark*
- *1169.Emergent Initiatives*

Category 2:

- *1512.Roads-Maintenance Mgt*
- *1514.Roads-Construction Mgt*

Category 3:

- *1535.Transport Planning*

In response, Wyong Shire Council stated the following[26]:

> *'The categories you refer to are Responsibility Centres. The nature of these costs is management and planning initiatives for shire wide infrastructure that incorporates plans for water and sewer infrastructure.'*

26 Email from Ian Johnson on Wed 24/10/2012 12:11 PM

Despite the response provide above, our view, as expressed in the Draft Report, was that the nature of the driver is likely to be the broader Council requirements in relation to the iconic sites listed; road maintenance/construction management; and transport planning, not the water and wastewater business. For example, we would assume – based on the title - that '*Iconic Sites #4 - Denning/Short St Carpark*' will be related to the specific development of that site for the purposes of creating a carpark. Whilst this may also need to have regard to the surrounding water and wastewater infrastructure, or the need to obtain access to water and wastewater infrastructure, the driver is assumed to be the development of the carpark itself. A standalone water and wastewater service provider would not incur the costs for such development, or if they did, it would be on behalf of the proponent (a stand-alone Council), and therefore, recovered directly from the proponent. Put another way, private businesses, in conducting their operations, have to consider the impact on water and wastewater infrastructure, and/or their ability to obtain adequate access to water and wastewater infrastructure. However, the onus is on the business to incur those costs – that is, it is a normal part of their operational expenditure. Overall, we have reservations as to the extent to which these cost would be incurred by a standalone water and wastewater business. As such, we stated in our draft report that we could not conclude that it is reasonable for a prudent and efficient service provider to incur such costs.

As stated previously, Wyong Shire Council's response to the draft report was that[27]:

> *'Due to the nature of Wyong Water Supply Authority being consolidated with Council there are a number of governance and regional activities that are associated with such a relationship resulting in both costs and benefits to the customers of the Water Supply Authority. Specific examples include Councillor Support, such as election costs and as Iconic Site developments.'*

In summary, we are still not convinced that these costs are consistent with those that a prudent and efficient water and wastewater service provider would incur. No additional, definitive details were provided in relation to the detailed accounts, and moreover, why the costs in those accounts would be incurred by a stand alone, prudent and efficient water and wastewater service provider.

Inconsistent Corporate Cost for 2013

We note that in the Corporate Overhead model that we were provided prior to the Draft Report, the Corporate Overhead amount for Water, Sewerage and Stormwater Drainage is $12,203,761, however the figure in the submission is $13.6M.

It was noted that in an email from Ian Johnson on Tue 2/10/2012 11:04 AM that '*we shall investigate this variance but so that IPART can commence review, the files attached should be used*'.

As part of the response to the Draft Report, Wyong Shire Council confirmed that this was due to the fact that this figure excluded the stormwater drainage corporate overhead of $1.4m that is included within the Roads and Stormwater and Asset Management units.

Allocation of Corporate Costs to Water, Wastewater and Drainage

As background, it is noted that once the total amount of corporate costs is calculated, 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.

27 OGW Report - Response_v2_141112.doc

Figure 13: Original AIR (Table 5.2) – Corporate Allocations to Water, Wastewater and Drainage

Table 5.2 - Operating Expenditure of Regulated Business Activities by Item ($'000)												
					Financial year ending 30 June	2008	2009	2010	2011	2012	2013
	Code	NPR	I/C	Use	Unit	Actual	Actual	Actual	Actual	Actual	Projections
Allocation of corporate opex to:											
- water - conventional	OW29		I	O	%	45.1%	59.5%	47.8%	49.8%	50.6%	50.8%
- desalinated	OW30		I	O	%						
- recycled water - Section 16A related	OR159		I	O	%						
- other	OR160		I	O	%						
- wastewater	OS32		I	O	%	36.6%	26.5%	34.3%	37.0%	37.5%	38.6%
- stormwater	OD33		I	O	%	18.3%	14.0%	17.9%	13.2%	11.9%	10.6%
- non-regulated businesses (excluding all recycled water)			C	O	%	-	-	-	(0.0%)	-	0.0%

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 Gosford City Council.

Notwithstanding this, we have some concerns with the level of allocations that are being ascribed to drainage service. In particular, whilst the overall percentage allocation to drainage has remained constant and is broadly consistent with Gosford City Council's percentage allocation, in the context of Wyong Shire Council's drainage operating expenditure forecasts, it leads to corporate costs contributing just under 40% to the overall cost of providing drainage services in most years.

Overall, whilst the latter is of some concern, we note Wyong's Shire Council's response to the draft report, namely, that[28] "*it is not appropriate for Wyong Shire Council's corporate cost allocation to be compared to Gosford City Council's allocation due to differences in corporate structure and inputs*". Consistent with our statement in our draft report, we are a not in a position to definitively state that this is incorrect, therefore, given the other factors identified above, 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.

Capitalisation policy

It is our understanding that Wyong Shire 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 costs.

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, 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.

Conclusion – 2013 Corporate Costs

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

28 OGW Report - Response_v2_141112.doc

We recommend that three changes be made:

- The allocation methodology that is used to derive 2013 corporate costs revert back to the current approach;
- The proposed increase in corporate costs between 2012 and 2013 be removed, and instead, the labour component of the 2013 corporate costs be based on 2012 labour costs, inflated by the recommended labour cost escalator (see later section of this report for details on this recommended labour cost escalator); and
- That accounts explicitly mentioned in the section "*Inclusion of costs that do not relate to the water / wastewater business*" 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 Wyong Shire Council submitted to IPART as part of their submission.

Figure 14: Original AIR (Table 5.2) - Water

	Financial year ending 30 June				2008	2009	2010	2011	2012	2013
	Code	NPR	I/C	Use	Unit	Actual	Actual	Actual	Actual	Actual	Projections
Water - conventional											
Labour (excl employee provisions)	OW62		I	O	$'000	3,074	4,891	4,622	4,055	3,909	4,526
Payments to associated unregulated businesses	OW63		I	O	$'000						
External consultants and/or contract(or)s	OW64		I	O	$'000	569	1,691	96	200	165	1,033
Hire services	OW65		I	O	$'000	1,043	3,714	3,084	3,391	2,697	2,099
Bulk water purchases / water costs	OW82		I	O	$'000	193	388	1,244	439	11	249
Materials	OW66		I	O	$'000	2,271	3,686	2,082	2,659	2,748	1,996
Energy	OW67		I	O	$'000	637	967	969	1,172	1,772	2,677
Licence fees	OW68		I	O	$'000	16	18		6	0	199
BOO costs	OW69		I	O	$'000						
Climate change fund payments	OW70		I	O	$'000	950	950	950	950		
Corporate overheads	OW71		I	O	$'000				-		
Advertising, phone, tipping fees, insurance	OW72		I	O	$'000	1,066	313	202	213	61	492
Loss on disposal of assets	OW73		I	O	$'000				1,640	1,522	
Central Coast Water corp directors fees	OW74		I	O	$'000					300	300
Road Opening Fees	OW75		I	O	$'000						350
<agency defined>	OW76		I	O	$'000						
<agency defined>	OW77		I	O	$'000						
Rates and taxes other than income tax	OW78		I	O	$'000						
Employee provisions	OW79		I	O	$'000	1,454	2,450	2,464	2,097	1,913	2,066
Actuarial accruals to defined benefit schemes	OW153		I	O	$'000						
Other (total of all items smaller than 5% of total operating expenditure)	OW141		I	O	$'000						
Allocated portion of Corporate opex			C	O	$'000	9,283	9,322	5,537	5,350	5,494	6,912
Total operating expenditure for water - conventional			C	O	$'000	20,556	28,390	21,249	22,171	20,591	22,899

Source: AIR Table 5.2

On first review, we had a number of questions for Wyong Shire Council, including, but not limited to[29]:

- *What is the reason for the increase in external consultants in 2013, which in turn flows through to forecast opex for the next regulatory period? Is this driven by one off factors, such as the preparation of regulatory submissions, or is it for on-going items? In explaining this, can you also compare and contrast the situation that is driving external consultant cost increases in water (in 2013) with wastewater (which does not have any material increase), as well as outline what was the key driver of the one-off increase in 2009, and then subsequent reduction in 2010/2011/2012?*
- *What is the change in external obligation (e.g., what legislation) that is driving the increase in road opening fees expected to be incurred in water in the 2013 year (and beyond), and how has $350k been derived? Does this also impact wastewater?*

29 'Wyong_Preliminary Questions.doc' contained in email to Ian Johnson sent on Fri 28/09/2012 3:28 PM

- *What is the driver of the step-up in advertising / phone etc in 2013 (and beyond) to be at around twice the levels of 2011 and 2010, and 8 times the level of 2012?*
- *What are the specific drivers of the ~15% nominal increase in labour costs (excl. employee provisions) in 2013 (and ~8% nominal in employee provisions), relative to 2012 (NOTE: we are unable to reconcile this with what is in the SIR Opex 'Key factors contributing to change in opex' section of the water table)? We would particularly seek comment on the extent to which this will occur, in the absence of any material increase in FTE's (as per 'Non-Financial' data sheet in AIR). Does this reflect a change in your capitalisation policy? If so, has this been reflected in a lower capitalisation rate being applied to your forecast capex program?*
- *Licences: Wyong's submission states that "the costs of water licences issued by the NSW Office of Water have increased significantly over the current determination period and are becoming material considerations. This is particularly relevant to usage fees" (page 31). The costs allocated to 'Licence fees' in the above table do not indicate 'a substantial increase over the current determination period', unless of course, this is only meant to refer to the final year of the period? Can you confirm that the Licence fees referred to are classified under this cost category, and not another cost category? Further, if they are classified under this category, is the entire increase in 2013 due to licences issued by the NSW Office of Water? Why is this not mentioned in the SIR Opex as a driver of costs between 2012 and 2013? Is this figure known with some certainty, or is it variable?*
- *Why are losses on the disposal of assets including as an operating expenditure?*

Excluding the responses relating to Road Opening Fees and Licence fees (which are discussed separately), Wyong Shire Council's responses were that[30]:

- *'External consultants comprises a mix of on-going and one-off items, resulting in an irregular spending trend year on year…..The increase from 2011/12 to 2012/13 (budgeted) is due to an increase in the expenditure for transitioning to the CCWC ($650K), coupled with a Dam Failure Mode Study ($200K)……During 2007/08 and 2008/09 costs were incurred for investigations into alternate underground cable routes for a future capital works project. Consultant costs were slightly higher in 2008/09 than in following years, as there were preliminary route investigations for the Mardi to Mangrove Pipeline. In reviewing these costs, it is obvious the 2008/09 figures in Table 5.2 are incorrect, probably because the AIR was completed prior to the Financial Statements being finalised……While there are also several one-off studies planned in the Wastewater business, these do not start until 2015/16 and beyond.*
- *There has been no material change in the budgeted costs for advertising, phone costs and minor equipment purchases however this line item also includes the budgeted payment to Gosford Council for joint water equalisation payments. In prior years there has been a payment to Gosford Council for operating costs and a payment from Gosford Council for the loan equalisation which nets out. The joint water agreement was recently reviewed and amended. Effective 1 July 2012 there will no longer be a loan equalisation. We have included an estimated amount of $445K p.a. from 2012/13 on, to reflect the amount payable to Gosford.*

30 MLB Response Opex.doc

- *The labour budget for 2012/13 was based on a detailed organisation-wide labour model which lists and fully costs every position, including overtime. A significant number of vacancies have remained unfilled during 2011/12, resulting in underexpenditure of $400K in 2011/12. The budget for 2012/13 has been formulated with the expectation that these will be predominately filled….The labour budget has increased 4.4% from 2011/12 to 2012/13…..Employee provisions are calculated at 54.5% of base, and includes allowances for payroll tax, superannuation, workers compensation and leave taken (not accrued). At year end this is adjusted for any over or under recovery, which may occur if actual leave taken significantly varies from the average."*
- *Council complies with Australian Accounting Standards, in addition to the Division of Local Government Code of Accounting Practice. Both require that losses on disposal of property, plant and equipment must be included in expenditure and disclosed in the Profit and Loss Statement.'*

Subsequent to the interview process, Wyong Shire Council noted that there were no '*losses on disposal of property, plant and equipment*' in the operating expenditure forecast[31].

Further, Wyong Shire Council provided an updated version of the AIR, which was adjusted for road opening fees, licences and correct 2008/09 figures.

Figure 15: Adjusted AIR provided by Wyong Shire Council

Water - Conventional	2007-08	2008-09	2009-10	2010-11	2011-12
Labour	4,055	4,411	4,622	4,055	3,909
External consultants	657	233	78	182	146
Hire services	2,764	2,436	3,101	3,409	2,715
Bulk Water	3	2,315	1,243	439	11
Materials	3,397	3,451	2,070	2,592	2,538
Energy	930	962	969	1,172	1,772
Licence fees	16	18	12	72	114
BOO					
Climate Change Fund Payments	950	950	950	950	
Other:					
Corporate Overheads	3,927	5,446	5,538	5,354	5,494
Advertising, phone, insurance	7	97	110	127	61
Loss on disposal of assets				1,640	1,522
Road Opening Fees	115	114	92	87	97
Employee Provisions	1,732	2,201	2,464	2,097	1,913
Other					300
Total	18,552	22,633	21,249	22,175	20,591

Source: Wyong Shire Council ('Updated AIR Table 5.2.doc')

Labour Costs, External Consultants and Advertising, Phone and Insurance

In our draft report, we accepted the statements regarding the change in costs for external consultants. The components, namely, the transitioning to the CCWC ($650K) are discussed in more detail in latter sections of this report. We also accepted the statements provided by Wyong Shire Council that the driver for the change in the advertising, phone costs and minor equipment purchases includes the budgeted payment to Gosford Council for joint water equalisation payments.

31 Email from Ian Johnson on Tue 16/10/2012 3:18 PM.

However, we noted that it was difficult to accept that the ~15% nominal increase in labour costs (excl. employee provisions) in 2013 relative to 2012 is consistent with a prudent and efficient service provider. In particular, the underlying incentives of the regulatory framework within which Wyong Shire Council operates would suggest Wyong Shire Council has an incentive to reveal their efficient operating costs, as any under expenditure relative to forecast, increases returns to the Council. This assumption needs to be tempered by the fact that there is no efficiency carryover mechanism applicable to Wyong Shire Council, therefore, less weight can be put on the final actual figures.

Either way, there is an underlying incentive to inflate the last year of the costs that are expected to be incurred in the final year of the regulatory period. We have no evidence, nor are we implying, that Wyong Shire Council has inappropriately responded to this incentive when proposing 2013 figures, however, we must consider the extent to which a prudent operator would increase labour costs by such an amount in any one individual year, when it has not done so in the near term past.

In assessing this, we also need to consider the extent to which consumers will see a benefit from this increased resourcing. In particular, we note that Appendix 9 of Wyong Shire Council's submission, which is a summary of Council's historic performance against indicators over the current pricing path from 2009/10 to 2011/12 inclusive and year to date for 2012/13, indicates that the Council has performed relative well against those measures. Further, as outlined in section 2.3.1.4 (Non Compliance Issues – Service Level Outcomes), Council has a clear understanding of what the drivers of non-compliance were, and moreover, it appears to relate to one off events (e.g., major raw water capital works were being undertaken at, and adjacent to, Mardi Dam) or one-off failures (e.g., non-compliance associated with the DECCW effluent discharge licence). Finally, it is noted that Wyong Shire Council is not proposing to provide substantive increases in the level of service it provides customers, relative to historic levels.

In response to the Draft Report, Wyong Shire Council stated that[32]:

> *'Through 2010/11 and 2011/12 Council's Operating strategy, including Water and Sewerage unit, was being reviewed by the General Manager. During this time a freeze was imposed on the filling of any vacant positions until business plans were updated to align with Council's new Strategic Plan. The new business plans resulted in a 6.2 Full Time Equivalent (FTE) reduction in the Water and Sewerage business.*
>
> *During the period of the review there were certain anomalies impacting our labour costs resulting in lower than normal staffing levels. This was driven by 3 FTE on long term leave including medical and long service leave that were not backfilled during the review. Although approvals have since been given to replace these positions and the recruitment process has commenced, it is not appropriate to simply inflate 2011-12 actual labour costs to obtain the 2012-13 labour budget.*
>
> *It is a reflection of the Council staff motivation that maintained a basic service to Council customers during this period. As detailed in the OGW report basic service levels were maintained however at the expense of proactive maintenance of the system that will have future implications if left unchecked. A prudent service provider cannot maintain a breakdown/failure maintenance strategy as a long term option for the business that is exposed to many regulated public health and environmental drivers that rely on a fully maintained and serviced system.*

32 OGW Report - Response_v2_141112.doc

While Council's labour costs may appear to be efficient, such low staffing levels are not sustainable, as evidenced by high overtime costs and increasing leave entitlements that are not conducive to a prudent and efficient business.

Current high vacancy levels also mean there is no capacity to undertake any backlog of work on ageing assets. This backlog is illustrated by Special Schedule 7 to the Annual Financial Statements:

	Required Annual Maintenance	***Current Annual Maintenance***	***Shortfall***
Water	*4,706*	*4,444*	*262*
Sewerage	*5,529*	*5,434*	*95*
Drainage	*3,136*	*1,906*	*1,230*
TOTAL	***13,371***	***11,784***	***1,587***

Maintaining the current FTE labour model resourcing strategy will provide a benefit to customers in terms of a decrease in water quality complaints (noting that these were not all driven by the Mardi Dam issue but by Department of Health direction regarding free chlorine levels and boil water alerts) and will also increase productivity of existing staff. Recent trends indicate high levels of sick leave and overtime that can be partly attributed to our vacancy rate further impacted by low levels of annual leave and long service leave being taken. The filling of the current vacancies will enable the strategic target of a 10% reduction per annum in the current leave liability over the next pricing path with the maintenance of service levels and staff well-being.

Furthermore Council conducted a Service Delivery Review in 2010 that analysed delivery of services with a view to sustain and improve the level and quality of service provided to the community. Actions that emerged from the SDR relating to the water and sewerage unit were to build efficiencies through closer links between strategic planners and operational staff, and to provide productivity improvements through better coordination and consistency of asset management. Other more specific actions include the increased use of infield technology that has improved efficiency with end to end processes; more proactive focus on work health and safety and injury prevention; and staff secondment to maximise productivity and allow staff establishment reductions by reducing unnecessary vacancies. This plan had a three year implementation horizon and Council is now entering into the next stage with further refinements envisaged as we prepare for the transition of the water and sewerage services to the Central Coast Water Corporation.

Our current labour projections demonstrate required positions for efficient delivery of service.

Vacancies are being progressively filled with the number of vacant positions dropping from approx 30 as at 30 June 2012 to 7 as at 1 November.'

Whilst we appreciate the level of detail that Wyong Shire Council has gone into in its response, and we have some sympathy for the position that Wyong Shire Council faces, we consider 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 calendar year. Therefore, we consider that actual operating expenditure in 2011/12 would lead to the best estimate of operating expenditure possible in the circumstances. Moreover, this is consistent with our overarching assumption that the regulatory regime provides an incentive to Wyong Shire Council to reveal their efficient costs.

Overall, having regard to the above, we are unable to conclude that the ~15% increase in water labour costs proposed by Wyong Shire Council is consistent with the costs that would be incurred by a prudent and efficient water and wastewater service provider, particularly when there appears to be no commitment to discernible improvements in levels of service stemming from that increased expenditure.

Instead, we consider 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.

Road Opening Fees

Wyong Shire Council stated that[33]:

> *'Road opening fees are incurred when a road is damaged in order to access water mains beneath the road. The Water business compensates Wyong Council roads department for the cost of road restoration that would not otherwise be required…..usually the water business works with roads and drainage to align works and avoid the need to do this, however sometimes there is urgent work required. The budget for road opening fees has been constant at $350k per year for some time, however it is not always fully expended. In prior years expenditure has been included in Other, but it is now shown as an individual item in the AIR.'*

Wyong Shire Council also provided a revised table outlining how Road Opening Fees had been incorporated into Table 5.2 of the AIR.

Figure 16: Road Opening Fees

Water	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**
Actual Amount	$115,190	$114,276	$91,600	$86,900	$96,495
Included in	Materials	Other	Other	Other	Materials

Source: Wyong Shire Council ('Road Opening Fees.doc')

For completeness, it is noted that in Row 98 of the AIR, Wyong Shire Council has included an allowance of $350k per annum in their forecast operating costs. Based on the information provided, and repeated above, we assume that this is based on the fact that a constant budget of this amount has always been allowed for.

33 MLB Response Opex.doc

Firstly, there is no conceptual issue with the notional payment of funds back into the roads business when a road is damaged in order to access water mains beneath the road. Any prudent and efficient water service provider would have to incur such fees as a consequence of such actions. However, the overarching threshold test is whether a prudent and efficient water and wastewater service provider would require a sum of $350k per annum to deal with such events. Clearly, the evidence from Wyong Shire Council itself is that it would not, as the average expenditure over the last 5 years is $100k – and this has been very consistent over that period. Furthermore, Wyong Shire Council has provided no substantive evidence to indicate that there is a material change in the underlying driver of this cost being incurred (i.e., there is no exogenous change that means the costs associated with road opening fees could be reasonably be expected to increase in the forthcoming regulatory period, relative to historic levels). Therefore, consistent with Wyong Shire Council's historic expenditure, we recommend that this expenditure item be reduced to $100k per annum from the $350k that is currently contained in the AIR.

Wyong Shire Council, in response to our Draft Report, accepted the above recommendation.

Licence Fees

Wyong Shire Council states that[34]:

> *'Licence fees paid to the Office of Water for bulk water extraction from Ourimbah Creek and Wyong River…'*

The need to make Licence Fee payments to the Office of Water is consistent with the requirements of a prudent service provider. However, information contained in the AIR questions the extent to which these fees were expected to increase over the forthcoming regulatory period. In particular, the AIR (Table 5.3 – Row 91) indicates that Licence Fees would increase from $0 in 2011/12 to $199k in 2012/13, which in turn was inconsistent with the submission, which stated in section 2.5.3.6 that[35]:

> '*the costs of water licences issued by the NSW Office of Water have increased significantly over the current determination period and are becoming material considerations. This is particularly relevant to usage fees*.'

Once alerted to this, Wyong Shire Council was able to provide a more detailed analysis of the historical licence fees. These are outlined in the figure below.

Figure 17: Breakdown of Licence Fees

Year	Wyong River	Ourimbah Creek	Total
2002-2003	$17,700.75	$5,850.00	$23,550.75
2007-2008	$21,450.75	$17,800.00	$39,250.75
2009-2010	$84,522.00	$22,850.00	$107,372.00
2010-2011	$113,698.30	$23,050.20	$136,748.50
2011-2012*	$103,290.51	$31,876.21	$135,166.71
2012-2013**	$111,290.99	$34,358.97	$145,649.96
2013-2014***	$117,945.31	$36,420.67	$154,365.98

Source: Wyong Shire Council ('Detail Listing and Breakup of NOW Water Charges from 2002 to 2012.xls')

34 Licences.doc as provided in the email from Ian Johnson on Fri 12/10/2012 1:25 PM

35 Wyong Council - Submission to IPART 2013 - 2017 - page 31

The aforementioned estimates (listed as *) are derived based on the '*IPART Water-Determination February 2011*', which affects these fees. We note that no information was provided to support why $199k has been allowed for in 2013, and $200k in 2014, given the material difference compared to the above figures.

Further, we acknowledged in the draft report that it is difficult to estimate the changes in price that will impact this cost driver beyond the completion of the current IPART determination period. Wyong Shire Council appears to have taken a conservative view of future price rises, beyond the 2013/2014 financial year.

Overall, our draft recommendation was that that unless Wyong Shire Council was able to provide further reason as to why the fees outlined in the above figure for '*Wyong River*' and '*Ourimbah Creek*' are materially different to their starting 2013 figure in the AIR of $199k, then the figures contained in the table above (converted to $ real 2012/13) be used to derive the 2013 and 2014 figures contained in the AIR, and the same percentage growth rate as is currently assumed be used to obtain forecasts for the remainder of the forthcoming regulatory period.

In response to our Draft Report, Wyong Shire Council accepted the above recommendation.

Conclusion – 2013 Water Operating Costs

Based on the reasons set out above, we are unable to deem that Wyong Shire Council's proposed 2013 costs for water services is consistent with that which a prudent and efficient service provider would incur.

Instead, we consider that:

- 2012 labour 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;
- Expenditure on Road Opening Fees be reduced to $100k per annum, from $350k that is currently contained in the AIR, consistent with Wyong Shire Council's historic expenditure;
- The figures contained in the Figure 17 (converted to real $2012/13) pertaining to Licence fees be used to derive the 2013 and 2014 figures contained in the AIR, and the same growth percentage growth rate as is currently assumed be used to obtain forecasts for the remainder of the forthcoming regulatory period; and
- All other 2013 costs should be accepted as proposed (including the estimated amount of $445K p.a. in 2013 in '*advertising, phone costs…* ', which includes the budgeted payment to Gosford City Council for joint water equalisation payments under the JWA[36]; and the zero dollar amount for '*loss on disposal of assets*').

6.3.3. Establish efficient baseline operating expenditure forecasts – Wastewater

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

36 Joint Water Equal.doc provides a breakdown of the calculation of this amount.

Figure 18: Original AIR (Table 5.2) - Wastewater

	Financial year ending 30 June					2008	2009	2010	2011	2012	2013
	Code	NPR	I/C	Use	Unit	Actual	Actual	Actual	Actual	Actual	Projections
Wastewater											
Labour (excl employee provisions)	OS62		I	O	$'000	3,187	4,902	4,291	4,731	4,916	4,997
Payments to associated unregulated businesses	OS63		I	O	$'000						
External consultants and/or contract(or)s	OS64		I	O	$'000	141	197	177	300	181	184
Hire services	OS65		I	O	$'000	1,279	3,536	2,999	3,412	3,647	2,868
Materials	OS66		I	O	$'000	1,668	1,820	2	2,162	2,522	2,213
Energy	OS67		I	O	$'000	1,402	1,796	1,803	2,198	1,568	1,920
Licence fees	OS68		I	O	$'000	43	-	1,877	54	51	51
BOO costs	OS69		I	O	$'000			49	-		
Climate change fund payments	OS70		I	O	$'000						
Corporate overheads	OS71		I	O	$'000	1,625	-				
Advertising, phone, tipping fees, insurance	OS72		I	O	$'000		3,892	31	127	95	42
Loss on disposal of assets	OS73		I	O	$'000						
Central Coast Water corp directors fees	OS74		I	O	$'000						
Road Opening Fees	OS75		I	O	$'000						
<agency defined>	OS76		I	O	$'000						
<agency defined>	OS77		I	O	$'000						
Rates and taxes other than income tax	OS78		I	O	$'000						
Employee provisions	OS79		I	O	$'000	1,507	2,278	2,203	2,314	2,421	2,298
Actuarial accruals to defined benefit schemes	OS157		I	O	$'000						
Other (total of all items smaller than 5% of total operating expenditure)	OS148		I	O	$'000						
Allocated portion of Corporate opex			C	O	$'000	7,535	4,152	3,973	3,975	4,078	5,254
Total operating expenditure for wastewater			C	O	$'000	18,387	22,573	17,404	19,273	19,480	19,827

Source: AIR Table 5.2

On first review, we had a number of questions of Wyong Shire Council, including, but not limited to[37]:

- *Why is there a reduction in energy costs in 2012 from 2011, and then step up in 2013? Further, the SIR Opex ascribes $350k to the increase in energy costs, from 2012, based on a 10% price increase, yet this does not equate to 10% of the 2012 figure ($1568k). Is the additional uplift to do with the Carbon tax? Or is there also a 'volume' driver that was not mentioned in the SIR Opex? If so, can you please explain what this driver is, and why you consider it reasonable to assume that it will continue to impact energy costs throughout the next regulatory period?*
- *Confirmation on 2010 figures – did materials really drop to such a low level, and Licence Fees jump to an extremely high level (relative to the amounts in each year either side), or are these figures in error?*

In response, Wyong Shire Council stated that[38]:

> *'In 2010-11 Council was experiencing significant delays receiving energy supply invoices and therefore had to make estimates and accrue the costs. In 2011-12 the accrual was reversed and payment made. These timing differences result in higher than usual costs for 2010-11 and lower than normal for 2011-12 however overall these are on par with annual averages (average of $1,883 pa).'*

In relation to the second issue, it was noted by Wyong Shire Council that an error was made in populating the AIR, in that the "*2*" in 2010 for materials should actually be the figure below ($1.803M), and all other figures below that (i.e., $1.877M for Licence fees should actually be against Energy; and the $0.049M against BOO should actually be against Licence fees) should also move up. Wyong Shire Council stated that the AIR should read as following.

37 'Wyong_Preliminary Questions.doc' contained in email to Ian Johnson sent on Fri 28/09/2012 3:28 PM

38 MLB Response Opex.doc

Figure 19: Revised AIR (Table 5.2) - Wastewater

Labour (excl employee provisions)	OS62	I	O	$'000	3,187	4,902	4,291	4,731	4,916
Payments to associated unregulated businesses	OS63	I	O	$'000					
External consultants and/or contract(or)s	OS64	I	O	$'000	141	197	177	300	181
Hire services	OS65	I	O	$'000	1,279	3,536	2,999	3,412	3,647
Materials	OS66	I	O	$'000	1,668	1,820	1,803	2,162	2,522
Energy	OS67	I	O	$'000	1,402	1,796	1,877	2,198	1,568
Licence fees	OS68	I	O	$'000	43	-	49	54	51

Source: MLB Response Opex.doc

In summary, based on the information provided in the AIR, and the explanations identified as part of the interview process, and the assumption that Wyong Shire Council has revealed its efficient costs in its actual 2012 figures, we have no reason to consider that Wyong Shire Council's proposed 2013 costs for wastewater services are not consistent with that which a prudent and efficient service provider would incur.

Conclusion – 2013 Wastewater Operating Costs

Based on the reasons set out previously, we have no reason to consider that Wyong Shire Council's proposed 2013 costs for wastewater services are not consistent with that which a prudent and efficient service provider would incur in the circumstances faced by Wyong Shire 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 Wyong Shire Council submitted to IPART as part of their submission.

Figure 20: Original AIR (Table 5.2) - Drainage

	Financial year ending 30 June					2008	2009	2010	2011	2012	2013
	Code	NPR	I/C	Use	Unit	Actual	Actual	Actual	Actual	Actual	Projections
Stormwater											
Labour (excl employee provisions)	OD62		I	O	$'000	272	447	514	479	493	709
Payments to associated unregulated businesses	OD63		I	O	$'000						
External consultants and/or contract(or)s	OD64		I	O	$'000	52	138	280	225	157	288
Hire services	OD65		I	O	$'000	258	1,987	993	619	1,227	797
Materials	OD66		I	O	$'000	58	111	97	123	131	172
Energy	OD67		I	O	$'000						
Licence fees	OD68		I	O	$'000				2	1	-
BOO costs	OD69		I	O	$'000				-	-	-
Climate change fund payments	OD70		I	O	$'000						
Corporate overheads	OD71		I	O	$'000	178		8			
Advertising, phone, tipping fees, insurance	OD72		I	O	$'000		75		(57)	2	9
Loss on disposal of assets	OD73		I	O	$'000						
Central Coast Water corp directors fees	OD74		I	O	$'000						
Road Opening Fees	OD75		I	O	$'000		-				
<agency defined>	OD76		I	O	$'000						
<agency defined>	OD77		I	O	$'000						
Rates and taxes other than income tax	OD78		I	O	$'000						
Employee provisions	OD79		I	O	$'000	129	200	264	243	248	379
Actuarial accruals to defined benefit schemes	OD158		I	O	$'000						
Other (total of all items smaller than 5% of total operating expenditure)	OD149		I	O	$'000						
Allocated portion of Corporate opex			C	O	$'000	3,775	2,194	2,073	1,420	1,291	1,441
Total operating expenditure for stormwater			C	O	$'000	4,722	5,152	4,230	3,054	3,551	3,793

Source: AIR Table 5.2

In response to the above, we sought further information as to the ~43% nominal increase in labour (excluding employee provisions) in 2013, relative to 2012, given the much tighter range within which it has fluctuated in the previous 3 years (~15%, ~-7% nominal), and the large fluctuations in the 'Hire Services' category of costs.

In response, Wyong Shire Council stated that:

> *'2011-12 labour included vacancies. 2012-13 budget based on all vacancies being filled. (Same as Water labour year on year increase).*
>
> *2010-11 included a refund of $400K (that was paid in 2009-10) and there has been inconsistency year on year as to which accounts were included in hire & contracts vs corporate overheads.'*

Wyong Shire Council was able to provide a detailed reconciliation of these changes. Notwithstanding this, consistent with our approach to assessing the large increase in water labour costs, in our draft report, we were unable to explicitly state that the ~43% nominal increase in labour costs in 2013 relative to 2012, which was based on all vacancies being filled, is consistent with a prudent and efficient service provider.

In response to our Draft Report, Wyong Shire Council stated that[39]:

> *'Directly paralleling the water business, there is a backlog of storm water system maintenance arising from unfilled vacancies. Council is proposing to fill existing vacancies to enable a program of gross pollutant trap and open drainage maintenance to be undertaken. This work is a priority for the newly elected Council. Council believes that the reduction in labour cost allowances proposed by OGW is unreasonable and cannot be supported'*

Consistent with our comments in relation to the large, proposed increase in water labour costs, we still do not consider that a ~43% nominal increase in labour costs in one year is consistent with the cost outcomes that a prudent and efficient service operator would incur. Overall, the underlying incentives of the regulatory framework that Wyong Shire Council operates under would suggest Wyong Shire Council has an incentive to reveal their efficient operating costs, as any under expenditure relative to forecast, increases returns to the Council. Furthermore, we note that the historical labour costs associated with the provision of drainage services has been very consistent, which, prima facie, indicates that the current resourcing levels are able to consistently deliver the required levels of service. We also note that no material increase in service levels is proposed as a result of this material increase in labour resources.

Overall, we consider 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. We also consider it reasonable to apply this same approach for other components, given the volatility in the 2013 proposed expenditure levels, relative to the 2012 actual expenditure levels.

Conclusion – 2013 Drainage Operating Costs

Based on the reasons outlined in the previous section, we do not consider Wyong Shire Council's proposed 2013 drainage operating cost forecasts to be reasonably consistent with that which a prudent and efficient service provider would incur.

Overall, we consider 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. We also consider it reasonable to apply this same approach for other components, given the volatility in the 2013 proposed expenditure levels, relative to the 2012 actual expenditure levels.

6.3.5. Real Cost escalators and efficiency allowances

Wyong Shire Council has escalated their 2013 forecast costs by the following real cost escalators and efficiency allowances to calculate their forecast operating expenditure for the forthcoming regulatory period:

- Labour cost escalators: Wyong Shire Council have incorporated a 1.45% real labour cost escalator.

39 OGW Report - Response_v2_141112.doc

- Corporate Costs: Wyong Shire Council has assumed a 0.5% per annum real increase in corporate overheads.
- Materials cost escalators: Wyong Shire Council have incorporated a 0% real increase in their materials costs.
- Electricity cost escalators: Wyong Shire Council has entered a new energy supply contract that increases costs on average 9% in 2011-12 costs, and then a blanket annual escalation for energy cost of 10% across the rest of the regulatory period.
- Carbon price impacts: Wyong Shire Council 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 Wyong Shire Council's operating expenditure forecasts.

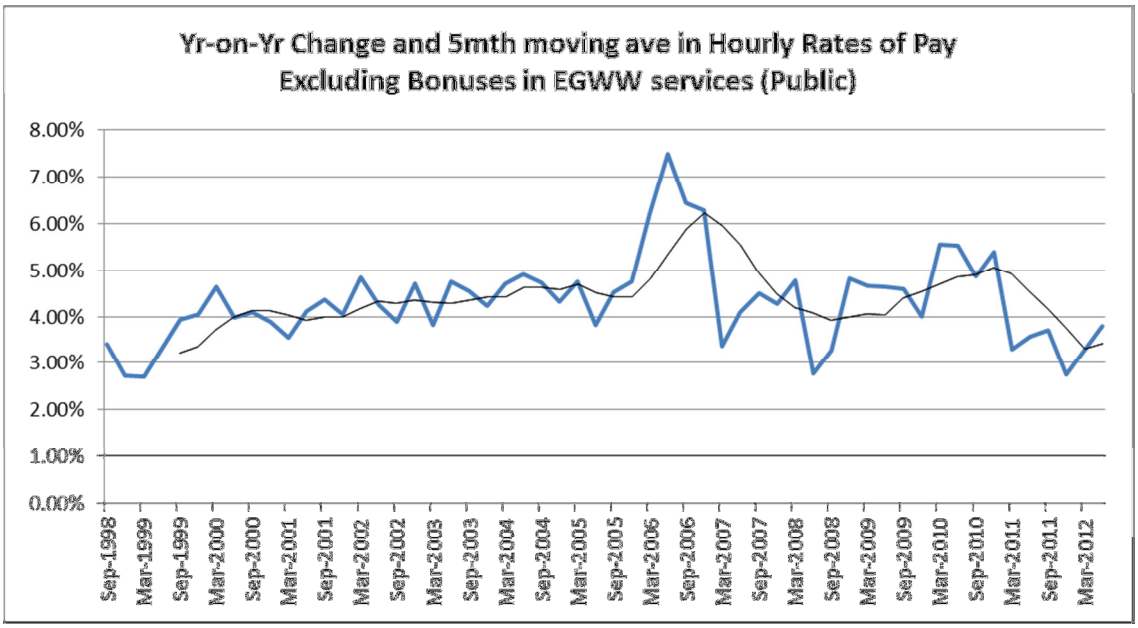
Labour Cost Increases

Wyong Shire Council has incorporated a 1.45% real labour cost escalator. We understand that this is made up of the following:

- 0.25% performance
- 0.20% overtime increases
- 1.00% CCWC equalisation for WSC staff paid less than GCC

Our first observation is that the overall magnitude of this labour cost increase – around 4.5% in nominal terms – appears reasonable when compared with observed labour cost increases across the Utilities sector[40] historically, and detailed forecasts of labour costs increases applied to other regulated utility businesses. Examples of both are outlined below.

Figure 21: 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)

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

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 Wyong Shire Council's proposed labour cost increases are correct, collectively, they do indicate that they are in the reasonable range that could be expected of a prudent water and wastewater service provider – particularly if we assume no labour productivity. This, however, does not necessarily mean that the detailed make up of that 1.45% escalator, as proposed by Wyong Shire Council, is reasonable.

Notwithstanding the latter point, for the purposes of the draft report, we considered Wyong Shire Council's 1.45% real labour cost increase to be a reasonable allowance for a prudent and efficient water and wastewater service provider, given that it lies within the reasonable range that would be expected of a prudent and efficient water and wastewater service provider.

We continue to maintain this recommendation.

Corporate Costs

In its submission, Wyong Shire Council states that[41]:

> *'Corporate support costs will increase by an average 0.4% per annum in real terms over the next five years. This compares favourably to the average property growth over the same period of 0.5% per annum.'*

The formula in row 54 of the SIR Opex sheet ('*Key factors contributing to change in opex*') indicates that a 0.5% growth rate, not 0.4%, is used to escalate corporate costs (the row heading also states '*Growth @ 0.5%*').

41 Wyong Council - Submission to IPART 2013 - 2017 - page28

Following on from this, during the interview process, Wyong Shire Council confirmed that in fact, 0.5% growth rate was applied to derive the forecast corporate costs. Further, we sought evidence (qualitative, and empirical) as to why total corporate costs have any relationship with the number of customers served, given the inference in the statement in the submission comparing growth rates in corporate costs to average property growth, and given that these costs[42] '*consist of indirect Council costs associated with delivery of services and include legal and governance; information management/technology; finance; human resources; integrated planning and reporting; and contract management and procurement*'. Broad justification was provided in relation to this issue, including the impact on payroll and other such items. Further, correspondence from Wyong Shire Council indicated that whilst[43]:

> *'Growth of corporate costs of 0.5% per year was used, this is inclusive of any labour cost increases (i.e. any labour cost increases in overhead departments would be offset by efficiencies or other savings to get a net increase of 0.5% pa).'*

Based on the evidence provided, we do not consider that a prudent and efficient water and wastewater service provider's corporate (or overhead) costs would be directly linked to growth in customer numbers. We further note that Gosford City Council has not linked their corporate costs to growth in customer numbers, nor, do the types of costs included in the corporate accounts lead us to consider this inclusion reasonable.

However, we do accept that some of the corporate overhead costs are likely to be labour related, therefore, Wyong Shire Council's comment that its growth rate is inclusive of any labour cost increases needs to be considered in that context. Given that we have accepted that a real labour cost escalator of 1.45% is reasonable, this would mean that around a 1/3 of the overall corporate costs that are allocated back into the water and wastewater business are labour related. Based on our review of the accounts that are included in the corporate overhead model, we consider this to be a reasonable estimate, although we note that ideally, Wyong Shire Council would undertake a more detailed, bottom up construction of the escalator that it applies to its corporate overhead costs.

Materials Cost Increases

Wyong Shire Council has not incorporated any allowance for the real increase in the cost of materials that they procure over the next regulatory control period, although they have included an allowance for the increased volume of materials that they are likely to have to purchase over the regulatory control period.

We accept that the inclusion of a zero per cent real material cost escalator is reasonable, having regard to the overarching need to provide for allowances that a prudent and efficient service provider would provide.

Electricity Cost Increases

Wyong Shire Council has stated that[44]:

> *'Council has entered a new energy supply contract that increases costs on average 10%. It is expected this will continue based on IPART's recent energy supplier determinations. This increase does not include any impact of carbon pricing.'*

---

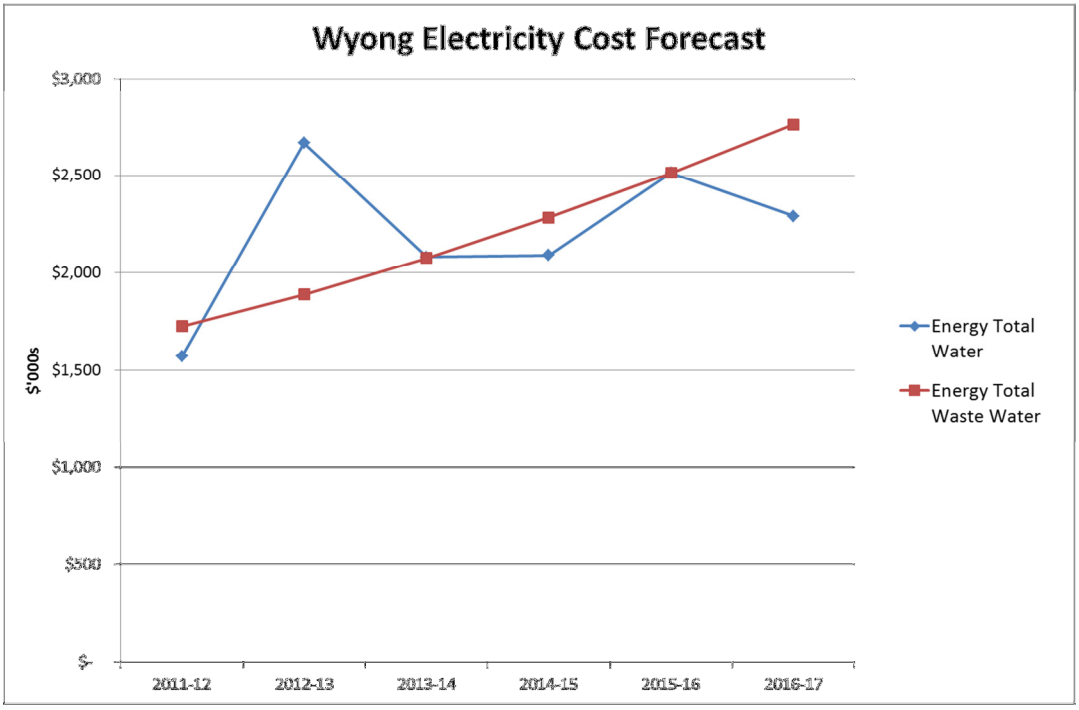
42 Ibid

43 Email received from Ian Johnson on Mon 22/10/2012 3:03 PM.

44 MLB Response Opex.doc

Wyong Shire Council has forecast volume changes in two of the key water pumping assets, and the Joint Water Pumping stations in particular to reflect their anticipated development and usage. This has caused an odd first year major escalation in water pumping costs followed by a similar de-escalation in the following year. This does highlight the need to forecast such larger load specifically/stand-alone – both in terms of their volumes and in terms of their weighted average tariff impacts. The latter has not been undertaken it appears by Wyong.

Figure 22: Wyong Shire Council Electricity Cost Forecast



Source: OGW

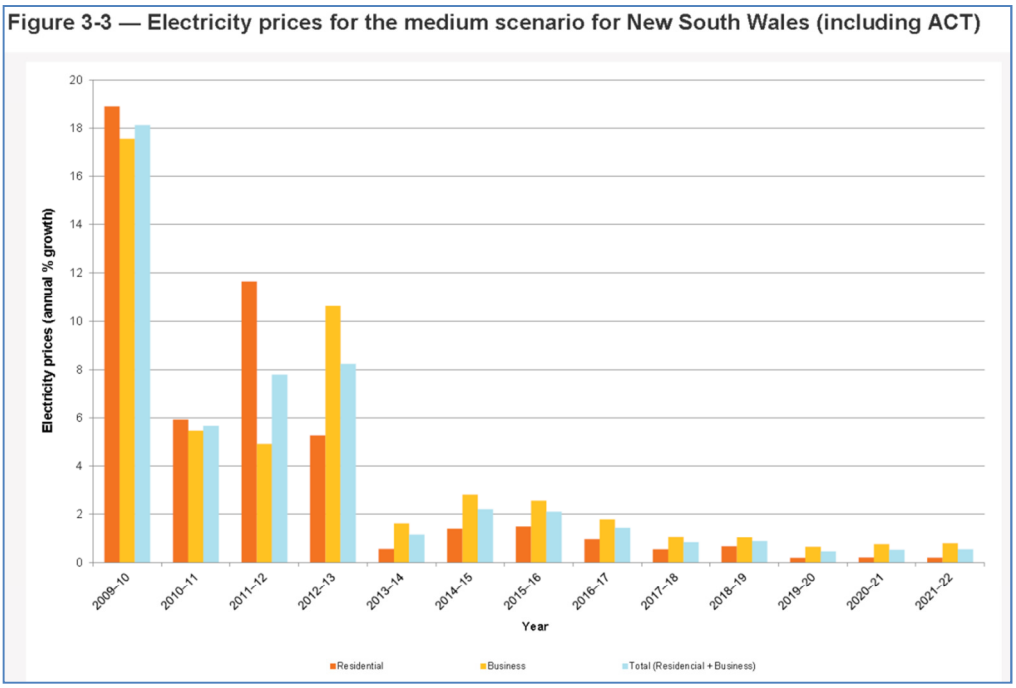
Wyong Shire Council, which is in the same electricity network area as Gosford City Council, has applied a 9% price escalation to the forecast 2011-12 costs (including allowances for new loads on their system) and then a blanket annual escalation for energy cost of 10% across the rest of the regulatory 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.

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 base years and applies the escalation factors given.

The Australian Energy Market Operator (AEMO) has recently published a 2012 forecast of Retail Price[45] annual growth for Business customers in NSW through to 2021-22:

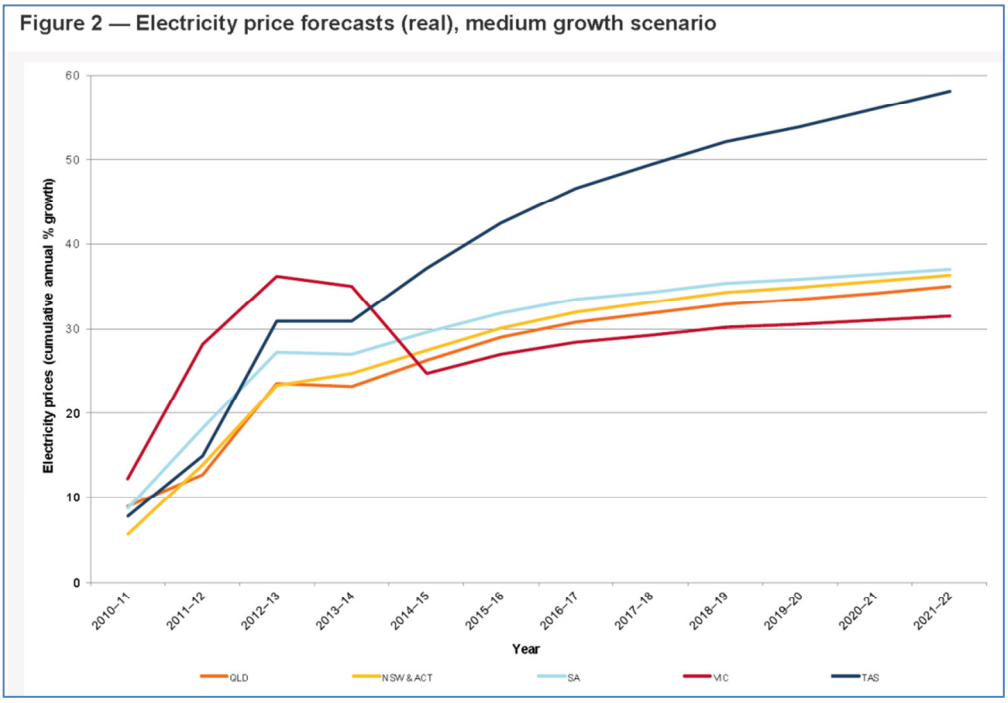
45 Economic Outlook Information Paper, National Electricity Forecasting, 2012, AEMO: In 2012, AEMO commissioned the National Institute of Economic and Industry Research (NIEIR) to undertake a detailed analysis of Australia's economic growth and electricity prices based on economic scenarios defined by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

Figure 23: AEMO Retail Electricity Price Growth Forecasts 2012 - NSW



Source: AEMO

Figure 24: AEMO Retail Electricity Price Growth Forecasts 2012 Cumulative



Source: AEMO

These forecasts are underpinned by treasury based carbon price forecasts (that is, they are inclusive of the carbon price, as well as expected network prices, etc.).

The forecasts indicate (approximated from the curve) the following annual % real 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 8: 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

The first year of this forecast broadly matches that reported by Wyong Shire Council in their new energy contract, but the following years are markedly below the on-going Wyong Shire Council forecast of a flat 10% annual increase.

Without a succinct built up model, it is only possible to comment on the Council forecast in an aggregate sense.

Our recommended approach is to escalate Wyong Shire Council's energy prices in line with the AEMO forecasts, given that this is a credible source of information; and is up-to-date, as it was completed in 2012 (NOTE: In latter sections we discuss the application of a volume growth escalator for electricity).

In response to the draft report, Wyong Shire Council stated that[46]:

> *'Council disagrees with the statement that Wyong did not forecast in terms of volume and tariff impacts. A generic tariff increase of 10% p.a. was applied to ongoing standard electricity usage which was based on changes to our current electricity supply contract. The annual step increases due to usage by the Mardi to Mangrove transfer system were modelled and also incorporated however please note that there was a minor calculation error in the original estimates for these step increases and there was also no annual tariff increase applied to the step increases. The corrected base costs are in the table below for your reference.*
>
> | Electricity Forecasts - Water | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 4 year total |
> |---|---|---|---|---|---|---|
> | Original unescalated | 2,446,789 | 1,892,455 | 1,767,154 | 1,688,916 | 1,634,919 | 6,983,442 |
> | Original escalated at 10% pa | 2,667,000 | 2,081,700 | 2,090,070 | 2,169,477 | 2,289,425 | 8,630,672 |
> | **Corrected unescalated** | **2,667,000** | **2,152,812** | **2,027,511** | **1,949,273** | **1,895,276** | **8,024,872** |
>
> *It is not appropriate to make comparisons between Wyong and Gosford City Council's escalations as different suppliers and contract terms would apply together with the different operation conditions associated with geographic differences.*
>
> *Council disagrees with the application of the AEMO electricity price escalators to Council's forecast electricity usage, as based on Council's current three year contract with Energy Australia peak usage energy charges increase from 2011-12 to 2012-13 by 21.1%, and from 2012-13 to 2013-14 by 4.6% whereas the AEMO escalators are 10.5% and 1.5% respectively.*
>
> *Council's contract with Energy Australia is due for renewal during 2013-14. Therefore our current contract escalations would be the minimum increases we require.'*

46 OGW Report - Response_v2_141112.doc

The above response does not lead us to change our position on the use of the AEMO price forecasts for Business customers in NSW.

The escalation used generically by Wyong City Council across all tariffs and operating modes from 2011-12 to 2012-13 was 9% (which compared favourably with the AEMO forecast for the same period) and from that point a blanket 10% increase, again across all tariffs for all load no matter how it may be used.

Wyong City Council has quoted the EnergyAustralia peak usage energy charges escalators but there is no indication or evidence supplied that this is representative of average tariff outcomes across their electricity use as applied in the Electricity Costs model; particularly given large parts of the energy used would be off-peak. In fact the 2011-12 to 2012-13 energy escalator in the EnergyAustralia contract cited of 21.1% is more than double the escalator Wyong City Council used in its own submissions for the same period of 9% (as an average across all tariffs for all load no matter how it may be used).

In terms of the validity of comparing Gosford and Wyong City Council electricity costs the only comparison made was for the network tariff component as they are in the same network region undertaking similar businesses (and hence exposed to the same underlying regulated tariffs) and the network tariffs have been the main escalator of overall retail electricity prices in NSW. This comparison of price escalation was purposefully divorced from forecasts of electricity consumption which may well vary between Gosford and Wyong City Councils.

In terms of the corrected numbers provided in the comments we were unable to validate these numbers with the information to hand from Wyong City Council. The original Electricity Costs model supplied by Wyong City Council did appear to escalate all “step changes”.

We would also reiterate that the development of an electricity cost forecasting model based on tariffs and associated consumption profiles would materially add to the forecasting capability for electricity costs.

Carbon Tax Increases

Wyong Shire Council has stated that[47]:

> *‘The impact of carbon pricing has not been factored into any other costs therefore there is no risk of double counting.*
>
> *Council has provided all cost forecasts in real terms – that is, no CPI has been applied.*
>
> *We are assuming the source document referred to is IPART’s Information Paper – Effects of the carbon price on local Councils – Dec 2011 on the effects of the carbon price on local councils. This discusses the increase to rates allowed to partially recover the impact of the carbon pricing. Council will incur additional costs each year due to carbon pricing, regardless of mechanisms to increase rating revenue.*
>
> *Efficiency allowances are embedded within other cost drivers. Although an increase in costs of 0.4% has been included based on IPART’s information paper, IPART recognises that the impact will be higher however should be somewhat offset by efficiency savings.’*

Based on our review of the raw operating expenditure forecast model, and an accompanying spreadsheet titled ‘*Carbon Pricing wyong.xls*’, it is clear that Wyong Shire Council have applied 0.4% per annum to all of their operating costs to derive the overall impact of the Carbon Price.

47 Ibid

Further, based on reviewing the electricity model provided to us by Wyong Shire Council ('*2012-13 electricity.xls*'), we are unable to definitively state that the Carbon Price has not already been factored into electricity price rises proposed by Wyong Shire Council for the 2012/2013 year. However, based on a spot check of that model, the overall price rise ascribed to wastewater related energy costs in 2012/13 is 9%, which would imply that the carbon price has already been provided for in the electricity cost increases – given that this is consistent with the AEMO price rises outlined previously (which were inclusive of carbon).

This is important, as our understanding is 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[48]; 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[49]. 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[50].

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. 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 (direct) 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[51]:

> *'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 Wyong Shire Council's year-on-year operating costs).

---

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 Ibid pg 12 and 13

Efficiency Programs

Wyong Shire Council states in its submission that[52]:

> *'The financial projections presented in Council's submission do not make allowance for any efficiency gains.'*

Subsequent to this, we sought further information from Wyong Shire Council as to their rationale for including no efficiency gains, particular given the implementation of the CCWC, which was underpinned by, amongst other things, the drive to obtain efficiencies.

In summary, Wyong Shire 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, it was noted by a number of different staff members that only a small number of functions would be brought across into the CCWC during the next regulatory period. These include: Planning; Asset Management and Regulatory Services. There are around 30 FTEs (out of 166FTEs) in these groups; therefore, the bulk of the staff would stay within Council over the forthcoming 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, Wyong Shire Council noted that whilst they are not offering up efficiency gains, they were not seeking funding to, amongst other things, maintain an ageing asset base, and that they were '*maintaining existing staffing levels*' (although our observation is that whilst staffing levels aren't assumed to increase in the forthcoming regulatory period, they are assumed to increase materially in 2013, which in turn drives expenditure in 2014 and beyond). We further note that Wyong Shire Council has not sought specific funding for small, incremental changes, to that may potentially impact its cost structure over the forthcoming period.

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 Wyong Shire Council's operating expenditure forecasts must reflect its differing ability of 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 in to derive the comparator rates for electricity and gas decisions is a Labour Price Index, which is a labour price index, rather than a labour 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 funding for such compositional changes, we do not consider it reasonable to apply an efficiency adjustment.

In summary, we accept Wyong Shire Council's position that no explicit productivity gains should be incorporated into the operating expenditure forecasts.

52 Wyong Council - Submission to IPART 2013 - 2017 - page 32

Conclusion – Real Cost Escalators and Efficiency Improvements

The following table outlines the real cost escalators and efficiency improvements that we recommend applying to Wyong Shire Council's 2013 recommended operating expenditure forecasts, to obtain forecasts for the forthcoming regulatory control period.

Table 9: Real Cost Escalators

Real Cost Escalator	2013-14	2014-15	2015-16	2016-17
Labour	1.45%	1.45%	1.45%	1.45%
Corporate Costs	0.5%	0.5%	0.5%	0.5%
Materials	0%	0%	0%	0%
Electricity	1.5%	2.8%	2.5%	1.7%
Carbon Tax	0.4%	0.4%	0.4%	0.4%
Efficiency Gains	0%	0%	0%	0%

6.3.6. Growth drivers

Wyong Shire Council has incorporated a 0.5% growth escalator. Wyong Shire Council have indicated that this is related to the per annum growth in the number of customers that they expect to serve over the forthcoming regulatory control period. Wyong Shire Council also state that the[53]:

> *'Growth at 0.5% p.a. was applied to all water and sewerage costs with the exception of: energy 10% pa; labour 1.45% pa and one off items such as studies, bulk water purchases and CCWC costs - the actual forecasts were used instead of a growth increment'.*

Whilst Wyong Shire Council have not provided any substantive evidence in support of the linkage between historical volume of materials (and other goods and service) purchased, and growth in customer numbers, we consider it reasonable to assume that there is some positive relationship between the volume of materials and some cost categories, namely electricity, 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 these two variables as well. In the absence of any other detail information, we consider that the number of customers is a reasonable proxy for the increased volume of materials and electricity (excluding large, variable users of electricity such as the Mardi to Mangrove transfer) that will be consumed over the forthcoming regulatory control period.

Therefore, we consider Wyong Shire Council's proposed 0.5% increase to be reasonable and consistent with the costs that a prudent and efficient water and wastewater service provider would incur. However, to be clear, we consider that this escalator should only be applied to materials and electricity – not any other cost categories. The 0.5% is based on the forecast number of customers contained in Wyong Shire Council's submission.

53 MLB Response Opex.doc provided via email on Mon 22/10/2012 3:21 PM

Conclusion – Growth Drivers

The following table outlines the growth drivers that we recommend be applied to Wyong Shire Council's 2013 recommended materials and electricity operating expenditure forecasts (excluding large, variable users of electricity such as the Mardi to Mangrove transfer), to obtain forecasts for the forthcoming regulatory control period.

Table 10: Growth Drivers

Growth Driver	2013-14	2014-15	2015-16	2016-17
Materials volume	0.5%*	0.5%	0.5%	0.5%
Electricity volume	0.5%*	0.5%	0.5%	0.5%

**Based on forecast customer number growth.*

6.3.7. Discretionary changes in levels of service

Wyong Shire Council stated as part of the interview process that they have not incorporated any explicit cost allowance for changes in discretionary services levels.

OGW accepts the position put forward by Wyong Shire Council, and thus, concludes that this component of Wyong Shire Council's operating expenditure forecasts is consistent with a prudent and efficient service provider.

6.3.8. Step Changes

Wyong Shire 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 the business will be operated over the forthcoming regulatory control period, relative to how it currently operates. 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.

The following table identifies the step increases in costs during the next regulatory period that have been forecast by Wyong Shire Council.

Table 11: Proposed Step Changes - Corporate

Step Change	2013-14	2014-15	2015-16	2016-17
CCWC Establishment Fees ($k)	1,173	1,142	1,148	823

Source: MLB Response Opex.doc

Table 12: Proposed Step Changes - Water

Step Change	2013-14	2014-15	2015-16	2016-17
Mardi Sludge Dewatering	500,000			
Purchase Water	268,540	239,320	159,820	120,960
Electricity for MMLP	578,000	436,000	350,000	288,000
Coastal Transfer Study	100,000			

Source: Wyong Shire Council ("List of Non Recurrent Opex.xls)

Table 13: Step Changes - Wastewater

Step Change	2013-14	2014-15	2015-16	2016-17
Bushfire Clearing around facilities	30,000			
Bushfire & boundary clearing - Toukley	40,000			
General tree clearing Wyong Sth	60,000			
Bushfire & boundary clearing - Mannering Park	60,000			
Bushfire & boundary clearing - Charmhaven		40,000		
Bushfire & boundary clearing - Gwandalan		60,000		
Odour Studies		150,000	150,000	
Site Preventative Maintenance		90,000	90,000	
Digestor cleanout - Bateau Bay			40,000	40,000
Wyong South Desludge				120,000
Charmhaven Desludge	60,000			
Mannering Park Desludge		120,000		
Benthos Study			200,000	

Source: Wyong Shire Council ("List of Non Recurrent Opex.xls)

Further to the above, we have added an additional Step Change to those which have been explicitly proposed by Wyong Shire Council. This relates to the cost associated with changes to the POEO Act and additional regulatory reporting requirements.

These are explained in further detail below.

CCWC Establishment Costs

In their submission, Wyong Shire Council state that[54]:

> *'The total forecast cost to transition to the CCWC and JSB is expected to be $24.7M over the next determination period.'*

They also state that[55]:

54 Wyong Council - Submission to IPART 2013 - 2017 - page 30

55 Ibid

> *'Customers will see the benefits of the lower cost base through lower operating expenditure requirements in future pricing determinations. However in the short term Council will incur significant transition costs (currently estimated at $24.7M) to establish the CCWC and JSB and restructure business processes. It is proposed that these transition costs be apportioned equally between both Councils' water and sewerage business and general residual activities. Therefore Wyong Shire Council's water supply authority seek to recover $6.2M of this (being 25%).'*

It also states that[56]:

> *'To limit the impacts on customers it is proposed to recover the transition costs allocated to the water and sewerage function over the next two determination periods (currently planned across eight years). As such, Council has incorporated $3.1M in proposed expenditures for the next price path.'*

Despite the above, it was noted in the draft report that it was somewhat unclear to us exactly how much expenditure has been included in the operating expenditure forecasts. It was our understanding from the interviews that in fact, the full $6.2M was included, not the 50% ($3.1M) as is implied in the statement above. Further, when reconciling the large increase in water labour costs for 2013, the following table was provided. It appears to ascribe $4.2M in costs to the '*transition to CCWC*' between 2014 and 2017. This is also the figure in Table 11 above.

Figure 25: Costs associated with Transition to CCWC

Water ('000)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Transition to CCWC			10	8	650	1,173	1,142	1,148	823
Audit Costs					50	50	50	50	50
Supply & Scheme Analysis	28	61	39	97	110	110	110	110	110
Survyes			23						
Dam Failure Mode Study					200				
borefield monitoring	12	12	51	22	3	3	3	3	2
Customer monitoring					2	2			
Water testing		5	59	19					
Investigations	173								
Website design	20								
Total	**233**	**78**	**182**	**146**	**1,015**	**1,338**	**1,305**	**1,311**	**985**

Source: MLB Response Opex.doc

We also noted in the draft report that the other CCWC cost – the '*Central Coast Water corp directors fees*' – is included as a separate line item in the AIR, therefore, this should not be the explanation for the difference between the two.

On a related issue, we noted in the draft report that we reviewed the documentation (provided by Gosford Council) that breaks down the $24.7M total costs over the regulatory period[57]. 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.

56 Ibid

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

The other key issue associated with the transition to the CCWC pertains to the allocation of costs between the Council and the CCWC. 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 noted previously, Wyong Shire Council state '*..it is proposed that these transition costs be apportioned equally between both Councils' water and sewerage business and general residual activities…. Therefore Wyong Shire Council's water supply authority seek to recover $6.2M of this (being 25%).'*

Our concern, as expressed in the draft report, was that 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 26: Costs associated with Transition to CCWC from PCG Meeting 5

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

		Current IPART period (2010-2013)		Next IPART period (2014-2017)			
		Actual	Budget	Forecast	Forecast	Forecast	Forecast
Item	Total	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	1,626,000[1]	1,104,324	1,829,473	1,763,397	1,777,092	1,096,140
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**	**1,626,000[1]**	**1,354,324**	**2,429,473**	**2,363,397**	**2,377,092**	**1,696,140**

[1] 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 mentioned establishment/transfer costs over the forthcoming regulatory period are $3.23M[58] – and we can only assume that this does not include a 50% deduction for this period (with this being held over until next period).

In response to our draft report, Wyong Shire Council stated that[59]:

> *'We note that the OGW proposed allowances set out in Figure 26 have been selectively quoted from an internal discussion paper and do not take into account the discussions and resolutions of the meeting at which the discussion paper was considered. The figures presented above are the most recent figures and are consistent with allocation approach adopted by the Councils.'*

The table referred to above is provided below.

58 It is unclear from the document whether these are in real or nominal dollars

59 OGW Report - Response_v2_141112.doc

	2013-14	2014-15	2015-16	2016-17	4 year total	Next price path total	Total
Total project costs	6,985	6,735	6,785	4,185	24,691	-	24,691
50% to Wyong	3,493	3,368	3,393	2,093	12,346	-	12,346
25% to WSA	1,746	1,684	1,696	1,046	6,173	-	6,173
Amount recovered	873	842	848	523	3,086	3,086	6,173
Plus board costs	300	300	300	300	1,200	1,200	2,400
TOTAL AIR	**1,173**	**1,142**	**1,148**	**823**	**4,286**	**4,286**	**8,573**

Source: Wyong Shire Council - OGW Report - Response_v2_141112.doc

In summary, we continue to consider that it would be prudent and efficient to include some of the costs associated with the transition to the new CCWC, however we do not consider the amount included in the submission to be prudent or efficient, given other supporting documentation indicates that a smaller amount would be included, if a beneficiary pays approach were adopted. More specifically, we consider a beneficiary pays approach to be an entirely reasonable allocation approach, assuming that approach leads to a cost allocation that is greater than the avoidable cost of not including the CCWC in the overall project (which we have no information to this effect). Further, we note that in correspondence from Wyong Shire Council in response to the draft report, no further underlying justification was made as to why a 50:50 split was reasonable, fair to water consumers, or consistent with the expenditure that a prudent and efficient water and wastewater service provider would incur. The comments were focused on the assertions that that we "selectively quoted" those figures, and that '[60]*the figures presented ….are the most recent figures and are consistent with allocation approach adopted by the Councils*'. We quoted those figures because they were based on a beneficiary pays principle, which we consider to be a robust means of allocating these costs.

JWS Mardi WTP Sludge Dewatering and Removal

Wyong Shire Council states that[61]:

> *'This project is required to restore the sludge lagoons' operating capacity. Due to the recent upgrade in pumping infrastructure the lagoons will now receive greater backwash volumes necessitating and accelerating this project. These lagoons have not been dewatered for over 20 years and are currently operating in the top 2 metres of available capacity.*'

OGW has confirmed, via review of the documentation pertaining to this driver for this cost increase, that the remaining capacity of the lagoon has been estimated by an independent consultant. Further, the overall costs that have been included by Wyong Shire Council appear reasonable, given the cost estimates provided in the independent consultant's report. Finally, we have also reviewed the operating expenditure forecasting model to confirm that these costs are removed from the forecasts once the project is due to be completed.

Overall, given the information provided, we consider that the inclusion of such costs is consistent with a prudent and efficient water and wastewater service provider.

60 OGW Report - Response_v2_141112.doc

61 Explanation of Non Recurrent Operating Costs.doc

JWS Purchase Water

This relates to projected purchases of water from the Hunter. We have been informed by IPART that there is no need for us to review this expenditure item, as the consumption forecasts and transfer price will be the subject of additional work by IPART.

JWS Electricity for MMLP (Mardi to Mangrove Transfer System)

This relates to projected energy costs for the Mardi to Mangrove Transfer System which has been recently commissioned.

In relation to the volumes that will be transferred, Wyong Shire Council's submission states that[62]:

> *'The Mardi to Mangrove transfer system (M2M) will typically operate during wet periods when the water availability from the streams exceeds the demands and MCD is below its top operating level (currently 80% of capacity due to spillway capacity issues). Given that MCD is currently significantly lower than 80% of capacity (discussed in Section 2.6.11) operation of the M2M should take place when water availability permits. It is envisaged that significant transfers will be required during the four year price path from 2013/14'*

It further states that[63]:

> *'The statistical analysis undertaken utilised the stochastic module of the Central Coast Headworks model. This model generates statistical based results derived from historical climatic conditions.'*

The model was further explained to OGW in detail as part of the interview process. The key issues that OGW noted from that discussion were that:

- An extended streamflow sequence has been utilised in the model – this goes back to 1885, although pre ~1950, the sequence is a synthetic dataset, derived based on rainfall data;
- 50th percentile, or expected case has been used to derive the outturn volume flows;
- Demands are endogenous within the model – that is, they are derived, based on, amongst other things, climate and restriction levels.

It is our understanding that the fundamental aspects of the model, including the assumed yield underpinning the streamflow data, was accepted by IPART and its consultants as part of the last review process.

In conclusion, given the timeframes and scope of this review, we are not in a position to review the detailed mechanics of this model. However, the description of the model provided to us, as well as the fact that the model was accepted by IPART and its consultants last time around, provides us with confidence that the model is fit for purpose, and conceptually does what it should be doing given how the outputs of the model are to be used.

62 Ibid

63 Ibid

With regards to the cost of electricity, as per discussions in previous sections, Wyong Shire Council's electricity price forecasts are significantly higher than recent AEMO forecasts. Based on this information, we have recommended a reduction in the percentage price increase proposed by Wyong Shire Council. Consistent with this, we also consider that this smaller rise in electricity prices over the period also be applied to the electricity consumed by the Mardi to Mangrove Transfer System.

JWS Coastal Transfer Study

Wyong Shire Council state that[64]:

> *'This project is a review of current water supply transfer arrangements between Wyong and Gosford via the "Coastal Connection".....The study has been instigated to review options to increase current transfer capacity and to remove operational "roadblocks".'*

It is noted that we are recommending that the DAF plant be deferred, and that instead, a major bulk water system review be carried out for the JWS system. Whilst this review may, by default, address the issues regarding coastal transfers, we still consider it reasonable to provide an allowance to undertake such a study. Therefore, we accept the inclusion of this cost item.

Bushfire Clearing - Sewerage

Wyong Shire Council has included a number of step changes associated with undertaking bushfire clearing. The stated projects are[65]:

- Bushfire clearing around facilities
- Bushfire & boundary clearing - Toukley
- General tree clearing - Wyong Sth
- Bushfire & boundary clearing - Mannering Park
- Bushfire & boundary clearing - Charmhaven
- Bushfire & boundary clearing - Gwandalan

In correspondence with OGW, Wyong Shire Council noted that this covers generic activities at the nominated sewage treatment plants and associated facilities[66]:

- Boundary Clearing
- Bushfire Control
- Selective Tree Removal

They further state that[67]:

> *'These activities not only relate to ensuring the security of key infrastructure from fire hazard but are also intended to better define site boundaries, prevent damage to fencing and minimise unauthorised site entry.'*

64 Explanation of Non Recurrent Operating Costs.doc

65 Ibid

66 Ibid

67 Ibid

The primary observation made in our draft report was that such work is likely to be consistent with the outcomes that would be expected of a prudent water and wastewater service provider. However, one would expect that even if this is on say a 2 yearly, or four yearly cycle, Wyong Shire Council would have defined a work program that spreads work fairly evenly across that cycle. Given this, and given that nothing in the documentation indicated that this is driven by a new or recent requirement being placed on Wyong Shire Council (e.g., a new legislative or regulatory requirement), our draft report assumed that some costs are already included in Wyong Shire Council's baseline operating expenditures. That is, any increases in expenditure associated with bushfire & boundary clearing at one facility would be offset by reductions at another facility, because of the co-incidence (or lack thereof) of the work.

Therefore, our draft recommendation was that despite the fact that the expenditure is likely to be consistent with a prudent service provider, we assume that Wyong Shire Council would be undertaking such work on a fairly consistent, rolling cycle, which would mean that this program of work is already compensated for in underlying baseline expenditure.

In response to our Draft Report, Wyong Shire Council stated that[68]:

> *'The requirement to undertake this work is in accordance with Part 3 Division 4 of the Rural Fires Act 1997 and Wyong's Bushfire Risk Management Plan. OGW's unsupported assertion that this work should have been included in previous pricing period budgets is not correct. The work has not previously been undertaken nor included in prior budgets. We believe that the work is essential and the proposed budget allowances be retained.'*

Firstly, it is noted that the aforementioned response is the first time that we have been alerted to the existence of Wyong Shire Council's Bushfire Risk Management Plan, and more particularly, the fact that the proposed costs are linked to that plan. Whilst the plan was not provided to us in response to the Draft Report, we obtained what we understand is the most up-to-date plan from the Rural Fire Service website[69].

On page 8 of the plan, it states that the Bushfire Risk Management Plan '*must be reviewed and updated within each successive five-year period from the constitution of the BFMC*". The last time this was updated was in July 2011, thus we assume the plan will last through to July 2016.

Also of note is the statement on page 14 in that plan that '*Risks below a certain level were assessed as not requiring treatment within the life of this Plan. This is due to a combination of risk priority, resource constraints and capacity to undertake works. Within the Wyong BFMC area the level of acceptability is Medium. Areas of Medium or Low risk are likely to be managed by routine procedures and so do not require a specific application of resources*.'

Having regard to the above, we have reviewed this plan, and we make the following observations:

- Bushfire clearing around facilities: Whilst the description provided by Wyong Shire Council is somewhat 'general', we consider this to be reasonable, based on a review of the BFMP, and the fact that there are a number of infrastructure facilitates that require '*treatments*' over the 5 year period over which the plan covers;
- Bushfire & boundary clearing – Toukley: There are a number of treatments ascribed to assets in Toukley in the BFMP, therefore, we consider that this expenditure is likely to be reasonable;

68 OGW Report - Response_v2_141112.doc

69 http://www.rfs.nsw.gov.au/dsp_content.cfm?cat_id=1040 (accessed on the 15th of November, 2011.

- General tree clearing - Wyong Sth: There are a number of treatments ascribed to assets in Wyong South region in the BFMP, therefore, we consider that this expenditure is likely to be reasonable;
- Bushfire & boundary clearing - Mannering Park: On page 36, the BFMP indicates that the consequence associated with the Mannering Park STP is '*moderate*', whilst the overall risk is assessed as being '*medium*'. Under the column '*Treatment No.*', there is nothing listed as being required;
- Bushfire & boundary clearing – Charmhaven: On page 37, the BFMP states that the consequent associated with the Charmhaven Sewer Treatment Plant is '*moderate*', whilst the overall risk is assessed as being '*medium*'. Under the column '*Treatment No.*', there is nothing listed as being required; and
- Bushfire & boundary clearing – Gwandalan: On page 36, the BFMP indicates that the consequence associated with the Gwandalan STP is "*moderate*", whilst the overall risk is assessed as being '*medium*'. Under the column '*Treatment No.*', there is nothing listed as being required.

Overall, it unclear to us why the assets that are listed as having a "medium" overall risk, and thus, according to the guidance on page 14 of the BMFC, '*are likely to be managed by routine procedures and so do not require a specific application of resource'*, would, for the purposes of developing the regulatory submission, be listed as requiring treatments over the five year period, which we understand the BFMP covers.

Furthermore, we note that the expenditure is proposed in either 2013-14 or 2014/15, both of which are within the 5 year period assumed to be covered by the BMFC. In short, this information appears to, prima facie, indicate that additional expenditure on mitigating bushfire risks associated with, or surrounding the Mannering Park, Charmhaven and Gwandalan assets, is not required over the 5 year period over which the BMFC covers.

Overall, we accept the $130k of costs in 2013/14 associated with bushfire clearing around facilities; Bushfire & boundary clearing – Toukley; and General tree clearing - Wyong Sth. For the other assets, given that Wyong Shire Council have linked their proposed expenditure to the BMFC, and our reading of the BMFC is that no specific application of resources is required under the BMFC, we are not in a position to deem this to be prudent or efficient.

Odour Studies - Sewerage

Wyong Shire Council states that[70]:

> *'Odour studies are proposed to be carried out at Charmhaven, Gwandalan, Mannering Park, Bateau Bay and Toukley STW's.*
>
> *The management and monitoring of odour related issues are an EPA licence condition.'*

Further to this, it is noted that the annotations contained in the detailed operating expenditure forecasting model indicate that this has to be undertaken every five years. Given the timing of the proposed expenditures – 2014/15 and 2015/16 - and the five year sequencing, as well as the fact that this relates to an EPA licence condition, we consider this expenditure to be consistent with that which a prudent and efficient water and wastewater service provider would incur.

70 Ibid

Preventative Maintenance - Sewerage

Wyong Shire Council states that[71]:

> *'This relates to a specialist consultancy for the development of preventative maintenance strategies for each STW.'*

We acknowledged in our draft report that there may be a need for a prudent service provider to avail themselves of external assistance in relation to such issues as preventative maintenance strategies, however we were not provided with enough information as to why a specialist consultancy is required to undertake this particular piece of work. Nor were we informed as to why the proposed timing had been chosen; nor how the condition of each STW has been taken into account when assessing the likely benefits associated with undertaking such a strategy, particularly as Wyong Shire Council state that it will be done "at each STW", not a selection of treatment plants that breach a certain threshold level of condition rating.

Overall, based on the information available, we were unable to state in our draft report that this proposed expenditure is consistent with a prudent and efficient service provider.

In response to the Draft Decision, Wyong Shire Council stated that[72]:

> *'The development of preventative maintenance plans is a key step in Council's asset management improvement program. Further, Council does not have the staff resources or necessary expertise to undertake this work efficiently in house. As such a decision has been taken to have this work undertaken by an experienced consultant/contractor. The implementation of improved maintenance outcomes will result in better overall cost outcomes for Council and its customers and it is unreasonable to reject the proposed budget allowances.'*

In principle we would agree that having a preventative maintenance plan is a key component of an asset management program. However, we would have thought that an efficient operator would already have one based on the operation and maintenance manuals provided by the suppliers. This then begs the question as to how Wyong Shire Council are currently maintaining their plants. Notwithstanding this, we note that Wyong Shire Council may be seeking to augment existing plans via the undertaking of the aforementioned works. However, even then, the response from Wyong Shire Council does not address the core issues outlined in the draft report, namely: why the proposed timing has been chosen; and how the condition of each STW has been taken into account when assessing the likely benefits associated with undertaking such a strategy, particularly as Wyong Shire Council state that it will be done "at each STW", not a selection of treatment plants that breach a certain threshold level of condition rating.

In the absence of information pertaining to these core issues, we are unable to recommend that this additional expenditure is prudent or efficient.

Bateau Bay STW - Cleanout Digestor & Inspect

Wyong Shire Council states that[73]:

71 Ibid

72 OGW Report - Response_v2_141112.doc

73 Ibid

> *'This work is scheduled every 5 to 7 years - work is currently well overdue. Following the digestor cleanout an inspection of the concrete and internal structures by a specialised consultant will occur to determine if any further capital works are required. There are 2 Digestors on site requiring cleaning.'*

Whilst Wyong Council has not linked the need for this expenditure to a particular external requirement, it is clearly good industry practice for such works to occur. We take on face value, Wyong Shire Council's comment that this is undertaken every 5 – 7 years – which means that it would not be in any underlying costs – and that it is well overdue.

Therefore, we consider that this proposed expenditure is likely to be consistent with that which a prudent and efficient service provider would incur.

Wyong South, Charmhaven and Mannering Park - De-sludge of Wet Weather Lagoons

Wyong Shire Council states that[74]:

> *'Over time sludge lagoons progressively build-up deposits of sludge from treated effluent. Periodically lagoons need to be dewatered and sludge removed in order to limit algal blooms and to ensure the lagoon operates to design capacity. In the next price path work will be undertaken at the nominated treatment plants.'*

We agree with Wyong Shire Council that this is not something that a business would generally be doing on a regular basis. Furthermore, we agree that a prudent service provider would undertake such work if there is evidence of sludge build-up. With disposal costs alone being around $60 per tonne, the costs included in the operating expenditure forecasts appear reasonable, therefore, we conclude these forecasts costs are consistent with those that are likely to be incurred by a prudent and efficient water and wastewater service provider.

Benthos Study

Wyong Shire Council states that[75]:

> *'This study was carried out annually until 2011 at a cost of $80K - $100K pa. It has now been rescheduled to be carried out every 3-4 years. This study is an EPA licence requirement for the monitoring of the impacts of the two ocean effluent outfalls.'*

Based on the information provided, we accept that this expenditure is not otherwise incorporated into Wyong Shire Council's baseline expenditure, and furthermore, there is an external driver, namely, an EPA licence requirement, underpinning the need to undertake such studies.

Therefore, we conclude that the inclusion of the forecast operating costs associated with doing such a study is likely to be consistent with that which a prudent and efficient water and wastewater service provider would incur in the forthcoming regulatory period.

POEO Act

Whilst Wyong Shire Council have not specifically identified this as a Step Change, we understand that there has been a clear legislative change pertaining to the Protection of the Environment Legislation Amendment Act 2011.

Gosford City Council has previously stated that due to the POE Act changes[76]:

74 Ibid

75 Ibid

'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.'

We have confirmed the changes to the POE Act, and consider the estimate provided by Gosford City Council to be reasonable, and consistent with a prudent and efficient service provider. We consider that this increase in costs would equally apply to Wyong Shire Council, and would have been one of the drivers of their proposed increase in labour costs in 2013. Therefore, we consider the inclusion of such costs as a Step Change for Wyong Shire Council to be consistent with a prudent and efficient water and wastewater service provider.

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.

Table 14: 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

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

Table 15: Recommended Step Changes - Water

Step Change	2013-14	2014-15	2015-16	2016-17
Mardi Sludge Dewatering	500,000			
Electricity for MMLP	533,000	362,000	250,000	164,000
Coastal Transfer Study	100,000			

**Based on advice from IPART, we have not assessed the purchase of water from Hunter Water.*

Table 16: Recommended Step Changes - Wastewater

Step Change	2013-14	2014-15	2015-16	2016-17
Bushfire Clearing around facilities	*30,000*			
Bushfire & boundary clearing - Toukley	*40,000*			
General tree clearing Wyong Sth	*60,000*			

76 Gosford City Council ('121004 Information requested at IPART consultant review interviews.doc')

Bushfire & boundary clearing - Mannering Park	*0*			
Bushfire & boundary clearing - Charmhaven		*0*		
Bushfire & boundary clearing - Gwandalan		*0*		
Odour Studies		150,000	150,000	
Site Preventative Maintenance		*0*	*0*	
Digestor cleanout - Bateau Bay			40,000	40,000
Wyong South Desludge				120,000
Charmhaven Desludge	60,000			
Mannering Park Desludge		120,000		
Benthos Study			200,000	

Table 17: Recommended Step Changes - Additional

Step Change	2013-14	2014-15	2015-16	2016-17
POE Act	120,000	120,000	120,000	120,000

6.4. Prudency and Efficiency of Operating Expenditure in Current Price Path

There is no data that would lead us to conclude that Wyong Shire Council's water and wastewater 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 Wyong Shire Council over the period. In particular, Wyong Shire Council performs reasonably well 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 commented upon in more detail below) over the regulatory period.

6.5. Prudency and Efficiency of Operating Expenditure in Future Price Path

Our review of Wyong Shire 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 Wyong Shire Council's proposed operating expenditure forecasts.

Table 18: Recommended Changes to Assumptions Underpinning Proposed Operating Expenditures

Operating Expenditure Component	Recommended Change
Corporate overheads	■ The allocation methodology that is used to derive 2013 corporate costs revert back from the proposed "proportion of operating expenditure" approach to the

	current approach. ■ The proposed increase in corporate costs between 2012 and 2013, which is primarily driven by the assumption that currently vacant positions will be filled, be removed, and instead, the labour component of the 2013 corporate costs be based on 2012 labour costs, inflated by the recommended labour cost escalator. In the absence of the detailed derivation of this cost escalator, a cost escalation rate should be estimated based on customer growth. ■ That a number of specific accounts be removed from the overall corporate cost pool that is in turn allocated back into the water and wastewater business, as they do not relate to the provision of water and wastewater services.
Starting 2013 Costs	■ The proposed increase in water and drainage labour costs between 2012 and 2013, which is primarily driven by the assumption that currently vacant positions will be filled, be removed, and instead, 2012 water and drainage labour 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; ■ All other categories of drainage costs incurred in 2012 should also be inflated the cost and growth escalators recommended in this report; ■ Expenditure on Road Opening Fees be reduced to $100k per annum, from $350k that is currently contained in the AIR, consistent with Wyong Shire Council's historic expenditure; and ■ The amount of Licence Fees for 2013 and 2014 be reduced to reflect the figures contained in the Figure 17 (converted to real $2012/13), and the same growth percentage growth rate as is currently assumed be used to obtain forecasts for the remainder of the forthcoming regulatory period.
Real cost escalators	■ The magnitude of Wyong Shire Council's real cost escalators be accepted, except for the electricity price rise. Instead, this should reflect the most recent forecasts provided by AEMO;
Growth Escalators	■ That Wyong Shire Councils proposed growth escalator be rejected, rather, we recommend that instead of applying this escalator to all costs other than labour, electricity and 'one off' items, this escalator should only be applied to 'materials' and 'electricity'.
Step Changes	■ That the step changes pertaining to 'Bushfire & boundary clearing - Mannering Park'; 'Bushfire & boundary clearing - Charmhaven'; 'Bushfire & boundary clearing - Gwandalan'; and 'Site Preventative Maintenance' be removed; ■ That an additional Step Change pertaining to changes in the POE Act be included; and ■ The CCWC Establishment Costs that are allocated back into the water and wastewater business should revert back to that 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.

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

Table 19: Forecast versus Recommend Operating Expenditure Forecasts ($'000 real 2013)

Operating Expenditure Component[77]	2013/14	2014/15	2015/16	2016/17	Total
Corporate					
Forecast	13,689	13,715	13,835	13,910	55,150
Recommended	10,661	10,715	10,768	10,822	42,966
Water					
Forecast	16,665	16,136	16,268	16,151	65,221
Recommended	14,948	14,363	14,450	14,566	58,327
Wastewater					
Forecast	15,554	16,112	16,503	16,577	64,746
Recommended	15,099	15,364	15,666	15,603	61,732
Drainage					
Forecast	2,601	2,532	2,465	2,417	10,015
Recommended	2,355	2,367	2,380	2,392	9,494
Total					
Forecast	**48,509**	**48,495**	**49,071**	**49,056**	**195,131**
Recommended	**43,064**	**42,808**	**43,264**	**43,383**	**172,519**
% Reduction	(11.225%)	(11.728%)	(11.835%)	(11.564%)	(11.588%)

Source: AIR; 'Wyong Model of Forecasts - Final.xls'

77 All forecast figures have been estimated based on our own modelling, and exclude water purchases from Hunter Water. All forecasts also exclude any additional reimbursements that may be required to be paid to Gosford City Council under the JWS, which have not otherwise been forecast as part of the original submission.

7. Capital Expenditure

In response to the draft report, Wyong Shire Council has provided comments on the Capital Expenditure review (see Appendix A) and these have been addressed in this section

7.1. Asset Management Framework

Wyong Shire Council in its submission has made the following statements with respect to asset management[78]:

'*In 2011 Council undertook a restructure of its planning, asset management and capital works delivery functions. Prior to 2011 the structure included:*

- *an 'Assets' group responsible for asset management and capital works delivery; and*
- *an 'Investigation and Design' group responsible primarily for in-house design work.*

The new structure put in place involves:

- *a 'Planning and Asset Management' group responsible for planning, strategic asset management, project assessment and approval, project prioritisation and capital budget allocation; and*
- *a 'Program Delivery' group responsible for the management and delivery of the approved capital program.*

In concert with these changes;

- *asset class specific asset management plans have been prepared; and*
- *a project prioritisation process has been implemented; and*
- *procedures for the assessment and approval of projects have been strengthened, together with the establishment of a gateway approval process.*

The above changes should lead to a significant improvement in capital program outcomes for Councils water and sewer business.'

It is obvious from the review of documentation that most of the progress on asset management has occurred since these changes were effected and there is still room for improvement.

78 Wyong Council - Submission to IPART 2013 - 2017 - page 31

Wyong Shire Council, in addition to implementing the structural changes that allow more focus on asset management, participated with Gosford City Council in developing a long-term strategic plan for water and sewerage service needs to 2050 - the Water and Sewerage Master Plan ('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 was undertaken collaboratively 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 by Wyong Shire Council in developing renewal/replacement projects proposed in their submission. For example the Sewerage Pump Station (SPS) renewal/replacement program has been developed by conducting risk assessments and then undertaking condition assessments to identify those SPS's in need of renewal/replacement.

Wyong Shire Council use Matman as their asset management information system as compared to Gosford City Council, which uses Hansen.

Wyong Shire Council has only partially populated its asset management information system, Matman, with its asset data. Wyong Shire Council's system differs significantly from that used by Gosford City Council and Wyong Shire Council uses a different asset hierarchy to Gosford City Council. With the planned merger of the asset management functions of the two water and wastewater businesses planned for 2014, Wyong Shire Council is reluctant to fully populate and utilise their current system.

Since the Matman system is not fully populated most of the asset related data for Wyong Shire Council is kept in databases and spreadsheets:

- Failure data (breaks and chokes) is held in a series of MS Access databases.
- Electrical and Mechanical information is currently held separately by the Electrical/Mechanical Supervisor.

The level of detail of maintenance and repair costs is not currently sufficient to assess costs at a specific asset level (e.g., individual SPS's). Costs are recorded at an asset class level and are split into northern or southern region only.

A range of documents were obtained during the review to substantiate the statements made by Council. These included:

- TM24 Technical Memorandum – Infrastructure Risk Management Framework and Guideline - February 2012
- TM25 Technical Memorandum - Asset Guidelines (Condition Assessment and Renewals Program) - August 2012
- TM27 Technical Memorandum – Review of Asset Planning Tools - August 2012
- AMP Sewer Pipes - January 2012
- AMP Sewerage Treatment Works - May 2012
- AMP Water Mains - January 2012
- AMP Water Treatment Works – January 2012
- AMP - Water and Sewerage Infrastructure Assets - June 2010

The technical memorandums, prepared as part of the Master Plan development, outline the procedures followed by Wyong Shire Council in developing their asset renewal/replacement program.

Asset management plans have been developed, but as can be seen by their dates, they are only recent documents and are still a work in progress.

One area where our review identified room for improvement is in the prioritisation of replacement works. The asset management strategy at present is to identify 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, compared against the 'do nothing' case. 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 that Council assess other models such as those used by other authorities that enable their decisions on replacing assets to be[79] '*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.

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 (2012) 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.

It is noted that both Wyong Shire Council and Gosford City Council 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

As stated previously, Wyong Shire Council collaborated with Gosford City Council in recently developing a long term plan for water and sewerage needs to 2050 – the 'Water and Sewerage Master Plan'. The risk management and criticality framework developed as part of the Master Plan was used in the preparation of the Council'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.

Council, for growth related projects, use population forecasts to plan for new assets. This review identified that for the Kiar Ridge Reservoir and the Charmhaven STP project, this process needs to be improved. Timeframes for these works need to be reviewed on a regular basis utilising the most recent actual population and growth figures. A similar finding has been made for growth related projects in Gosford.

Council has a five step gateway process for project approval:

- Review by the planning group
- Review by Project Approval Team

79 Sydney Water – Submission to IPART 2012 pricing determination p236

- Business case approval
- Contract development
- Tendering

The Project Approval Team is a Council team, not just water and sewerage, and assesses projects against Council's strategic business objectives.

The prioritisation process developed as part of the Master Plan will be the next step in refining the project prioritisation framework.

7.3. Procurement and Delivery Systems

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

- A minimum of two selective tenders for projects less than $50,000
- 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. For specialist work, Council have used an Expression of Interest process to shortlist prospective tenderers who are then invited to quote on a selective basis.

A combination of in-house resources and engagement of contractors is used for project management with larger projects typically outsourced.

Some replacements, small extensions, relocations, small SPS renewals and projects with a level of variability are carried out by day labour (when operational work load is low).

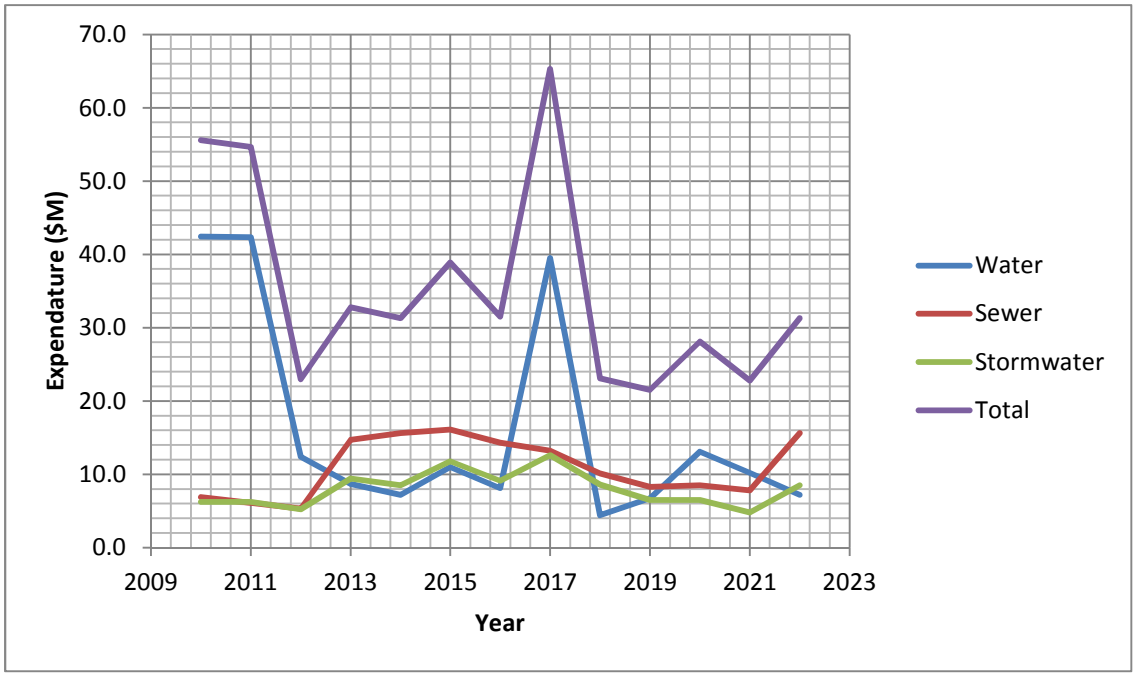
A joint panel has recently been established with Gosford City Council for pumps and pipes engineering consultancy, which should simplify the tender process as assessment should be primarily on price.

The procurement and delivery systems used by Council are all in accordance with industry best practice, 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

Wyong Shire Council's long term expenditure is summarised in Figure 27. The large peak in water capital expenditure through 2010 and 2011 is a result of Joint Water Supply (JWS) projects most notably the Mardi to Mangrove Pipeline (Approx. $120M joint funded). A notable water related spending increase occurs in 2017; this is attributed to large growth related projects servicing WSC's northern region which are expecting significant future growth, particularly around the Warnervale township.

Figure 27: Long Term Capital Expenditure ($'000 real 2013)



Source: Sourced from SIR

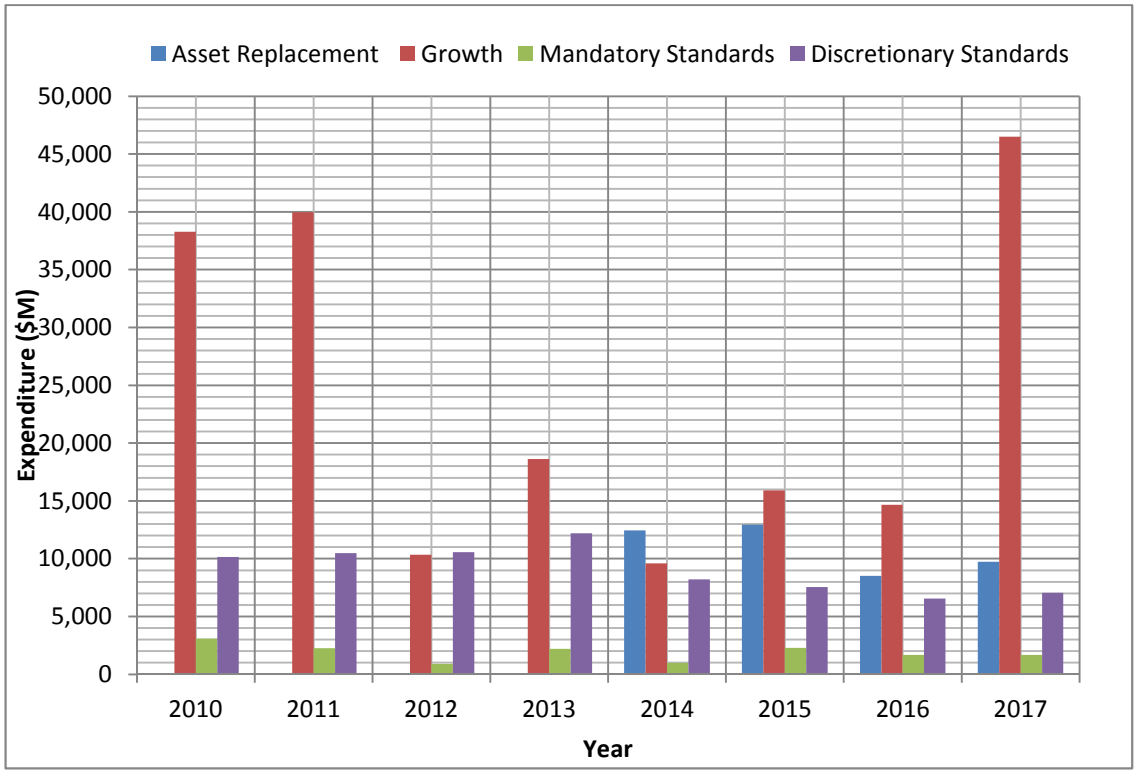
The long term investment plan is largely driven by asset replacement and growth:

- Asset replacement – annual budgets are based on useful life assumptions. Condition assessments are undertaken following risk assessments but it appears that there is a component of ad-hoc reaction to operational concerns. Works are prioritised based on the condition assessments with the highest priority works undertaken based on budget available. As discussed in Section 7.1, this process needs further improvement;
- Growth – works are based on Developer Servicing Plans (DSP) which will generally be based on hydraulic modelling/assessment and anticipated growth rates. Works in small '*Greenfield*' developments are usually undertaken entirely by developers. '*Infill*' developments and trunk infrastructure for larger developments is often undertaken by Wyong Shire Council with costs recovered via developer charges/capital contributions as specified in the DSP.

The last DSP was completed in 2006, and forecast high growth. The last 6 years (possibly due to the Global Financial Crisis) have seen lower than anticipated growth and as such, current servicing strategies are recommending more infrastructure addition/upgrades than are actually needed. It is acknowledged that WSC received revised population projections following their submission to IPART in 2012 however more regular assessments of actual growth compared to predicted growth are recommended to efficiently schedule Council funded works.

Future capital expenditure by driver is shown in Figure 28.

Figure 28: Expenditure by driver 2010-2017 ($'000 real 2013)



Source: Sourced from SIR

The capital expenditure on asset replacement is receiving more focus in future years. 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 is undertaken 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.

The significant level of growth driven projects reinforces the need for Wyong Shire Council to regularly update their DSP's and growth projections to avoid misalignment of capital expenditure with actual growth.

7.5. Assessment of Historical Water Capital Expenditure

Table 20 (below) provides an overview of water expenditure including a comparison between the previous determination and actual expenditure over the current price path.

Table 20: Historical Water Expenditure ($'000 real 2013)

Driver	2009/10	2010/11	2011/12	2012/13	Total
Joint Water Supply Projects					
Asset Service Reliability	-	-	-	-	-
Growth	36,162	36,228	6,435	3,980	82,805
Mandatory Standards	16	48	34	38	136
Discretionary Standards	1,139	873	1,469	1,000	4,481
Total	**37,317**	**37,148**	**7,938**	**5,018**	**87,422**
Council Specific Projects					
Asset Service Reliability	-	-	-	-	-
Growth	754	1,643	236	1,508	4,142
Mandatory Standards	243	355	590	525	1,712
Discretionary Standards	1,139	1,814	2,722	1,820	7,496
Total	**2,136**	**3,812**	**3,549**	**3,853**	**13,350**
Comparison with Determination					
Total Water Expenditure	**39,599**	**40,958**	**12,158**	**8,660**	**100,771**
Determination	103,201	26,277	7,623	11,400	148,101
Difference	(63,602)	14,681	4,535	(2,740)	(47,730)

Source: Sourced from SIR

Wyong Shire Council's water expenditure over the 2010/13 determination period was significantly less than the determination allowed. The vast majority of under expenditure has been identified and is attributed to deferral of growth related projects including:

- Deferral of Mardi to Warnervale Trunk Main due to lack of growth
- Delay in Entrance/Nth Entrance Trunk Main due to RTA bridge constraints
- Deferral of Porters Creek Stormwater Harvesting due to lack of growth
- Deferral of Gorokan to Norah Head Trunk Main due to lack of growth
- Deferral of Kiar/Bushells Reservoir due to lack of growth

Several of the projects that have been deferred from the 2010/13 determination period have been included in the 2014/17 determination period, however updated growth forecasts have not been used to confirm the timing of these projects. This is one of the major concerns with a number of the forecast projects that were assessed.

Approximately $2.5M of the under expenditure is attributed to a reduction in water main refurbishment '*due to sufficient asset performance*'. It is unclear whether the under expenditure is a result of over estimation; an inability to deliver as a result of staff shortages; or a combination of both. Wyong Shire Council has proposed a significant reduction for water main renewals for the 2014/17 determination period, which will not be disputed.

To assist in the assessment of the prudency and efficiency of the historical water capital expenditure, two projects were chosen for review, being '*Increase Transfer Capacity from Mardi Dam to Mardi WTP*' and the '*Replacement of unlined fittings and corroded tapping bands*'. The first is predominantly a drought security project, whilst the second is based on the asset management strategy.

7.5.1. Increase Transfer Capacity from Mardi Dam to Mardi WTP

Description of project

The Mardi Dam Transfer System was completed as part of a larger project known as the '*Mardi Suite of Works*' (approx. $45M), which included the construction of the Mardi High Lift Pump Station and the provision of high voltage power supply to the site.

The Mardi Suite of Works was accepted by both WSC and GCC as necessary for the proper operation of the water supply system. The Mardi Suite of Works was an integral part of delivering the WaterPlan 2050 Strategy and was delivered under the Joint Water Scheme (JWS).

Drivers/ Justification

The Mardi Suite of Works was justified for the following reasons:

1. The existing outlet works at Mardi Dam required replacement. The NSW Government's Dam Safety Committee recommended in 1992 that the outlet works be decommissioned and removed due to deterioration of the structure;
2. The new dam outlet works were required to increased capacity from the dam needed to utilise the recently completed Mardi to Mangrove Link Project;
3. The high lift pump station was required to provide flexibility in transferring water between the various demand centres in Gosford and Wyong, thereby increasing overall security of the joint water supply scheme, particularly in periods of drought. It replaced ageing infrastructure and is anticipated to reduce operating costs for the joint water supply scheme; and
4. The high voltage power supply to Mardi was required to ensure reliable supply of power to operate the Mardi Water Treatment Plant, the Mardi Dam Transfer System, the Mardi High Lift Pumping Station and the Mardi to Mangrove Link Pump Station.

The following figure was extracted from WSC's budget submission for the Mardi Suite of works, 19 November 2008, and details the key drivers for each component of the works.

Figure 29: Drivers for Mardi Suite of Works

PROJECT ELEMENT	PRINCIPAL FACTORS DRIVING COMPLETION						
	Dam Safety Requirement	Operational Purposes	M2M Link - Capacity to Transfer	Hunter Water Agreed Commitment	Safe Yield and Supply Flexibility Gosford/ Wyong	Existing Aged Infra- structure	Water Quality Issues
Outlet Tower and Road diversion (Mardi Dam Transfer System)	X		X		X	X	
Spillway widening	X						
Spillway bridge		X					
Reclaimed water main diversion							X
Penstock and valves to Transfer Pump Station	X		X		X	X	
Transfer Pump Station	X		X		X		
High Lift Pump Station and inter- connecting pipework				X	X	X	
Mardi High Voltage Ring Main			X		X		
High Voltage power supply upgrade to Mardi			X	X (for Mardi HLPS)	X	X (To replace existing aged pump stations no. 2 & 4)	

Source: WSC Budget Submission - Mardi Suite of Works 19/11/2008

Options Assessment/ Solution development

No information was provided.

Project Delivery

Department of Commerce (DoC) was engaged to manage both the design and the construction of the works. A construction contract was awarded for $41.5M in May 2009 and Practical Completion was awarded in November 2012.

No Post Completion Review (PCR) was undertaken by either DoC or WSC. WSC advised that their project manager retired shortly after the project completion due to health reasons and this is why a PCR was not undertaken.

Cost Summary (Actual expenditure vs. Determination)

The following table summarises the actual expenditure as detailed in WSC Annual Information Return (ARI) over the 2010/13 determination period.

Table 21: Breakdown of expenditure for Mardi Suite of Works ($'000 real 2013)

Component of the project and ARI reference	2009/10	2010/11	2011/12	2012/13	Total
Mardi Transfer System (W87)	12,796	2,662	-	-	15,458
High Lift WPS and Ring Main (W85)	5,214	2,543	5	-	7,762
Raising and Ancillary Works (W37)	1,911	383	1	-	2,295
HV Power Supply Upgrade (W29)	1,867	259	-	-	2,126
Total	**21,787**	**5,847**	**6**	**-**	**27,640**

Source: Sourced from SIR

Actual expenditure was under the determination amounts for all components of the project. As this project was funded under the JWS, GCC should note a similar under expenditure.

Table 22: Actual expenditure vs. Determination for Mardi Suite of Works ($'000 real 2013)

	Mardi Transfer System	High Lift WPS and Ring Main	Raising and Ancillary Works	HV Power Supply Upgrade	Total
Actual	15,458	7,762	2,295	2,126	27,640
Determination	18,030	10,306	2,451	2,661	33,404
Difference	(2,625)	(2,545)	(156)	(535)	(5,861)

Source: Sourced from SIR

Assessment of Prudence and Efficiency

This review has not examined the overall project justification as this was assumed to have been confirmed based on the 2010/13 price path determination.

The delivery system utilised by Wyong Shire Council is in accordance with best industry practice and each of the key project components was delivered under budget with respect to the previous determination indicating that the delivery was indeed efficient.

7.5.2. Replacement of unlined fittings and corroded tapping bands

Description of project

The project was a programmed replacement of water main fittings as part of an overall asset replacement program. The work aimed to reduce complaints associated with poor pressure and dirty water by replacing tapping bands, valves and hydrants. Replacements were triggered based on age, soil conditions and dirty water complaints.

The fittings replacement program has been in operation for many years. Deficiencies have been recognized in the original construction of the water main system for WSC including:

- Unlined valves rapidly corrode with valves becoming inoperable and restricting flows
- Some tapping bands were supplied with poor bolting systems which corrode and subsequently fail in aggressive soils.

Drivers/ Justification

The replacement of fittings and tapping bands occurs both reactively and proactively with the objective of minimising water quality issues, low pressure complaints and unplanned failures.

WSC provided a capital funding request form for the replacement of a water main resulting from a fitting/tapping band project, the form prompts the author to:[80]

> *'Provide a breakdown of the capital cost estimate. Separately identify risk allowances associated with the delivery of the project. For each identified risk, provide estimates of:*
>
> - *Probability of occurrence*
> - *Minimum cost outcome if risk occurs*
> - *Most likely cost outcome if risk occurs*
> - *Maximum cost outcome if risk occurs'*

With this information a simple Cost Benefit Ratio could be undertaken to justify the works, however, in the examples provided by Wyong Shire Council, this information was not provided in the funding request indicating that although adequate systems seem to be in place they are not being used as intended.

Although the works may have been justified, the funding request form did not document suitable justification for the works and was little more than a summary of the intended project execution.

Options Assessment/ Solution development

Where tapping band replacements are undertaken as reactive works (as a result of a failure), the assessment of repair options is generally not practical. Fittings are replaced new for old.

80 WSC Water and Sewerage request for capital funding form - Replace 300m of water main at Main Road Toukley

During the repair of fittings, the repair crew observe the condition of the pipe to which the fitting is attached. These ad-hoc condition assessments often result in the replacement of nearby fittings or short lengths of water main.

Planning staff are developing a more proactive replacement program by tracking where work has been completed and recording areas experiencing tapping band failures in a GIS (mapping) system. It is proposed that the spatial recoding of failures and problems areas will allow WSC to identify priority areas for planned works.

Project Delivery

The majority of the program is carried out by day labour. Day labour use the fittings replacement program as a method of optimising the output of the day labour workforce where the natural 'lulls' in reactive work can be filled by programmed work. Some of the larger work is carried out by contract labour.

When proactive replacements are undertaken, the operations supervisor monitors the total amount of expenditure to ensure the annual project budget is met.

Cost Summary Cost Summary (Actual expenditure vs. Determination)

Wyong Shire Council underspent on the fitting and tapping band replacement budget by approximately 35% when compared with the 2009/13 price path determination. Details are provided in the table below.

Table 23: Actual expenditure vs. Determination unlined fittings/tapping bands ($'000 real 2013)

	2009/10	2010/11	2011/12	2012/13	Total
Actual	-	330	486	500	1,316
Determination	-	-	-	-	1,918
Difference	-	-	-	-	(602)

Source: Sourced from SIR

Wyong Shire Council has advised that the under expenditure was due to an inability to deliver resulting from staff shortages and the diversion of day labour crews to higher priority operational and maintenance work. Wyong Shire Council has proposed a significant reduction for fitting and tapping band replacements expenditure over the 2014/17 determination period (total 4 year expenditure of $600,000 ($ real 2013) which will not be disputed.

Assessment of Prudence and Efficiency

The prudency of undertaking reactive works is not in question, however the justification and prioritisation of proactive works warrants further consideration. The decision to undertake proactive fitting and tapping band replacements needs to be justified by comparing replacement with an 'operate to fail' option.

Delivery of the proactive works, currently undertaken by day labour, may or may not be the most efficient system. Benchmarking should be undertaken.

There is insufficient information to say that these works were not justified and as such it is recommended to include the full expenditure in the RAB.

7.6. Assessment of Historical Wastewater Capital Expenditure

Table 24 provides an overview of wastewater expenditure including a comparison between the previous determination and actual expenditure over the current price path.

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

Driver	2009/10	2010/11	2011/12	2012/13	Total
Asset Service Reliability	-	-	-	-	-
Growth	1,256	1,743	3,460	9,177	15,635
Mandatory Standards	2,837	1,853	290	1,640	6,619
Discretionary Standards	2,319	2,298	1,469	3,913	10,000
Total	**6,412**	**5,894**	**5,213**	**14,730**	**32,254**
Comparison with Determination					
Total Expenditure	**6,412**	**5,894**	**5,213**	**14,730**	**32,248**
Determination	35,500	10,900	10,100	10,100	66,600
Difference	(29,088)	(5,006)	(4,887)	4,630	(34,352)

Source: OGW sourced from SIR

Wyong Shire Council's wastewater expenditure over the 2010/13 determination period was significantly less than the determination allowed. The vast majority of under expenditure has been identified and is attributed to deferral of growth related projects including:

- Deferral of Wyong South STP upgrade due to lack of growth
- Deferral of Charmhaven STP upgrade due to lack of growth

To assist in the assessment of the prudency and efficiency of the historical wastewater capital expenditure, two projects were chosen for review, being Warnervale Town Centre and Bateau Bay inlet works. The first is a predominantly growth related project, whilst the second is based on meeting mandatory standards.

7.6.1. Warnervale Town Centre

Description of project

This project involves the provision of trunk sewer mains for the proposed Warnervale Town Centre. The project has been on the books for several years and has been subject to delays resulting from a lack of progress on the development of the Warnervale Town Centre.

RMS (formally RTA) has now committed to major road works which has in turn triggered the development of the CBD with a Woolworths supermarket expected to be one of the initial users.

The investigation and design phase of the project is complete and all planning approvals and land easements have been obtained. Tenders for construction of the works have been called and evaluated, with the award of the contract expected in late October.

Drivers/ Justification

The driver is growth. The need for the trunk sewer main was identified in Council's Development Servicing Plan (DSP No.18) for the area and documented in the related sewer servicing strategy produced by GHD in 1993. There is currently no sewer connection available for this development.

Options Assessment/ Solution development

No information was provided.

Project Delivery

Wyong Shire Council decided to fund the trunk sewer gravity main servicing the CBD and recoup costs rather than requesting the lead developer to bankroll and construct the works.

In 2007, Wyong Shire Council engaged DoC to manage the design and construction activities associated with water and sewerage services for both Warnervale Town Centre (WTC) and Wyong Employment Zone (WEZ).

Wyong Shire Council engaged Bonacci to complete the Concept Design, Detailed Design and Tender Documentation for both the WTC and WEZ sewerage trunk mains. In November 2010 the engagement was terminated by WSC due to concerns regarding the performance of the consultant. Wyong Shire Council then engaged Trehy Ingold Neate to complete the design works.

Wyong Shire Council subsequently terminated the project management engagement with DoC. It is proposed that the project will now be managed by Council.

Following the completion of the construction phase, Wyong Shire Council anticipates a project assessment and lessons learnt review in line with Council's project management system.

Cost Summary Cost Summary (Actual expenditure vs. Determination)

It is unclear exactly what was allowed in the last determination for this project. It is assumed that the item titled '*Section 94 Works (Undertaken by Council)*' for which $7.649M was allowed incorporated this project. It is not clear, however, what other projects were covered by this line item in the past determination and how they performed.

Table 25: Summary of expenditure for the Warnervale Town Centre project ($'000 real 2013)

	2009/10	2010/11	2011/12	2012/13	Total
Actual	756	-	247	4,580	5,582

Wyong Shire Council spent $2.6M between 2007 and 2012 of which it has advised $0.36M was related to the purchase of easements and the remainder related to preconstruction activities and management of the project. Wyong Shire Council is forecasting an additional $4.6M expenditure in the 2012/13FY bringing the total project cost to $7.2M.

Wyong Shire Council pre-tender estimate was $2.08M. A construction contract was awarded for $2.27M on 10 October 2012; however the contractor subsequently requested to withdraw from the contract. Council intends to award to the next preferred tenderer for $2.53M.

Assessment of Prudency and Efficiency

For a project of this size, it would be reasonable to allow 10% of the construction estimate for design activities and 12% of the design cost for project management. Based on a construction estimate of $2.1M (Wyong Shire Council's pre-tender estimate) a reasonable allowance for preconstruction activities would have been 0.24M +/- $0.05m.

Wyong Shire Council's preconstruction activities have cost $2.2M or 106% of the award sum - almost 10 times more than would be reasonably expected.

Over the course of this project, Wyong Shire Council terminated engagements with both the design consultant and the project management consultant, indicating that a certain amount of diligence has being applied by Council in managing their consultants. We also note that Council followed approved processes in procuring the consultant services. These terminations are likely to have resulted in additional works being required and additional preconstruction costs being incurred however not to the extent of $2.2M.

The prudency of undertaking the works and the timing for delivery appear robust, however the delivery of preconstruction activities does not appear efficient.

Accounting for the termination of both design and project management consultants, it is considered reasonable that preconstruction costs may have reached up to $0.5M (~20% of construction estimate). It is recommended that the additional expenditure above this amount ($1.7M) not be included in the RAB.

In response to the draft report, Wyong Shire Council provided comments (see Appendix A) asserting that the full preconstruction expenditure should be included in the RAB and made specific mention of easement purchase, stakeholder consultation, ecology, constructability/cost efficiency etc. as contributing factors to the excessive preconstruction expenditure. OGW notes that $0.36M of the $1.23M expenditure incurred in 2007 was for the purchase of easements and this amount has not been included in the preconstruction expenditure to be excluded from the RAB. With respect to the stakeholder consultation, ecology, constructability/cost efficiency etc., these are all considered a normal part of the design process and it is reasonable that these costs should not have exceeded the determination made above.

7.6.2. Bateau Bay Inlet Works

Description of project

The existing screens at Bateau Bay Sewage Treatment Works were installed in the early 1980's and were approximately 25 years old. The screens produced a product that was high in faecal matter and had to be covered '*same day*' at the landfill site. The quality of the screenings was very poor.

Effluent from the plant was sent to the ocean outfall with some floatable material of obviously sewage origin entering the ocean.

A poor screenings capture rate also affected downstream processes resulting in increased chokes (higher maintenance costs) as well as producing poorer quality sludge.

Screenings from the existing facility were placed in 240L sulo bins for subsequent disposal and were highly odorous. Manual handling issues had also been identified with the use of 240L sulo bins.

Drivers/ Justification

It was identified that the implementation of modern fine screens would;

- Improve manual handling and OH&S issues to an acceptable modern standard;

- Minimize odour issues on site, during transportation and at the landfill site;
- Improve maintenance of the facility by having readily available spares, and
- Improve the quality of the products of screened material for landfill, effluent for ocean disposal and the sludge for composting at Buttonderry.

The screenings produced from the new facility would have a low faecal content with no free water making the product more acceptable for transportation as well as for disposal at the landfill site. Odour generation from the screenings would be greatly reduced.

The treatment of the liquid stream, downstream of the screens would be enhanced, with decreased chokes in pumps, better sludge production and reduced maintenance from screenings accumulating within the plant. The effluent sent to the ocean outfall would have reduced floatables of obviously sewage origin.

Options Assessment/ Solution development

Three options were examined including:

- Construction of an entirely new facility including civil structures (rejected due to cost);
- Refurbish the existing screening equipment (Several sub options were examined), and
- 'Do Nothing'.

The selected option was to refurbish the existing civil structures with modern step screens similar to those installed at Charmhaven and Wyong South Treatment Plant. This option involved minimal modifications to the civil structures. The proposed collection would be from 3 cubic metre bins eliminating existing manual handling issues.

Project Delivery

The procurement options examined for the delivery of the project included:

- Purchase and install using Wyong Shire Council resources;
- Design consultancy and then construction contract on the approved design, and
- Design and Construct Contract (D&C)

Wyong Shire Council propose the use of a D&C procurement method with any proposal that achieves the project objectives and offers '*value for money*' being considered. This option focuses on the outputs of what is to be delivered rather than the method of delivery.

No propriety equipment is eliminated from the tender and consequently market forces should result in the best '*value for money*' solution to meet the required performance. It is anticipated that overall design costs will be lower as suppliers will have standard configurations that suit their equipment.

Cost Summary (Actual expenditure vs. Determination)

It is unclear exactly what was allowed in the last determination for this project. It is assumed that the project formed part of the $12,884M unallocated Wastewater works.

Table 26: Summary of expenditure for the Bateau Bay inlet works project ($'000 real 2013)

	2009/10	2010/11	2011/12	2012/13	Total
Actual	-	-	48	1,300	1,348

Source: Sourced from SIR

Assessment of Prudence and Efficiency

Works appear prudent with clear drivers documented and the investigation and delivery methods appear robust and efficient.

7.7. Assessment of Historical Stormwater Capital Expenditure

Table 27 provides an overview of stormwater expenditure including a comparison between the previous determination and actual expenditure over the current price path.

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

Driver	2009/10	2010/11	2011/12	2012/13	Total
Asset Service Reliability	-	-	-	-	-
Growth	227	468	230	3,967	4,893
Mandatory Standards	-	-	-	-	-
Discretionary Standards	5,589	5,520	4,928	5,465	21,503
Total	**5,818**	**5,989**	**5,155**	**9,432**	**26,396**
Comparison with Determination					
Total Expenditure	**5,818**	**5,989**	**5,155**	**9,432**	**26,396**
Determination	10,100	8,600	8,800	8,600	36,100
Difference	(4,282)	(2,611)	(3,645)	832	(9,704)

Source: Sourced from SIR

To assist in the assessment of the prudency and efficiency of the historical stormwater capital expenditure, one project was chosen for review, being the Minnesota Road Culverts.

7.7.1. Minnesota Road Culverts

Description of project

Minnesota Road provides a direct and strategic north-south link between Wyong, Watanobbi and Wadalba in the south through to Warnervale, Woongarrah, Hamlyn Terrace and Charmhaven in the north. The only alternative route relies on State Roads - Pacific Highway and Sparks Road, which is much longer.

The 1.4km road between Pacific Highway and Warnervale Road is poor. The existing road is narrow, has no sealed road shoulders, very poor pavement, and no provision for drainage. A 600m section of the road is inundated with flood water several times a year and motorists using the road have no prior warning that the road is inundated until they get to the floodwaters.

In large flood events the road is considered to be a high hazard floodway whereby vehicles entering floodwaters may be swept away. This makes the road probably one of the highest risks in the Shire from a flooding perspective.

The project sets out to undertake design work to improve the existing condition of Minnesota Road. Reconstruction works are proposed to incorporate a widened pavement and travelling lanes, road shoulders suitable for cyclists, shared path on the eastern side, kerb and gutter along the frontage of the proposed Hamlyn Terrace Community and Sporting Facility, piped road drainage, table drains, culverts through the causeway and relocation of services, where required.

Drivers/ Justification

Wyong Shire Council has justified the project based on providing a safe, fit-for-purpose road, complete with shared path and providing flood-free access in flood events up to the 1 in 100 year event.

Implementation of this project aligns with Council's Shire Strategic Vision in the following ways by:

- Improving travel options in the form of bicycle lanes / shared path and motor vehicle transport;
- Maintaining areas of natural value;
- Creating a better quality of life and ease of travel for road users;
- Reduce traffic volumes on State Roads, including Pacific Highway and Sparks Road, and
- Reduce the risk of death or serious injury associated with a flooded road.

Options Assessment/ Solution development

Several upgrade options have been drafted and costed and a flooding assessment is being carried out to test the options.

Project Delivery

The sequence of events underpinning the project is as follows:

- July 2008 – Project created estimating completion in 2010/11, total value $4.3m with the funding source '*to be established*';
- Aug 2009 – Worley Parsons engaged to undertake concept and detailed design ($127,314);
- Aug 2010 – Request made to NSW shadow cabinet, project estimate $4.6M;
- Sept 2010 – Project Management Plan (PMP) developed part-way through design. PMP estimated completion in April 2012, Total Value $5.5M, funding source not specified;
- May 2011 – Wyong Shire Council applied for federal government funding of $3M to undertaken the works with Wyong Shire Council proposing to fund the remainder. The following is an extract from the development grant recommendation[81]:

  'As advised on 7 September, your application was not approved for funding in Round One of the RDAF. Although not funded, your project met the eligibility criteria and was considered by the RDAF Advisory Panel. The Panel noted that:

  Due to the competitiveness of Round 1, your responses to the selection criteria were not considered as strong as other applications.

81 RDAF101133 - Regional Development Australia Fund Round One

In response to Criterion 1, the extent to which the project leveraged funding from a variety of sources was limited compared to other applications.

The application did not provide adequate evidence of the broader community benefit to be delivered by the project in response to Criterion 2B.

The Business Plan submitted in response to Criterion 3 did not adequately demonstrate the sustainability and viability of the project.

Your capacity to implement and maintain the project was not sufficiently demonstrated in response to Criterion 4.'

- Feb 2012 – Design was finalised;
- Sep 2012 – IPART submission was lodged with an allocation of $2.44M in 2012/13 to be funded by stormwater funds (combination of the stormwater fund and stormwater section 94 contributions).

Cost Summary (Actual expenditure vs. Determination)

Wyong Shire Council's AIR details the following project expenditure, both past and forecast for the 2012/13FY.

Table 28: Summary of expenditure for the Minnesota road culvert project ($'000 real 2013)

	2009/10	2010/11	2011/12	2012/13	Total
Actual (R333)	254	-	-	-	254
Actual (R344)	1	-	-	-	1
Actual (R366)	-	1	-	-	1
Actual (R445)	-	-	88	-	88
Actual (R467)	-	-	45	-	45
Actual (R492)	-	-	-	1,825	1,825
Actual (R493)	-	-	-	618	618
Actual Total	255	1	133	2,443	2,832

Source: Sourced from SIR

Expenditure totalling $389,000 was incurred against the stormwater budget between 2009/10 and 2012/13 financial years, however, it is unclear exactly what this expenditure has been used for as the full road design (including culvert design) commissioned in 2009 amounted to $127,000.

Assessment of Prudence and Efficiency

No justification has been provided for funding/part-funding the Minnesota road works from the stormwater fund. Approximately 50% of the project funding is to be taken from the stormwater fund and it is unclear where the remainder of the funding will be sourced (roads fund or government grants presumably).

Justification for the funding split seems to be as basic as attributing the cost of the stormwater culverts (as they relate to water) to the drainage fund and covering the rest of the project from the alternate funding source. Although on first glance this approach seems like a logical approach, the driver for undertaking works is entirely road related. The creation of stormwater culverts are a direct consequence of the road works and would not be justified on their own merit.

There is no evidence to suggest that the project will have any benefit on the community from a drainage perspective (apart from alleviating the flooding of a road which is solely a roads matter). As this project will not add value to the Wyong Shire Council stormwater system, the allocation of $2.8m from the drainage fund is seen as neither prudent nor efficient use of stormwater funding.

In response to the draft report, Wyong Shire Council provided extensive comments (see Appendix A) justifying the Minnesota road project and its subsequent expenditure of stormwater funds.

Information regarding Wyong Shire Council's current stormwater approval process and prioritisation methodology was made available and used in making the initial recommendation. The reiteration of this information has not provided any additional evidence that the works are prudent. In the comment, Wyong Shire Council states;

> *'each project now requires a robust business case'*

Although information was provided to OGW under the heading '*Business Case*' the documentation contained little more than an outline of the proposed works and made no attempt to justify the works using a robust methodology. In addition to not justifying the works the documentation makes no mention of how the project will be funded and whether or not justification exists for partially funding the works from the stormwater fund.

It is noted that the proposed culverts will have a lower level than the existing spillway thereby improving the passage of stormwater through the creek. Wyong Shire Council has not however provided any information suggesting that this increase is needed, that the reduction in level will meet any predetermined requirements or that the works will not be to the detriment of the lower portions of Porters Creek as a result of more rapid discharge of stormwater.

OGW now acknowledge that the Minnesota Road works are listed in the Porters Creek Floodplain Risk Management Plan, however this document was not provided in response to OGW's requests for project justification.

Although commendable, the awards and award nominations mentioned throughout Wyong Shire Councils comment do not provide any additional justification for this project proceeding.

Wyong Shire Council has stated in its comment, the $237k expenditure incurred in 2009/10 should be attributed to the Road component of these works. This comment further justifies the exclusion of this amount from the RAB and further reiterates OGW's comment in section 7.10.1 of this report that WSC needs to develop a policy for attributing funding between stormwater and roads to prevent the future misallocation of funds.

It is noted that the recently received tender price for the works is lower than that originally forecast; this has not been shown to increase the justification of the works.

7.8. Assessment of Proposed Water Capital Expenditure

Table 29 provides an overview of proposed water expenditure over the 2014/17 determination period.

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

Driver	2013/14	2014/15	2015/16	2016/17	Total
Joint Water Supply Projects					
Asset Service Reliability	2,664	4,905	2,379	4,561	14,509
Growth	-	-	-	-	-
Mandatory Standards	175	1,475	850	850	3,350
Discretionary Standards	-	-	-	-	-
Total	**2,839**	**6,380**	**3,229**	**5,411**	**17,859**
Council Specific Projects					
Asset Service Reliability	2,910	2,965	2,265	2,215	10,355
Growth	1,175	1,275	2,275	31,375	36,100
Mandatory Standards	300	300	300	300	1,200
Discretionary Standards	-	-	-	-	-
Total	**4,385**	**4,540**	**4,840**	**33,890**	**47,655**
Total Water Expenditure	**7,224**	**10,920**	**8,069**	**39,301**	**65,514**

Source: Sourced from SIR

To assist in the assessment of the prudency and efficiency of the proposed water capital expenditure, two projects were chosen for review being the Kiar Ridge Reservoir and the design of the Dissolved Air Flotation Plant (DAF). The first is a growth driven project, whilst the second is a mandatory standard driven project.

7.8.1. Kiar Ridge Reservoir

Description of project

In 2007 NSW Department of Commerce (DoC) undertook hydraulic modelling of Wyong Council's Water Distribution System to identify the upgrade requirements of servicing future growth over a 50 year planning horizon.

The model identified the requirement for a new 15ML reservoir at Kiar Ridge in 2016 to supply proposed development and service critical low pressure areas such as Blue Haven following future growth in the northern areas of the shire.

Council will be updating the hydraulic model within the next two years and the appropriate sizing and timing for Kiar Ridge Reservoir will be updated as part of this modelling exercise. Following the completion of additional hydraulic modelling, Council will be able to refine the requirements for the reservoir and carry out the capital works initiation process (incl Business Case).

Drivers/ Justification

The sole driver for Kiar Ridge Reservoir is growth.

Options Assessment/ Solution development

The Kiar Ridge Reservoir project has not passed a strategy level of development. WSC's current pricing submission forecasts construction of the reservoir in 2016/17 with preconstruction activities planned to take place in the 3 years preceding.

Evidence has been presented which confirmed that several servicing options have been assessed including servicing the area using 3 smaller reservoirs as opposed to one large reservoir. It appears that a robust assessment of options has been undertaken for a project in such an early stage of development.

Project Delivery

Typically new infrastructure associated with growth is constructed and funded by the lead developer with the developer then receiving an approved offset to their water and or sewerage contributions (Documented process in DSP's). For large and/or significant projects, Council funds the project and undertakes investigation and design activities as well as construction. In this case, the works are funded through contributions already collected from the relevant DSP areas.

Wyong Shire Council is proposing a conventional concept design, detailed design then construction delivery approach which is reasonable for a project of this size and nature.

Cost Summary

Wyong Shire Council is proposing the following annual expenditure. It should be noted that this project is not subject to joint funding under the JWS.

Table 30: Summary of proposed expenditure for Kiar Ridge reservoir ($'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
Kiar Ridge reservoir	100	200	200	7,300	7,800

Source: Sourced from SIR

The timing and value of preconstruction activities appear reasonable with respect to the construction estimate.

Assessment of Prudence and Efficiency

The DoC strategy recommending the works calculated future demand based on the findings of a report by Whelans Planning in 2006 which identified projected growth between 2006 and 2051.

More recent population projections (.id, 2012) suggest that actual growth between 2006 and 2012 and forecast growth over the next determination period will be significantly less than predicted by Whelans in 2006. This comparison is outlined in the table below.

Table 31: Comparison of Wyong Shire population projections

	2006	2011	2012	2016	2017	2031
Population Projection (Whelans, 2006)	150,400	166,100	-	179,400	-	220,100
Population Projection (.id, 2012)	-	-	154,966	-	162,045	203,449

Source: Sourced from SIR

The DoC strategy concluded that Kiar Reservoir would be required in 2016 (based on a 2016 population projection of 179k). Latest estimates suggest the population in 2016 will only be 162k and thus the reservoir is not yet required.

Based on this information, it not considered prudent for Wyong Shire Council to be undertaking either the design or construction of Kiar Reservoir during the 2014/17 price path. The project may be justified in a future determination period, subject to growth and a revised water supply servicing strategy.

7.8.2. Dissolved Air Flotation Plant to improve water quality

Description of project

Water quality in Mardi Dam has been impacted by the increased pumping regime associated with the Mardi to Mangrove Transfer project. The completion of the transfer station has allowed larger pumping rates whilst the Wyong River has large flows. This increased pumping rate results in additional turbidity in Mardi Dam and a resultant deterioration in the quality of raw water to Mardi Treatment Works.

Consultants SKM produced a report in 2008 recommending a 160ML/day (MLD) Dissolved Air Flotation (DAF) plant be constructed between the river off-take and Mardi dam at an estimated cost of $17.6M. The $17.6M dollar option was preferred over a cheaper $9.8M option of installing a 160MLD DAF plant in the existing Mardi WTP on the grounds that the additional costs are warranted by improvements in the dam water quality (not treated water quality) and the flexibility to use the DAF in a pre or post treatment capacity.

Consultants GHD produced a report in 2011 suggesting the SKM report was based on limited data and contained shortcomings. The GHD report concluded that Phoslock dosing be used to control nutrient and algae in Mardi Dam and recommended a trial period be undertaken to confirm effectiveness. As an interim solution GHD suggested that Mardi WTP be shut down or flow through the plant reduced when turbidity is high. GHD further concluded that additional treatment (DAF or sedimentation) may be required but not until demand from Mardi WTP increased to around 120MD or Mangrove Creek Dam was unable to sustain demand during periods of high turbidity in Mardi Dam.

Drivers/ Justification

Wyong Shire Council has concerns that water produced from the water treatment plant may not meet the Australian Drinking Water Guidelines (ADWG) and therefore is suggesting the project is being driven by mandatory standards.

Options Assessment/ Solution development

Numerous options have been explored and documented in the SKM report of 2008 and the GHD report of 2011. The GHD report identified both long term and interim solutions to avoid/defer large capital expenditure where possible.

Project Delivery

Wyong Shire Council is forecasting the detailed design of a $20M DAF plant, at a cost of $1.M in the 2014/17 price path, with construction anticipated to follow in the 2018/21 price path.

Cost Summary

Wyong Shire Council has allowed $0.7M over the 2014/17 price path for the detailed design of a DAF plant assuming that an additional $0.7M would be provided by GCC under the JWS agreement. Expenditure has been estimated as 7% of the estimated cost of the DAF plant, which is considered reasonable.

Table 32: Summary of proposed expenditure for DAF detailed design ($'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
Detail design of DAF Plant	-	-	350	350	700

Source: Sourced from SIR

Assessment of Prudence and Efficiency

GHD recommended that potential water quality issues could be managed through flow reduction (or temporary isolation) of the Mardi WTP. These recommendations have been accepted by Wyong Shire Council as an interim solution and are currently being applied. We consider additional investigation should be undertaken to better understand the suitability of maintaining this management strategy as a long term solution with consideration given to the total system redundancy now provided as a result of interconnection with GCC.

The following are extracts from GHD report[82]:

> '*If in the future these operational measures are not possible, for example, if Mangrove Creek Dam was at a low level and Mardi WTP demands had increased to around 120 ML/d then additional treatment would need to be provided at Mardi WTP.'*

And

> *'If these operational measures were considered to be acceptable initially, then significant capital expenditure would be delayed or avoided. Additional treatment could be provided at Mardi WTP at some time in the future if it becomes necessary.'*

WSC's Average Day demand (ADD) is currently 34MLD and expected to reach 71MLD by 2050; both are significantly below the threshold level for trigging an upgrade (120MLD) as indicated by GHD.

It is not seen as prudent or efficient for Wyong Shire Council to undertake the design of a DAF plant during the 2014/17 price path. The project may be justified in a future determination period pending additional investigations into both water quality at Mardi WTP and water security of the future CCWC.

82 GHD - Mardi to Mangrove Link Project WP 05 - Water Quality Strategy Report, 2011

Deferral of this project from Wyong Shire Council's 2014/17 price path will result in the deferral of an equivalent value from GCC's 2014/17 price path as the project was proposed for joint funding under the JWS.

In response to the draft report, Wyong Shire Council provided comments (see Appendix A) claiming that OGW's rejection of all allowance to address water quality issues is unreasonable.

OGW note that Wyong Shire Council has already engaged consultants SKM to undertake water quality monitoring and assess interim upgrade options. Table 36 summarises Wyong Shire Council's anticipated water quality expenditure following the removal of the DAF design from the 2014/17 determination period. OGW believe this allowance is reasonable and will allow WSC to undertake necessary modelling and planning work and develop a sustainable solution.

Table 33: Proposed Water Quality Strategy ($'000 real 2013)

Driver	2013/14	2014/15	2015/16	2016/17	Total
Water Quality Strategy	75	75	-	-	150
Work from WQ Strategy(Short Term)	-	500	500	500	1,500
WSC total expenditure	75	575	500	500	1,650
Total JWS expenditure	150	1,150	1,000	1,000	3,300

Source: Sourced from SIR

7.9. Assessment of Proposed Wastewater Capital Expenditure

Table 34 provides an overview of proposed wastewater expenditure over the 2014/17 determination period.

Table 34: Proposed Wastewater Expenditure ($'000 real 2013)

Driver	2013/14	2014/15	2015/16	2016/17	Total
Asset Service Reliability	6,879	5,069	3,859	2,969	18,776
Growth	8,140	10,380	9,840	9,660	38,020
Mandatory Standards	500	500	525	525	2,050
Discretionary Standards	-	-	-	-	-
Total	**15,519**	**15,949**	**14,224**	**13,154**	**58,846**

Source: Sourced from SIR

As can be seen from the proposed wastewater expenditure large expenditures are proposed for asset service reliability. OGW have noted the submission by the EPA with respect to surveillance and renewal of wastewater assets and consider the allowances for asset service reliability proposed by Wyong Shire Council are consistent with the intent of EPA's submission.

To assist in the assessment of the efficiency and prudence of the proposed wastewater capital expenditure, two projects were chosen for review being Charmhaven STP and Toukley sludge lagoons. The first is predominantly growth related, whilst the second is driven by the need to meet mandatory standards.

7.9.1. Charmhaven STP

Description of project

The augmentation of Charmhaven STP is required to service the Warnervale Release Area and will increase the nominal capacity of the plant from 40,000 EP to 60,000 EP through the construction of a third aeration tank.

Development in the Warnervale release area was delayed for various reasons, and as a result the project did not progress past the Investigation and Design phase during the 2010/13 determination period as originally proposed.

WSC periodically reviews the current load at Charmhaven STW in conjunction with population projections to determine if preconstruction activities need to commence or if the project should be deferred and reviewed again in the future.

The most recent review was undertaken by WSC in August 2012 and concluded that:

- The existing plant at Charmhaven has sufficient capacity for approximately an additional 10,000 residents;
- That a review of the loading on the STW should be carried out every 18 months to determine a better estimate for the required timing of the amplification;
- It is unlikely that the amplification will be required prior to 2017, and
- Accepting an additional 2MLD of mine water will have negligible impact on operations of the Charmhaven STW

Drivers/ Justification

The sole driver for upgrading Charmhaven STP is growth.

Options Assessment/ Solution development

Minimal information was provided.

Project Delivery

Cardno Pty. Ltd. was engaged to develop a design for the augmentation in May 2004 and the DoC was engaged to Project Manage the delivery in 2006. The project was not undertaken.

To date, only the Investigation and Design (including tender documentation) phase of the project has been completed. When an annual loading review of plant identifies the need to commence pre-construction activities sometime in the future, Wyong Shire Council has indicated that a business case for construction of the plant will be produced in line with Council's capital works initiation procedures.

Cost Summary

Wyong Shire Council is proposing the following annual expenditure.

Table 35: Proposed expenditure for the Charmhaven STP project ($'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
Charmhaven STP	-	-	5,500	7,000	12,500,

Source: Sourced from SIR

Assessment of Prudence and Efficiency

The STP has both hydraulic and biological capacity to accept an additional 10,000 Equivalent Persons (EP) i.e. the existing plant is only operating at 75% capacity.

Growth over the entire WSC LGA between 2012 and 2017 is expected to be ~7,000 EP and not all of this growth will occur in the Charmhaven STP catchment. Shire wide growth estimates are summarised in the table below.

Table 36: Population projections

	2012	2017	2031
2012 Population Projection (.id)	154,966	162,045	203,449

Source: Sourced from SIR

As growth over the 2014/17 determination period will not exceed the current capacity of the STP, it is not seen as prudent or efficient for Wyong Shire Council to upgrade Charmhaven STP during the 2014/17 price path. The project may be justified in a future determination period subject to growth. It is recommended that Wyong Shire Council continue to undertake periodic assessments of the STP loading and defer the project until growth requires the works be undertaken.

7.9.2. Toukley Sludge Lagoons

Description of project

The site adjacent to the Toukley Sewage Treatment Works was historically used by Council as a landfill site with operations ceasing many years ago. Council has a Landfill Site Rehabilitation Program for all disused landfill sites in the Local Government Area. Investigations as part of the landfill rehabilitation program has identified a potential ammonia leak from the Toukley STW site to the adjoining lake.

Groundwater monitoring (Golder Associates, 2012) has implied that one (or both) of the existing sludge lagoons at Toukley STW may be leaking. This project is still in the investigation phase and as such a business case has not been prepared or solution identified.

Council's waste unit will be completing remediation of the former landfill site immediately downstream of the sludge lagoons commencing 2015/16 as part of a Remediation Action Plan (RAP) prepared for the site. Rectification of the sludge lagoons is required prior to this date to allow time for additional monitoring to verify the source of contamination has been removed (if not the landfill site remediation will require a higher spec treatment).

Drivers/ Justification

This project has the following key drivers;

- Asset Service Reliability – Return the Toukley sludge lagoons to a serviceable state.
- Mandatory Standards – Reduce environmental impacts from Toukley STP. Once the STP is confirmed as the pollution source this will be required from the regulator (EPA).

Options Assessment/ Solution development

Pending confirmation that the STP is actually the pollution source, Wyong Shire Council intends to investigate numerous options including;

- Relining the existing sludge lagoons, and

- The installation of alternate sludge dewatering facilities to allow the elimination of the sludge lagoons.

Project Delivery

The procurement methodology has not been finalised however Wyong Shire Council has advised that it will consider factors such as:

- The possible existence of latent conditions with an old facility;
- The high risks of these latent conditions;
- The high risks of an operational site;
- The need to have close cooperation with operations at the site, and
- The best party to accept the risks.

Cost Summary

Wyong Shire Council is proposing the following annual expenditure;

Table 37: Proposed expenditure for the Toukley sludge lagoon project ($'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
Toukley Sludge Lagoons	-	800	200	-	1,000

Source: Sourced from SIR

Assessment of Prudence and Efficiency

The prudency and efficiency of this project is difficult to comment on as a preferred solution is yet to be identified. However, based on information provided, the problem has been clearly defined, justified drivers exist for undertaking remedial works and Wyong Shire Council is progressing through the investigation and options assessment in a logical way.

The budget allowance of $1M has been based on a preliminary estimate of the lowest cost solution (relining the existing lagoons) to address the most probable cause (leakage from the southern sludge lagoon).

The allowance of a provisional sum to undertake remedial works is seen as prudent given the problem and drivers and the value of the allowance appears reasonable.

7.10. Assessment of Proposed Stormwater Capital Expenditure

Table 38 provides an overview of proposed stormwater expenditure over the 2014/17 determination period.

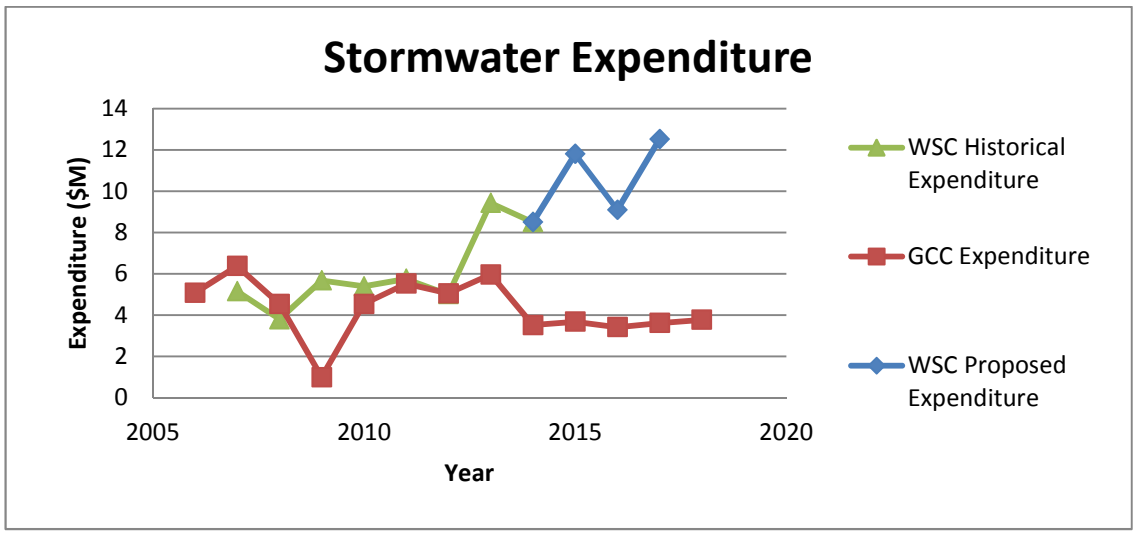
Table 38: Proposed Stormwater Expenditure ($'000 real 2013)

Driver	2013/14	2014/15	2015/16	2016/17	Total
Asset Service Reliability	-	-	-	-	-
Growth	275	4,247	2,549	5,473	12,544
Mandatory Standards	-	-	-	-	-
Discretionary Standards	8,225	7,550	6,550	7,050	29,375
Total	**8,500**	**11,797**	**9,099**	**12,523**	**41,919**

Source: Sourced from SIR

The following graph compares WSC's and GCC's stormwater expenditure (both historical and proposed).

Figure 30: Comparison of long-term storm water expenditure



Source: Sourced from SIR

It can be seen that Gosford City Council and Wyong Shire Council's stormwater budgets have historically trended together around $5M per annum. Wyong Shire Council proposes to increase spending in 2012/13FY to $9.4M with the annual figure increasing progressively to $12.5M in the 2016/17FY.

To assist in the assessment of the prudency and efficiency of the proposed stormwater capital expenditure, one project was chosen for review being the '*Unallocated Projects*'.

7.10.1. Unallocated Projects - to be confirmed

Description of project

Stormwater capital funding has historically been allocated for either:

1) Drainage capital works (these are generally upgrades) undertaken in conjunction with the roads rehabilitation/renewal/upgrade programme to achieve synergies and to maximise the life of newly constructed pavements, or

2) Drainage capital works to alleviate flooding (upgrades or more often new works).

Wyong Shire Council maintains a register of known stormwater flooding issues which are not attributed to major River or Lake flooding. Councils use a prioritisation system which ranks projects based on the extent of flooding attributed to each issue, problems are scored as follows[83]:

'Category	*Source of Problem*
1)	*Flooding of habitable rooms within buildings or damage to properties.*
2)	*Flooding of non-habitable structures (such as garages) or roadways.*
3)	*Minor safety hazards or flooding of yards.*
4)	*Hazards to properties – e.g. scouring.*
5)	*Drainage maintenance problems.*
6)	*Low priority drainage works'*

Projects are prioritised based on the above categorisation and high priority projects are added to Council's capital works program.

Drivers/ Justification

All unallocated stormwater funding has been justified as discretionary standards.

Options Assessment/ Solution development

Wyong Shire Council has advised that new projects are now rated by an interdisciplinary Project Assessment Team (PAT), according to four key factors derived from council's community strategic vision:

- Economic viability;
- Community benefit;
- Environmental impact, and
- Governance

Each proposed project now receives a '*score*' and a unique quadratic graph ranking the project against Wyong Shire Council's criteria. Following approval by the PAT, approval is sought from Council before proceeding with each stormwater capital works program.

Project Delivery

It is assumed that project delivery will be assessed following the selection of projects and allocation of funds.

Cost Summary

Wyong Shire Council's 2014/17 price submission proposes a total stormwater expenditure of $42M over the 4 years of which $18.5M is yet to be allocated to projects. This is summarised in the table below.

83 WSC, Capital Works Approval Procedure 2009- 2013

Table 39: Comparison between allocated and unallocated stormwater projects ($'000 real 2013)

Project	2013/14	2014/15	2015/16	2016/17	Total
Allocated Stormwater Projects	8,500	5,800	3,100	6,100	23,500
Unallocated projects	-	6,000	6,000	6,500	18,500
Total	8,500	11,800	9,100	12,600	42,000

Source: Sourced from SIR

Assessment of Prudency and Efficiency

Wyong Shire Council has been unable to demonstrate a robust methodology for identifying and planning future stormwater works and for justifying stormwater expenditure. Many of Wyong Shire Council's stormwater projects are undertaken in conjunction with road works and are jointly funded between the stormwater fund and the roads or general fund. No documentation or methodology could be provided explaining how costs are apportioned between the two funds leading to the possibility of misallocation between the two funds.

The detailed review of Minnesota Road Works (Section 7.7.1 of this report) provides evidence of stormwater funding being over generously attributed to predominantly road related works.

Furthermore, Wyong Shire Council has not delivered on proposed expenditure over the past determination period as shown in the table below.

Table 40: Wyong Shire Council's previous record on stormwater delivery ($ real 2013)

	2009/10	2010/11	2011/12
Determination	$10.1M	$8.6M	$8.7M
Actual	$5.8M	$6.0M	$5.1M
Difference	($4.3M)	($2.6M)	($1.7M)
Difference (%)	(42.6%)	(22.4%)	(19.5%)

Source: Sourced from SIR

It is recommended that all allowances for unallocated stormwater funds be removed from this determination period.

In order to demonstrate prudent and efficient expenditure of stormwater funding in future determination periods, it is recommended that Wyong Shire Council:

1. Undertake plans of management for all stormwater catchments. These will not only allow Wyong Shire Council to prioritise and plan future works but will also provide the necessary documentation to enable Wyong Shire Council to apply for both State and Federal Government grants;
2. Develop a policy on the prudent and efficient attribution of funding between stormwater and roads funds when works are undertaken concurrently;
3. Develop an approval process which clearly justifies the spending of stormwater funds on a project by project basis. This should be applied to projects which are solely and partially funded by the stormwater fund.

In response to the draft report, Wyong Shire Council provided extensive comments (see Appendix A) claiming that OGW's recommendation was unjustified and unreasonable.

Council has explained that a large number of projects were added to the flooding register following major flooding in June 2011. Neither the addition of these projects to the register nor the reprioritisation of the register shows any evidence that it is prudent or efficient for WSC to proceed with the works.

With respect to Wyong Shire Council's comment that the $6m in unallocated funding is consistent with expenditure from previous years, OGW refer to Figure 30.

The fact that Wyong Shire Council has now produced a list allocating the '*unallocated*' projects does not demonstrate the prudent and efficient expenditure of stormwater funding in future determination periods.

Wyong Shire Council's comments with respect to distinguishing between stormwater and roads projects and the respective funding allocations are noted. OGW reinforces the recommendations made above regarding WSC's stormwater management, funding and approval process.

7.11. Prudency and Efficiency of Capital Expenditure in Current Price Path

The review of capital water and wastewater expenditure projects in the current price path has found the expenditure to be generally prudent and efficient.

It is recommended that the actual expenditures incurred by Council in the 2009-2013 price path including the projected figures for 2013 be rolled into Council's regulatory asset base apart from:

- $1.7M of the Warnervale Town Centre trunk gravity main
- The full value of the Minnesota road culverts (2.8M est.)

Table 41: Recommendation on Capex to be rolled into RAB ($'000 real 2013)

	2009/10	2010/11	2011/12	2012/13*	Total
WSC Water Capital Expenditure	39,599	40,958	12,158	8,660	101,375
Recommended Water Adjustment	-	-	-	-	0
WSC Wastewater Capital Expenditure	6,412	5,894	5,213	14,730	32,248
Recommended Wastewater Adjustment	-	-	-	-1,700	-1,700
WSC Stormwater capital Expenditure	5,818	5,989	5,155	9,432	26,395
Recommended Stormwater Adjustment	-255	-1	-134	-2,443	-2,833
Capital Recommended to be Rolled into RAB	**51,573**	**52,840**	**22,393**	**28,679**	**155,485**

**Projected*

7.12. Prudency and Efficiency of Capital Expenditure in Future Price Path

The review of the specific water and wastewater projects revealed that a large portion of the expenditure was not prudent. In particular, growth driven projects are able to be deferred based on Council's own population projections. The apparent systemic nature of this issue indicates that there may be a material risk to the prudency around all growth related projects.

In addition to the projects discussed in detail above it is further recommended the Modifications to Mardi Dam Inlet project (2014/17 value $1.0M) be deferred. This project has the same drivers, justification and timing as the DAF plant and the necessity of the works cannot be justified at this stage as a suitable interim solution is available and operating.

Table 42: Modifications to Mardi Dam inlet proposed expenditure ($'000 real 2013)

	2013/14	2014/15	2015/16	2016/17	Total
Modifications to Mardi Dam inlet	100	900	-	-	1,000

Source: Sourced from SIR

It is recommended that the Mardi to Warnervale Trunk Main project (2014/17 value $25M) also be deferred from the 2014/17 determination period. WSC advised that this project has two key drivers one being growth and the second being an overdue contractual agreement with Hunter Water Corporation (HWC). WSC was not at liberty to provide the contractual agreement to Oakley Greenwood however it is understood that IPART has been provided all relevant documentation. Based on the information available to Oakley Greenwood, the growth related drivers are similar in nature and timing to that of Kiar Ridge Reservoir and thus it is not justified to undertake the project during the 2014/17 determination period.

Table 43: Mardi to Warnervale Trunk Main proposed expenditure ($'000 real 2013)

	2013/14	2014/15	2015/16	2016/17	Total
Mardi to Warnervale Trunk Main	500	500	1,000	23,000	25,000

Source: Sourced from SIR

The review of specific stormwater projects has revealed that significant expenditure is not prudent and has highlighted several areas for improvement, including the development of a funding attribution policy and a more robust project justification process.

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

- Removal of the DAF Detailed Design (WSC managed) will result in a $700,000 reduction from each Council's 2014/17 price path.
- Removal of the Mardi dam curtain (WSC managed) will result in a $1,000,000 reduction from each Council's 2014/17 price path.
- Removal of Mangrove Creek Dam Spillway works (GCC managed) will result in a $4,000,000 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 WSC's contribution being reduced to $12,159,000 and GCC's contribution being reduced to $12,142,000.

At present, a significant portion of renewal/replacement works are carried out by Council. 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. The following table summarises the recommendations on capital expenditure for the 2014/17 price path.

Table 44: Recommended capital expenditure adjustments ($'000 real 2013)

Project		2013/14	2014/15	2015/16	2016/17	Total
Kiar Ridge Reservoir	Proposed	100	200	200	7,300	7,800
	Recommended	-	-	-	-	-
	Difference	(100)	(200)	(200)	(7,300)	(7,800)
Dissolved Air Flotation Plant	Proposed	-	-	350	350	1,400
	Recommended	-	-	-	-	-
	Difference	-	-	(350)	(350)	(700)
Modifications to Mardi Dam inlet	Proposed	100	900	-	-	1,000
	Recommended	-	-	-	-	-
	Difference	(100)	(900)	-	-	(1,000)
Mardi to Warnervale Trunk Main	Proposed	500	500	1,000	23,000	25,000
	Recommended	-	-	-	-	-
	Difference	(500)	(500)	(1,000)	(23,000)	(25,000)
Charmhaven STP	Proposed	-	-	5,500	7,000	12,500
	Recommended	-	-	-	-	-
	Difference	-	-	(5,500)	(7,000)	(12,500)
Toukley Sludge Lagoons	Proposed	-	800	200	-	1,000
	Recommended	-	800	200	-	1,000
	Difference	-	-	-	-	-
Unallocated Projects - To be	Proposed	-	6,000	6,000	6,500	18,500
	Recommended	-	-	-	-	-

Confirmed	Difference	-	(6,000)	(6,000,)	(6,500)	(18,500)
Total	**Difference**	**(700)**	**(7,600)**	**(13,050)**	**(44,150)**	**(65,500)**

Table 45: Recommended capital expenditure ($'000 real 2013)

	2013/14	2014/15	2015/16	2016/17	Total
Adjustment to WSC projects	(700)	(7,600)	(13,050)	(44,150)	(65,500)
Adjustment to JWS projects (delivered by GCC)	(125)	(125)	(1,000)	(2,750)	(4,000)
Total Adjustment	(825)	(7,725)	(14,050)	(46,900)	(69,500)
Total adjusted capital program	30,539	31,147	17,471	18,286	97,443
Recommended Efficiency Gain	5%	5%	5%	5%	5%
Recommended Efficiency Gain	(1,527)	(1,557)	(874)	(914)	(4,872)
Recommended Capital Program	**29,012**	**29,590**	**16,598**	**17,372**	**92,571**

8. Outputs measures

The following sections outline the performance 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.

Wyong Shire Council's submission states that:

> *As part of the current pricing determination Council is required to report to IPART on annual performance outcomes against a range of operational and customer indicators.*
>
> *Attached as Appendix 9 is a summary of Council's historic performance against those indicators over the current pricing path from 2009/10 to 2011/12 inclusive and year to date for 2012/13.*

The table is reproduced below.

Figure 31: Output measures from Current Determination

Appendix 9 - Historic Performance against IPART Output Measures

	Output or activity measure	Indicator	2009/10	2010/11	2011/12	2012/13 Cumulative Progress
Water						
1	Water quality	100% compliance with NHMRC monitoring guidelines	Achieved	Achieved	Achieved	Achieved
2	Water quality	100% compliance with NHMRC health guidelines	Achieved	Achieved	Not Achieved*	Not Achieved*
3	Water quality complaints	No more than 5 per 1000 customers annually	Achieved	Not Achieved (17.2)	Not Achieved* (7.6)	Not Achieved* (36.0)
4	Interruptions	Less than 5% of customers have service interrupted (planned or unplanned) that total more than 5 hours in a year	Achieved	Achieved	Achieved	Achieved
5	Water pressure	Water pressure at least 15m for at least 98% of customers on an annual basis	Achieved	Achieved	Achieved	Achieved
6	Customer satisfaction	No more than 15% of customers dissatisfied with the service delivered	Achieved	Achieved	Achieved	Achieved
Sewerage						
7	Effluent Discharges	Effluent discharges to the ocean meet DECC licence conditions 100% of the time	Achieved	Achieved	Not Achieved*	Achieved
8	Wastewater Odours	Less than 1% of properties experience odours on an annual basis	Achieved	Achieved	Achieved	Achieved
9	Wastewater Overflows	Less than 1% of properties experience overflows on an annual basis	Achieved	Achieved	Achieved	Achieved
10	Customer Satisfaction	No more than 5% of customers dissatisfied with the service delivered	Achieved	Achieved	Achieved	Achieved

* See explanation in Section 2.3.1.4

Source: Wyong Council - Submission to IPART 2013 - 2017 - Appendix 9

As is outlined in the above table, whilst Wyong Shire Council has been able to achieve the majority of their proposed service standards, there are a number that have not been (or are unlikely to be) achieved. These are:

- Water quality complaints – 2010 onwards;
- Water quality – 2011 onwards; and
- Effluent discharges – 2011/12.

In its submission, Wyong Shire Council outlines a number of reasons for not complying with these proposed levels of services[84]:

> *'a) The high level of water quality complaints in 2010/11 and the first half of 2011/12 was due to elevated iron and manganese levels. This situation arose during a period when major capital (raw water based) works were being undertaken at, and adjacent to, Mardi Dam. These works necessitated the temporary draw down of Mardi Dam which resulted in higher than usual levels of iron and manganese in the raw water which the Mardi Water Treatment subsequently had difficulty in effectively treating with consequent "pass through" of poor quality water into the distribution system.*
>
> *Water quality complaints in the second half of 2011/12 and also to date have occurred as a result of chlorine dosing to increase chlorine residual levels. This has resulted in precipitation of manganese and some "die off" of biofilm on pipe walls contributing to dirty water. The increase in chlorine dosing was undertaken in consultation with Department of Health.*
>
> *b) Non compliance of microbiological water quality in relation to Australian Drinking Water Guidelines arose out of a single scheduled sample failure in March 2012 where a single E Coli organism was detected. As this output is measured on a YTD basis the non compliance will continue into 2012/13. The response to this issue is related to the increased chlorine dosing issue discussed in a) above.*
>
> *c) Non compliance associated with the DECCW effluent discharge licence in 2011/12 was associated with a single sampling failure of effluent discharged by Bateau Bay Sewage Treatment Works. The non compliance was considered to be a technical breach (related to sampling techniques) as effluent quality was not impacted. A subsequent retest confirmed full compliance.'*

Based on the discussion above, it is clear that the increase in water quality complaints has been be driven by a discrete exogenous factor, whilst the other two service level issues were due to one off breaches.

Whilst not condoning the non-achievement of proposed levels of service, it is our view that there has been no systematic reduction in the level of service that was accepted as part of the previous determination process.

8.2. Proposed output measures for the forthcoming determination period

In Appendix 13 of their submission, Wyong Shire Council has outlined their proposed levels of service for a number of discrete performance measures. An extract of that table is contained below.

84 Wyong Council - Submission to IPART 2013 - 2017 - page 14

Figure 32: Proposed output measures from Forthcoming Determination

Table 1: Proposed output measures for next Determination period

NWI Indicator		Output or activity measure	Indicator of activity by 2015/16	Comments
		Water		
C9	1	Water quality complaints per 1000 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 1000 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
		Sewerage		
	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: Wyong Council - Submission to IPART 2013 - 2017 - Appendix 13

Broadly, we consider that the overarching approach to defining the values that are ascribed to each of that 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 Wyong Shire Council has revealed the efficient costs associated with delivering existing levels of service. We also note that no material change in costs is being proposed by Wyong Shire Council to provide enhanced levels of service, which again reinforces the reasonableness of extrapolating current levels of service.

Notwithstanding the above, taken on face value, the above table indicates that Wyong Shire Council is proposing to remove a number of service level measures that have previously been reported against. In particular, measures of '*customer satisfaction*' and '*water pressure*' have, based on the above table, not been proposed. We further note that there is not proposed measure for the '*retail*' (or '*customer experience*') component of service delivery (e.g., time taken to answer phone calls). 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.

In its response to the draft report, Wyong Shire Council stated that[85]:

> *'It appears that Oakley Greenwood may have misunderstood the reason for the suite of proposed output measures outlined in Appendix 13. Attention is drawn to Section 2.4 of Council's price submission which outlines the justification for the proposed measures.'*
>
> *'As the intent of the proposed output measures is to give IPART a "snapshot" or overview of some of the more high level agency performance and service levels it is not practical to include all indicators.'*

It is noted that Section 2.4 of the Council's submission states the following[86]:

> *'Gosford City Council has recently completed a Master Planning Process to review a range of operating issues such as asset performance standards, water quality etc. with a view to developing a future strategy for the provision of water and sewerage services in the Gosford LGA.*
>
> *The Master Planning Process recognises that the CCWC will be subject to an Operating Licence similar to those for Sydney and Hunter Water Corporations.*
>
> *With the imminence of the CCWC, Wyong Council also participated in the Master Planning Process and in the development of the outcomes.*
>
> *As part of the Master Planning process a project team specifically reviewed and analysed current Levels of Service (LOS) and developed a suite of proposed LOS for the CCWC.*
>
> *A summary of the proposed LOS and associated explanation is included as Appendix 13. It is proposed that both Councils adopt these LOS for the next pricing path.*
>
> *It is recommended that IPART adopt these LOS to form the basis of the Output Measures for each Council for the next price path.'*

The following figures are extracts from the Master Plan.

85 OGW Report - Response_v2_141112.doc

86 Wyong Council - Submission to IPART 2013 - 2017 - pg 26

Figure 33: Performance Targets in Master Plan - Water

Table 3-4 Water System Service Performance Targets

Performance Criteria	2010/11 Gosford Result	2009/10 NWI Benchmark (median) * denotes NOW benchmark	Current LoS	Future LoS by 2021	Commentary
Water quality complaints per 1000 properties	9	3	20	5 (3 at 2051)	Performance significantly improved in 2010/11 from 39 the previous year to 9. The future LoS target is within the 50 percentile band of the peer data set.
Average Duration of Unplanned Interruption – water (minutes)	222	115	Not specified	230	Primarily an operational driver. Improvement in data quality necessary, before a change in target could be considered.
Average Frequency of Unplanned interruption – water (no. per 1000 properties)	222	114	Not specified	150	Consistent with improvement in water main break frequency The median of peer data at 2009/10 is 114.
Microbiological Compliance (98% of samples -no E-Coli)	100	100*	100	100	Regulatory requirement - ADWG
Chemical Compliance (95% of results less than Guideline)	100	100*	100	100	Regulatory requirement - ADWG
Minimum Water Pressure (metres at property connection)	Not applicable	Not applicable	12	12	Small number of customers below 20 m head.
Water main breaks (per 100 km of water main)	30	21	10 (target)	20	Consistent with the decision to improve performance on interruption frequency, water main break frequency. The current target of 10 has not been achievable historically.
Calculated Annual Real Losses –water (L/service connection/ day)	52	52			

Source: Report for Gosford City Council - Water and Sewer Master Plan 21

Figure 34: Performance Targets in Master Plan - Wastewater

Table 4-5 Sewerage System Service Performance Targets

Performance Criteria	2010/11 Gosford result	2009/10 NWI Benchmark (median) * denotes NOW benchmark	Current LoS	TARGET LoS by 2021	Commentary
Sewage Overflows per 100 km main	39	15* HWC – 75 (05/10) SWC - 64 (07/08)	30	30	Total number of overflows = 488. Levels of service to be reviewed following coastal carrier upgrade.
No overflows from pumping stations in dry weather			0	0	Regulatory requirement for pumping stations built after 2004.
Sewerage mains breaks and chokes (per 100 km of sewer main)	42 (5 year average of 39)	44	12	35	Consistent with performance expectation on overflow performance LoS.
Odour Complaints per 1000 properties	1.2	0.6*	2	1	Some significant septicity issues, resulting in premature failure of assets. Significant works are underway which are expected to drive an improvement.

For more detailed information on the development of future levels of service for the Master Plan, refer to Appendix A TM01 – Levels of Service.

Source: Report for Gosford City Council - Water and Sewer Master Plan 41

We note that the Master Plan covers one of the issues that we raised in our draft report, namely, levels of service around minimum water pressure, however no mention is made of overall customer satisfaction or any measure of retail services. It is likely that this is a function of the scope of the Master Plan document. We consider that all are important measures of service for a prudent and efficient water and wastewater service provider, and even if Wyong Shire Council is currently delivering high levels of service as measured against these service attributes, they should be either reinstated (e.g., 'Customer Satisfaction') or installed (e.g., measures of retail service).

In the case of the latter, we note that the Essential Services Commission in Victoria has recently released a position paper[87] that outlines the proposed service indicators that water businesses in Victoria will be measured against. This includes measures such as '*percentage of calls connected to operator within 30 seconds*' and '*average time taken for call to be connected to operator*'.

In summary, we recommend that Wyong Shire Council's proposed levels of service, as outlined in Appendix 13 of their submission (and reproduced in Figure 32) be accepted, subject to the following inclusions:

- 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, with this metric broadly reflecting current levels of service[88];

87 Essential Service Commission - Review Of Water Performance Report Indicators Final Report - August 2012

88 IPART NSW water utilities performance, 2010/11 - page 112

- Percentage of telephone calls answered within 30 seconds of no less than 80%, which, whilst below the national average[89] for utilities of the size of Wyong Shire Council, is slightly above Wyong Shire Council's near term historic performance[90], but within the range that is has achieved in the current regulatory control period.

Table 46: Recommended Output Measures

Service	Output or activity measure	Indicator of activity by 2015/16*
Water	Water quality complaints per 1000 properties	9.9
	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 Wyong Shire Council*

89 National Water Commission | National Performance Report 2010-11 | Urban water utilities - page 84

90 For example, IPART Performance of NSW metropolitan water utilities, 2009/10 page 50 notes that 2008/09 performance was 92%, however this reduced to 65% in the following year.

9. Conclusions

In assessing the historical expenditure and forecasts expenditure that have been provided by the businesses, our threshold test has been to provide a considered opinion as to whether we believe the proposed expenditures 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 Wyong Shire 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 Wyong Shire Council, have to spend that amount of money, or utilise the chosen procurement method, to undertake that proposed program or project.

Having regard to the above, there is no data that would lead us to conclude that Wyong Shire Council's historical water and wastewater 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 Wyong Shire Council over the period. In particular, Wyong Shire Council performs reasonably well 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.

However, our review of Wyong Shire 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 Wyong Shire Council's proposed operating expenditure forecasts.

Table 47: Recommended Changes to Assumptions Underpinning Proposed Operating Expenditures

Operating Expenditure Component	Recommended Change
Corporate overheads	■ The allocation methodology that is used to derive 2013 corporate costs revert back from the proposed "proportion of operating expenditure" approach to the current approach. ■ The proposed increase in corporate costs between 2012 and 2013, which is primarily driven by the assumption that currently vacant positions will be filled, be removed, and instead, the labour component of the 2013 corporate costs be based on 2012 labour costs, inflated by the recommended labour cost escalator. In the absence of the detailed derivation of this cost escalator, a cost escalation rate should be estimated based on customer growth. ■ That a number of specific accounts be removed from the overall corporate cost pool that is in turn allocated back into the water and wastewater business, as they do not relate to the provision of water and wastewater

	services.
Starting 2013 Costs	▪ The proposed increase in water and drainage labour costs between 2012 and 2013, which is primarily driven by the assumption that currently vacant positions will be filled, be removed, and instead, 2012 water and drainage labour 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; ▪ All other categories of drainage costs incurred in 2012 should also be inflated the cost and growth escalators recommended in this report; ▪ Expenditure on Road Opening Fees be reduced to $100k per annum, from $350k that is currently contained in the AIR, consistent with Wyong Shire Council's historic expenditure; ▪ The amount of Licence Fees for 2013 and 2014 be reduced to reflect the figures contained in the Figure 17 (converted to real $2012/13), and the same growth percentage growth rate as is currently assumed be used to obtain forecasts for the remainder of the forthcoming regulatory period.
Real cost escalators	▪ The magnitude of Wyong Shire Council's real cost escalators be accepted, except for the electricity price rise. Instead, this should reflect the most recent forecasts provided by AEMO;
Growth Escalators	▪ That Wyong Shire Councils proposed growth escalator be rejected, rather, we recommend that instead of applying this escalator to all costs other than labour, electricity and 'one off' items, this escalator should only be applied to 'materials' and 'electricity'.
Step Changes	▪ That the step changes pertaining to 'Bushfire & boundary clearing - Mannering Park'; 'Bushfire & boundary clearing - Charmhaven'; 'Bushfire & boundary clearing - Gwandalan'; and 'Site Preventative Maintenance' be removed; ▪ That an additional Step Change pertaining to changes in the POE Act be included; and ▪ The CCWC Establishment Costs that are allocated back into the water and wastewater business should revert back to that 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.

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

Table 48: Forecast versus Recommend Operating Expenditure Forecasts ($'000 real 2013)

Operating Expenditure Component[91]	2013/14	2014/15	2015/16	2016/17	Total
Corporate					
Forecast	13,689	13,715	13,835	13,910	55,150
Recommended	10,661	10,715	10,768	10,822	42,966
Water					
Forecast	16,665	16,136	16,268	16,151	65,221
Recommended	14,948	14,363	14,450	14,566	58,327
Wastewater					
Forecast	15,554	16,112	16,503	16,577	64,746
Recommended	15,099	15,364	15,666	15,603	61,732
Drainage					
Forecast	2,601	2,532	2,465	2,417	10,015
Recommended	2,355	2,367	2,380	2,392	9,494
Total					
Forecast	**48,509**	**48,495**	**49,071**	**49,056**	**195,131**
Recommended	**43,064**	**42,808**	**43,264**	**43,383**	**172,519**
% Reduction	(11.225%)	(11.728%)	(11.835%)	(11.564%)	(11.588%)

Source: AIR; 'Wyong Model of Forecasts - Final.xls

The review of capital water and wastewater expenditure projects in the current price path has found the expenditure to be generally prudent and efficient. However, it is recommended that the actual expenditures incurred by Council in the 2009-2013 price path including the projected figures for 2013 be rolled into Council's regulatory asset base apart from:

- $1.7M of the Warnervale Town Centre trunk gravity main
- The full value of the Minnesota road culverts (2.8M est.)

91 All forecast figures have been estimated based on our own modelling, and exclude water purchases from Hunter Water. All forecasts also exclude any additional reimbursements that may be required to be paid to Gosford City Council under the JWS, which have not otherwise been forecast as part of the original submission.

Table 49: 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	9,382	39,599	40,958	12,158	8,660	110,757
Recommended Water Adjustment	-	-	-	-	-	-
Water capital expenditure to be rolled into RAB	**9,382**	**39,599**	**40,958**	**12,158**	**8,660**	**110,757**
Actual/forecast Wastewater Capital Expenditure	3,887	6,412	5,894	5,213	14,730	36,136
Recommended Wastewater Adjustment	-	-	-	-	-1,700	-1,700
Wastewater capital expenditure to be rolled into RAB	**3,887**	**6,412**	**5,894**	**5,213**	**13,030**	**34,436**
Actual/forecast Stormwater capital Expenditure	6,314	5,818	5,989	5,155	9,432	32,708
Recommended Stormwater Adjustment	-	-255	-1	-134	-2,443	-2,833
Stormwater capital expenditure to be rolled into RAB	**6,314**	**5,562**	**5,988**	**5,022**	**6,989**	**29,875**
Total growth capital expenditure to be Rolled into RAB	15,876	41,335	39,612	11,666	17,667	126,155
Total recommended capital expenditure to be Rolled into RAB	**19,583**	**51,573**	**52,840**	**22,393**	**28,679**	**175,068**

**Projected*

Further to the above, the review of the specific water and wastewater projects revealed that a large portion of the expenditure was not prudent. In particular, growth driven projects are able to be deferred based on Council's own population projections. The apparent systemic nature of this issue indicates that there may be a material risk to the prudency around all growth related projects.

The review of specific stormwater projects has revealed that significant expenditure is not prudent and has highlighted several areas for improvement, including the development of a prudent and efficient funding attribution policy and a more robust project justification process.

At present, a significant portion of renewal/replacement works are carried out by Council. 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. The following table summarises the recommendations on capital expenditure for the 2014/17 price path.

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

- Removal of the DAF Detailed Design (WSC managed), which will result in a $700,000 reduction from each Council's 2014/17 price path.
- Removal of the Mardi dam curtain (WSC managed), which will result in a $1,000,000 reduction from each Council's 2014/17 price path.
- Removal of Mangrove Creek Dam Spillway works (GCC managed), which will result in a $4,000,000 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 WSC's contribution being reduced to $12,159,000 and GCC's contribution being reduced to $12,142,000.

The following tables outline that the changes that we recommend be made to Wyong Shire Council's capital expenditure forecasts.

Table 50: Recommended capital expenditure adjustments ($'000 real 2013)

Project		2013/14	2014/15	2015/16	2016/17	Total
Kiar Ridge Reservoir	Proposed	100	200	200	7,300	7,800
	Recommended	-	-	-	-	-
	Difference	(100)	(200)	(200)	(7,300)	(7,800)
Dissolved Air Flotation Plant	Proposed	-	-	350	350	700
	Recommended	-	-	-	-	-
	Difference	-	-	(350)	(350)	(700)
Modifications to Mardi Dam inlet	Proposed	100	900	-	-	1,000
	Recommended	-	-	-	-	-
	Difference	(100)	(900)	-	-	(1,000)
Mardi to Warnervale Trunk Main	Proposed	500	500	1,000	23,000	25,000
	Recommended	-	-	-	-	-
	Difference	(500)	(500)	(1,000)	(23,000)	(25,000)
Charmhaven STP	Proposed	-	-	5,500	7,000	12,500
	Recommended	-	-	-	-	-
	Difference	-	-	(5,500)	(7,000)	(12,500)

Toukley Sludge Lagoons	Proposed	-	800	200	-	1,000
	Recommended	-	800	200	-	1,000
	Difference	-	-	-	-	-
Unallocated Projects - To be Confirmed	Proposed	-	6,000	6,000	6,500	18,500
	Recommended	-	-	-	-	-
	Difference	-	(6,000)	(6,000,)	(6,500)	(18,500)
Total	**Difference**	**(700)**	**(7,600)**	**(13,050)**	**(44,150)**	**(65,500)**

Table 51: Recommended capital expenditure ($'000 real 2013)

	2013/14	2014/15	2015/16	2016/17	Total
Adjustment to WSC projects	(700)	(7,600)	(13,050)	(44,150)	(65,500)
Adjustment to JWS projects (delivered by GCC)	(125)	(125)	(1,000)	(2,750)	(4,000)
Total Adjustment	(825)	(7,725)	(14,050)	(46,900)	(69,500)
Total adjusted capital program	30,539	31,147	17,471	18,286	97,443
Proposed Efficiency Gain	5%	5%	5%	5%	5%
Proposed Efficiency Gain	(1,527)	(1,557)	(874)	(914)	(4,872)
Proposed Capital Program	**29,012**	**29,590**	**16,598**	**17,372**	**92,571**

With regards to the output measures that have been proposed by Wyong Shire Council for the forthcoming regulatory period, 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 Wyong Shire Council has revealed the efficient costs associated with delivering existing levels of service. We also note that no material change in costs is being proposed by Wyong Shire Council to provide enhanced levels of service, which again reinforces the reasonableness of extrapolating current levels of service.

Notwithstanding the above, it appears that Wyong Shire Council is proposing to remove a number of service level measures that have previously been reported against. In particular, measures of '*customer satisfaction*' and '*water pressure*' have not been proposed in the submission itself. We further note that there is not proposed measure for the '*retail*' (or '*customer experience*') component of service delivery (e.g., percentage of phone calls answered within 30 seconds). 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.

We consider that all are important measures of service for a prudent and efficient water and wastewater service provider, and even if Wyong Shire Council is currently delivering high levels of service as measured against these service attributes, they should be either reinstated (e.g., 'Customer Satisfaction') or installed (e.g., measures of retail service).

In summary, we recommend that in addition to the measures proposed by Wyong Shire Council in Table 1 of Appendix 13 of their submission, 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; and
- Percentage of telephone calls answered within 30 seconds of no less than 80.

Table 52: Recommended Output Measures

Service	Output or activity measure	Indicator of activity by 2015/16*
Water	Water quality complaints per 1000 properties	9.9
	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 Wyong Shire Council*

Appendix A: WSC Comments on Section 7 Capital Expenditure

7.1 Asset Management Framework

Wyong Council acknowledges that an area for improvement is a more robust assessment of total life cycle costs to guide renewal decisions. We note the comments made by OGW regarding renewal/maintain decisions being made on a cost basis. Whilst not disputing the need for cost/benefit analysis, we note that renewal decisions are also driven by customer service parameters.

7.1.1 Asset Classification

No comment made.

7.2 Capital Planning and Project Prioritisation

Council uses the most relevant population forecasts available when planning for future growth projects. During the interview period Council received access to updated draft population forecasts prepared by Council's consultant. This updated forecast has confirmed that the population triggers for Kiar Ridge Reservoir and Charmhaven Sewage Treatment Plant (STP) will not be reached during the next price path.

As discussed during the interview period, Council annually assesses the performance of Charmhaven STP to update the estimated time for augmentation and ensure works start early enough to account for the long lead time associated with the construction of the plant. The timing of this augmentation may also be impacted by developments in the coal industry on the Central Coast.

Council also plans to undertake additional hydraulic modelling during the next determination period, based on the updated population forecasts, to assess the required scope and timing of major capital works.

Growth related upgrades to Sewage Pump Stations (SPS) are based on runtime information obtained from Council's SCADA system. This identifies growth associated with infill development, while upgrades associated with greenfield development are identified through the Development Application (DA) process.

7.3 Procurement and Delivery Systems

We would argue that the use of day labour for extensions, connections and small capital projects is in accordance with normal industry practice. Further, maintaining some level of self perform capability is a prudent business strategy.

7.4 Long Term (10 Year) Investment Plan

Although the last formal DSP reports were prepared in 2006, population and expenditure forecasts were updated for this pricing review.

7.5 Assessment of Historical Water Capital Expenditure

As noted above, revised population forecasts were received over the course of the interview period.

7.5.1 Increase Transfer Capacity from Mardi Dam to Mardi WTP

No comment made.

7.5.2 Replacement of unlined fittings and corroded tapping bands

Drivers Justification

The funding request form described relates to a watermain that experienced a series of progressive breaks in a commercial district which resulted in significant consequential damages. The project was given an urgent priority and as a result the documentation was limited.

We note that the fitting and tapping band replacement program is undertaken by day labour resources and allows the peaks in maintenance and repair work to be addressed. The under expenditure in this program resulted from a need to divert resources to operation and maintenance work and reinforces the need to fill existing staff vacancies as discussed in our comments on section 6.3.2 of the OGW report.

7.6 Assessment of Forecast Water Capital Expenditure

No comment made.

7.6.1 Kiar Ridge Reservoir

Assessment of prudency and efficiency

Council undertook its own comparison of the population projections used in the Department of Commerce modelling and those contained in the recently released figures by .id consulting. The population trigger for construction of Kiar Ridge reservoir will not be reached during the next determination period and the deferral of this project to a future price path will not be disputed. As outlined above, Council will undertake additional hydraulic modelling based on updated population forecasts to confirm the required scope and timing of major capital works.

7.6.2. Dissolved Air Flotation Plant to improve water quality

The use of Phoslock is untested method of improving water quality and the approval to use Phoslock would rest with the Office of Water and Environmental Protection Authority.

We note that there have been water quality issues in Mardi Dam and at Mardi Water Treatment Plant associated with the commissioning of the Mardi to Mangrove Transfer System. SKM has been engaged to undertake water quality modelling and assess interim upgrading options. Obtaining data on water quality issues has been compounded by the recent dry weather which has not allowed high flow transfers of water to the dam. Some augmentation of the treatment plant is likely to be required, however insufficient investigation and scoping work has been completed to put forward definitive project proposals. The DAFF plant was proposed as this is one of the likely options. We can understand OGW stating that there is insufficient justification for the DAFF plant itself, however some level of investigation and preconstruction funds will be required to address water quality issues, and these will be of the order of magnitude of the costs put forward in our submission. OGW, however, are proposing that no allowances be made to enable Council to address water quality issues. We believe that OGW's rejection of all allowances to address water quality issues is unreasonable.

7.7 Assessment of Historical Wastewater Capital Expenditure

No comment made

7.7.1 Warnervale Town Centre

Assessment of prudency and efficiency

Council agrees that there were issues associated with the cost of project management and design of this project. However, the general allowance of 10% for design and 12% of design for project management is not considered applicable to a project of this nature.

The alignment of the gravity main was required to cross several parcels of privately owned land which has not yet been rezoned or subdivided. An easement was also obtained along the alignment which limits the future development potential of the subject land. The management of the design process required extensive stakeholder consultation and required the balance of constraints including flood zones, ecology, development potential of private land and constructability/cost efficiency of the final design. We assert that the full preconstruction expenditure should be included in the RAB.

7.7.2 Bateau Bay Inlet Works

No comment made.

7.8 Assessment of Forecast Wastewater Capital Expenditure

No comment made.

7.8.1 Charmhaven Sewage Treatment Plant

Assessment of prudency and efficiency

Following the receipt of the updated population forecasts, Council does not dispute the deferral of this project to a future price path. However if a high growth scenario were to occur, and Council's programmed analysis of the plants performance showed augmentation was required, Council would need to commence construction. With cost recovery occurring during the next price path.

7.8.2 Toukley Sludge Lagoons

No comment made.

7.9 Assessment of Historical Stormwater Capital Expenditure

Capital Works Approval Procedure 2009 - 2013

The report raises concerns with the justification process for stormwater projects. It is considered however that the report does not adequately consider and subsequently accurately reflect the true situation. The following provides further information in response to the issues raised in the report to enable the necessary consideration to be made.

As reported previously as part of both the current review and prior year determinations, drainage capital works funding has historically been allocated based on two priorities:

1 Drainage capital works (these are generally upgrades) are undertaken in conjunction with the roads rehabilitation/renewal/upgrade programme to achieve synergies on construction between works (noting >90% of drainage infrastructure is in the road corridor) and to maximise the life of newly constructed pavements.

2 Drainage capital works to alleviate flooding (upgrades or more often new works).

When determining which areas will receive funds for drainage capital works they are prioritised in the following order.

Category: Source of Problem

1 Flooding of habitable rooms within buildings or damage to properties.

2 Flooding of non-habitable structures (such as garages) or roadways.

3 Minor safety hazards or flooding of yards.

4 Hazards to properties – e.g. scouring.

5 Drainage maintenance problems

6 Low priority drainage works.

Over the years Council has given priority to progressively reducing the number of buildings subject to local stormwater flooding by other than lake and major river flooding i.e. priority to Category 1 and 2 flooding. A database exists of all category 1 & 2 locations over past decades. Council staff constantly review this database to identify the currency of the ranking and complete engineering investigation and design briefs for relevant projects.

The stormwater capital works approval procedure for the period 2009 – 2013, as per previous IPART determination periods, consisted of Council staff creating the capital works program based on the above philosophy and the elected Council would provide the final approval of the proposed program as part of the annual Strategic Planning Process.

Current Capital Works Approval Procedure

Currently the stormwater capital works program is developed in draft form based on the same philosophy as above.

However, in 2011/2012, a new model for project assessment was implement and formally adopted by Council. All new capital works projects/programs over $100K are required to go through Councils new project justification process, including all stormwater projects.

All new projects are now rated by an interdisciplinary Project Assessment Team (PAT), according to a quadruple index of factors. Council derived these factors from its community strategic vision:

- Economic viability
- Community benefit
- Environmental impact
- Governance

Each proposed project now requires the completion of a robust business case and each project receives a 'score' and a unique quadratic graph, enabling teams to make judgements about a project's sustainability and value to the community. The interdisciplinary nature of the PAT means that projects receive a rigorous evaluation, which takes into account perspectives from the range of Council management areas.

This process results in robust project management, diversity of staff engagement in the project process and, most importantly, community confidence that only the right projects are built at the right time and in the right way.

Once projects are approved by the PAT, the elected Council will provide the final approval of the capital works program.

Councils project justification procedure has been regarded by many as the 'gold standard' of holistic planning. It has received a highly commended award from the Federal Department of Transport & Local Government and is a core component of Councils submission for the 2011/2012 A. R. Bluett Memorial Award which is administered by the NSW Local Government Association. The award is presented each year to the Council that has made the greatest relative progress. It is considered to be the highest accolade a New South Wales Council can aspire to. Council is currently a finalist to the Award and the judging panel recently attended Wyong Shire to be briefed on the project justification tool.

In summary, it is considered that from 11/12, Council has a robust project justification procedure in place. Further improvements have been implemented for 12/13, including mandatory PAT approval for every capital program/project >$100k prior to inclusion in Councils works program.

7.9.1 Minnesota Road Culverts

The OGW report (pg 86) suggests that "*there is no evidence to suggest that the project will have any benefit on the community from a drainage perspective*"…

This begs the question as to what is the value of a stormwater system. It exists to deliver a service: to manage stormwater runoff to an acceptable level of hazard, damage and nuisance, relative to the potential consequences associated with human activities at that location.

The catchment upstream of Minnesota Road compromises of a recent urban release area. It forms part of the headwaters of the Porters Creek Floodplain. There is regular flooding of the area which is directly attributable to the conversion of the Wadalba/Warnervale area from a rural land use to high density residential area i.e. the major source of runoff from the catchment is urban rateable lands.

The new culverts will also have lowered inverts relative to current thereby improving the passage of stormwater from the urbanised Warnervale/Wadalba catchment through to the Porters Creek Wetland.

Therefore we have to manage the interaction between the stormwater runoff from the urban area upstream of the catchment and an existing arterial road servicing that development area, hence the need for culverts – a stormwater system.

The project is accordingly listed as a drainage project in the relevant S94 contributions plan. There is insufficient funding in the contributions plan to complete this project and accordingly Council is using some of its general drainage revenue funding to complete this project.

The culvert works at Minnesota Road were listed as one of the priority management actions within the Porters Creek Floodplain Risk Management Plan. This has recently been completed in accordance with the NSW Government's gazetted guideline: *Floodplain Development Manual: the management of flood liable land*, April 2005. Wyong Shire Council received an award for this work from Stormwater NSW (see below).

Historic Expenditure

Table 34 in Oakley Greenwood's report detailed Wyong Council's stormwater expenditure for the Minnesota Road Culvert project, both past and forecast.

Upon review of the reported expenditure, Council advises that the $237K expenditure reported in the 2009/10 financial year was actually the expenditure that had been charged to the road component of this job. There was no stormwater expenditure in the 2009/10 financial year.

The $130K stormwater expenditure reported for the 2011/12 financial year comprised of survey, flood modelling and project management costs. In particular, there was a need to undertake detailed survey work upstream of the culvert and then undertake detailed modelling as an extension to the flood modelling previously undertaken for the Porters Creek Floodplain study. This information was also needed to address concerns from upstream landowners over the impact of the culvert works on the effective drainage of upstream development and a future urban release area.

The $127K design fee for this project was fully funded from the road component of the Minnesota Road Culvert project.

Proposed Expenditure

Oakley Greenwood's report states "IPART submission was lodged with an allocation of $2.44M in 2012/13 from the stormwater fund". This statement is incorrect as this project has the following stormwater financial breakdown:

- Minnesota Road Culverts (stormwater fund) - $1,825K
- Minnesota Road Culverts (Section 94 Contribution) - $618K

Council advises that the remainder of the funding for this project will be sourced from Council's general revenue fund (roads fund).

However, tenders have recently been sought for the supply and laying of the culverts associated with this project. The tendered prices were lower than expected. Therefore, Council advise that the proposed stormwater expenditure for this project will now consist of:

- Minnesota Road Culverts (stormwater fund) - $1,616K
- Minnesota Road Culverts (Section 94 Contribution) - $618K

This represents a saving of $209K from the stormwater fund.

7.10 Assessment of Forecast Stormwater Capital Expenditure

7.10.1 Unallocated Projects

The report recommended that the 'unallocated' stormwater funds be removed from the determination period. This is considered unjustifiable and unreasonable on the following basis:

Council experienced an increase in wet weather during the past 18 months including a number of high intensity events, one of which led to Wyong Shire being declared by the NSW Government as a Natural disaster area. This occurred during the period of June 2011 – April 2012 when the current capital works program was being developed for the 2012/2013 Strategic Plan. This is the plan that was submitted as part of the current review.

Council received numerous reports of flooding in locations that had not previously flooded and thereby Council had no previous record of flooding at these locations. Therefore, these newly identified flood prone areas were added to Council's flooding register and resulted in the need for a complete review and a re-prioritisation of the register. Without undertaking a full investigation, design, estimate and cost benefit review and analysis of all the projects on the newly updated flooding register, Council was unable to create a robust stormwater capital works program beyond 2013/14 at the time of the 12/13 Strategic Plan development. Hence a large allocation to 'unallocated' until such time the necessary investigations were complete.

A key component also missing from the historical stormwater capital works program has been an asset renewal program. This has not historically been a priority given the vast majority of the assets are yet to reach their asset life. This will change however in future years as assets start to reach the end of their useful life. In recent years Council has been collecting the data for the key components of such a program i.e. what assets have we got, age if known and their condition.

Currently Council has collected conditional assessment using CCTV of approximately 50% of its stormwater network. In order to develop a stormwater renewal program, it is necessary to allocate resources and/or funding in order to input the CCTV conditional assessment data that has been collected into an asset management system.

Council is in the process of purchasing the required asset management system that will be dedicated to stormwater asset management. Council expects that a stormwater renewal program will be developed and implemented by the 2014/15 financial year. Council had proposed to fund the future stormwater renewal program from the current unallocated funds.

Councils adopted 2012/2013 Strategic Plan identifies the key 4 year stormwater delivery plan action of "Implementing Strategic capital works programming using asset management systems".

Therefore, Council had identified that approximately $6m will be spent each year after 2013/14 on stormwater capital projects covering both category 1 & 2 flooding priorities and a stormwater renewal program. The budget for these items had simply been identified as "Unallocated Projects" from 13/14 until these planning works were completed. This $6M was consistent with expenditure from previous years.

In recent months however staff have been reviewing and investigating projects in the register The recruitment of a new Stormwater Engineer role in 2012 has facilitated this. Councils 2013/14 to 2016/17 capital works programs across all activities have been in development as part of its annual Strategic Planning Process

Since IPART representatives and the Consultants visited Wyong Council, staff have produced the future stormwater capital works programme for the financial years from 2013/14 to 2016/17 as part of its annual Strategic Planning Process. Through this process, stormwater projects that were previously identified on Council's flooding register have been investigated and priorities allocated to a financial year. An allocation specifically for the future stormwater renewal program being developed has also been identified. Therefore, there are no longer any "unallocated stormwater projects" listed on Council's future stormwater capital works program. This program was subsequently lodged to meet the corporate deadline of November 7 as the first draft for Councils consideration as part of the 13/14 Strategic Plan.

The updated future stormwater capital works program as prepared as part of the 13/14 Strategic Planning Process is included as a separate attachment on the covering email to this response.

Historic Stormwater Capital Expenditure

Oakley Greenwood's report states "*Wyong Shire Council has shown an inability to deliver over the past determination period*", referring to the under expenditures in Council's stormwater capital program.

To the contrary Wyong Shire Council has an excellent record of delivery of the stormwater capital works using the source of funds derived from the Drainage charge under the Water Management Act. The following is noted:

10/11 Budget = $4850

10/11 Actuals = $5289

11/12 Budget = 4,880

11/12 Actuals = $4791

The under expenditure identified in the Oakley Greenwood's report primarily relates to S94 developer funded projects administered under the Environmental Planning and Assessment Act 1979. The Contribution Plan 7A – Warnervale District outlines a number of S94 developer funded drainage projects. These include Minnesota Road Culverts and Warnervale Road culverts. These projects were deferred in response to a number of reasons, most notably insufficient developer contributions (i.e. income) being received in the Warnervale area post GFC due to a downturn in residential building in the area.

These conditions continue to exist and are the reason why the Minnesota Road culverts are now proposed to be part funded through income from the drainage levy as opposed to S94 developer contributions.

Attributing capital works funds between Roads & Stormwater

Council currently does not have a formal policy that stipulates what is a road project and what is a stormwater project. However as the majority of Council's stormwater capital projects are chosen from Council's flooding register, there is usually no ambiguity when it comes to defining which components of a project are road related or stormwater related.

Nevertheless, there is a distinction which is applied when projects span across both Roads and Stormwater.

Historically if a project has both road and stormwater components, the excavation, pits pipes etc. are considered drainage. Open roadside table drains and kerb and gutter are generally classed as road assets and attributable to the road component of the project. The fact is however that adjoining land uses usually drain their lands via pipes to Councils roadside longitudinal drainage system (e.g. 90mm stormwater connection into open table drain or kerb) and the community perceives such assets as kerb and gutter and table drains to be part of the drainage system. Council therefore has in fact historically applied a much more conservative definition of drainage than it could.

It is clear however that Council has a designated civil estimating resource that distinguishes between the drainage and road components of a project at the estimating stage. Costs for the drainage component include an apportionment of design, survey, and establishment. The full costs for such tasks as excavation/ supply/lay of pits, pipes, outlet structures, etc. are fully costed to the drainage component. The construction

supervisor has a copy of the estimates and they are trained on distinguishing costs between the road and drainage components of their projects.

7.12 Prudency and efficiency of capital expenditure in future price path

As described earlier, projects driven by growth are identified by a number of techniques including existing hydraulic modelling reports, analysis of sewage pump station run times, analysis of treatment plant performance, development servicing plans and development applications. While some specific projects are now recommended for deferral based on updated population forecasts other projects are still required and the general statement "there may be a material risk to the prudency around all growth related projects" is not entirely accurate.

With regard to the 'Modifications to Mardi Dam' project, Council does not dispute the deferral of this project to a future price path. Recently completed CFD modelling by Sinclair Knight Merz (SKM) (completed subsequent to the lodging of our price submission) has indicated that a curtain within the dam is not an effective solution and that any potential inlet nozzle modifications will be minor in nature. However we reiterate our comments made against section 7.6.2 of the OGW report that funding allowance needs to be made for investigation and preconstruction works to address water quality issues at Mardi Dam/Mardi Water Treatment Plant.

With regard to the Mardi to Warnervale pipeline project, we reiterate that Council has a binding contractual commitment to construct this pipeline, and a copy of the contractual agreement has been provided to IPART. The project will need to be constructed in the 2013-17 price path. Disallowing proposed expenditure on this project would have a significant detrimental impact on Council's residual capital works program as the funds to construct the pipeline would need to be diverted from other projects. As such we strongly request that the budget allowances for this project proposed in our pricing submission be allowed for in the determination.

OGW is also proposing that no funds be allowed for the modification of the spillway at Mangrove Creek Dam to address probable maximum flood and dam safety issues. We believe that disallowing expenditure on this project would be unreasonable, and we fully support Gosford City Council's submissions and representations on this issue.

OGW has also proposed that a 5% efficiency target be applied to the capital program. Whilst we believe that continued improvements to our capital program management and procurement processes will deliver efficiencies, a flat 5% target cannot be supported. Indeed OGW do not provide any substantiation as to why such a large efficiency target should be applied and, given the lack of substantiation and supporting rationale for the target, it could reasonably be assumed that the recommended target is purely arbitrary. As an alternative, we would propose efficiency targets in line with those proposed by Halcrow (and accepted by IPART) at the last pricing review, namely:

2013/14 0%

2014/15 1%

2015/16 2%

2016/17 3.5%.