Prudency and Efficiency Assessment - Gold Coast City Council

QUEENSLAND COMPETITION AUTHORITY

Price Monitoring of South East Queensland Water and Wastewater Distribution and Retail Activities 2013 - 2015

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SINCLAIR KNIGHT MERZ SKM

BDO

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Limitation statement

The sole purpose of this report and the associated services performed by Sinclair Knight Merz Pty Ltd (SKM) and its sub consultant, BDO, is to assist the Queensland Competition Authority (the Authority) in its price monitoring of the five SEQ water and wastewater distribution and retail entities in accordance with the scope of services set out in the contract between SKM and the Authority. That scope of services, as described in this report, was developed with the Authority.

In preparing this report, SKM has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by the Authority, the water distribution and retail entities and/or from other sources. Except as otherwise stated in the report, SKM has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

SKM derived the data in this report from information sourced from the Authority, the water distribution and retail entities and/or available in the public domain at the time or times outlined in this report. The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations and conclusions expressed in this report. SKM has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

This report should be read in full and no excerpts are to be taken as representative of the findings. No responsibility is accepted by SKM for use of any part of this report in any other context.

This report has been prepared within the time restraints imposed by the project programme. These time restraints have imposed constraints on SKM's ability to obtain and review information from the entities.

This report has been prepared on behalf of, and for the exclusive use of, the Authority, and is subject to, and issued in accordance with, the provisions of the agreement between SKM and the Authority. SKM accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this report by any third party.

1. Introduction

The Queensland Competition Authority (the Authority) is continuing the process of monitoring the prices for water and wastewater services provided by the five water distribution and retail entities within south east Queensland (SEQ):

- Queensland Urban Utilities
- Unitywater
- Gold Coast City Council
- Logan City Council
- Redland City Council

The five entities, own, operate and maintain the local water distribution and wastewater collection and treatment infrastructure and are responsible for the retail sale of water supply and wastewater collection and treatment services to customers. The purpose of the price monitoring is to review the costs and revenues associated with the provision of water and wastewater services by the five entities. The five entities are monopoly providers in neighbouring areas. The aim of the price monitoring is to ensure efficiency of costs within the monopoly distribution and retail businesses in particular and to ensure sustainable water practices within the SEQ water industry in general.

To assist this process, the Authority appointed SKM to review the capital and operating expenditure forecasts for provision of regulated services over the period from July 2013 – June 2015.

The consultancy consists of two components:

- Component 1 – Sample Selection
- Component 2 – Prudency and Efficiency of Costs

Under the terms of appointment, SKM is required to:

a) Assess the existence of robust policies and procedures having regard to good industry practice, as well as compliance with such, using the review of processes and procedures implemented in approvals of expenditure and costs for a sample of capital expenditure projects and operating expenditure categories to evaluate such. In this assessment, SKM was required to determine if particular, policies and procedures reflect strategic development plans, integrate risk and asset management planning, if they support corporate directives, if they are consistent with external drivers, and if they incorporate robust procurement practices

b) Assess the robustness of the operating and capital expenditure programme planning and delivery processes in an overall sense and identify any areas for improvement

c) Form a view on the prudency and efficiency of capital and operating expenditure, focusing on any areas of significant cost increase and identifying the reasons why such cost increases have occurred

In addition, the Authority engaged SKM to review the entities' progress in implementing the Authority's supported criteria; which are:

- Consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective
- Consideration of alternative investments, the substitution possibilities between operating costs and capital expenditure, and non-network alternatives such as demand management
- A standardised approach to cost estimating, including a standardised approach to estimates for items such as contingency, preliminary and general items, design fees and contractor margins, so that there is uniformity of cost estimating across all proposed major projects

- A summary document to be prepared for identified major projects so as to facilitate standardised reporting
- An implementation strategy to be developed for each major project
- A 'toll gate' or 'gateway' review process to be implemented so that appropriate reviews are undertaken at milestone stages for selected projects
- Information on the compatibility with existing and adjacent infrastructure and consideration of modern engineering equivalents and technologies.
- Includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices

SKM has prepared a report for each of the five water distribution and retail entities (Queensland Urban Utilities, Unitywater, Gold Coast City Council, Logan City Council and Redland City Council). This report documents SKM's assessment of the prudency and efficiency of the operating costs and capital expenditure for Gold Coast City Council for the July 2013 to June 2015 period.

1.1 Terms of reference

SKM has undertaken the assessment of the prudency and efficiency of operating and capital expenditure based on the terms of reference issued by the Authority. The full terms of reference are provided in Appendix G.

1.2 Prudency and efficiency

SKM has adopted the following definitions of prudency and efficiency of operating costs and capital expenditure generally in accordance with those set out by the Authority in its terms of reference:

- ***Operating expenditure*** is ***prudent*** if it is required to meet the entities' requirements relating to its legal and regulatory obligations or its contracts with customers
- ***Operating expenditure*** is ***efficient*** if it is undertaken in a least-cost manner over the life of the relevant assets and is consistent with relevant benchmarks
- ***Capital expenditure*** is ***prudent*** required as a result of a legal obligation, new growth, renewal of existing infrastructure, or it achieves an increase in the reliability or the quality of supply that is explicitly endorsed or desired by customers, external agencies or participating councils
- ***Capital expenditure*** is ***efficient*** if:
- The scope of the works (which reflects the general characteristics of the capital item) is the best means of achieving the desired outcomes after having regard to the options available, including more cost-effective regional solutions, the substitution possibilities between capital and operational expenditure and non-network alternatives such as demand management
- The standard of the works conforms to technical, design and construction requirements in legislation, industry and other standards, codes and manuals. Compatibility with existing and adjacent infrastructure is relevant as is consideration of modern engineering equivalents and technologies. Compliance with regulatory obligations (e.g. water NetServ[1] plans) is likely to be highly relevant.
- The cost of the defined scope and standard of works is consistent with conditions prevailing in the markets for engineering, equipment supply and construction. In assessing such, SKM has substantiated its view with reference to relevant interstate and international benchmarks and information sources. For example, the source of comparable unit costs and indexes has been given where available and relevant and the efficiency of costs justified.

[1] Network Service Plans

1.3 Scope exclusions

The following items are outside of the scope of our review:

- Review of capital costs before 2012-13 and after 2014-15 associated with projects that have been reviewed, unless expenditure is to be commissioned in the review period
- Review of other parts of a project for which a specific part is being undertaken as part of the commission, eg the review of a supply contract when SKM is reviewing the installation contracts of supplied goods
- Development of detailed budget cost estimates for the capital projects under review

1.4 Report overview

This report is structured as follows:

- **Section 1** provides an introduction to the project
- **Section 2** provides background in respect of Gold Coast City Council, the Authority and the scope of this review
- **Section 2** provides a brief overview of the information provided by Gold Coast City Council for the purposes of this review
- **Section 3** outlines SKM's review of Gold Coast City Council's management processes, and more specifically, its approach to planning and asset management
- **Section 4** outlines SKM's assessment of the operating costs incurred/forecast by Gold Coast City Council
- **Section 2** outlines SKM's assessment of capital expenditure incurred/forecast by Gold Coast City Council
- **Sections 1.2** and **0** summarises the findings of SKM's assessment and presents the conclusions drawn from the review and recommendations in respect of the prudency and efficiency

1.5 Application of assessment

SKM's assessment of prudency and efficiency of capital expenditure applies to Gold Coast City Council's proposed expenditure from 1 July 2013 to 30 June 2015 and to an assessment of prudency and efficiency of proposed operational costs forecasts from 1 July 2013. The underlying information used to make this determination may only be relevant to the particular circumstances and activities that will be undertaken in 2013-15. Hence, the acceptance of expenditure as being prudent and efficient in this assessment should not be used a precedent for regulatory assessments in the future. This applies to both recurring operating expenditure and capital projects where capital expenditure will be spread over a number of years.

2. Background

2.1 The entities

On 1 July 2010, the Queensland Government implemented a series of reforms in the SEQ water industry. One result of this was the formation of three new water distribution and retail entities. These entities were formed by amalgamating a number of council based and owned water utilities into three larger water entities. These entities owned the water and sewerage distribution infrastructure and sell water and sewage disposal services to customers in their respective areas. The three distribution and retail entities were Queensland Urban Utilities, Unitywater and Allconnex Water.

In addition to the retail distribution entities, four new bulk water entities that owned and operated the SEQ Water Grid were established on 1 July 2008.

On 1 July 2012, Allconnex Water was disestablished which enabled Gold Coast City Council, Logan City Council and Redland City Council to resume the delivery of water and wastewater services in their local government areas. As a result of these changes, five entities now own, operate and maintain the local water distribution and wastewater collection and treatment infrastructure in SEQ. These entities are responsible for the retail sale of water supply and wastewater services to customers. The progression of the responsible entity for the servicing areas is illustrated in **Table 1**.

Table 1 : Water Distribution and Retail entities servicing areas

Water Distribution and Retail Entities (Prior to 30 June 2010)	**Water Distribution and Retail Entities (1 July 2010 - 30 June 2012)**	**Water Distribution and Retail Entities (1 July 2012 - Present)**
Brisbane City Council	Queensland Urban Utilities	Queensland Urban Utilities
Ipswich City Council		
Lockyer Valley Regional Council		
Scenic Rim Regional Council		
Somerset Regional Council		
Sunshine Coast Regional Council	Unitywater	Unitywater
Morton Bay Regional Council		
Gold Coast City Council	Allconnex Water	Gold Coast City Council
Logan City Council		Logan City Council
Redland City Council		Redland City Council

A merger of the SEQ Water Grid Manager, LinkWater and the former Seqwater occurred on 1 January 2013 with the formation of the new the Seqwater. This new organisation has also accepted the water security and efficiency responsibilities previously performed by the Queensland Water Commission.

The five current entities are the subject of this interim price monitoring assessment. This price monitoring and this subsequent report is built on the three previous years of annual interim price monitoring from 1 July 2010 to 30 June 2013, and is being carried out against a backdrop of:

- Entities in the fourth year of an establishment phase (Queensland Urban Utilities and Unitywater)
- Entities in the second year following the disestablishment of Allconnex Water
- Historic data drawn from information provided by previous service providers

- Entities implementing developed processes and systems for:
  - Capital works evaluation, approval and budgeting
  - Operational expenditure budgeting

This report is concerned with the prudency and efficiency of the operating and capital expenditure programme of Gold Coast City Council with respect to its water and wastewater business only.

2.2 Gold Coast City Council

Gold Coast City Council provides water supply and wastewater services to over 500,000 customers within an area covering some 14,000 km^2 (**Figure 2-1**). Gold Coast City Council service area stretches from Stapylton in the north to Coolangatta in the south. (Gold Coast City Council, 30 September 2013)

Water and wastewater services are provided to more than 221,000 residential and 16,000 non-residential connections in the Gold Coast City Council region. Gold Coast City Council also services approximately 5,000 trade waste customers. (Gold Coast City Council, 30 September 2013).

Gold Coast City Council' infrastructure assets include:

- 65 water reservoirs
- 59 water supply pumping stations
- 3,092 km of water supply pipelines
- 4 sewage treatment plants
- 527 sewage pumping stations
- 3,143 km of sewerage pipeline
- 1 advanced recycled water treatment plant (Gold Coast City Council, 30 September 2013)

Figure 2-1: Gold Coast City Council Drinking Water Catchments

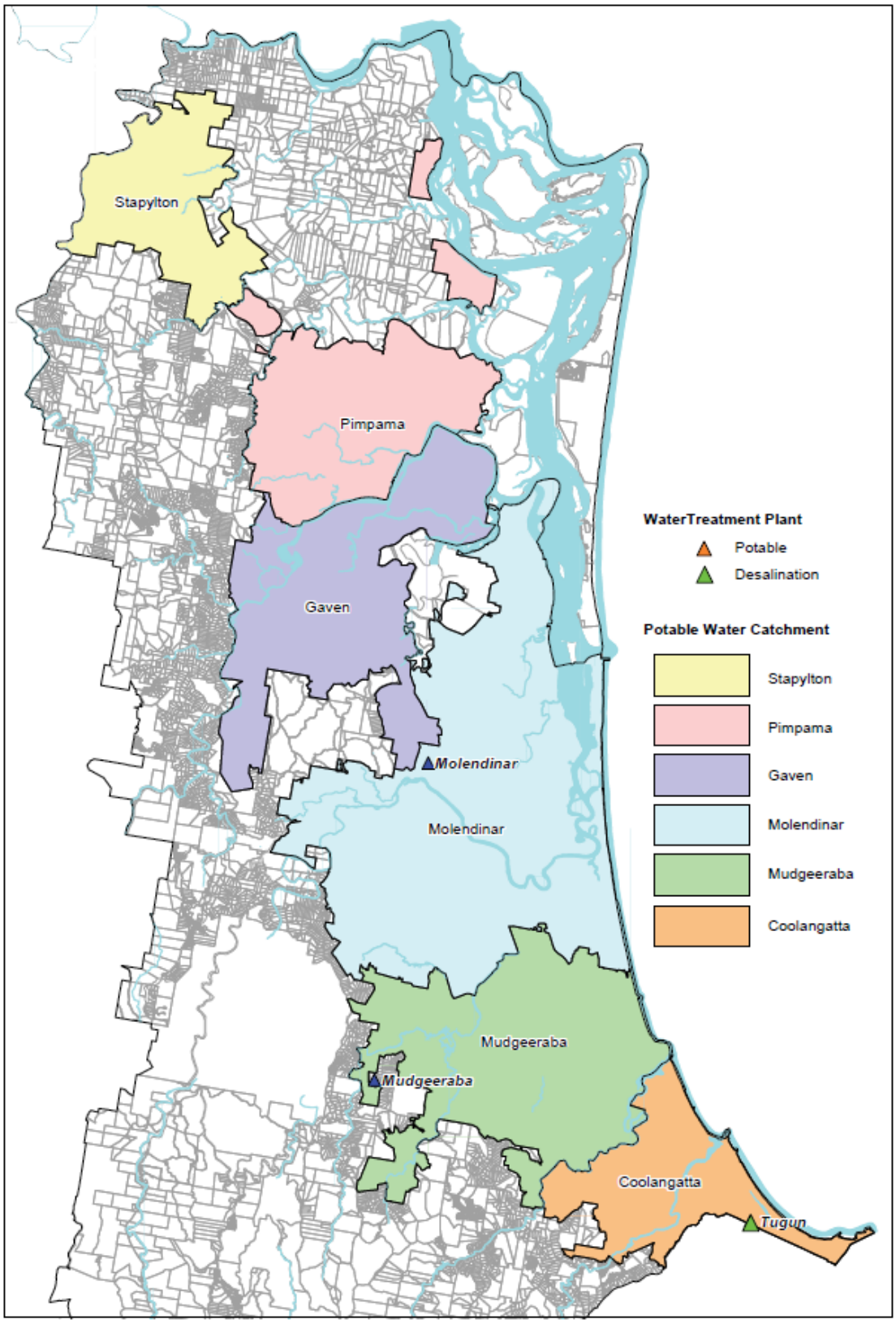
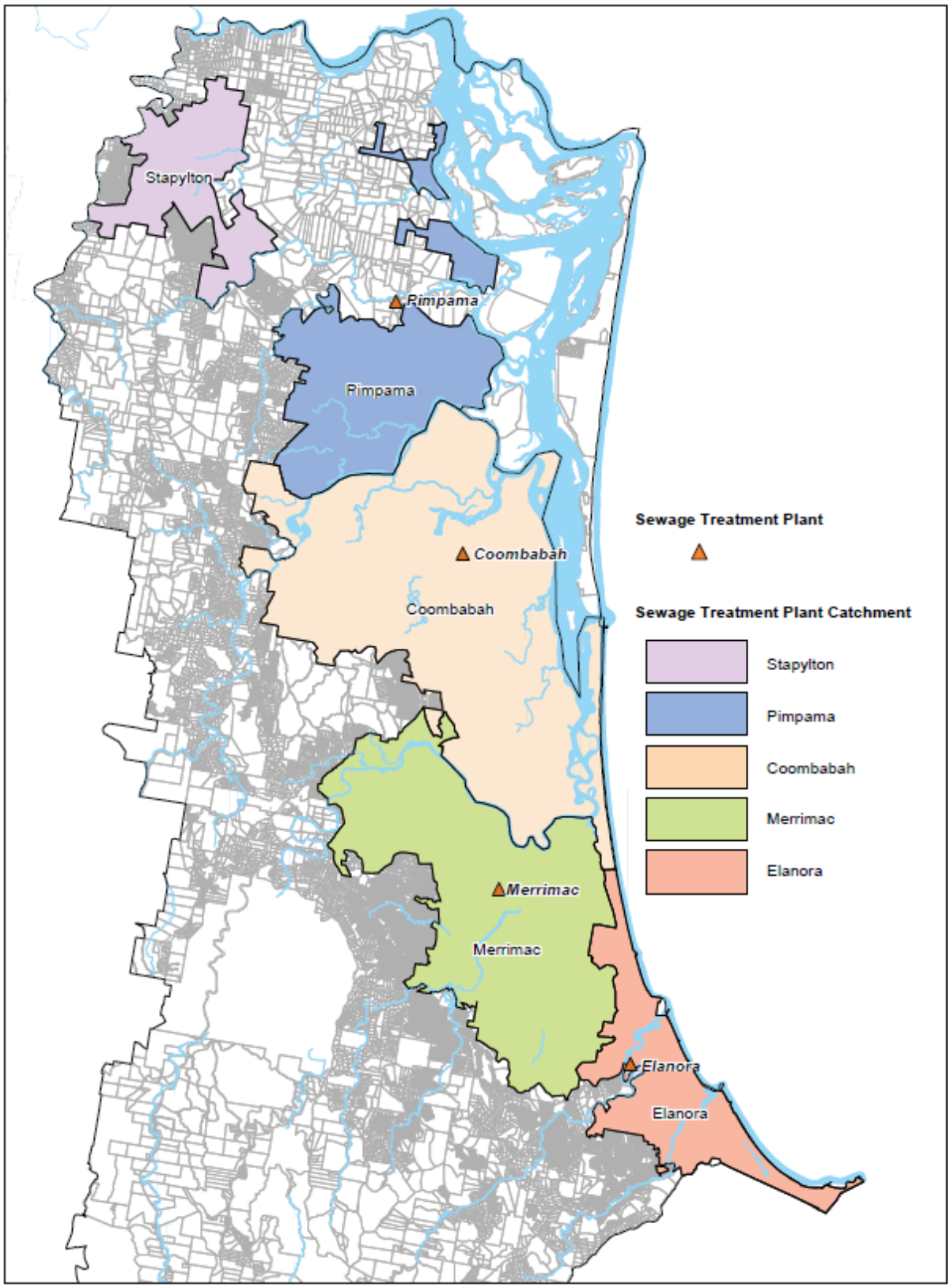


Figure 2-2: Gold Coast City Council Sewage Catchments



2.3 The role of the Authority

The Authority is an independent Statutory Authority established by the Queensland Competition Authority Act 1997 and is given the task of regulating prices, access and other matters relating to regulated industries in Queensland.

Under the Queensland Competition Authority Act, the Authority's roles in relation to the water industry are to:

- Investigate and report on the pricing practices of certain declared monopoly or near monopoly business activities of State and local governments
- Receive, investigate and report on competitive neutrality complaints
- Mediate and/or arbitrate access disputes and water supply disputes
- Investigate and report on matters relevant to the implementation of competition policy

The Treasurer and Minister for Trade and the Attorney-General and Minister for Justice have referred the monopoly distribution and retail water and wastewater activities of Queensland Urban Utilities, Unitywater, Gold Coast City Council, Logan City Council and Redland City Council to the Authority for price monitoring from 1 July 2013 to 30 June 2015.

Under the referral, the Authority must:

- Provide information to customers about the costs and other factors underlying the provision of water and sewerage services including distinguishing between bulk and distribution/retail costs to the extent possible
- Allow the entities to treat bulk water costs as a 'cost-pass-through' item
- Monitor the change in prices of distribution and retail water and sewerage services for residential and non-residential customers
- Monitor water and sewerage revenues against the maximum allowable revenue based on the total prudent and efficient costs of carrying on the activity
- Advise a benchmark Weighted Average Cost of Capital(WACC) by 31 January 2013 and monitor the WACCs applied by the entities against the benchmark WACC
- Provide a Draft Report for 2013-15 by 31 January 2014 and a Final Report by 31 March 2014

3. Policies and procedures

3.1 Introduction

For Gold Coast City Council this section of the report addresses the following task:

> *"Assess the existence of robust policies and procedures having regard to good industry practice, as well as compliance"* [2]

It includes the following specific assessment for capital expenditure, and a similar review for operating expenditure.

a) *"assess whether the entities' policies and procedures for capital expenditure are robust having regard to good industry practice, as well as compliance,… In particular, the policies and procedures should reflect strategic development plans, integrate risk and asset management planning, corporate directives, regional priorities, be consistent with external drivers, and incorporate robust procurement practices*

b) *the review of policies and procedures should also report on whether the entity:*

   i) *considers the prudency and efficiency of expenditure from a regional perspective;*

   ii) *includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices;*

   iii) *applies a standardised approach to cost estimating, including for items such as indexation, contingency, preliminary and general items, design fees and contractor margins;*

   iv) *prepares a summary document and implementation strategy for major projects and programs; and*

   v) *includes a 'toll gate' or 'gateway' review process at relevant milestone stages;*

c) *assess the robustness of each entity's capital expenditure program and delivery processes in an overall sense and identify any areas for improvement;"* [3]

3.2 Capital expenditure policies and procedures

3.2.1 Good industry practice

SKM considers that good industry practice for the development of capital projects and budgets includes the following:

- The identification of projects which meet the requirements of prudency and efficiency
- Project prioritisation, including prioritisation across programs of work
- Consideration of the timing of projects and the ability to deliver the capital programme
- A defined review and approvals process, including documentation of this process

This has been codified in the Gateway™ Process developed by the UK Office of Government Commerce, which has been endorsed by the Queensland Government and a number of other states for major infrastructure programs and projects.

[2] Referral Notice (g) i
[3] Terms of Reference 2013-15 SEQ Price Monitoring Assessment of Operating and Capital Costs issued to SKM by the Authority

In respect of supporting documentation required to gain approval for capital expenditure for a given capital project, good industry practice should include:

- A phased process, starting with a project outline, through a series of approval gates to defined requirements for business cases and final approvals
- A tiered structure, with differentiated requirements and degrees of documentation and review for projects depending on their cost
- Alignment with strategic business drivers such as strategic plans, customer service standards and compliance requirements
- Fully supported capital expenditure approval documentation incorporating:
    - The project background/rationale
    - The project drivers
    - The options reviewed to address the drivers, including the method of selecting the preferred option
    - For major projects, a fully costed and financially evaluated option studies, including a “do nothing” option, preferably on a present value, or, if appropriate, a net present value basis
    - Where capital is constrained, explanation of why a project is proposed over others that may adhere to the above requirements
    - A defined scope of works for the preferred option
    - The identification of project risks and how they will be managed
    - A breakdown of the approved project cost and the basis of this cost estimate, including defined cost estimating procedures, including the treatment of contingencies
    - The critical success factors of the project
    - An implementation plan

For historic projects, the process should address:

- How the project was implemented
- How the project performed – successes and lessons learned
- How the project addressed the original need
- How the project addressed the critical success factors
- How the as-built cost compared with the original estimate
- If the as-built cost of the project changed the order of merit of the options considered at the options analysis stage

The level of supporting documentation will be dictated by the project size, project cost and the respective sign-off authority level within an organisation. The chart below illustrates the kind of detail that should be presented, and notes that the estimates used for many projects can be expected to have an uncertainty of 30% or more.

Figure 3-1: Typical estimation accuracies and expected documentation

Capital Project Estimating Classifications

	Class 4 Order of Magnitude	Class 3 Pre-Feasibility Study (PFS)	Class 2 Feasibility Study (FS)	Class 1 Definitive Estimate
Methodology	Capacity Factored Equpment Factored (2) Historical data/Parametric models	Conclusion of MTCs, budget pricing, factors and semi-detailed unit rates	Detailed MTOs, detailed until costs, budget pricing for all major equipment. Detailed equipment list.	Contribution of comments, awarded contracts, defined unit rates and detailed MTO's.
Purpose	Preliminary economic and technical investiaion. Project screening. Comparision or alterntives, configurations and options.	Economic feasibilty of one or more chosen options.	Project approval and basis of securoing finacing "sustainable" study.	Detailed control, target measuement, change variation, monitor and control of implementation phase.
Basis of Estimate				
Accuracy-Indicative Range	±30% to ±100%	±20% to ±25%	±10% to ±15%	±5% to ±10%
Accuracy Develelopment	Judgemental	Evaluated	@Risk Detail Analysis	@ Risk Detail Analysis
Level of Project Definition	0% to 5%	10% to 30%	30% to 70%	70% to 100%
Level of Engineering (% of Total)	0 to 2%	2% to 5%	10% to 15%	5% to 10%
Expected Estimate Contingency Range	25% to 40%	15% to 20%	10% to 15%	5% to 10%
Contracting Strategy	Assumed	Preliminary	Defined	In place
Site				
Location	Assumed	Preliminary	Specific	Final
Maps and Surveys	None	Preliminary	Some detail	Detail
Soil Tests and Geotechnics	None	Preliminary	Final	Final
Site Visits	Not essential	Desirable	Essential	Consturction start
Construciton Support	Assumed	Proposed method	Detail support	Final
Construciton site Agreement	Assumed	Assumed	Prelim discussion	Final/In place
Delivery Strategy	Assumed	Preliminary	Initial strategy	Specific
General Project Data				
Project Scope Description	General	Preliminary	Defined	Defined
Plant production/Facility Capacity	Assumed	Preliminary	Defined	Defined
Hydrology	None	Preliminary	Defined	Defined
Integrated project Plan	None	Preliminary	Defined	Defined
Project Master Schedule	None	Preliminary	Defined	Defined
Escalation Strategy	None	Preliminary	Defined	Defined
Work Breakdown Structure (WBS)	General	Preliminary	Defined	Defined
Project Code of Accounts	None	Preliminary	Defined complete	Defined
Contingency Strategy	Assumed/Factored	Calculated	Detail calc./Analysis	Detail calc. on ETC
Engineering Deliverables				
Block flow Diagrams	Started Preliminary	Preliminary/ Complete	Complete	Complete
Plot Plans	None	Started	Preliminary/ Complete	Complete
Process Flow Diagrams (PFDs)	None	Startd/Preliminary	Preliminary/ Complete	Complete
Utility Flow Diagrams (LFDs)	None	Startd/Preliminary	Preliminary/ Complete	Complete
Piping & Instrumentation Diagrams (P&IDs)	None	Started	Preliminary/ Complete	Complete
Heat & Material Balances	None	Started	Preliminary/ Complete	Complete
Process Equipment List	None	Started/Preliminary	Preliminary/ Complete	Complete
Utility Equipment List	None	Started/Preliminary	Preliminary/ Complete	Complete
Electrical Single Line Diagrams	None	Started/Preliminary	Preliminary/ Complete	Complete
Specifciations & Data Sheets	None	Started	Preliminary/ Complete	Complete
General Arrangement Drawings	None	Started	Preliminary/ Complete	Complete
Spare Parts Inventory	None	% of Direct Cost	Started/Preliminary	Preliminary/ Complete
Detailed Design Drawings	None	None	Started	Preliminary/ Complete
Capital Cost Estimate				
Infrastructure Costs:	Assumed	Investigated	Finalise detail	Finalised
General Cost Approach	Factored block costs	Preliminary quanity	Detail quanity	Detail/acutal quanity
Major Equipment Costs	Data bank/factored	Single source	Multiple source	Fixed tender
Civil Work	Rough quantity	Preliminary	Detailed take-off	Tender prices
Structural Work	$/unit vol.	Prelim take-off	Detailed take-off	Tender prices
Piping and Instrumentation	% machinery	Prelim take-off/%	Detailed take-off	Tender prices
Electrical	$kW	Prelim take-off	Detailed take-off	Detailed estimates
Installation	Factored/%	Man-hours/unit rates	Man hours	Man-hours/ contract
Indirect Costs	% or total	Prelim calculation	Calculation	Detail calcuation

This approach is similar to the widely used front-end-loading (FEL) approach to capital project development and similar processes used within major resources companies.

In addition, the overall capital expenditure programme should be weighted equally through the respective regulatory periods. This strategy maintains a steady and reliable stream of work for construction contractors and reduces the price impacts of the substantial capital works programmes during earlier years of the regulatory period.

As the multi-year capital expenditure programme is updated each year through this planning process, its impact on operating costs should be incorporated into the following year's budget for review by senior management and approval by the Board.

3.2.2 Gold Coast City Council process

In its assessment of Gold Coast City Council's capital expenditure Policies and Procedures SKM reviewed the following documents supplied by Gold Coast City Council:

- "City of Gold Coast Water and Sewerage Network Services Plan (Netserv Plan) Part B " version 0 dated 1 July 2013
- "Capital Program & Operational Budget Guidelines Gold Coast Water 2013-14" Version 1 (Budget Guidelines)
- "Gold Coast City Council 2013-14 Planning and Budget Preparation Guidelines" dated December 2012
- "05 QP-22 Lifecycle for major and standard capital projects" Revision 3 19/08/2013 (Lifecycle)
- "QP-22 Project Management Methodology" draft Rev. 4 8/07/2013 (Methodology)
- "Gold Coast Water QP-22 Templates" (Templates)
- "Capex Program – Gcw Project Planning And Delivery Governance"
- "QP 2242 MCA assessment tool - project theme and criteria weightings worksheet" Rev. 3, 09/07/2013
- "QP-2243 Project planning assumptions" Rev. 2, 19/08/2013
- "Briefing Note Gold Coast Water compliance register" 11 July 2013 WSS1125/873(P1)

3.2.3 Capital expenditure programme and delivery processes

Gold Coast City Council's Budget Guidelines categorises projects as follows:

- ***"Minor Projects.*** *Relate to projects that are less than $250,000 and considered 'Low' or 'Moderate' risk.*
- ***Standard Projects.*** *Relate to projects that are between $250,000 and $1 million and/or considered 'Low' or 'Moderate' risk.*
- ***Major Projects.*** *Relate to projects that are greater than $1 million and/or considered 'High' risk."*

More detailed definitions are given in section 5.19 of the Methodology.

In response to SKM's Draft Report, Gold Coast City Council's "*acknowledges that an overall Capital Program and Delivery Framework is yet to be formalised, however the Budget Preparation process and the Quarterly Budget Review process undertaken within GCW provide clear evidence of the robust review and assessment process to which all budget requests are subject to ensure the elements and prudence and efficiency are addressed. Particular reference is made to GCW's Quarterly Budget Review Guidelines – Sections 3.1.4 and 3.2.4 which outline the Quarterly Review Workshop process.*"

SKM concludes that Gold Coast City Council's capital project governance processes are as yet to be completed and are undergoing development. However, the overall process outlined by Gold Coast City Council reflects the Gold Coast's strategic development plans and corporate directives and integrates risk management and asset management planning.

3.2.4 Standardised approach to cost estimating

The document "QP-2243 Project planning assumptions" outlines a standardised approach to cost estimating which is compliant with good industry practice, and is robust.

3.2.5 Prepares a summary document

All three categories of projects are required[4] to have summary documents prepared, of increasing rigour with increasing size. QP2201 Project brief and QP2206 Business Case Template in the Templates detail these requirements. The process is compliant with good industry practice and is robust.

3.2.6 Prepares an implementation strategy

All three categories of projects are required[5] to have Project Delivery Plans prepared. Project staging, procurement strategy and external funding are addressed. QP-2207 Project Delivery Plan in the Templates provides the detailed requirements. The process is compliant with good industry practice and is robust.

3.2.7 Includes a 'gateway' review process

The "CAPEX Program – GCW Project Planning and Delivery Governance", Budget Guidelines[6], the Methodology[7] and the Lifecycle describe project phasing and a series of decision gates for planning and development of the budget[8]. Examples provided in the Templates set out the requirements for the information required for each decision gate. The gated review process used is compliant with good industry practice and is robust.

QP 2211 Post Implementation Review Report in the Templates outlines a benefits realisation assessment which is compliant with good industry practice and is robust.

In the Methodology sections 3.11 and 3.12, two groups of management staff, the Business Review Committee and the Program Review Group are assigned responsibilities, which is not good industry practice. Below Council or Board level only individuals should be assigned responsibilities, although these individuals may convene an appropriate committee to assist them with their responsibilities.

In response to SKM's Draft Report, the following information was provided:

> *GCW (GCW) advises that the Director of GCW is the ultimate individual with single point accountability for all decisions made under delegated authority or recommendations made to Council from or on behalf of GCW.*
>
> *The Director has chosen to convene both the Business Review Committee (BRC) and the Project Reference Group (PRG) to provide him with appropriate and relevant advice from staff at senior levels across all disciplines within the Directorate to assist him to make the best-informed decisions possible for the required business outcomes.*
>
> *GCW considers this to be good practice to ensure an holistic and well-informed approach to decision-making for the Directorate.*
>
> *It is also understood that GCW's Project Reference Group (PRG) plays a similar role to Asset Management Committees which is common practice for water utilities around Australia".*

[4] Budget Guidelines section 6.2
[5] Budget Guidelines sections 6.2, 9.1.6, 9.1.8 and 9.1.12 and Methodology section 5.4
[6] Budget Guidelines section 9.1.6
[7] Methodology section 4
[8] Budget Guidelines Attachment A

In response, SKM believes that if the Methodology sections 3.11 and 3.12 referenced the Director of GCW, instead of the BRC and the PRG, these procedures would be documenting good industry practice.

3.2.8 Includes a detailed analysis of options for major projects

Stage 2 of a project's development is described as "Concept planning – option assessment feasibility" and section 5.3 of the Methodology briefly describes its requirements. "QP-2205 Project options analysis" in the Templates and "QP 2242 MCA assessment tool - project theme and criteria weightings worksheet" meet the requirements of good industry practice and are robust.

3.2.9 Only includes only commissioned capital expenditure from 1 July 2010 in the RAB

In the 'Price Monitoring Submission – 2013-15', Gold Coast City Council states:

> *"Consistent with QCA's information requirements GCW has used the following calculation to determine the roll forward regulatory asset base (RAB) from 1 July 2010 for each year to 30 June 2015.*
>
> *Closing RAB = (Opening RAB + Net Capital Expenditure (Capex) – Regulatory Depreciation – Disposals + Indexation)"*

The 'Price Monitoring Submission – 2013-15' includes the following table which provides an estimate of the RAB as at 30 June 2015.

Table 2 : Rolled forward asset base ($M)

Description ($M)	2010-11	2011-12	2012-13	2013-14	2014-15
Opening RAB	2,511.87	2,605.97	2,605.43	2,672.94	2,675.84
Net CAPEX	79.59	46.97	98.24	26.38	14.22
Regulatory Depreciation	77.35	81.70	86.47	90.64	87.02
Indexation	91.86	34.18	55.75	67.15	67.07
Closing RAB	**2,605.97**	**2,605.43**	**2,672.94**	**2,675.84**	**2,670.11**

In response to SKM's Draft Report, Gold Coast City Council provided two spread sheets to outline the capital expenditure programme. SKM notes that with respect to the spread sheets provided, the information template (5.6.2) and a separate spread sheet (2013 Capex for QCA Draft – 13-8-2013), the overall values for these spread sheets align.

In response to SKM's Draft Report, Gold Coast City Council advised that:

> *"There are some fundamental differences between 5.6.2 and 2013 Capex for QCA Draft – 13-8-2013 which cause them to differ, prima facie.*
>
> *1) 5.6.2 includes an escalation factor for future years*
>
> *2) 5.6.2 starts at 2012-13 and does not include prior years.*
>
> *2013 Capex for QCA Draft – 13-8-2013 is the source document and includes "as incurred" expenditure and "as commissioned" expenditure. 5.6.2 is as incurred only."*

SKM notes that Gold Coast City Council has very limited detailed financial information available from the Allconnex Water period and that Gold Coast City Council has only been able to provide definitive data for the period since transition back to Council on 1 July 2012.

Based on the information available, SKM understands that the RAB only includes commissioned capital expenditure from 1 July 2010.

3.2.10 Compliance

As well as generic legislation, Gold Coast City Council needs to comply with the following water industry-specific regulatory requirements in its capital expenditure processes:

- Water Act 2000
- Water Supply (Safety and Reliability) Act 2008
- Sustainable Planning Act 2009
- Integrated Planning Act 1998
- Environmental Protection Act 1994
- Environmental Protection (Water) Policy 2009
- Plumbing and Drainage Act 2002
- Public Health Regulation 2005
- Australian Drinking Water Quality Guidelines
- South East Queensland Water (Distribution and Retail Restructuring) Act 2009
- Customer Water and Wastewater Code, Queensland Water Commission 2011
- Financial Accountability Act 2009
- Financial and Performance Management Standard 2009
- Queensland Procurement Policy

The Financial Accountability Act 2009 and the associated Financial and Performance Management Standard 2009 set out the financial management and reporting responsibilities of statutory bodies in Queensland, including Gold Coast City Council. As well, it mandates compliance with the Queensland Procurement Policy. The Auditor-General is responsible for giving an opinion on whether these requirements have been complied with in all material respects.

SKM has reviewed Gold Coast City Council's major capital expenditure governing documents supplied with the results shown below.

Table 3 : Overview of SKM's review of Gold Coast Water's major capital expenditure governing documents

Major governing documents supplied/accessed	Issues arising from Gold Coast City Council's documents
City of Gold Coast Annual Plan 2013-14 Adopted 21 June 2013	The following industry-specific Acts are specifically referenced: • SEQ Water (Distribution and Retail Restructuring) Act 2009 • Environmental Protection Act 1994 • Sustainable Planning Act 2009
Gold Coast City Council Corporate Plan 2009 -14	No water industry-specific Acts are specifically referenced.
City of Gold Coast Water and Sewerage Network Services Plan (Netserv Plan) Adopted July 2013	The following industry-specific Acts are specifically referenced: • SEQ Water (Distribution and Retail Restructuring) Act 2009 • Environmental Protection Act 1994 • Sustainable Planning Act 2009
City of Gold Coast Water and Sewerage Network Services Plan (Netserv Plan) Part B " version 0 dated 1 July 2013	The following industry-specific Acts are specifically referenced: • SEQ Water (Distribution and Retail Restructuring) Act 2009
Capital Program & Operational Budget Guidelines Gold Coast Water 2013-14 Version 1	No water industry-specific Acts are specifically referenced.

Major governing documents supplied/accessed	Issues arising from Gold Coast City Council's documents
Gold Coast City Council 2013-14 Planning and Budget Preparation Guidelines dated December 2012	The following industry-specific Acts are specifically referenced: • Sustainable Planning Act 2009 • Plumbing and Drainage Act 200
QP-22 Project Management Methodology draft Rev. 4 8/07/2013	No water industry-specific Acts are specifically referenced. However, in section 5.21 the Regulatory and Other Approvals document (QP-2246) is described as "a mandatory checklist to ensure that all potential approvals required by regulatory and other agencies are identified."
QP-2246 Regulatory and Other Approvals in the Templates	This document lists some permitting, liaison and consultation requirements but does not appear to be a comprehensive checklist for all regulatory requirements for the water industry.

From the above review SKM concludes that the capital expenditure policies and procedures supplied do not meet the requirement to have regard to "compliance".

The document "Briefing Note Gold Coast Water compliance register" dated 11 July 2013 outlines that Gold Coast City Council is making good progress on implementing a compliance register aimed at meeting this requirement.

In response to SKM's Draft Report, Gold Coast City Council advised that:

"compliance issues are addressed throughout our processes, however documentation of such could be improved – to address this, it is proposed amendments will be incorporated into QP-22 documentation (Capex); and appropriate wording will be incorporated within GCW's Budget Preparation Guidelines (Capex & Opex)".

3.2.11 Considers regional perspective

The South East Queensland Water (Distribution and Retail Restructuring) Act 2009 outlines the regional requirements for the Netserv Plans[9].

Also, among other things, the Bulk Water Supply Code intends to "*encourage co-ordinated network planning between the bulk and the distribution sectors to achieve infrastructure planning (including water quality improvements) on a best value for money basis*." [10]

The document "City of Gold Coast Water and Sewerage Network Services Plan (Netserv Plan) Part B " contains the sentence "*The plan will deliver a strategic business framework for water cycle management that reflects national and regional policy direction.*" Gold Coast City Council advised that it has participated in a Review of Stapylton sewerage servicing strategy which considered capital expenditure options across water entity boundaries, and that it also has participated in eight regional groups and forums.

However, none of the capital expenditure procedural documents reviewed has explicit provisions to address the above regional requirements at key decision points. The capital expenditure process therefore does not comply with this requirement.

In response to SKM's Draft Report, Gold Coast City Council has stated that it:

"…participates in numerous regional committees and forums to ensure a whole of SEQ regional perspective is incorporated across all aspects of GCW planning and operations."

And Gold Coast City Council acknowledged that:

[9] The term is not capitalised in the legislation.
[10] http://www.dews.qld.gov.au/__data/assets/pdf_file/0013/32305/bulk-water-supply-code.pdf section 13

"…documentation of consideration of such regional aspects could be improved and GCW will investigate appropriate amendments to be incorporated into QP-22 documentation (Capex) and GCW's Budget Preparation Guidelines (Capex & Opex) to address this matter.".

3.2.12 Procurement

Adoption of good industry practice in procurement helps to ensure that goods and services have been acquired on an efficient and prudent basis. Results-based principles and practices are set down in the *Local Government Act 2009*, *Local Government Regulation 2012*, and *Queensland Procurement Policy* as well as in the *Public Expenditure and Financial Accountability Framework* and similar frameworks adopted internationally by the World Bank and other international agencies.

The good industry practices for the procurement of goods and services are:

- Procurement policy
  - It is comprehensive and adopts competitive procurement as the default method
  - It clearly defines when other methods can be used and how they are justified
  - It is freely available to the public
- Strategy – there is an active multi-year strategy to identify cost-saving opportunities that become available
- Competition – contracts are awarded by open competition unless otherwise justified
- Transparency
  - The public has ready access to procurement plans, bidding opportunities, evaluation criteria, and the results of tenders and requests for offer
  - Evaluation processes are documented and subject to independent audit
  - Losing bidders are offered feedback
- Complaints handling
  - There is an independent process for reporting and resolving complaints from bidders and potential bidders

Gold Coast City Council has confirmed that all procurement activities are carried out by the Council's Chief Procurement Officer. It has a Procurement Policy and Standards. Furthermore, it has developed quantified bankable saving targets in relation to procurement and also developed protocols to deliver savings and ensure value for money through the application of strategic procurement techniques. SKM therefore concludes that the Council's Procurement Policy and Standards are in accordance with good industry practices.

3.2.13 Planned improvements to processes

Gold Coast City Council advised that "*CH2M HILL has been engaged to undertake a review to assess the efficiency and effectiveness of GCW's capital planning and delivery framework with best practice and other water utilities.*"

In addition, a second planned improvement is described as follows:

> ***"MS Project Server***
>
> *GCW currently utilises a number of systems to 'manage' different areas of project management, including Project Office, SAP, MS Project Standard.*
>
> *Work is currently underway to develop, configure and implement MS Project Server as a new Project Management Information System which will be used by Gold Coast Water (as well as other Directorates within Council)."*

3.3 Operating expenditure policies and procedures

3.3.1 Good industry practice

In a regulated business it is necessary to demonstrate that an operating cost budget is efficient and that the expenditure is necessary to meet or exceed regulated service delivery standards and to maintain assets so they meet or exceed their expected asset life for a given class of asset. Equally as important is the necessity to ensure efficient operation of assets delivering regulated services to enable them to continue to contribute to the regulated services efficiently over their remaining economic or specified life.

A further objective of good practice in budgeting is to achieve ongoing efficiency improvements in the management of assets. Therefore, good industry practice in budgeting is generally based on the development of sound asset management and maintenance strategies that can improve the reliability and remaining operating life of assets. These strategies are in turn, based on detailed and accurate asset registers that contain asset information on:

- Asset age
- Installation/commissioning dates
- Date and nature of major modifications/upgrades
- Asset condition
- Remaining asset life
- Risk and consequence of failure

The starting point for measuring the efficiency of operating costs is the actual expenditure in a base year. This should be assessed for efficiency and adjusted, if necessary, to a level consistent with that of an efficient operator. Future-year operating costs forecasts are then based on extrapolating these base year costs using appropriate indices, taking into account planned and expected material changes to the asset base and material changes in operation and maintenance practices.

A regulated utility's forecast operating costs over the upcoming regulatory period is an important input to the revenue forecasting process. Typically, it must review the extent to which the forecast operating costs are consistent with the provision of an annual revenue requirement, which, in turn, is consistent with the general regulatory principles of the regulated industry. These principles are that the allowed annual revenue requirement or maximum allowable return must fairly compensate the regulated utility for the economically efficient costs and risks it incurs in providing regulated services, to encourage:

- A stable and transparent commercial environment which does not discriminate between users
- The same market outcomes as would be achieved if the market for its regulated services was contestable
- Competition in the provision of its regulated services wherever practicable
- The commercial viability of the regulated utility, through the recovery of efficient costs associated with the regulated services, and a reasonable return on the utilities approved capital invested in its regulated assets and business systems
- Recovery of only those costs related to the provision of the regulated services
- Fairness in the charges made for the regulated services, including the progressive removal of cross-subsidies
- Maintenance of service delivery levels subsisting at the beginning of a regulatory period and an improvement of service delivery levels during the period contemplated by a regulator's final decision
- Maintenance of the regulated assets such that, at the end of regulatory period, the regulated assets are able to continue to provide regulated service delivery without above-average expenditure on upgrades or critical maintenance and continue the service delivery levels previously achieved through their remaining economic life consistent with the standard asset life for a given class of asset

The nature of operating costs means there are elements that are controllable, such as deferring or bringing forward maintenance, or the amount of overtime worked. Moving to outsourcing or contracting some services (such as through SLAs with a Council) can lead to apparent changes in operating costs if the contracted services appear against a different cost category (for example, moving maintenance to "admin and general". To understand the efficient level of operating costs requires an understanding of any such cost accounting changes and of the underlying cost drivers.

Where operating costs vary materially from one year to another, there should be an explanation of underlying causes to determine the representative level of operating costs for an efficient base year.

The reasonably efficient level of expenditure should then be escalated forward through each year of the regulatory period under review, on the basis of its sensitivity to changes in the key drivers of an expenditure category and recognising material changes in the asset base in future years. For example, the key driver of meter-reading costs is likely to be customer numbers, since meter reading costs will increase as the number of customer accounts increase[11].

In undertaking this analysis, due account should be taken of the sensitivity of expenditure in a particular cost category to its key cost driver. Meter-reading costs, for example, have a high variable cost component and will therefore be very sensitive to customer numbers, whereas customer account supervision costs are largely fixed and will be much less sensitive to customer numbers. Historical expenditure trends in a particular cost category may be analysed to help assess the appropriate sensitivity of expenditure to a key cost driver. Similarly, plant operating costs will be split between fixed and volume-related costs.

Equally, customer densities, terrain over which the regulated assets are built, climate and economic conditions (such as strength of an economy and resultant impact on contractor costs), can impact on a regulated industry's operational expenditure. These variations in the cost drivers require careful use of benchmarking between utilities to avoid misleading comparisons.

3.3.2 Operating budget formation

Gold Coast City Council's operating costs consist of bulk charges from Seqwater (supplier of potable water), business as usual operating costs such as employee expenses, chemical costs, sludge handling costs, electricity costs, materials and services, corporate costs from SLAs, and licence fees. Operating expenditure in 2012-13 formed the basis for the 2013-14 budget and the 2014-15 forecasts of operating costs.

Planning and budget preparation

The Gold Coast City Council operating budget consists of the following components:

- The base budget (budget centre level)
- Additions to the base (ie inflation, expansion/growth proposals, new recurrent and non-recurrent budget proposals to address corporate priorities and risks)
- Deletions from the base (ie budget reductions due to efficiencies in real savings to budget)
- Internal transfers (intra and inter-directorate budget transfers)

The budgeting is effectively an escalation of previous year's and does not take into account changes in maintenance procedures eg to preventative maintenance or the condition of the fleet (other than through an assumption that the fleet condition, on average, remains as per previous years.

A detailed operating budget is required for year 1 only (ie base budget), with subsequent years' modelled through its long term financial plan. Development of the 2013-14 operating budget commenced with the recurrent base budget in the September 2012 budget review.

[11] The number of customer accounts is considered a more relevant driver than the number of active meters since most of a meter reader's time is spent moving from one customer to the next.

Gold Coast City Council prepares its budget using the Power Budget tool. Operating budgets are loaded into Power Budget at the lower level i.e. cost centre/cost element. Power Budget only allows direct entry for (1) internal transfers, (2) budget reductions and (3) inflation. Any growth and new proposals are required to be entered through a Custom Form which provides the justification for the proposed expenditure and the current level of service.

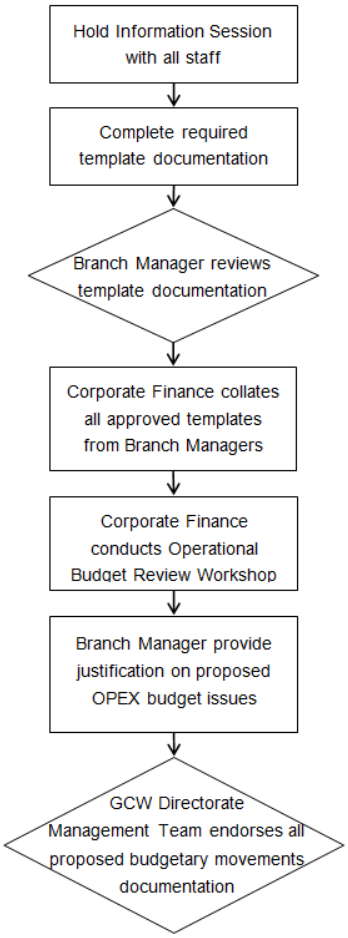
In addition, the tool requires a risk mitigation number at cost centre level (which is a unique number that identifies a relevant existing risk mitigation plan in the Corporate and Directorate Risk profiles and in the Risk Management Information System). The aim is to ensure that funded risk mitigations can be identified for inclusion in the Operational Plan and reported on quarterly. Only existing mitigations outlined in the Corporate and Directorate Risk profiles are included in Power Budget as this system is audited to ensure the validity of the data recorded.

The *Capital Program and Operational Budget Guidelines GCW 13-14* provide clear deadlines for budget preparation. Gold Coast City Council also emphasises the need to provide justifications to meet economic regulatory requirements. This includes providing sufficient information for Council and management to understand the services the budget centre provides and the associated risks. This justification is included in the budget documents presented to the Council.

Quarterly budget reviews

Gold Coast City Council conducts a quarterly review of its budgets in August, October, February and May.

The following illustrates the quarterly budget review process:



A quarterly budget review report is prepared by the Commercial Performance unit and presented via the Water Services Committee to the Council for approval. Once approved, the proposed budget changes are incorporated into the Council's Quarterly Budget Review process per the *Gold Coast City Council Budget Review Policy*. A separate Council report is required for all operational variations greater than $100 K, or where the variation is greater than 10% and $50 K of the Budget Centre.

All budget changes are documented in a spread sheet and provided to Directorate Finance to upload into Power Budget and the SAP system.

Operating budget escalation costs

The *Gold Coast Water Escalation Guideline – 2013* provides the following percentage increments for current costs:

Cost	2013-14	2014-15	2015-16 to 2022-23	Basis
Electricity	11.9%	4.5%	6.71%	Australian Energy Market Commission report regarding electricity price estimates
Labour	3.5%	3.5%	3.5%	Recent Deloitte Economics labour cost forecasts
Capital	4.0%	4.0%	4.0%	QCA's 2012 report for SEQ price monitoring review
Chemical	5.0%	2.5%	2.5%	Mid-point of the forecasted rate of inflation by RBA.
Bio-solids/Sludge Handling	10.0%	2.5%	2.5%	Mid-point of the forecasted rate of inflation by RBA.
Other operating costs	2.5%	2.5%	2.5%	Mid-point of the forecasted rate of inflation by RBA.
Regulatory asset base	2.5%	2.5%	2.5%	Consistent with the RBA medium-term inflation target

Any diversion from the guideline must be discussed with the Manager, Commercial Performance.

Conclusion

In conclusion, SKM considers that the operating budget formation process is in accordance with good industry practice and is robust.

3.3.3 Compliance

The review in **Section 3.2.10** includes a review of operating budget formation policies and procedures for compliance.

3.3.4 Asset management system

Good industry practice for asset management is currently specified by PAS 55-1:2008, the Publicly Available Specification for Asset Management Part 1 Specification for the optimized management of physical assets.

A similar draft ISO standard is currently being developed, Draft International Standard ISO/DIS 55001 Asset management — Management systems — Requirements.

SKM has reviewed the following documents against the requirements of PAS 55-1:2008 with the results as shown in the following table:

- "Asset Management Forum Draft AMP numbers" September 2013
  - "Water Supply Asset Management Plan Asset Renewals & Network Optimisation Service Sustainability" v 0.3 17 May 2013 Report AM0005

- "Sewerage Asset Management Plan Asset Renewals & Network Optimisation Service Sustainability" v 0.2 2 April 2013 Report AM0006
- "Recycled Water Asset Management Plan Asset Renewals & Network Optimisation Service Sustainability" V2 17 May 2013 Report AM0006 (collectively, the AMPs)

- "City Governance Committee Resolution: IMGC.090610.008 Asset Management Plans" (proposal)
- "City Governance Committee Resolution: IMGC.090610.008 Asset Management Plans"

This resolution set the primary reference for the development of Asset Management Plans as the International Infrastructure Management Manual (IMMM). The requirements of this manual are closely aligned with the requirements of PAS 55, with the exception of section 4.7 of PAS 55 as noted below.

PAS 55 Section reference	Asset management system requirements	Issues arising from the proposal and the AMPs
4.1	General requirements	Not compliant with PAS 55 as detailed below
4.2	Asset management policy	An asset management policy was not supplied. Not compliant
4.3	Asset management strategy, objectives and plans	Compliant and robust
4.4	Asset management enablers and controls	• Structure etc. - Compliant and robust • Outsourcing - Not applicable • Training etc. - Initially addressed in the proposal. Compliant, but not robust on an ongoing basis. • Communication – The documents supplied do not contain or reference procedures for stakeholder communication, participation and consultation as required by section 4.4.4 of PAS 55. Not compliant • Documentation - Initially addressed in the proposal. Compliant, but not robust on an ongoing basis. • Information - Partially described in sections 2, 3 and 4 and Appendix C of the AMPs, however the information management requirements of section 4.4.6 of PAS 55 are not described or referenced. Not compliant. • Risk management - Compliant and robust • Compliance - Compliant and robust • Change - The documents supplied do not contain or reference procedures for the management of the impacts of change on asset management systems as required by section 4.4.9 of PAS 55. Not compliant
4.5	Implementation of asset management plan(s)	Initially addressed in the proposal. Compliant, but not robust on an ongoing basis.
4.6	Performance assessment and improvement	Compliant and robust
4.7	Management review	The documents supplied do not contain or reference procedures for management review of asset management systems as required by section 4.7 of PAS 55. Not compliant. A management review is not required under the IMMM.

Based on the documents supplied, SKM concludes that the asset management system is not in keeping with good industry practice and is not robust. This non-compliance with industry standards may lead to inefficiencies in expenditure and implementation and, potentially, service standards non-compliance.

In response to SKM's Draft Report, the following statement was provided:

> *"GCW acknowledge that the version of Asset Management Plans (AMPS) reviewed by SKM were the first generation of plans developed under the City of Gold Coast's (CoGC) corporate asset management planning framework and templates. This framework aligns with the delivery of key/core asset management planning practices for Council's various services (including water and sewerage services) adopting the IIMM format.*
>
> *It is envisaged that through the implementation of continuous improvement activities over next few iterations of the AMPS (updated annually), GCW will progress its asset management planning practices from this 'core'/compliant level to leaders within the industry. As part of this process, GCW will strive to achieve alignment with the new ISO 55000 asset management standards (likely publication date of February 2014).*
>
> *In a recent Capital Planning and Delivery Review, consultants CH2MHill assessed that the AMPS currently reflect the key elements of a contemporary asset management approach. They further acknowledged that the "continued implementation of the Improvement Plan action items presented in each of the Asset Management Plans will lead to more robust asset management planning, and as a consequence, more robust justification of forecast expenditure requirements".*
>
> *The second iteration of the AMPS are nearing completion. They will then be presented for management review and endorsement".*

SKM therefore concludes that Gold Coast Water's asset management plans are currently being developed and refined and SKM accepts that it is Gold Coast Water's intention to be compliant with PAS 55 and in keeping with good asset management practice.

3.3.5 Procurement

As noted in **Section 3.2.12**, Gold Coast City Council's procurement policy and standards adopt good industry practices and this extends to operating cost items.

3.3.6 Planned improvements to processes

Each AMP contained a comprehensive improvement plan with timelines in Section 8.

Gold Coast City Council advised the following:

> *"Council has implemented SAP as its ERP, with Council's initial "go live" occurring on 2nd April 2012. At that time, "Financials" (FI), "Controlling" (CO) and Procurement (SRM) modules were implemented. As part of Release 2, Plant Maintenance (PM) module is to be implemented.*
>
> *One of the major components of implementing the Plant Maintenance module centres around "Work Orders" for maintenance works which is designed to enable collection of financial data, assigned to the specific type of maintenance work etc that is being undertaken on specific individual asset components.*
>
> *Implementation of this module should enable GCW far greater scope to manage, interrogate and report upon maintenance expenditure associated with our significant infrastructure asset base."*

3.4 Conclusion

As detailed above, the requirements of Section 3.1 are addressed by the documents reviewed as summarised in the table below.

Table 4 : Summary of compliance of capital and operating expenditure policies

Requirements	Capital expenditure policies and procedures	Operating expenditure policies and procedures
Has a standardised approach to cost estimating	Compliant and robust	Not applicable
A summary document is prepared	Compliant and robust	Not applicable
An implementation strategy is prepared	Compliant and robust	Not applicable
Has a gateway review process	Compliant and robust	Not applicable
Includes detailed analysis of options for major projects	Compliant and robust	Not applicable
Has a benefits realisation assessment process	Compliant and robust	Not applicable
Includes requirements to comply with relevant legislation	Not compliant	Not compliant
Includes requirements to take account of regional issues.	Not compliant	Not compliant
Only commissioned capital expenditure from 1 July 2010 is included in the RAB	Compliant	Not applicable
Overall expenditure programme and delivery processes	Not compliant, due to the legislative compliance and regional issues above	Not compliant, due to the legislative compliance and regional issues above
Asset management in accordance with good industry practice	Not compliant	Not compliant
Procurement in accordance with good industry practice	Compliant and robust	Compliant and robust
Budget formation in accordance with good industry practice	Compliant and robust	Compliant and robust

4. Operating expenditure

4.1 Overview of operating expenditure

A breakdown of Gold Coast City Council's operating expenditure for the price monitoring period (financial years 2013-14 and 2014-15) is provided in **Table 5**.

Over the price monitoring period, Gold Coast City Council predicts that its total operating expenditure (excluding bulk water charges) will be $217.8 M. The forecast expenditure for 2013-14 is $947,800 less than expenditure in 2012-13, whilst 2014-15 forecasted expenditure is $5.04 million higher than 2013-14.

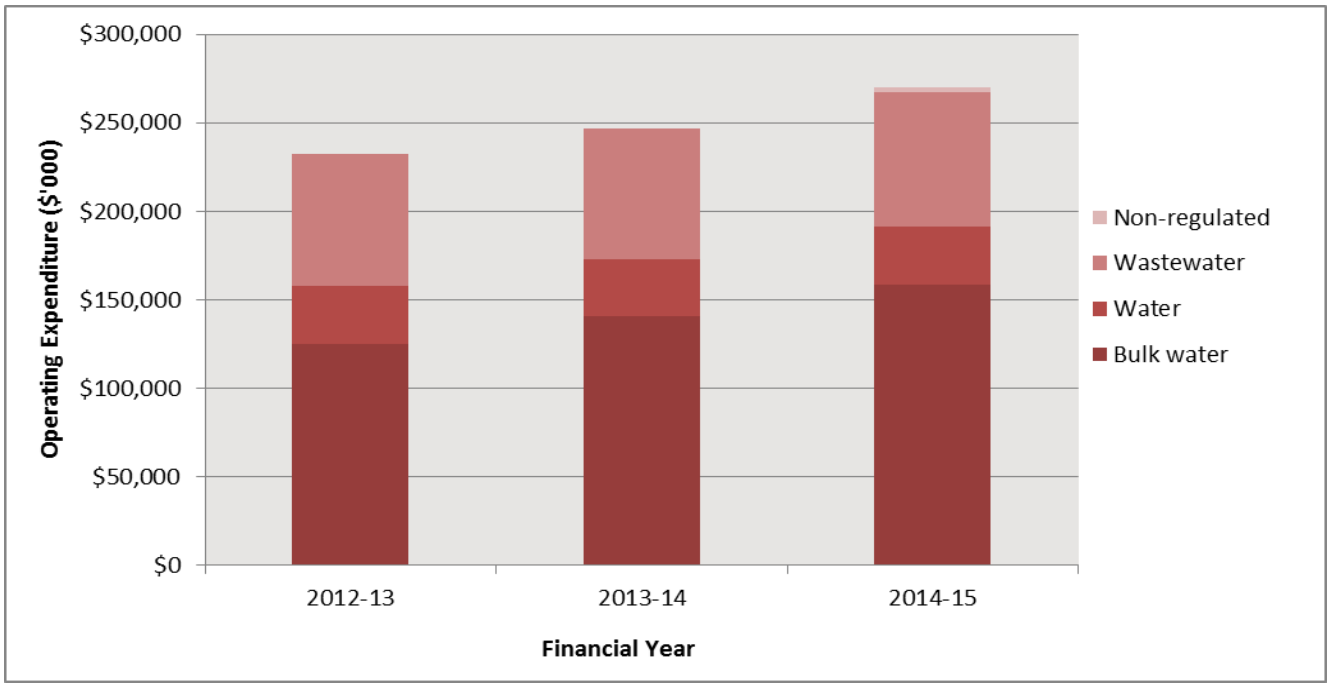
Table 5 : Total operating expenditure (values in nominal $) (Gold Coast City Council, 30 September 2013)

Service	2012-13 ($'000)	2013-14 ($'000)	2014-15 ($'000)
Bulk water	125000.0	140592.6	158357.0
Water	33139.8	31973.5	32940.7
Wastewater	74200.1	74418.6	76283.6
Non-regulated	0.0	0.0	2210.1
Total	232339.8	246984.6	269791.4
Total less Bulk water	**107339.8**	**106392.0**	**111434.4**

Figure 4-1 below provides an overview of the operating expenditure as detailed by Gold Coast City Council in its submission to the Authority. The main points to be drawn from the graph of annual operating expenditure over the three years (2012-15) are that: the water services operating expenditure (excluding bulk water costs) decreases by 1%; the wastewater services operating expenditure increases by 3%; and non-regulated operating expenditure is only recorded in 2013-15 at $2.2 M. Over the same period, expenditure on bulk water (driven by both demand and unit price increase from the bulk water supplier) will increase by approximately 21%.The primary cost driver for the variance between the 2013-14 and 2014-15 forecast expenditures is therefore the cost of bulk water, which increases by $17.7 M.

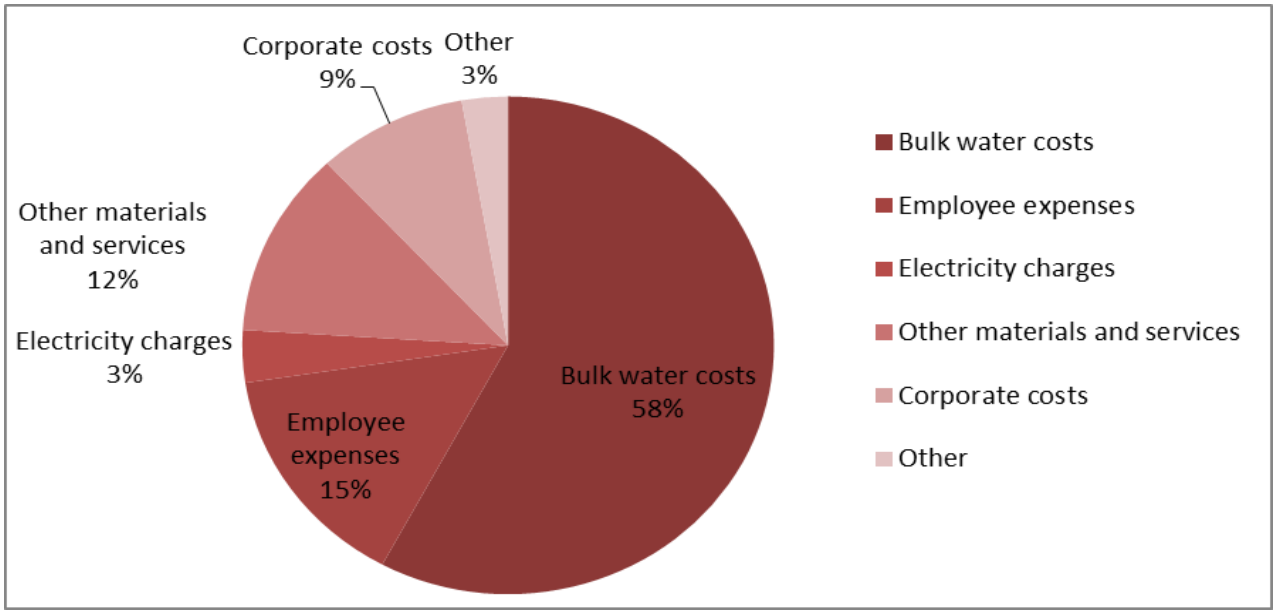
Gold Coast City Council stated in its submission that a 2% productivity factor adjusted for growth has been applied for forecasts. However, no further information has been provided as to how this factor has been applied to its various operating cost categories.

Figure 4-1: Total Operating Expenditure (Gold Coast City Council, 30 September 2013)



Gold Coast City Council has an operating expenditure budget of approximately $516.8 million (including bulk water charges) for the price monitoring period (financial years 2013-14 and 2014-15). Figure 4-2 charts the breakdown of the operating expenditure budget in terms of the main cost categories. As is evident from the chart, the cost of purchasing bulk water is the main operating expenditure item.

Figure 4-2: Total operating expenses for 2013-15 (including non-regulated costs) (Gold Coast City Council, 30 September 2013)



The following tables (Table 6 and Table 7) contain the cost breakdown of water and wastewater, excluding non-regulatory services.

Table 6 : Water operating expenditure 2012-2015 (values in nominal $'000) (Gold Coast City Council, 30 September 2013)

Item	2012-13 ($'000)	2013-14 ($'000)	2014-15 ($'000)
Bulk water costs	125000.0	140592.6	158357.0
Employee expenses	12372.7	11878.6	12398.1
Contractor expenses	0.0	0.0	0.0
GSL Payments	0.0	0.0	0.0
Electricity charges	1107.1	927.0	968.7
Sludge handling costs	0.0	0.0	0.0
Chemicals costs	49.0	106.0	108.7
Other materials and services	11502.5	10311.2	10492.4
Licence or regulatory fees	0.0	217.2	222.7
Corporate costs	8108.4	8533.5	8750.2
Non recurrent costs	0.0	0.0	0.0
Indirect taxes	0.0	0.0	0.0
Total water operating expenses	**158139.7**	**172566.1**	**191297.7**

Table 7 : Wastewater operating expenditure 2012-15 (values in nominal $'000) (Gold Coast City Council, 30 September 2013)

Item	2012-13 ($'000)	2013-14 ($'000)	2014-15 ($'000)
Bulk water costs	0.0	0.0	0.0
Employee expenses	24174.7	25414.1	26504.2
Contractor expenses	0.0	0.0	0.0
GSL Payments	0.0	0.0	0.0
Electricity charges	8296.3	7650.0	7994.3
Sludge handling costs	2434.9	2978.0	3052.5
Chemicals costs	3296.1	3510.0	3597.8
Other materials and services	23017.3	20858.5	20770.4
Licence or regulatory fees	0.0	347.8	356.5
Corporate costs	12980.7	13660.2	14008.1
Non recurrent costs	0.0	0.0	0.0
Indirect taxes	0.0	0.0	0.0
Total wastewater operating expenses	74200.1	74418.6	76283.6

4.2 Benchmarking

4.2.1 Comparability of data

SKM has completed high level benchmarking of Gold Coast City Council against other water utilities located in Australia. Gold Coast City Council's performance against other utilities is discussed below. However due to the high level of this assessment and data availability, direct savings are not capable of being identified from this benchmarking exercise. The various differences between water utilities affect the validity of benchmarking Gold Coast City Council's operating expenditure against other utilities. SKM is aware of differences in Australian water markets which must be considered when comparing water utilities. Aspects such as climate (temperature, rainfall, storm events etc), topography, service areas, connection density, location (rural or urban), technologies used, asset age, regulations, bulk water supply, consumer expectations, years of operation, labour requirements, existing wage agreements, staff employment protection arising from business restructuring, levels of service and licences are just some of the factors which influence operating expenditure.

Operating expenditure for Gold Coast City Council and Unitywater was obtained from 2013-14 Information Templates. The operating expenditure data of other Australian utilities was obtained from the National Water Commission's National Performance Report 2011-12. A cost escalation index was applied to the National Water Commission data to adjust costs to 2013-14 dollars. The CPI obtained from the Australian Bureau of Statistics website of 2.4% for 2012-13 was applied along with an assumed CPI for 2013-14 of 2.4%. SKM is aware of the limitations of accuracy when comparing of 2013-14 operating expenditure for Unitywater and Gold Coast City Council against other utilities which have been scaled up by application of CPI from 2011-12. However this is the most recent data available. The water operating expenditure used for comparison in this section includes bulk water costs.

Some of the major utilities used for Australian benchmarking are shown below Figure 4-3 and Figure 4-4. Barwon Water, ACTEW, Hunter Water Corporation, Unitywater and City West Water all have similar number of connections to Gold Coast City Council for both water and wastewater. Australian benchmarking will focus on these utilities as the main comparators to Gold Coast City Council.

Figure 4-3 : Number or water connections per utility

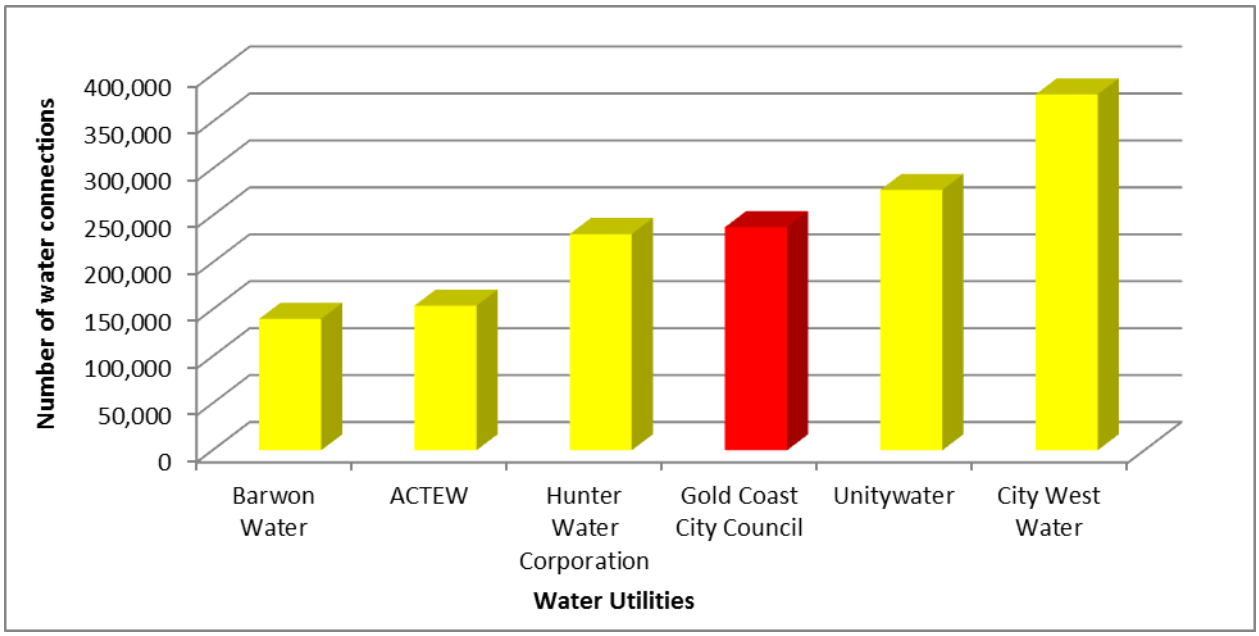
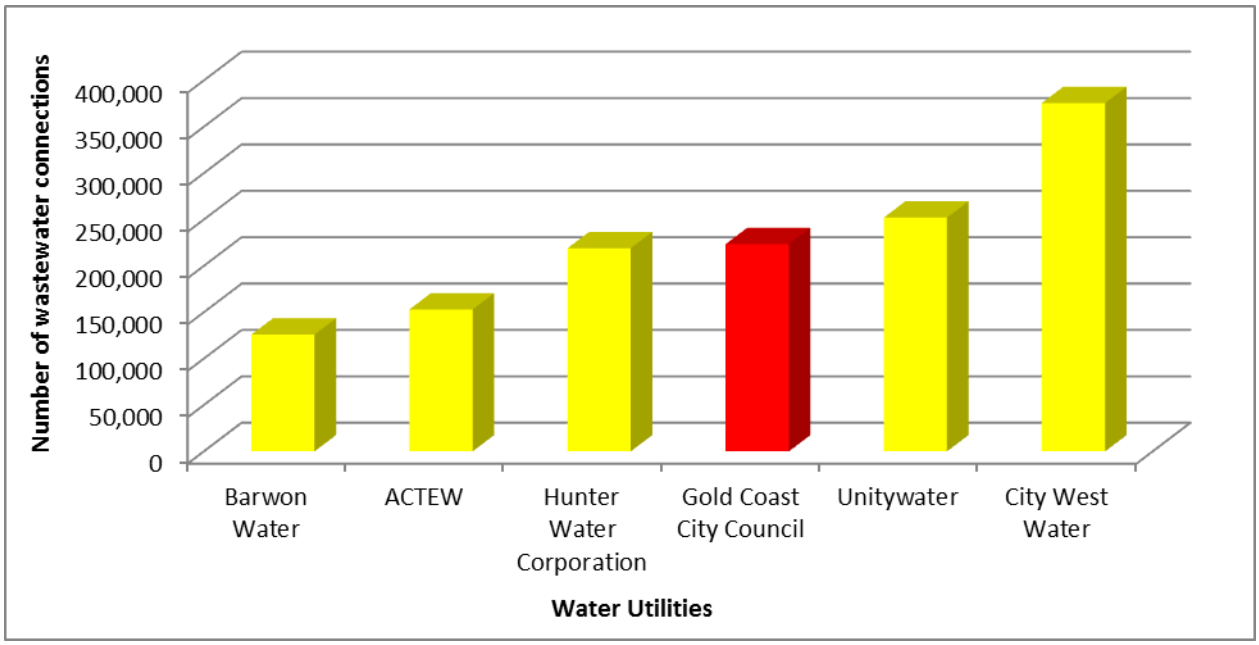


Figure 4-4: Number of wastewater connections per utility



4.2.2 Australian benchmarking

A high level comparison of operating expenditure for Gold Coast City Council against other Australian water utilities is shown below. SKM has included benchmarks for ACTEW, Hunter Water Corporation, Barwon Water, City West Water and Unitywater as shown in Table 8 below.

Table 8 : Gold Coast City Council aggregate cost metrics for Australian comparison

Metric	Description	Gold Coast City Council ($)	ACTEW ($)	Hunter Water Corporation ($)	Barwon Water ($)	City West Water ($)	Unitywater ($)
Customers	Total OPEX per total connection	536	412	268	349	467	528
	Water OPEX per water connection	726	406	236	353	535	669
	Wastewater OPEX per wastewater connection	333	417	302	345	400	373
Network size	Total OPEX per km of total pipeline	39,613	19,896	12,393	15,215	41,003	25,490
	Water OPEX per km of water pipeline	55,811	19,668	11,013	13,290	44,446	33,027
	Wastewater OPEX per km of wastewater pipeline	23,678	20,124	13,813	18,227	37,119	17,575

Table 8 shows that Gold Coast's operating expenditure for water services is higher than comparable Australian water utilities when compared against number of connections and kilometres of pipeline. The wastewater operating expenditure is lower than most Australian utilities shown in the table when compared against number of connections, and around the average when compared against km of pipelines.

When assessing the aggregate operating costs of water utilities around Australia, comparing expenditure per connection will tend to favour the larger utilities that have a large customer base and or high density of connections. Likewise, comparing expenditure with respect to network size will favour utilities with larger networks due to economies of scale. In order to show the relative performance of Gold Coast City Council's operating expenditure with its peers a two dimensional normalisation was used to develop a cost curve for water and wastewater services.

Figure 4-5 and Figure 4-6 shown below, compare the water and wastewater operating expenditure of Australian utilities using data sourced from the National Water Commission National Performance Report 2011-12 and scaled up using CPI for comparison with 2013-14 figures. The comparable water utilities which have been previously identified as having a similar number of connections (Barwon Water, ACTEW, Hunter Water Corporation, City West Water and Unitywater) are shown on the graph as blue circles. The red square shows Gold Coast City Council's operating expenditure in relation to connections per kilometre of pipeline. The green triangles show the other water utilities operating in South East Queensland to consider the effect bulk water charges may have on operating costs.

Figure 4-5: Comparison of Gold Coast City Council's operating expenditure on water services with other Australian water utilities

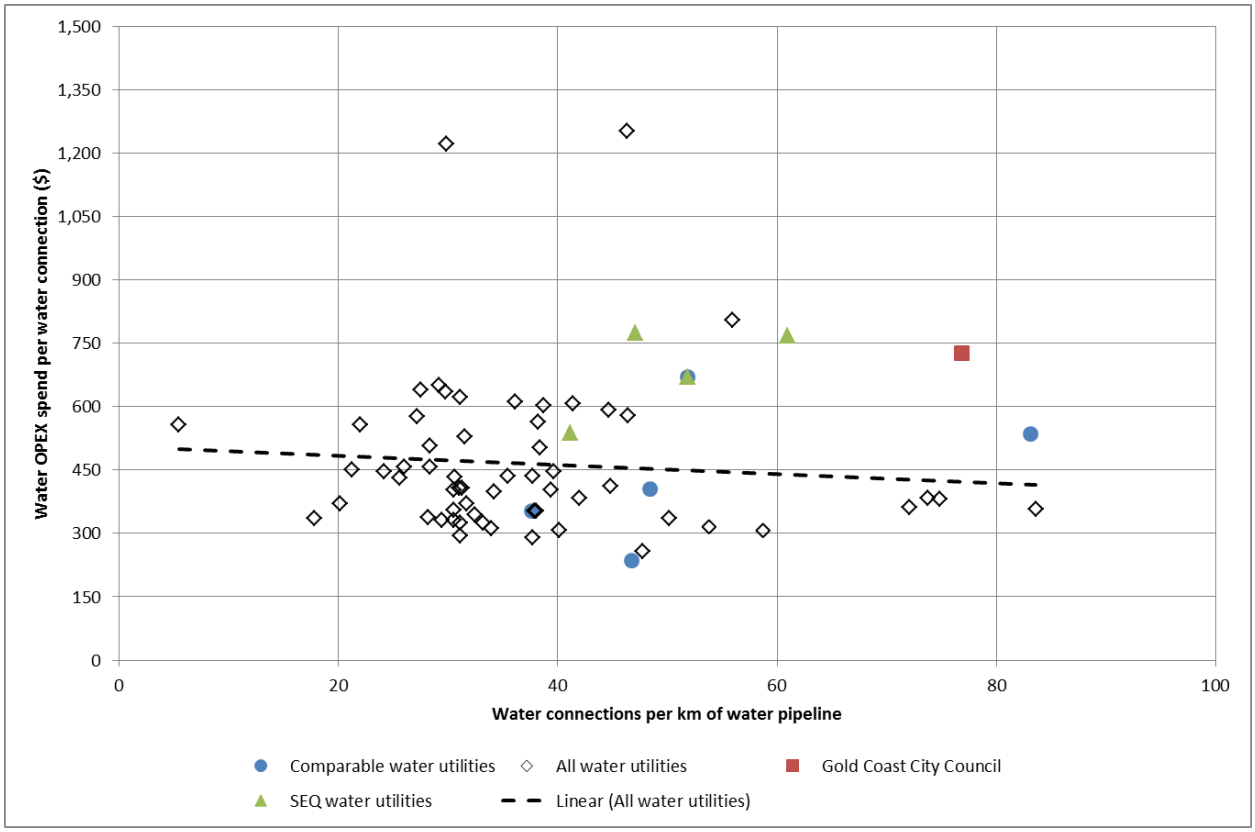


Figure 4-5 shows that Gold Coast City Council has a high water connection density compared to the majority of water utilities. It also shows that operating expenditure is higher than all other comparable water utilities shown in blue, and is higher than Australian benchmarks for water operating expenditure. Water utilities operating in SEQ (as shown as green triangles) also show higher operating expenditure than most utilities, which is likely to be a result of high bulk water charges for the SEQ region.

Figure 4-6: Comparison of Gold Coast City Council's operating expenditure on wastewater services with other Australian water utilities

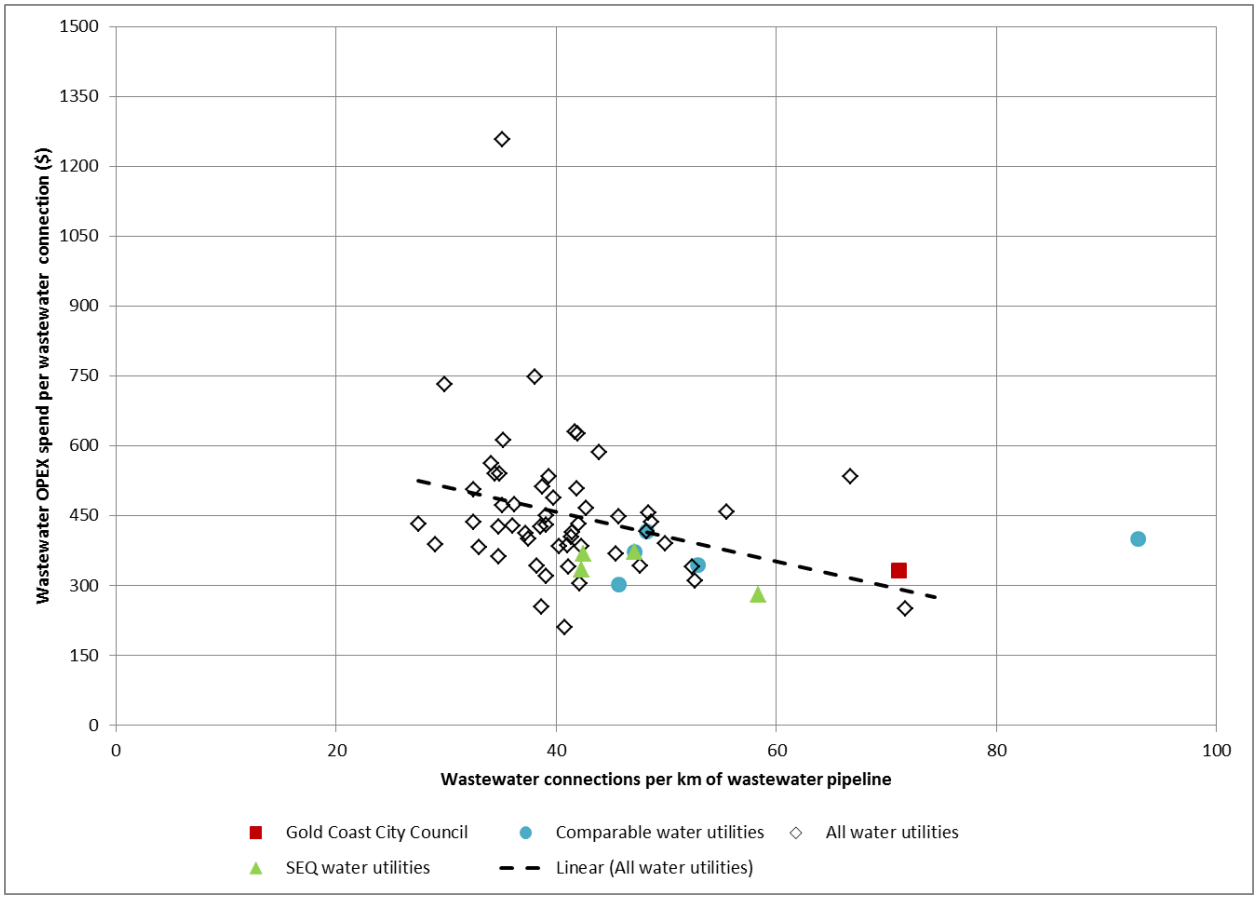


Figure 4-6 shows Gold Coast City Council's wastewater operating costs are similar to the comparable utilities and other Australian water utilities. Gold Coast City Council also has a high connection density for wastewater services and shown to be aligned with the Australian water utilities trendline.

SKM's overall conclusions from this benchmarking exercise is that Gold Coast City Council while operating a relatively dense network, has relatively high water operating expenditure when compared to other water utilities and similar wastewater operating expenditure to other utilities. SKM notes that bulk water charges in the SEQ region are likely to attribute to the higher operating expenditure for Gold Coast City Council's water services.

4.3 Sample selection

In undertaking a review of prudency and efficiency of operating expenditure the Authority has selected a sample of costs for detailed investigation. The sample is shown in Table 9 below.

The selection of the sample is based on the categories that attract the largest portion of operating expenditure and includes both fixed and variable costs. Bulk water costs, the largest of operating expenditure is excluded from SKM's sample as this cost is determined by other agencies and are not within the control of Gold Coast City Council. SKM's sample accounts for 94.6% of the total 2012-13 operating expenditure (less bulk water and non-regulated services) for 2012-13 and 93.3% over the forecast period (2013-14 and 2014-15).

Table 9 : Operating expenditure sample selection for Gold Coast City Council

Category	Service	Operating Expenditure ($'000)		
		2012-13	2013-14	2014-15
Corporate costs	Drinking water	8,108.43	8,533.46	8,750.18
	Other core water services	0.00	0.00	0.00
	Wastewater via sewer	11,321.09	11,913.55	12,217.15
	Trade waste	1,659.64	1,746.64	1,791.00
	Total	**21,089.16**	**22,193.65**	**22,758.33**
	% increase		**5.2%**	**2.5%**
Employee costs	Drinking water	12,305.69	11,332.19	11,829.85
	Other core water services	67.00	546.40	568.25
	Wastewater via sewer	22,636.00	23,873.19	24,893.19
	Trade waste	1,538.68	1,540.96	1,610.97
	Total	**36,547.37**	**37,292.73**	**38,902.27**
	% increase		**2.0%**	**4.3%**
Electricity costs	Drinking water	1,107.07	927.00	968.72
	Other core water services	0.00	0.00	0.00
	Wastewater via sewer	8,293.20	7,650.00	7,994.25
	Trade waste	3.09	0.00	0.00
	Total	**9,403.36**	**8,577.00**	**8,962.97**
	% increase		**-8.8%**	**4.5%**
Other Materials & Services	Drinking water	11,233.32	10,070.79	10,245.97
	Other core water services	269.16	240.40	246.41
	Wastewater via sewer	21,946.71	19,893.15	19,799.35
	Trade waste	1,070.63	965.30	971.04
	Total	**34,519.82**	**31,169.65**	**31,262.77**
	% increase		**-9.7%**	**0.3%**
Total Sample		**101,559.71**	**99,233.04**	**101,886.33**
Total operating expenditure, less bulk water and non-regulated services		**107,339.80**	**106,392.04**	**109,224.30**
Percentage		**94.6%**	**93.3%**	**93.3%**

Source: 2013/15 Information Template

4.4 Corporate costs

This section analyses Gold Coast City Council's corporate costs in total in respect of year-to-year budget changes. It then uses this analysis, with available benchmarks, to assess the prudency and efficiency of corporate costs, and to identify potential efficiency savings.

The corporate functions of Gold Coast City Council are carried out by its internal services providers in accordance with Service Level Agreements (SLAs).

According to the *Gold Coast City Council Price Monitoring Submission 2013-15*, the SLAs are:

- Gold Coast Water and Office of the Chief Executive Officer (OCEO)
- Gold Coast Water and Organisational Services (OS)
- Gold Coast Water and Planning Environment and Transport (PET)
- Gold Coast Water and Engineering Services (Fleet and Plant Branch)

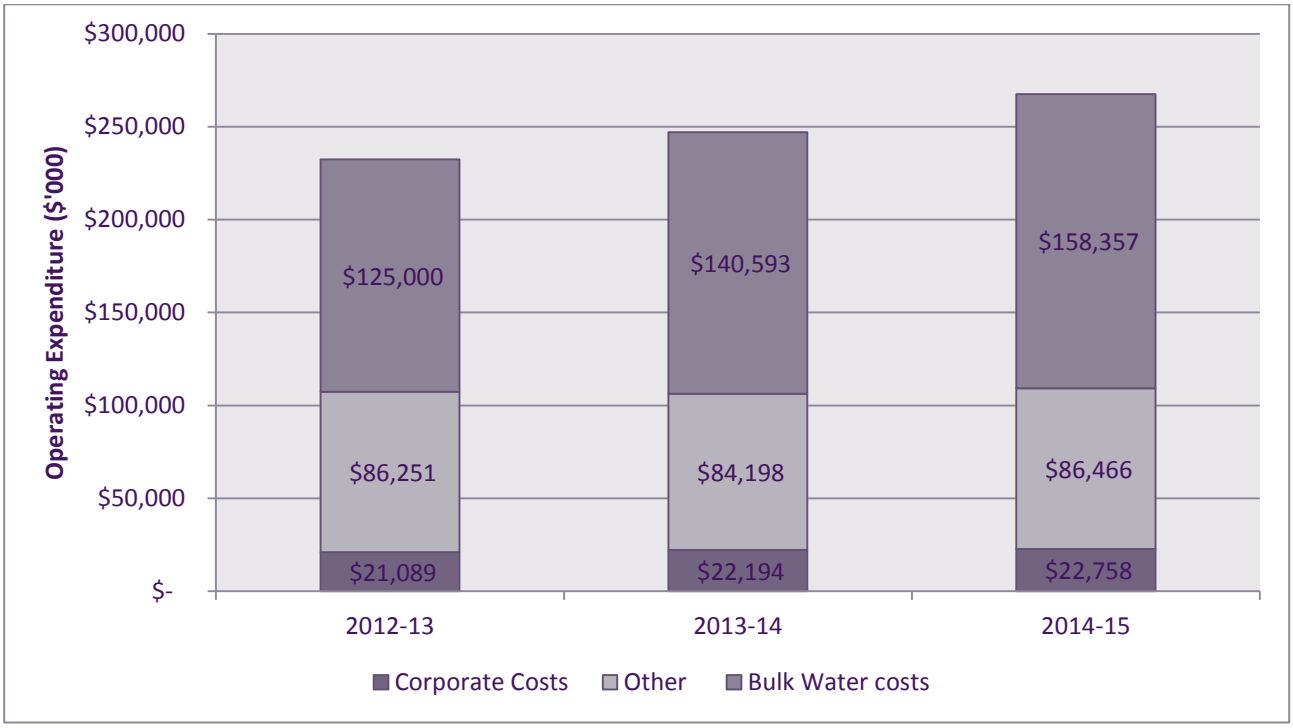
- Gold Coast Water and Engineering Services (Maintenance Services Branch)

However, SKM noted that only the costs incurred by the OCEO, OS and PET are classified as corporate costs, the rest are other materials and services costs.

4.4.1 Costs in total

Corporate costs comprised 9.1% of Gold Coast City Council's operating costs in 2012-13, and represent 19.6% of operating costs once bulk water costs are excluded. The budgeted/forecast annual changes in corporate costs, bulk water costs, and other operating costs over the next two years are shown in **Figure 4-7**.

Figure 4-7: Corporate Costs and Total Operating Costs (nominal $'000)



The year-to-year changes in the proportions of corporate costs are shown in **Table 10**.

Table 10 : Changes in Corporate Costs

	2012-13 Est. Actual ($'000)	2013-14 Budget ($'000)	2014-15 Forecast ($'000)
Corporate Costs	21,089	22,194	22,758
Total Operating Costs	232,340	246,985	267,581
Percentage of Total Operating Costs	9.1	9.0	8.5
Percentage of Total Operating Costs less Bulk Water Costs	19.6	20.9	20.8

Corporate costs, as a percentage of total operating costs, slightly decreased from 2012-13 to 2014-15. However, once bulk water costs are excluded, they represent an increasing proportion of total operating costs.

Definition and comparability

Accordingly to the *Gold Coast Water Price Monitoring Submission 2013-15,* the majority of its corporate costs are outlined in the SLAs, in functions as follows:

- Corporate financial management
- Corporate information technology services
- Governance services
- Marketing and communication services
- Human resource services
- Customer call centre
- Billing and revenue services
- Strategic city planning
- Stores management and procurement
- Fleet and plant services

Gold Coast City Council has advised that the fleet and plant services are not corporate functions and its associated costs are not included in corporate costs. However, to align with the Authority's definition of corporate costs, there are other costs within the Gold Coast Water business unit which could be considered as corporate costs. These are the costs incurred by the Commercial Performance Branch and Director and Strategy Branch. These costs are included in direct operating costs in its *Information Template*.

To be consistent with data provided to the Authority, corporate costs incurred within Gold Coast Water are analysed in **Section 4.4.4** and are not included in the other sections' analysis.

A time series of the annual changes in corporate costs is shown in **Table 11**.

Table 11 : Corporate Costs in Aggregate (nominal $'000)

Component	2012-13 Est. Actual ($'000)	2013-14 Budget ($'000)	2014-15 Forecast ($'000)
Corporate costs	21,089	22,194	22,758
less Non-regulated services corporate costs	-	-	-
Regulated Corporate Costs	**21,089**	**22,194**	**22,758**
Increase over previous year	-	1,105	564
% Increase over previous year	-	5.2	2.5

Gold Coast City Council allocated its corporate costs to drinking water, wastewater and trade waste services. It does not allocate any corporate costs to non-regulated services.

Corporate costs in the Information Template differ slightly from corporate costs in the *Price Monitoring Submission 2013-15* as show in **Table 12**. The differences are licence and regulatory fees of which were not included in the template.

Table 12 : Corporate Costs

	2012-13 Est. Actual ($'000)	2013-14 Budget ($'000)	2014-15 Forecast ($'000)
Corporate Costs in the Information Requirement Template	$21,089	$22,194	$22,758
Corporate Costs in the Price Monitoring Submission 2013-15	$21,090	$22,760	$23,340

	2012-13 Est. Actual ($'000)	2013-14 Budget ($'000)	2014-15 Forecast ($'000)
Differences (license and regulatory fees)	-$1	-$566	-$582

4.4.2 Cost of each Function

For each corporate function, the costs in the base year (2012-13) and the budgeted costs in 2013-14 are shown in **Table 13.**

SKM has been advised that the forecast costs for each corporate function in 2014-15 will not be available prior to the deadline for completing this assessment. The forecast total of $22.758 million is escalated from the 2013-14 total by applying a cost escalation factor of 2.5%.

Table 13 : Cost of each Corporate Function (nominal $)

Branch	Internal Service Provider	2012-13 Estimated Actual ($'000)	2013-14 Budget ($'000)	2014-15 Forecast ($'000)
OS	Customer Contact	4,044	2,386	-
	Facilities & Property	1,222	1,101	-
	Information Services	4,565	5,833	-
	Human Resources	908	841	-
	Procurement	1,402	1,633	-
	Revenue Services - Rates & Billing	3,276	2,711	-
	Others	0	183	-
	Sub-total OS	**15,417**	**14,687**	-
OCEO	Corporate Asset Management	105	141	-
	Corporate Communication	744	288	-
	Bank Fees	585	802	-
	Fringe Benefits Tax	227	190	-
	Corporate Finance	616	1,457	-
OCEO	Corporate Risk	621	700	-
	Corporate Planning and Performance	276	443	-
	Legal Services	183	200	-
	Sub-total OCEO	**3,356**	**4,223**	-
Other SLAs	Internal Audit	300	-	-
	Planning Environment and Transport	385	401	-
Total GCW SLAs Costs		**19,459**	**19,310**	**-**
Other Corporate Costs	External Services - Accountancy	300	-	-
	Affiliation and Membership	831	566	-
	Insurance Premiums	500	2,306	-
	Legal fees - Agency Charges	-	10	-
Total Corporate Costs		**21,089**	**22,193**	**22,758**
Increase over previous year		1,104	565	
% Increase over previous year		5.2	2.5	

The entity has advised the major budget changes from 2012-13 to 2013-14 are:

- The increase of $1.4 million information services costs, which is due to the costs increase associated with the implementation of a new SAP system.
- The increase of $1.8 million insurance premiums. Insurance premiums were underestimated in 2012-13 when the Gold Coast Water returning to the Council. SKM has noted that the entity shares 22% of the Council's total insurance premiums paid to its captive insurance company (The Gold Coast City Council Insurance Company Ltd).
- The increase of $0.84 million corporate finance costs, which is due to a calculation error. The corporate finance costs in 2012-13 should be $1.263 M. The actual increase in 2013-14 is $0.194 M

More detailed explanations on costs changes from 2012-13 to 2013-14 are provided in **Table 14.**

Table 14 : Cost Changes from 2012-13 to 2013-14

Internal Service Provider	2012-13 Estimated Actual ($'000)	2013-14 Budget ($'000)	Variance ($'000)	Explanations Provided by Gold Coast City Council
Customer Contact	4,044	2,386	-1,658	Revenue Services included $2 million for Customer Contact for Water Billing enquiries in 2012-13 but does not for 2013-14.
Facilities & Property	1,222	1,101	-121	Decreased
Information Services	4,418	5,833	1,415	Budgeted desktop costs increased $1.4 million due to the implementation of a new SAP system. The total increase of ICT costs is $8.5 M, of which 16.4% are allocated to the Gold Coast Water.
Human Resources	908	841	-67	Decreased
Procurement	1,402	1,633	231	The 10% increase reflects the cost of the service with some smoothing of service components (excluding stores, ICT and accounts payable).
Revenue Services - Rates & Billing	3,276	2,711	-565	Bank fees were included under Revenue Services for 2012-13 but under Corporate Finance for 2013-14 Postage was included under Revenue Services for 2012-13 but under Information Services in 2013-14.
Others (Telephony)	147	183	36	The new VOIP telephony system has been added to the asset system recently and the depreciation charge to Gold Coast City Council accounts for a $43k increase - it replaced a fully depreciated PABX hence the increase.
Corporate Asset Management	105	141	36	Training budget increased by $6,000, increments for employees and CPI.
Corporate Communication	744	288	-456	Change from 4 FTEs to 2 FTEs and also savings.
Corporate Finance	616	1,457	842	Due to a calculation error, the corporate finance costs in 2012-13 should be $1,395,169. Hence the actual increase in 2013-14 is $62,284 or 4.5%.
Bank Fees	585	802	217	Bank fees increased by $504,712 in 2012-13 in addition to CPI.
Fringe Benefits Tax	227	190	-37	Decreased
Corporate Risk	621	700	79	Budget increased due to WHS legislative requirements in addition to CPI.
Corporate Planning and Performance	276	443	167	1 FTE increase (transferred from Executive Services) plus CPI.

Internal Service Provider	2012-13 Estimated Actual ($'000)	2013-14 Budget ($'000)	Variance ($'000)	Explanations Provided by Gold Coast City Council
Legal Services	183	200	17	CPI
Planning Environment and Transport	385	401	16	4% labour escalation factor was applied.
Internal Audit	300	-	-300	This is the Council's QAO fee as a result of Allconnex/Gold Coast Water coming back to Council.
External Services - Accountancy	300	-	-300	In 2013-14 the $300,000 for accounting and economic regulation was allocated to other materials and services.
Affiliation and Membership	831	566	-264	This variance is due to the $255,000 paid to the Healthy Water Ways.
Insurance Premiums	500	2,306	1,806	There were a number of issues that arose before the transition of Allconnex back to Council. This included information not being provided to council to prepare their budget and as such Council made the best decision they could at the time which was $500,000. In the end this figure increased to around $2.6 M.
Legal Fees - Agency Charges	-	10	-10	Nominal allocation included within Gold Coast City Council's own budget for potential external legal costs that might be incurred.
Total	**21,090**	**22,192**	**1,104**	

Corporate Costs by Cost Elements

The budgeted 2013-14 SLA OS and OCEO costs by cost elements are given in **Table 4.15**. Labour costs accounted for 52.8% of the overall SLA OS and OCEO costs.

Table 4.15: Corporate Costs by Cost Elements ($'000)

Branch	Internal Service Provider	Labour Costs ($'000)	Non-Labour Costs ($'000)	Total Budget 2013-14 ($'000)
OS	Customer Contact	2,050	336	2,386
	Facilities Management	116	774	890
	Property (land acquisition etc)	155	56	211
	Information Service (IT)	2,196	2,081	4,277
	Records Management	375	673	1,048
	Spatial Information	397	111	508
	Human Resources	613	228	841
	Procurement	761	258	1,019
	Stores	321	293	614
	Water Rates & Billing	657	2,054	2,711
	Others	-	183	183
	Sub- total OS	***7,641***	***7,047***	***14,688***
OCEO	Corporate Asset Management	102	39	141
	Corporate Communication	227	61	288

Branch	Internal Service Provider	Labour Costs ($'000)	Non-Labour Costs ($'000)	Total Budget 2013-14 ($'000)
	Bank Fees	-	802	802
	Fringe Benefits Tax	-	190	190
	Corporate Finance	1,111	346	1,457
	Corporate Risk	454	246	700
	Corporate Planning & Performance	338	105	443
	Legal Services	114	86	200
	Sub- total OCEO	***2,346***	***1,875***	***4,221***
	Total SLAs OS and OCEO Costs	**9,987**	**8,922**	**18,909**

SLAs costs allocation methodology and drivers

According to the Gold Coast City Council *Base Budget Review – Service Level Agreement Background,* the SLAs cost allocation is generally based on the following guidelines:

- *"Recurrent operating expenses not directly relating to the delivery of a service e.g. items such as community donations, interest free loans, transfers to reserves and capital expenditure are not considered to be part of a service.*
- *Revenue raised by the internal service offsets the cost of providing that services e.g. the fire levy commission in Revenue Services is part of the rates and billing, as is the property transfer fee revenue.*
- *Service specific expense budgets held by another branch in OCEO or OS are applied to the service rather than the holder of the budget, e.g. Information Services has the Grange maintenance and support costs which are in the budget of the rates and billing service within Revenue Services.*
- *Depreciation, as calculated by Corporate Finance, is added to the operating cost for items where OS is custodian e.g. some administration buildings and most IT software and hardware.*
- *Consumption of other internal services is also added to the base cost.*
- *The sum of these components represents the total cost of a service which is then allocated by an agreed method e.g. head count, PC count, space.*

A summary of relevant cost drivers used to allocate the SLAs costs to the Gold Coast Water is in Table 16.

Table 16 : Costs Drivers

Internal Service Provider	Cost Driver	Weighted Average Cost Allocation Ratio in 2012-13*
Customer Contact	Transaction volume	29%
Facilities & Property	Building occupancy (m^2)	9%
Information Services	PC count & various transaction volumes based on service type	16%
People & Culture	FTE number	15%
Procurement	Various transaction volumes based on service type	27%
Revenue Services – Rates & Billing	Transaction volume	56%
Corporate Asset Management	Building occupancy (m^2)	14%
Corporate Communication	FTE number	12%

Internal Service Provider	Cost Driver	Weighted Average Cost Allocation Ratio in 2012-13*
Corporate Finance	Various transaction volumes based on service type & FTE No.	26%
Corporate Risk	FTE number	20%
Corporate Planning and Performance	FTE number	18%
Legal Services	FTE number	6%

* Some of the cost centres have several ratios depending on different service lines. Therefore, a weighted average ratio has been calculated to provide an indication of how these costs are allocated.

4.4.3 Costs at Council level (SLA related cost centres)

As Corporate Costs are allocated through SLAs from the Gold Coast City Council, SKM has reviewed the Council's overall operating costs and FTEs budgets in 2012-13 and 2013-14, as shown in the Table 17 : and Table 18 respectively.

Table 17 : Council's Operating Costs

	Labour Costs ($'000)	Non-labour Costs ($'000)	Total Operating Expenditure ($'000)
2012-13	53,716	50,865	104,580
2013-14	61,846	51,166	113,011
Operating Expenditure Increase over Previous Year			8,430
Operating Expenditure% Increase over Previous Year			8.1%

Table 18 : Council's FTE Number and Labour Costs

	2012-13	2013-14
Total Council's FTE Number	616	705
FTEs No. Increase over Previous Year		89
FTEs No.% Increase over Previous Year		14.4%
Total Labour-costs of the Year	**$53,715,829**	**$61,845,531**
Average Labour-costs	$87,201	$87,724

As indicated above, Gold Coast City Council's operating budget increased $8.4 million or 8.1% in 2013-14. The Gold Coast City Councils' budgeted average employee costs is $87,724 in 2013-14, and its budgeted total employee numbers increased by 89 or 14.4% from 2012-13 to 2013-14. While the 5.2% SLA costs increase in 2013-14 is less than Council's overall increase in operating costs, there is no indication that Gold Coast Water requires and will receive a higher level of corporate services than previously provided. SKM has noted that the Gold Coast City Council has allocated 20.2% of its total operating budget to the Gold Coast Water which as a comparison basis is higher than the 12% of the Logan Water.

4.4.4 Water business internal corporate costs

Gold Coast Water's internal corporate costs are from its corporate functions, namely the Commercial Performance Branch and the Director and Strategy Branch. Its year-to-year changes are shown in Table 19. The total additional corporate costs decrease slightly from 2012-13 to 2013-14. It then increases 3.2% in 2014-15.

Table 19 : Water Business Internal Corporate Costs by Functions (nominal $)

	2012-13 Est. Actual ($'000)	2013-14 Budget ($'000)	2014-15 Forecast ($'000)
Commercial Performance Branch	1,439	1,729	1,792
Director & Strategy Branch	2,782	2,446	2,518
Total	**4,221**	**4,175**	**4,310**
Increase over Previous Year		-47	135
% Increase over Previous Year		-1.1%	3.2%

Employee costs account for about half (49.4% in 2012-13) of the additional corporate costs as shown in Table 20**.**

Table 20 : Water Business Internal Corporate Costs by Cost Components (nominal $)

	2012-13 Est. Actual ($'000)	2013-14 Budget ($'000)	2014-15 Forecast ($'000)
Employee Costs	2,084	2,080	2,163
Other Materials & Services	2,137	2,095	2,147
Total	**4,221**	**4,175**	**4,310**

As these costs are included in direct operating costs in the Information Return, the overall operating costs analysis is in Section 4.7.

4.4.5 Prudence and efficiency

To assess whether Gold Coast City Council's budgeted and estimated corporate costs for 2013-14 and 2014-15 are at a level which is prudent and efficient, they were compared with:

- Corporate costs of Allconnex Water provided in the Authority's SEQ Interim Price Monitoring for 2011/12 Part B
- A range of corporate costs ratios incurred by other utilities - having regard for jurisdictional and other factors which would affect the validity of those comparisons

In undertaking this analysis, SKM was aware of, and made allowances for, the limitations of benchmarking. These limitations include:

- Differences in organisational structures and in the definition of corporate costs between Australian utilities
- The relative size and maturity of the organisations
- The effects of inflation when comparing costs in absolute terms

Regarding efficiency savings, SKM noted the results of the Authority 2011-12 review of Allconnex Water in which the Authority was of the view:

- That operating efficiencies of at least 2% per annum in non-bulk operating costs would be achievable in 2010-11 (compounding annually). Therefore, the Authority set Allconnex Water's operating efficiency targets of 4% in 2011-12 and 6% in 2012-13, consistent with the targets imposed by the Authority on the other two SEQ entities
- That the pursuit of efficiencies should continue despite the disestablishment of Allconnex
- SLAs costs should not be excluded from review and should not be viewed as fixed costs but subject to review for potential efficiencies

SKM also noted that Gold Coast City Council has applied a two per cent productivity gain in its future forecasts as stated in its *Price Monitoring Submission 2013-15 (page 33).*

Furthermore, SKM considers that in consolidating the water business back into the Gold Coast City Council, economies of scale can be achieved in some areas of operation. This should lead to some efficiency gains in the total operating costs of the Council and consequently the SLA costs to the water business unit.

4.4.6 Comparison between Allconnex Water and Gold Coast City Council

Gold Coast City Council was the largest of the three participating councils of Allconnex Water. According to the Participation Agreement, Gold Coast City Council was entitled to receive 61.65% of the participation returns from Allconnex Water (Logan City Council 27.21%, Redland City Council 11.14%).

A comparison between Gold Coast City Council and Allconnex Water is shown in **Table 21**. The relevant Allconnex Water costs information is from the Authority's *SEQ Interim Price Monitoring for 2011/12 Part B*.

Table 21 shows that corporate costs of Gold Coast City Council are higher than those of Allconnex Water. However, on a percentage of total cost basis (assuming a 61.65% interest), its total operating costs are proportionally lower than those of Allconnex Water - in particular, after the bulk water costs are excluded. It seems that the higher level of corporate costs may reflect a change in costing policy following the de-amalgamation of Allconnex Water, rather than a real increase in such costs.

Table 21 : Comparison between Allconnex Water and Gold Coast City Council

	2012-13 ($'000)	2013-14 ($'000)	2014-15 ($'000)
Allconnex Water Corporate Costs	28,970	28,450	n/a
Allconnex Water Operating Costs	418,150	447,090	n/a
Allconnex Water Bulk Water Costs	195,420	225080	n/a
Gold Coast City Council Corporate Costs	21,089	22,194	22,758
Gold Coast City Council Operating Costs	232,340	246,985	267,581
Gold Coast City Council Bulk Water Costs	125,000	140,593	158,357
Gold Coast City Council Corporate Costs/Allconnex Water Corporate Costs	72.8%	78.0%	-
Gold Coast City Council Operating Costs/Allconnex Water Operating Costs	55.6%	55.2%	-
Gold Coast City Council Operating Costs exc. Bulk Water Costs/Allconnex Water Operating Costs exc. Bulk Water Costs	48.2%	47.9%	-

4.4.7 Top-down benchmarks

For the SEQ retail distribution entities, the ratio of corporate costs to total operating costs after bulk water costs are excluded provides a useful 'top down' indicator of whether their corporate costs are efficient when compared with those of water utilities whose bulk water costs are significantly lower.

A comparison of the entity's corporate costs as a proportion of operating costs with other urban water utilities in Australia is as follows:

Table 22 : Corporate Cost Comparison

Utility	Annual Operating Expenditure	Corporate Costs/Operating Costs	Comment
Gold Coast City Council	$106 M	20.9%	Excludes bulk water costs 2013-14 budget Includes in-house and SLA costs

Utility	Annual Operating Expenditure	Corporate Costs/Operating Costs	Comment
Logan City Council	$51 M	14.3%	Excludes bulk water costs 2013-14 budget Includes in-house and SLA costs
Redland City Council	$24 M	26.2%	Excludes bulk water costs 2013-14 budget Includes in-house and SLA costs
Queensland Urban Utilities	$274 M	19.8%	Excludes bulk water costs 2012-13 estimated actuals Corporate costs said to align with QCA definition
Allconnex Water	$380 M	14.3%	Excludes bulk water costs 2011-12 budget In transition from Council SLAs
Unitywater	$243 M	33.8%	Excludes bulk water costs 2013-14 budget Corporate costs are said to align with QCA definition
Sydney Water	$901 M	19.8%	Excludes bulk water costs 2011-12 actuals IPART review found scope for significant efficiency gains
Hunter Water	$122 M	28.8%	Includes customer service function IPART review sought continuing efficiency of 0.25%, including from upgrading business systems

(Comparisons are not available for the three Melbourne utilities as the ESC review has not gone to this level.)

4.4.8 Cost escalations

In its *Escalation Guideline 2013*, Gold Coast City Council specifies that the cost escalation factor for its other operating costs (which includes corporate costs) is 2.5% from 2013-14 to 2022-23.

The corporate costs increase of 5.2% in 2013-14 is higher than the 2.5%. However, it is noted that the increase is mainly driven by the information services costs associated with the implementation of a new SAP system, a correction of previously underestimated insurance premium when the water business unit returned from Allconnex Water and also an increase in corporate finance costs. SKM is of the view:

- The SAP system related corporate costs increase should be offset by efficiency gained through business process improvements as the Council's corporate functions are now operating under an advanced ERP system. Therefore, SKM has recommended a downward adjustment of $1.305 M.
- Regarding the insurance premium increase, the Council should seek quotes from other insurance providers to ensure value for money

SKM considers that the cost escalation factor of 2.5% from 2013-14 to 2014-15 is reasonable and it aligns with the Reserve Bank of Australia's target range of 2 to 3% for inflation.

4.4.9 Conclusion

SKM concludes that Gold Coast City Council's budgeted corporate costs are prudent but not efficient. Efficiency savings should be achieved through business process improvements while operating under an advanced ERP system. The SKM recommended budget adjustments are summarised in **Table 23**.

Table 23 : Proposed Budget Changes

	2013-14 ($'000)	2014-15 ($'000)
Total Corporate Costs	22,193	22,758
Less: Adjustment to Information Services ($5,833M - $4,565 million *1.025%)	1,305	1,338
Total Proposed Corporate Costs	**20,888**	**21,420**

4.5 Employee expenses

4.5.1 Overview of operating expenditure

The labour cost budget for this item includes all staff Gold Coast City Council employs in the operation of their water supply and wastewater treatment assets. It does not include staff employed by the Gold Coast City Council that may provide corporate services to the water and wastewater business. The allocation of costs for such corporate services is governed by Service Level Agreements with Council and is accounted for under Corporate Costs in the Authority's template. The proposed employee expenses are shown in Table 24.

Table 24 : Proposed Employee Expenses

Category	Service	Operating Expenditure ($'000)		
		2012-13	2013-14	2014-15
Employee Expenses	Drinking water	12,305.69	11,332.19	11,829.85
	Other core water services	67.00	546.40	568.25
	Wastewater via sewer	22,636.00	23,873.19	24,893.19
	Trade waste	1,538.68	1,540.96	1,610.97
	Total	**36,547.37**	**37,292.73**	**38,902.27**
	% increase		**2.0%**	**4.3%**

Gold Coast City Council's staffing levels reduced from 450 (originally transferred to Allconnex Water) to 411. Initially 412 staff returned from Allconnex Water in July 2012. After an organisational reallocation of resources, Gold Coast City Council determined that only 411 FTE positions were required and thus one FTE position was deemed redundant. This level of staffing is expected to continue over the forecast period. This is shown in Table 25.

Table 25 : FTEs and Costs

Area	2012-13			2013-14		2014-15	
	FTE	Budget Cost ($'000)	Actual Cost ($'000)	FTE	Forecast Cost ($'000)	FTE	Forecast Cost ($'000)
Asset Solutions	37	854	813	35	777	35	970
Commercial Performance	12	1,130	1,049	13	1,354	13	1,443
Network Reliability	132	12,112	12,050	131	12,075	131	12,617
Operational Performance	50	5,134	4,765	52	4,738	52	5,426
Operational Strategy (including Director's Office)	3	731	763	7	725	7	1,216
Service Sustainability	43	4,402	4,435	40	5,048	40	4,963
System Control	135	12,528	13,139	133	14,006	133	13,909
Total	**412**	**36,891**	**37,014**	**411**	**38,724**	**411**	**40,545**

Area	2012-13			2013-14		2014-15	
	FTE	Budget Cost ($'000)	Actual Cost ($'000)	FTE	Forecast Cost ($'000)	FTE	Forecast Cost ($'000)
% increase					5.0%		4.7%
Vacancies as at 15 August 2013				17			

SKM notes that the detailed costs and forecasts (shown in Table 25) provided by Gold Coast City Council for employee costs in response to SKM's request for information are somewhat higher than that provided in its Information Template submission to the Authority. SKM understands that the difference is mainly due to the allocation of employee costs to non-regulated laboratory labour costs which in 2012-13 amounted to some $1.7 M.

Gold Coast City Council advised that this $1.7 million allocated to the non-regulated laboratory labour expenses has been included in its template for 2012-13. Accordingly, Gold Coast City Council advises that its provision it the template of $36.5 million for employee expenses should be reduced to $34.9 M.

Gold Coast City Council also advised that at the time the 2012-13 budget was prepared, insufficient data was available from Allconnex Water's records to accurately estimate the value of overtime and allowances that should have been included. General overtime information from Gold Coast City Council's payroll section was used to provide an estimate of the allowances. This allowance proved to be insufficient. This was because for Gold Coast City Council, the bulk of overtime and allowances are incurred due to the need to undertake network corrective maintenance. This is often required to be undertaken outside normal business hours (eg repairs to burst water or sewer mains) to meet the standards of service required. Over the 2012-13 year, actual overtime expenses incurred by Gold Coast City Council staff proved to be about $1M over budget and as a result, labour allocations were increased by approximately $1 million to allow for the additional overtime and allowances costs incurred.

While no contractor costs have been provided in the Information Template, in its submission (page 31) to the Authority, Gold Coast City Council states that it "uses contractors for specialist activities where required to supplement existing resources". These costs have not been separately identified in the templates but have been included in "Other Materials and Services"[12].

4.5.2 Provided documentation

The key reference documents used for this review are:

- *Gold Coast City Council Price Monitoring Submission 2013-15*, City of Gold Coast, 30 Sep 2013
- GCW QCA Information Requirements Templates.xls
- 1. TRACKS 41731305 v2 2013_15_PRICING_SUBMISSION_OPEX_RFI.xls
- 41757732_v1_RFI_GCW_036_45.xls
- Deloitte Access Economics, *Forecast growth in labour costs in Victoria – report prepared for the AER*, 4 Feb 2013

4.5.3 Prudency

SKM understands that the expenditure on employee costs is used to meet the following requirements:

- Legal obligations
- Operations and maintenance of existing infrastructure

[12] This is consistent with the practice of Queensland Urban Utilities and Unitywater. These costs appear as "sub-contractors" under Other Materials and Services.

Gold Coast City Council is required to supply drinking water and treat wastewater to meet license conditions for public health and environmental discharge limitations. The engagement of labour to operate and maintain the infrastructure under the responsibility of Gold Coast City Council is required to fulfil its obligations and therefore SKM is of the opinion that this expenditure is prudent.

4.5.4 Efficiency

Due to the transition from Allconnex Water over the 2012-13 period, SKM understands that labour costs were not well allocated amongst the various functional areas in this year. In addition, the organisational structure was in a state of flux. As a result, the data provided by Gold Coast City Council was not adequate to make a sufficiently robust comparison based on the functional areas. In preparing the 2013-14 and 2014-15 forecasts, a better understanding of actual employees allocated to the various functions was available, so more detailed budget allocations were possible.

SKM was advised by Gold Coast City Council that no additional FTEs are forecast across the water and wastewater business in 2013-14 and 2014-15. Adjustments in allocating staffing levels within functional areas however may still occur as greater understanding of resource requirements develops within the business. A vacancy rate 4% is expected and has been applied in the template data. This is consistent with historical rates and also with the vacancy rate seen in other SEQ water authorities including Unitywater. In its forecast, Gold Coast City Council escalated its employee costs by 4% pa to account for inflation, real labour costs increases and other labour expenses. This increase is comprised of 3.5% wage increase predicted over the forecast period by Deloitte Economics13, shown below in Figure 4-8 and a 0.5% allowance to account for the impact on employee entitlements liability (accrued long service leave and annual leave) when a pay rate increase takes effect.

Figure 4-8: Deloitte Access Economics' Wage Price Index forecast for Australia Labour Cost

[13] Deloitte Access Economics, *Forecast growth in labour costs in Victoria – report prepared for the AER*, page ii, 4 Feb 2013

4.5.4.1 Calculation of costs

SKM concludes that the 2% increase shown in the Information Template for 2013-14 is inaccurate as the 2012-13 expenses include costs incurred for non-regulated activities and excluded the additional overtime expenses required. Removing the $1.7 million cost for non-regulated laboratory labour cost while adding $1M to account for an increase in overtime costs results in revised 2012-13 employee expenses of approximately $35.8 M[14]. Accordingly, the increase in employee expenses to $37.3 million in 2013-14 is about 4% based on the revised employee expenses of $35.8 M. In 2014-15, the proposed increase in employee cost is 4.3%. This is generally consistent with the submission provided by Gold Coast City Council.

Gold Coast City Council has informed SKM that the Certified Agreement provides for pay increases of 3.1% pa for 2013-14 and 2014-15.

SKM also notes that while the superannuation guarantee is set to increase to 9.5% from 9.25% in 2013-14, Gold Coast City Council employees together with all Gold Coast City Council staff currently enjoy a higher rate (12%) of superannuation contribution than the legislated requirement as part of the Certified Agreement. As a result, the increase in the superannuation guarantee should not have any impact on employee expenses.

Gold Coast City Council has also informed SKM that a provision of $1M has been included in the 2012-13 employee expenses budget for overtime. During our discussions, the Council indicated that overtime is not encouraged and is only meant to respond to emergencies like unplanned disruptions to supply or major leakages. This allowance amounts to under 3% of its employee expenses budget of $34.9 million and in SKM's view is a reasonable allowance.

4.5.4.2 Market conditions

Gold Coast City Council has proposed increases in the cost of employee expenses of approximately 4% (after adjustments are made to the employee expense of 2012-13) for 2013-14 and 4.3% for 2014-15. The increase comprises of 3.5% wage increase forecast by Deloitte Economics and a 0.5% allowance to account for the impact of a wage rise on employee entitlements. While SKM is of the opinion that this proposed increase is not unreasonable and does reflect general (Australia) market conditions, Gold Coast City Council also advised that the wage increase provided for under its Certified Agreement (formerly known as the EBA) for 1 July 2013 was 3.1% and that as at 30 June 2013, its accrued employee entitlement liabilities amounted to some $11.6 M. As a result, the increase in liability would amount to approximately $358,700. The increase in accrued entitlement liability amounts about 0.9% of employee expenses (based on Gold Coast City Council's forecast of total employee expenses of $38.7 million for 2013-14). A worked example of the impact of a wage increase on its entitlement liability was provided to SKM. This is shown in Table 26.

Table 26 : Impact of wage increase on accrued employee entitlements

Employee Entitlements (Liability) balance as at 30th June 2013	**$**
Current Liability	4,110,818
Non-Current Liability	7,459,756
Total accrued liability as at 30th June 2013 (based on 2012-13 wages)	11,570,574
Impact of 3.1% wage increase in liability value	358,688
Projected Employee Expenses 2013-14	38,724,000
Additional 'employee expense' to be recorded in 13-14	0.93%

There is some inconsistency in the manner in which Gold Coast City Council has treated its forecast employee costs increases. While the Certified Agreement provides for a 3.1% pa increase in wages, Gold Coast City Council has applied an Australia wide figure of 3.5% forecast by Deloitte Access Economics. As the Certified

[14] Template Employee cost of $36.5M less $1.7 million (non-regulated laboratory) plus $1M (overtime) = $35.8M.

Agreement is not due to expire till 30 June 2015, the 3.1% increase will apply for the forecast period. Conversely, Gold Coast City Council has applied an additional 0.5% increase when a 3.1% increase in wages would result in an increase of about 0.9% to its employee expenses entitlement liability. Taking this consideration, an employee expenses increase of 4% is considered appropriate.

SKM also notes that businesses may account for the accrued employee entitlement liability by making adequate provision and investing the funds in interest bearing assets so that when these liabilities are redeemed, funds are available to pay them. SKM has been informed that Gold Coast City Council does not hold any such assets directly for its water and wastewater business and any interest returns from asset are include in general Council's revenue rather than credited to the water business. That said, it may then be appropriate to separately account for any revenue that the provisions may generate.

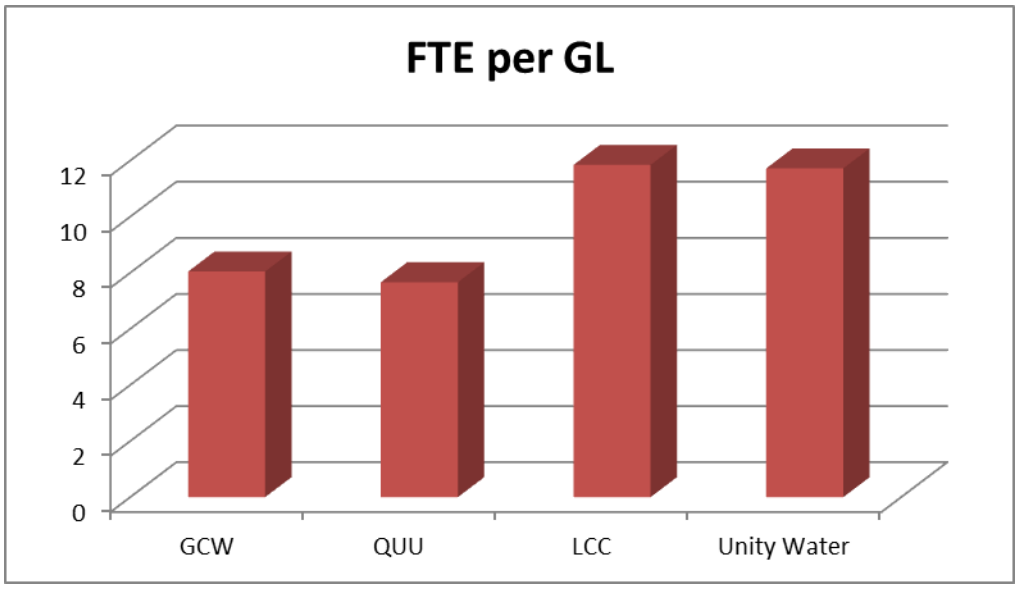
4.5.4.3 Benchmarking

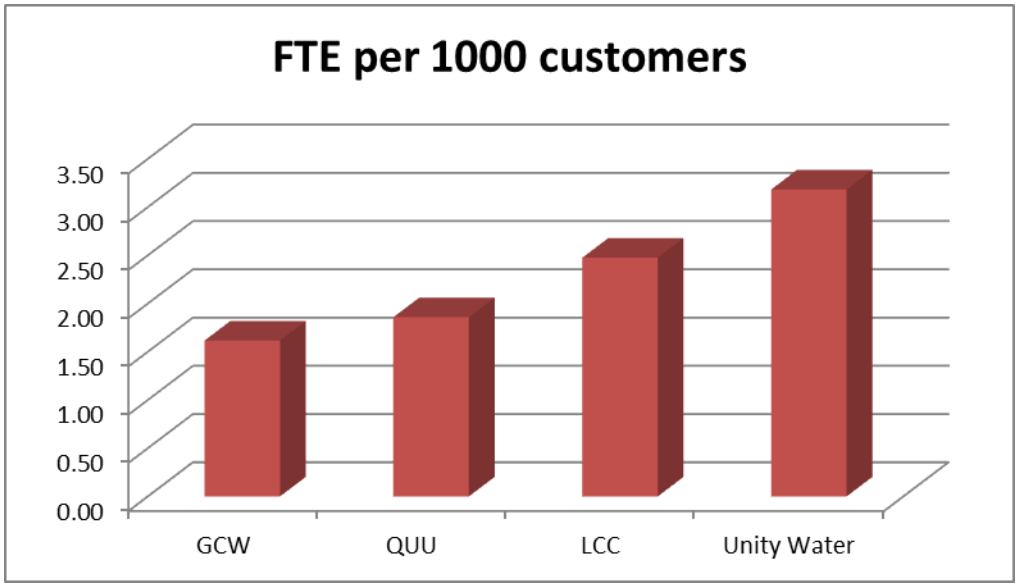
SKM has compared the staffing level proposed by Gold Coast City Council with its peers in South East Queensland namely Queensland Urban Utilities, Unitywater and Logan City Council. After removing the number of corporate services staff from Queensland Urban Utilities and Unitywater (to account for the fact that both Gold Coast City Council and Logan City Council water business staff numbers do not include corporate services staff which are provided by the councils), Gold Coast City Council staffing levels are relatively low in terms of both customer numbers and volume of water delivered. This is shown in Figure 4-8.

The relatively low FTE numbers seen in Gold Coast City Council reflects that current asset management approach which is mainly geared to responding to asset issues as they arise. While both Queensland Urban Utilities and Unitywater are attempting to adjust their asset management approach to a more preventative maintenance stance, resulting in some increases in employee numbers, but with as yet unquantified anticipated performance improvement for the assets, and eventually a reduction in costs due to reduced emergency events, Gold Coast City Council is still in a more reactive maintenance mode. As such, the relatively lower asset management staffing levels of Gold Coast City Council over, say Queensland Urban Utilities, is consistent with the different approaches of the two to asset management (reactive and proactive respectively). From discussions with Gold Coast City Council SKM understands that the business would like to move to a more proactive maintenance approach. If a more proactive maintenance approach is adopted, SKM expects that Gold Coast City Council's FTE staffing requirements would likely increase. However, this change in asset management practices and hence staffing levels is unlikely to eventuate within the current forecast period given the transition back from Allconnex.

In its response to SKM's Draft Report, Gold Coast City Council indicated that, while it agrees that the transition to a proactive maintenance approach for passive (linear) assets would likely lead to increased FTE requirements, such an increase should be offset by benefits associated with a reduction in resource requirement in operational/field staff and equipment and in the call centre. The Council further indicated that it is currently developing a more comprehensive regime of condition assessment of its linear assets with a view to minimising failures and subsequent supply interruptions across the network. This will facilitate enhanced information being available to feed into the Council's Asset Management Plans to improve its overall asset performance. The Gold Coast City Council also recognises that to adopt a more comprehensive preventative maintenance approach for linear assets, it would require the quantification of benefits to ensure prudence and efficiency and avoid any potential over servicing. SKM agrees that this is a reasonable approach as the Council seeks to transition to industry best practice asset management practices.

Figure 4-9 Relative FTE service delivery efficiency of SEQ water utilities





4.5.5 Comparison against saving targets

Gold Coast City Council stated in its submission that a 2% productivity factor adjusted for growth has been applied for forecasts. However, no further information has been provided as to how this factor has been applied to its various operating cost categories in general and to employee expenses in particular. Further, it is not clear from SKM's analysis that this productivity factor target has flowed through to the current budgets and hence submission to the Authority.

4.5.6 Summary

In summary, SKM considers that the staffing levels proposed by Gold Coast City Council are reasonable and reflect the current asset management approach (reactive as opposed to proactive). Adopting a more proactive maintenance approach in the future is likely to result in higher staffing levels, although, in the long term, this should result in overall lower operating and capital asset replacement costs.

However, SKM concludes that the forecast employee expenditure has been considered by SKM to be not efficient. Gold Coast City Council has proposed a 4% increase in 2013-14 based on the adjusted 2012-13 expense (rather than the 2012-13 expense provided in the template). In 2014-15, the Council has proposed an increase of 4.3%. SKM recommends a reduction in the rate of increase to 4% for 2014-15. This amounts to a reduction of $128,000 to the employee expenses allocation in the 2014-15 forecast (based on the 4% cost category escalation from the adjusted 2012-13 baseline). These adjustments and escalations are shown in Table 27.

Table 27 : Recommended Employee Expenses

	2012-13 ($'000)	2013-14 ($'000)	2014-15 ($'000)
Total proposed (template)	**36,547.37**	**37,292.73**	**38,902.27**
Adjustments			
less non-regulated labour	1,698.00		
add additional overtime	1,000.00		
Total expense (adjusted)	35,849.37		
Proposed increase from adjusted 2012-13 expense		4%	4.3%
SKM recommended increase		4%	4
Recommended expenses	35,849.37	37,283.34	38,774.68

Table 28 below classifies the documentation received and identifies any further information required to adequately review each section.

Table 28 : Employee Expenses quality of information provided

Section of OPEX review	Documentation Status	Additional Information Required
Prudency		
Cost driver		
Efficiency		
Calculation of costs		
Market conditions		
Benchmarking		
Saving targets		Details on identified savings due to productivity improvements

4.6 Electricity costs

4.6.1 Overview of operating expenditure

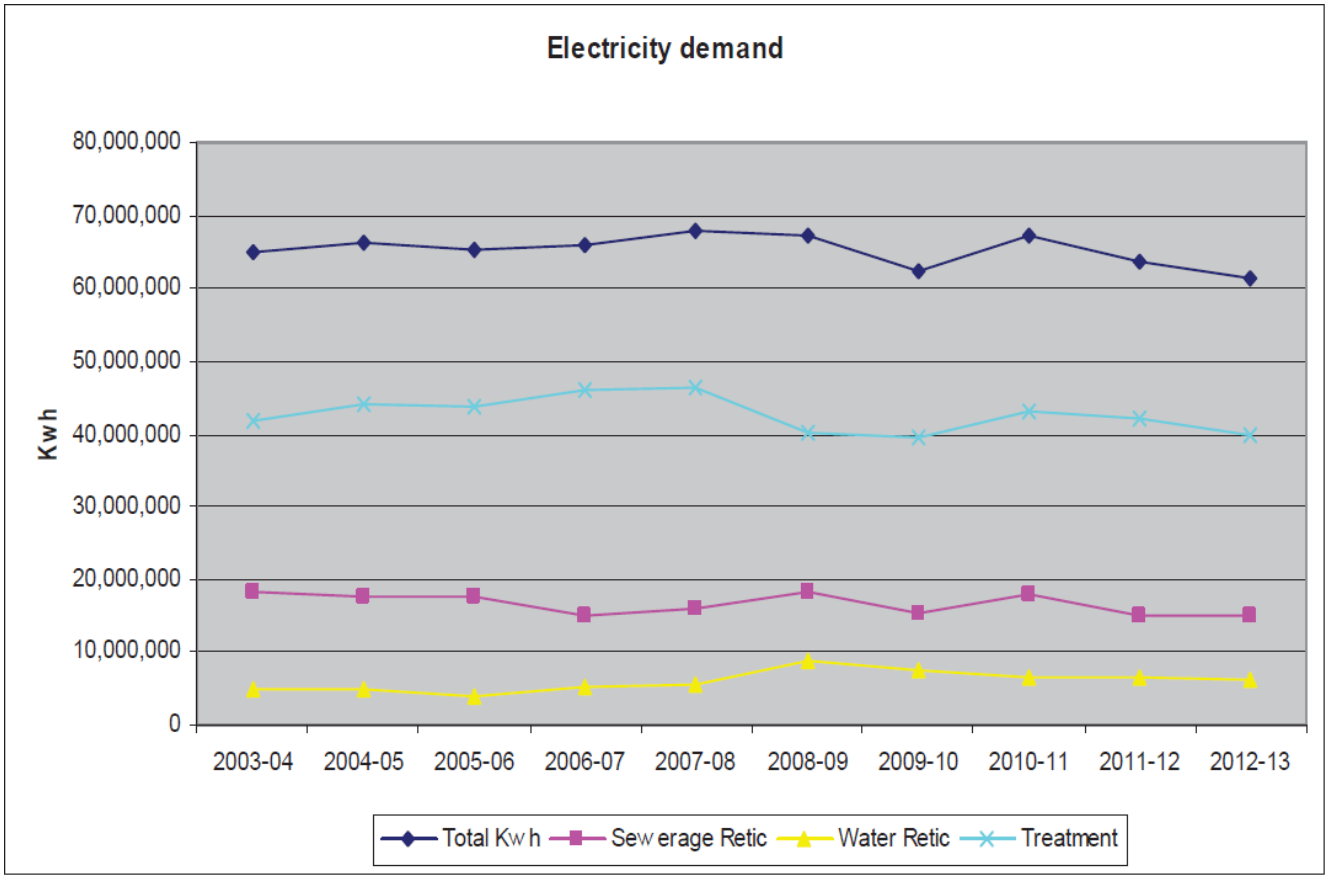
Electricity is used by the Gold Coast City Council water business for the transfer of water and wastewater in its network, and the treatment of wastewater in its sewage treatment plants. Some electricity is also used in the monitoring of water quality. In its submission, the Gold Coast City Council identified certain trends in its electricity consumption of the past few years. It states that

> *"… total electricity consumption remained relatively static from 2003 to 2008. Post 2008-09 fluctuations in electricity demand can be attributed to a combination of factors including wet weather events, dry conditions and asset transfers.*
>
> *During the dry weather events experienced over 2009-10 GCW supplied potable water to Logan increasing the overall level of pumping, therefore increasing electricity demand overall.*

In 2010-11 extreme wet weather events attributed to above average sewage flows increasing pumping and treatment activities at GCW's STP. The transfer of the Beenleigh STP (including associated sewerage pump stations) to Logan reduced net electricity demand."[15]

Figure 4-10 reproduces Gold Coast City Council's electricity demand for its water and wastewater business between 2003-04 and 2012-13.

Figure 4-10 Gold Coast City Council's electricity demand



Source: *Gold Coast Water Price Monitoring Submission 2013-15*, City of Gold Coast, 30 Sep 2013, P30

Table 29 details the electricity expenditure detailed in the Template for Gold Coast City Council's water business between 2012-13 and 2014-15.

Table 29 : Gold Cost City Council's proposed electricity expenditure for water and wastewater operations ($'000)

Service	2012-13	2013-14	2014-15
Drinking water	1,107.07	927	968.72
Wastewater via sewer	8,293.20	7,650.00	7,994.25
Trade waste	3.09	0	0
Total	9,403.36	8,577.00	8,962.97
% increase		-8.80%	4.50%

[15] *Gold Coast Water Price Monitoring Submission 2013-15*, City of Gold Coast, 30 Sep 2013, P 29 and 30

As seen in Table 29 Gold Coast City Council has proposed total electricity expenses for the period of 2013-15 of over $17.5 M. In 2013-14, electricity expenditure is projected to fall by 8.8% before increasing 4.5% in 2014-15.

4.6.2 Provided documentation

The key reference documents used for this review are:

- Gold Coast Water Price Monitoring Submission 2013-15, City of Gold Coast, 30 Sep 2013
- GCW QCA Information Requirements Templates.xls
- TRACKS 41731305 v2 2013_15_PRICING_SUBMISSION_OPEX_RFI.xls
- 9506182 v3 Supporting_Documentation_For_Opex key items.xls
- 41739250_v1_Gold_Coast_Water_Escalation_Guideline_2013.pdf
- 41757732_v1_RFI_GCW_036_45.xls
- AEMC 2013, Possible future retail electricity price movements: 1 July 2012 to 30 June 2015, Electricity price trends report, 22 March 2013, Sydney

4.6.3 Prudency

The expenditure on electricity is used to meet the following driver categories:

- Legal obligations
- New growth
- Operations and maintenance of existing infrastructure

Gold Coast City Council is required to supply drinking water and treat wastewater to meet license conditions for public health and environmental discharge limitations. Electricity provides motive and process energy for the operation of these services.

SKM is of the opinion that, as the population of SEQ grows, additional water and wastewater services are required to be supplied. Electricity consumption is related to the quantity of water supply and wastewater processed and will therefore increase with population growth in the service area.

Electricity is an integral part of the operation and maintenance of the Gold Coast City Council's existing infrastructure as all pump stations and process plants require electricity to function and operate safely.

The purchase of electricity for the operation of water supply, wastewater treatment plants and office facilities is required to fulfil Gold Coast City Council's obligations and hence, is prudent.

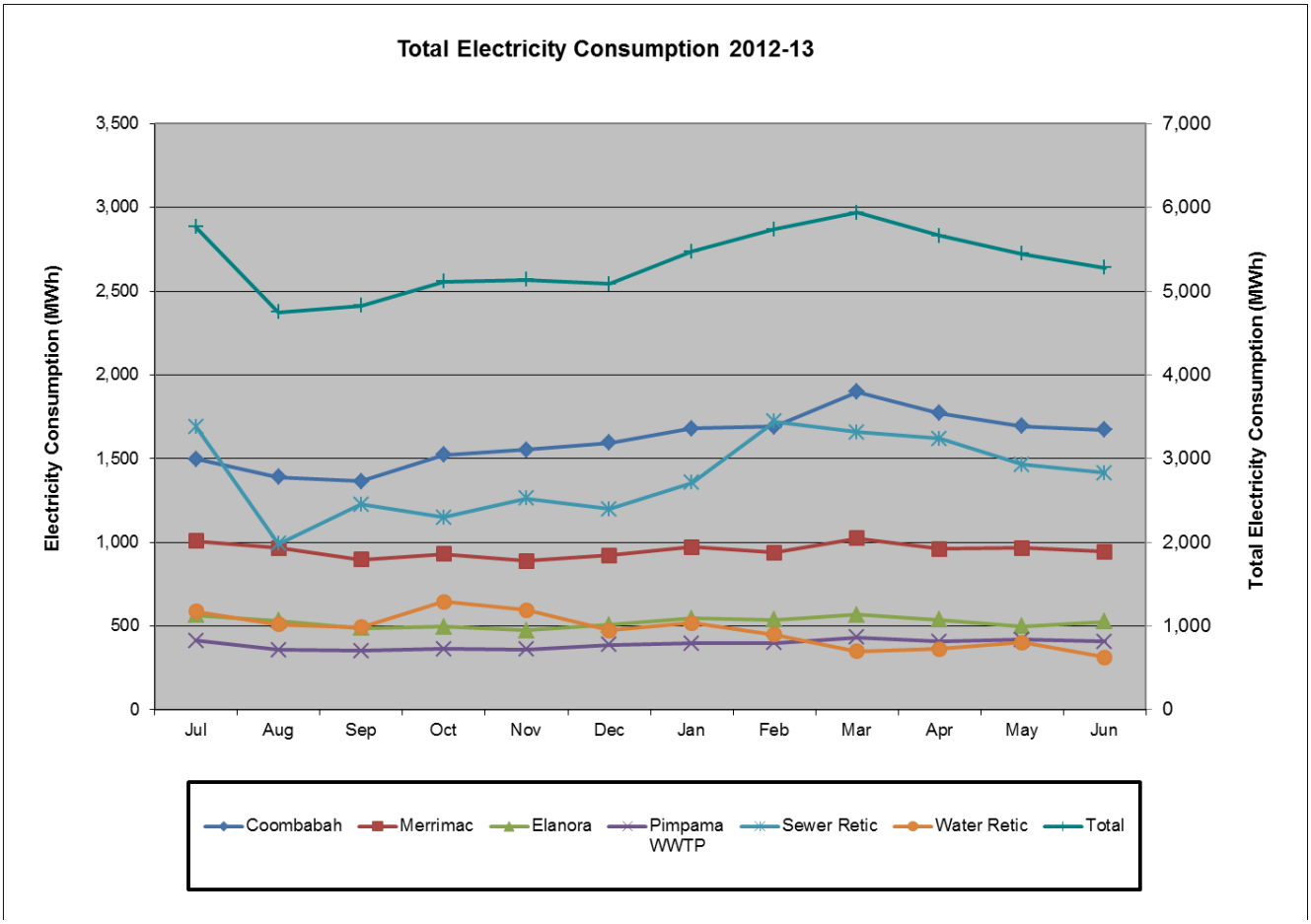
4.6.4 Efficiency

Calculation of costs

SKM is of the opinion that electricity expenditure is a variable cost and is expected to increase as usage increases and will also be affected by any electricity rate changes.

Gold Coast City Council provided to SKM the Microsoft Excel® model used to estimate the consumption of electricity in its pump stations and plants. The estimates are based on 2012-13 consumption. The electricity consumption in its pump stations, plants and network are shown in Figure 4-11.

Figure 4-11 2012-13 electricity demand



Source: 41757732_v1_RFI_GCW_036_45.xls

In its submission, Gold Coast City Council states that "costs are based on 2012-13 electricity demand and incorporate escalation assumptions. For 2013-14 electricity costs assume an escalation rate of 11.86 per cent derived from the Australian Energy Market Commission (AEMC) report which projects Queensland electricity prices for the years 2011-12 to 2013-14."[16]

In response to SKM's request for information, Gold Coast City Council advised that the 2012-13 Information Template cost for electricity of $9.4 million included about $40,000 worth of electricity allocated to non-regulated laboratory services. SKM therefore considers that this amount needs to be removed from the costs of electricity allocated to drinking water services.

Gold Coast City Council also informed SKM that, at the time when the 2012-13 Budget was prepared, information about electricity consumption from Allconnex was very limited and the estimate was derived based on the information made available at the time. Subsequent to GCW's return to Council, it became evident that this budget estimated was over-stated. Subsequently throughout Council's quarterly budget review processes during 2012-13, the total budget for electricity was reduced from $9.4 million to approximately $8.8 M.

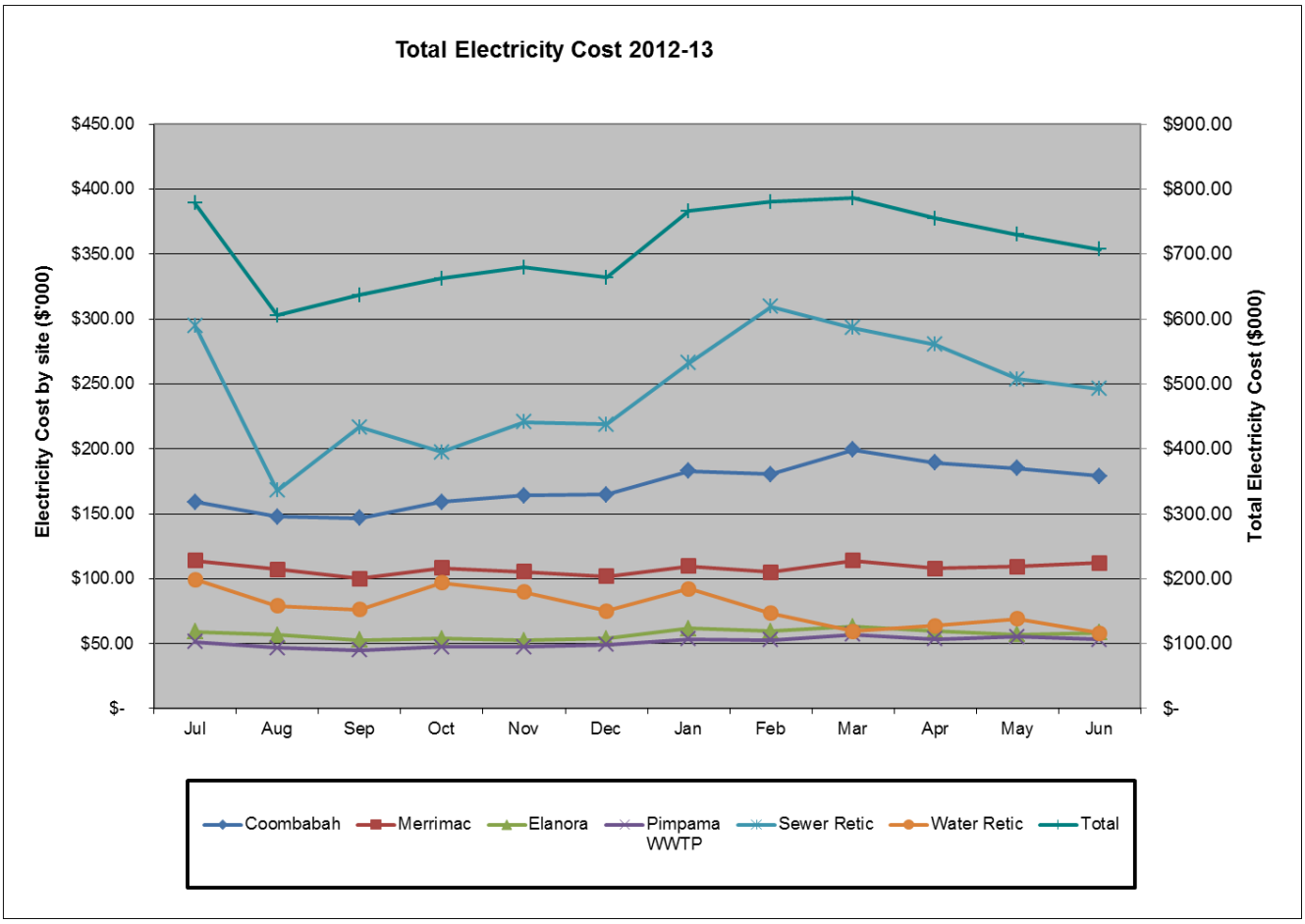
Gold Coast City Council also informed SKM that difficulties were experienced with receiving invoices and consumption information from the new electricity supplier (invoices for period from January 2013 were only received during August 2013). As a result, consumption information was not available to derive year-end accruals. While recorded total electricity expenses for the 2012-13 was under $8.4 M, based on the information

[16] *Gold Coast Water Price Monitoring Submission 2013-15*, City of Gold Coast, 30 Sep 2013, P30

subsequently available, it appear that the 2012-13 recorded expense was understated by approximately $0.2 M. SKM therefore estimates total actual electricity consumption for 2012-13 to be $8.6 M.

Gold Coast City Council's monthly electricity cost by its various water and wastewater assets are shown in Figure 4-12. Based on this data provided total 2012-13 expenditure amounted to $8.553 M.

Figure 4-12 2012-13 electricity cost



Gold Coast City Council has provided to SKM a spread sheet detailing how it estimated its proposed 2013-14 electricity expenditure. It is based on monthly consumption and expenditure between December 2011 and December 2012 (inclusive) for each consumption site and increasing the monthly expenditure by 11.86%. A carbon tax of $24/MWh is then added on the monthly cost[17] of the treatment plants. This monthly electricity cost is then annualised by averaging the 13 months of data and multiplying by 12. The annual estimated cost is then factored up by another 2% for most assets to take into account of load growth. Load at Coombabah is assumed to grow at 10% due to the commissioning of an additional treatment stage. GST is then removed from the calculations.

The calculations undertaken by Gold Coast City Council are replicated in Table 30.

[17] SKM notes that carbon tax is not added on to the electricity used in Gold Coast City Council's reticulation assets (both water and sewage). Inquiries with Gold Coast City Council indicated that the carbon price for reticulation assets were already included in the electricity price and was not unbundled.

Table 30 : Gold Cost City Council's electricity expenditure calculations

Asset	2012 Monthly cost ($'000)	2012 Monthly energy (MWh)	2013-14 Price increase	2013-14 Load growth	2013-14 Annual energy cost ($'000)	Carbon tax ($24/MWh) ($'000)	2013-14 Annual electricity cost ($'000)	GST	Annual 2013-14 cost less GST
Network ops wastewater	201.7	1,254	11.86%	2%	2,762.2		2,762.2	251.1	2,511.1
Network ops water	74.4	544	11.86%	2%	1,019.3		1,019.3	92.7	926.7
Coombabah STP	139.4	1,568	11.86%	10%	2,057.7	496.7	2,554.5	232.2	2,322.2
Merrimac STP	92.9	957	11.86%	2%	1,272.2	281.3	1,553.4	141.2	1,412.2
Elanora STP	48.6	530	11.86%	2%	665.4	155.7	821.1	74.6	746.4
Pimpama STP	43.9	394	11.86%	2%	600.9	115.7	716.6	65.1	651.4
Total	601.0	5,247.5			8,377.7	1,049.4	9,427.1	857.0	8,570.1

The method used by the Gold Coast City Council to forecast its electricity expenses for 2013-14 is based on a number of major assumptions. It assumes that 2012 was a normal year in weather terms and that the flow rates for both water and sewage is "normal". It also assumes that the price increase of 11.86% based on the AEMC's report that "*suggests the main drivers of Queensland price movements are the wholesale electricity component, estimated to increase by 44 per cent and the distribution component, forecast to increase by 40 per cent. The 11.86 per cent is derived by dividing the 40 per cent over three years*."[18]

For 2014-15, Gold Coast City Council has assumed that total electricity expenditure will grow by 4.5% from the 2013-14 expenditure.

For 2014-15, Gold Coast City Council's electricity expenditure assumed growth rate of 4.5% is based on the "*Australian Energy Market Commission's electricity price movements final report for 2013. The report assumes Queensland electricity price movements from 25.6.1c/kWh in 2012-13 to 27.9c/kWh in 2014-15 which calculates an average 4.5 per cent per annum."*

SKM considers that the process used by the Gold Coast City Council to forecast its electricity cost as being relatively simplistic. The method used to project the effects of price and load growth increases are applied at a very high level and besides a general increase in prices, the method does not take into consideration different prices for various categories of energy charges or demand charges. It also does not take into consideration the potential for any changes in operations and technology that may be available to manage electricity usage or the effect of weather (for example there is a correlation between high rainfall and high electricity consumption due to increased pumping costs during high rainfall events).

Gold Coast City Council stated that it has based its 11.86% increase in electricity prices for 2013-14 on the AEMC's 2013 report. However, SKM has been unable to reconcile this report to the Council's assumption. The AEMC report does state that the nominal percentage increase in Queensland from 2011-12 to 2012-13 was 16% and the average annual increase from 2012-13 to 2013-14 is 4%. The report also states that a total price increase of 5.8c/kWh is projected between 2014-15 from 22.1c/kWh in 2011-12.[19] This suggests a nominal price

[18] *Gold Coast Water Price Monitoring Submission 2013-15*, City of Gold Coast, 30 Sep 2013, P30
[19] AEMC 2013, Possible future retail electricity price movements: 1 July 2012 to 30 June 2015, Electricity price trends report, 22 March 2013, Sydney, P109

increase of about 26.2% over the period or 8.1% pa. The report however also notes that the "*values did not incorporate the (then) recent pass through approvals by the AER in respect of feed-in tariff costs for 2011/12 or retail price proposals under the QCA's draft retail price determination for 2013/14."*[20] It is thus likely that the increase would be larger than 8.1%. The replicated table from the AEMC report may be seen in Table 31.

Table 31 : Replicated table from the AEMC report[21]

Figure 3.3 Queensland - summary of price trends by component from 2011/12 to 2014/15

Queensland	Nominal percentage increase between 2011/12 - 2012/13	Average annual increase between 2012/13 - 2014/15	Nominal price increase between 2011/12 - 2014/15 c/kWh	Percentage of total price increase attributable to component
Transmission component	4%	3%	0.2	3%
Distribution component	16%	9%	3.4	59%
Wholesale energy component	4%	2%	0.7	13%
Retail component	48%	-1%	1.5	26%
Total	**16%**	**4%**	**5.8**	**100%**

Notes:

1. These values do not incoporate recent pass through approvals by the AER in respect of feed-in tariff costs for 2011/12, or retail price proposals under the QCA's draft retail price determination for 2013/14.
2. Values are nominal (not adjusted for inflation) and exclusive of GST.
3. Numbers may not add due to rounding.

In May 2013, the Authority determined that small customers on tariffs would face increases in electricity prices[22] as it transitions to cost reflective tariffs and a typical residential customer consuming 4,250 kWh pa would face increases of 22.6% in 2013-14.[23] Non-residential customers similarly face increases of over 15% in South East Queensland. However, large non-residential customers in South East Queensland no longer have access to regulated electricity prices and the applicability of such prices to the all the Gold Coast City Council's sites is questionable as many of them are not covered by this decision and only a number of smaller sites would face such an increase.. Also large contestable sites already face cost reflective tariffs and so can expect to face lower increases than the 15% indicated in the Authority's determination.

The assumed load growth of 2% is also unrelated to any growth in flow rates or population. SKM notes that the Office of Economic and Statistical Research has projected the Gold Coast population to grow by 2.4% pa between 2011 and 2016 based on its medium growth series.

The 10% load growth assumed for Coombabah is based on the commissioning of Stage 5 upgrade of the wastewater treatment plant and reflects the resulting increase in capacity. Gold Coast City Council has based its estimate of 10% additional load on an estimate provided by its engineers/operators. This estimate was based on an understanding of the electrical requirement of the additional equipment. Given the lack of current data, SKM accepts that the 10% estimate is a reasonable assumption based on an estimate of the energy requirement of the additional equipment installed.

[20] AEMC 2013, Possible future retail electricity price movements: 1 July 2012 to 30 June 2015, Electricity price trends report, 22 March 2013, Sydney, P30.

[21] AEMC 2013, Possible future retail electricity price movements: 1 July 2012 to 30 June 2015, Electricity price trends report, 22 March 2013, Sydney, P31

[22] Queensland Competition Authority, *Final Determination: Regulated Retail Electricity Prices 2013-14*, May 2013

[23] Queensland Competition Authority, *Final Determination: Regulated Retail Electricity Prices 2013-14*, May 2013 P IX

While SKM accepts that the $24/MWh is a reasonable value to apply for carbon tax, Gold Coast City Council also informed SKM that in the actual application of the carbon tax, a rate of around $21/MWh was applied to invoices.

SKM also recognises that the Gold Coast City Council has only recently resumed control of water and wastewater services from Allconnex. In the transition, the quality and quantity of data available to the Council is both limited and in some cases dated because the electricity retailer's failure to supply up to date invoices. SKM also notes that Gold Coast City Council's current electricity supply contract is currently due for renewal. Given the recent fluctuations in electricity contract prices, SKM acknowledges that future prices are difficult to predict, although given the greater certainty over carbon pricing, this difficulty has been reduced albeit not eliminated.

Gold Coast City Council's forecast of 4.5% increase in 2014-15 is based on the AEMC's report that Queensland electricity prices are projected to increase from 25.6.1c/kWh in 2012-13 to 27.9c/kWh in 2014-15. The Council has not considered the added cost of load growth although the increase may be offset somewhat if the Carbon Tax is repealed as the Federal Government has indicated it intends to do.

Given these uncertainties, SKM is of the opinion that the likely range of electricity price increases for 2013-14 may be between 8.1% (based on the AEMC report) and 15% (from the Authority's determination). The mid way point between these two estimates is 11.55%. Whilst not necessarily agreeing with Gold Coast City Council's method of estimating the increase of 11.86%, SKM is of the view that it is close to the midway point of the reasonable range of likely price increase and therefore appropriate.

Therefore the expenditure is assessed as not being efficient. SKM has re-estimated the forecast electricity expenditure for 2013-14 shown in Table 32.

Table 32 : 2013-14 revised electrical expenditure calculations

Asset	2012 Monthly cost ($'000)	2012 Monthly energy (MWh)	2013-14 Price increase	2013-14 Load growth	2013-14 Annual energy cost ($'000)	Carbon tax ($24/MWh) ($'000)	2013-14 Annual electricity cost ($'000)	GST	Annual 2013-14 cost less GST
Network ops wastewater	201.7	1,254	11.86%	2.4%	2,773.1		2,773.1	252.1	2,521.0
Network ops water	74.4	544	11.86%	2.4%	1,023.3		1,023.3	93.0	930.3
Coombabah STP	139.4	1,568	11.86%	10%	2,057.7	434.6	2,492.4	226.6	2,265.8
Merrimac STP	92.9	957	11.86%	2.4%	1,277.2	247.1	1,524.2	138.6	1,385.7
Elanora STP	48.6	530	11.86%	2.4%	668.0	136.8	804.8	73.2	731.6
Pimpama STP	43.9	394	11.86%	2.4%	603.3	101.6	704.9	64.1	640.8
Total	601.0	5,247.5			8,402.5	920.1	9,322.6	847.5	8,475.1

For 2014-15, SKM accepts the 4.5% estimate of price increase based on the AEMC's report as reasonable. However, SKM is of the opinion that for both 2013-14 and 2014-15, the estimate of load growth of 2% is insufficient. To reflect population growth in the Gold Coast LGA, the OESR has projected 2.4% pa growth. SKM would recommend using this value as the proxy for load growth.

Market conditions

Allconnex's electricity supply contract was novated to the Gold Coast City Council when the Council took over the water and wastewater asset. The contract with various electricity retailers is due to expire on 31 December 2013 and the Council is currently in the process of tendering for a new supply contract.

No specific information has been provided with which to assess the market conditions for Electricity Expenses. Gold Coast City Council have stated that all procurement is undertaken in accordance with the council's procurement policy. The aim of the procurement policy is to ensure that the Gold Coast City Council:

- Obtains value for money
- Promotes open and effective competition
- Encourages the development of competitive local business and industry
- Ensures environmental protection and
- Promotes ethical behaviour and fair dealing

SKM considers that Gold Coast City Council's procurement policies and procedures are in accordance with good industry practice and are robust. This is likely to result in a fair market value being achieved for the supply of electricity form 2014 when the new contract will be in effect.

In its response to SKM's Draft Report, Gold Coast City Council provided information that a new electricity supply contract had been accepted by the Council effective from 1 January 2014. The Council's preliminary assessment of the new electricity contract indicate that the new prices would result in cost increases of about 13% over the 2012-13 costs for large sites. Negotiations for the supply of electricity to smaller sites continue and are due to be concluded in November 2013.

Efficiencies and economies of scale

No specific efficiency target has been provided nor has Gold Coast City Council stated how economies of scale are being addressed. Changes in practice may be able to lead to more efficient utilisation of electricity or may be able to lower the cost of electricity by reducing peak demand. Gold Coast City Council has not at this stage been able to investigate these potential savings given the recent transfer of responsibility for water and wastewater services but this is an area where savings may be achieved.

4.6.5 Summary

SKM has determined that the expenditure is required to meet legal obligations, to meet new growth and to allow the operation and maintenance of existing infrastructure.

The electrical expenditure is therefore assessed as prudent.

SKM is of the view that the manner in which Gold Coast City Council has forecast its electricity expenses is relatively simplistic. However, SKM also acknowledges that Gold Coast City Council has only recently resumed control of water and wastewater services from Allconnex and that the quality and quantity of data available to the Council for electricity expenses is both limited and in some cases dated because of the electricity retailer's failure to supply up to date invoices. Given the recent fluctuations in electricity contract prices, SKM acknowledges that future prices are difficult to predict. Nevertheless, the price increase of 11.86% for 2013-14 falls within and is central to the range SKM believes is reasonable.

Given that the actual application of the carbon tax was around $21/MWh rather than $24/MWh assumed, SKM recommends using the actual rate, recognising also that the applicability of the carbon tax after 2013-14 is uncertain.

SKM is also of the opinion that the 2% load growth assumed by the Gold Coast City Council is unsupported. In the absence of more robust flow data and water/wastewater demand growth rates, SKM is of the view that the OESR's population growth rate provides a basis as a proxy for load growth. Between 2011 and 2016, the OESR projects that the Gold Coast population would grow at 2.42% pa. SKM accepts the 10% growth applied to Coombabah given the current state of knowledge of the plant. Table 33 shows SKM's recommended electricity expenses.

Table 33 : Electrical expenditure revised electricity expenditure ($'000)

Electricity expenses	2012-13	2013-14	2014-15
Proposed expenses	9,403.4	8,577.0	8,963.0
SKM recommended	8,552.9	8,475.1	9,069.0

Table 34 below classifies the documentation received and identifies any further information required for adequate review.

Table 34 : Electricity Expenses quality of information provided

Section of OPEX review	Documentation Status	Additional Information Required
Prudency		
Cost driver		
Efficiency		
Calculation of costs		Provide explanation for assumed 2% load grow (10% for Coombabah) and why reticulation assets do not attract a carbon tax.
Market conditions		Provide additional information discussing market conditions face by Gold Coast City Council
Saving targets		Provide additional information on efficiency and economies targets

4.7 Other materials and services

4.7.1 Overview of operating expenditure

The Other Materials and Services category covers a range of different expenses that are not directly allocated to other defined categories. Gold Coast City Council has stated that:

> *"Materials and services expenditure predominantly reflects GCW's operations and maintenance activities. Operations and maintenance involves the management and regular on-going work that is necessary to keep water and sewage assets operating."*[24]

Gold Coast City Council has proposed total expenses for Other Materials and Services over the forecast period of 2013-14 and 2014-15 of $62.4 M. This is shown Table 35 which provides an overview of the Other Materials and Services expenditure detailed in the Information Template.

Table 35 : Gold Coast City Council's proposed Other Materials and Services expenditure ($'000)

Category	Service	Operating Expenditure ($'000)		
		2012-13	2013-14	2014-15
Other Materials & Services	Drinking water	11,233.32	10,070.79	10,245.97
	Other core water services	269.16	240.40	246.41

[24] *Gold Coast Water Price Monitoring Submission 2013-15*, City of Gold Coast, 30 Sep 2013, P31

Category	Service	Operating Expenditure ($'000)		
	Wastewater via sewer	21,946.71	19,893.15	19,799.35
	Trade waste	1,070.63	965.30	971.04
	Total	34,519.82	31,169.65	31,262.77
	% increase		-9.7%	0.3%

The data shows that, for the 2013-14 financial year, a reduction in expenditure is expected for all regulated service categories. Overall the operating expenditure for other materials and services are forecast to fall by almost 10% from the 2012-13 level. For 2014-15, a small overall increase is forecast amounting to 0.3%. While other materials and services expenditure for "Drinking Water" and "Other Core Water Services" (Recycled Water) are forecast to increase by about 1.8% in 2014-15, the expenditure in Wastewater and Trade Waste is forecast to fall by 0.4%.

4.7.2 Provided documentation

The key reference documents used for this review are:

- Gold Coast City Council Price Monitoring Submission 2013-15, City of Gold Coast, 30 Sep 2013
- GCW QCA Information Requirements Templates.xls
- TRACKS 41731305 v2 2013_15_PRICING_SUBMISSION_OPEX_RFI.xls
- 41757732_v1_RFI_GCW_036_45.xls
- 39455781_v2_2013_14_CONSULTANTS,xls
- Procurement Policy and Standards, City of Gold Coast, effective from 12 February 2013
- Gold Coast Water, Escalation Guideline – 2013, City of Gold Coast

4.7.3 Prudency

The expenditure category Other Materials and Services has been used as a 'catch all' for expenditure that does not meet the criteria for the other expenditure categories. Gold Coast City Council has also included in this category expenditure relating to consultancies and other services contracts rather than directly identify these costs separately as provided for in the Authority's template. As such a wide variety of items (ie materials and services) has been captured under the category.

Gold Coast City Council stated in its Information Template submission that: "*materials and services expenditure predominantly reflects GCW's operations and maintenance activities … that is necessary to keep water and sewage assets operating*". SKM is of the view that the expenditure in Other Materials and Services has been incurred to meet the following driver categories:

- Legal obligations
- Growth in both connections and water delivery volumes and
- Operations and maintenance of existing infrastructure

SKM is also of the opinion that the expenditure relating to this category is necessary to enable Gold Coast City Council's to meet its service delivery obligations. SKM thus considered this expenditure to be prudent.

4.7.4 Efficiency

4.7.4.1 Calculation of costs

Gold Coast City Council informed SKM that estimates for materials and services expenditure are generally based on historical information, with some 'bottom up' calculations for specific one-off requirements. Projections

for 2014-15 are based on 2013-14 budget, with an escalation factor applied. General materials and services operating costs (together with chemical costs and bio-solids) are escalated at the forecast rate of inflation based on inflation forecasts contained in the Reserve Bank of Australia (RBA) Statement on Monetary Guideline and the mid-point of the RBA medium-term inflation target range. The current RBA inflation target range is 2-3% giving mid-point of 2.5% pa.

In response to SKM's request for information, Gold Coast City Council provided details of the 2012-13 and 2013-14 budget for Other Materials and Services. Table 4-36 provides details of the major expenditure items in this category.

Table 36 : 2012-13 Other Materials and Services expenditure ($'000)

Description	Water	Wastewater	Trade Waste	Recycled Water	Unallocated	Regulated total	Unregulated	Total
SLA Plant, Fleet & Equipment	2,434.0	816.7	50.0	56.1	3,536.3	6,893.0	92.0	6,985.0
External Services - Repairs and Maintenance	1,218.2	3,375.9	4.0	61.7	270.0	4,929.8	64.6	4,994.4
WWTP Charge	0.0	4,000.0	0.0	0.0	0.0	4,000.0	0.0	4,000.0
Consultancies - Engineers	1,071.0	1,670.0	0.0	300.0	310.0	3,351.0	0.0	3,351.0
Pipes and Related Fittings	1,355.0	804.8	0.0	7.0	15.0	2,181.7	0.0	2,181.7
External Hire - Plant and Equipment	856.3	465.1	0.0	0.5	3.0	1,324.8	0.0	1,324.8
Consultancies - Environmental	0.0	670.0	0.0	100.0	370.0	1,140.0	0.0	1,140.0
External Services - Other	52.0	276.0	225.0	105.4	340.0	998.4	29.8	1,028.2
Other Mechanical Parts	104.4	799.7	0.0	2.5	38.0	944.6	0.0	944.6
Electrical Supplies	78.0	650.0	0.0	1.9	35.0	764.9	3.0	767.9
Training	0.0	0.0	0.0	0.0	700.0	700.0	0.0	700.0
Other Construction Materials	666.0	0.0	0.0	0.0	0.0	666.0	0.0	666.0
External Services - Restorations	452.0	125.0	0.0	0.0	0.0	577.0	0.0	577.0
Consultancies - Other	0.0	50.0	75.0	60.0	350.0	535.0	0.0	535.0
External Services - Contract Mowing	137.0	173.2	0.0	7.0	0.0	317.2	0.0	317.2
Internal tipping charges	148.0	107.0	0.0	32.0	0.0	287.0	0.0	287.0
Purchased Office and General Equipment	0.0	27.0	0.0	0.0	250.0	277.0	0.0	277.0
Protective Clothing	7.2	10.1	3.6	0.5	252.7	274.1	0.0	274.1
Consultancies - Managerial	75.0	75.0	0.0	0.0	120.0	270.0	0.0	270.0
Other Hardware	91.0	96.4	0.0	3.7	75.6	266.6	3.2	269.8
Plumbing Supplies	242.0	11.6	0.0	0.0	1.0	254.6	0.0	254.6
Grit Removal	0.0	238.0	0.0	0.0	0.0	238.0	0.0	238.0

Description	Water	Wastewater	Trade Waste	Recycled Water	Unallocated	Regulated total	Unregulated	Total
External Services - Laboratory	2.4	225.0	0.0	0.0	0.0	227.4	92.8	320.2
Contract Payments	0.0	227.0	0.0	0.0	0.0	227.0	0.0	227.0
Licensing Agreement and Royalty Costs	50.0	50.0	0.0	0.0	123.3	223.3	0.0	223.3
External Services - Health and Safety	0.0	2.2	0.0	0.0	200.0	202.2	0.0	202.2
Mobile Phone Charges	0.0	3.0	3.0	3.0	155.9	164.9	0.0	164.9
Other Equipment and Supplies	22.1	76.1	12.5	25.6	11.0	147.3	0.0	147.3
Marketing and promotion	0.0	0.0	0.0	0.0	120.0	120.0	0.0	120.0
Consultancies - Surveyors	0.0	103.0	0.0	0.0	0.0	103.0	0.0	103.0
Others (<$100k)	182.7	451.2	3.0	75.1	536.3	1,248.2	380.2	1,628.4
Total	**9,244.2**	**15,578.8**	**376.1**	**841.9**	**7,813.1**	**33,854.1**	**665.7**	**34,519.8**

Comparing the data provided in the Information Template and the detail budget, while the totals for "Other materials and services" are the same ($34.5 M). SKM considers that the 2012-13 template includes some $665,000 budgeted in the unregulated services area (none was stated in the template). Discussions with Gold Coast City Council has revealed that this amount was inadvertently included in the "Other materials and services" cost for drinking water and should be removed from the template amount.

In addition, $7.8 million is unallocated in the detailed budget. Gold Coast City Council has indicated that this unallocated amount is for expenditure that relates to the whole business unit and cannot be directly linked to either water, wastewater or trade waste while the other amounts in the detailed budget can be directly linked to one of these services. These unallocated costs have then been allocated by Gold Coast City Council to one of these services based on the opening 2010/11 RAB values which provides the following allocation:

- Water 38.45%
- Wastewater 53.68%
- Tradewaste 7.87%

Making these necessary adjustments to the Information Template data, SKM is of the view that the 2012-13 expenditure on "Other Materials and Services" should be as shown in Table 4-37.

Table 37 : Adjusted 2012-13 Other Materials and Services expenditure ($'000)

Description	Water	Wastewater	Trade Waste	Recycled Water	Total
Other Materials and Services	12,248.3	19,772.9	991.0	841.9	33,854.1

Gold Coast City Council also provided a detailed "Other Materials and Services" budget for 2013-14. The major (>$1000,000) expenditure items are shown in Table 4-38.

Table 38 : 2013-14 Other Materials and Services expenditure budget ($'000)

Description	Water	Wastewater	Trade Waste	Recycled Water	Total
Internal Plant Hire Settlement WO	1,040.9	2,628.8	258.7	0.0	3,928.4
Maintenance Services - Other	773.7	2,930.8	0.6	72.0	3,777.0
Rental/Hire - Fleet, Plant and Equipment	2,470.3	1,004.2	2.5	0.0	3,477.0
Wastewater Treatment Charges[25]	0.0	3,138.6	0.0	0.0	3,138.6
Consultancies - Engineering and Construction	695.0	1,206.0	0.0	0.0	1,901.0
Other Services	863.3	905.7	25.5	0.0	1,794.5
Consultancies - Managerial, Strategy and	363.4	587.3	74.4	0.0	1,025.0
Electronic and Electrical Supplies	106.5	841.5	18.7	0.0	966.6
Other Equipment and Supplies	112.5	788.2	6.1	0.0	906.7
Maintenance Services - Parks and Landscaping	501.0	336.7	0.0	7.0	844.7
Internal SS Revenue - GCW charges[26]	3.8	585.4	244.4	0.0	833.6
Staff Training and Development	299.9	418.7	61.4	0.0	780.0
Pipes and Pipe Fittings	472.5	247.4	0.0	6.0	725.9
Tankerage Services	35.0	620.0	0.0	0.0	655.0
Consultancies - Other	258.4	221.2	32.4	75.0	587.0

[25] This cost item refers to the charges associated with the "Logan/Gold Coast Wastewater Treatment Agreement". The agreement provides for Logan City Council to treat the wastewater of customers in the Gold Coast LGA, including, but not restricted to areas such as Yalta and Staplyton, at the Beenleigh Wastewater Treatment Plant

[26] This cost item refers to the charges applied for laboratory testing and analysis undertaken by the Council's internal "Scientific Services" laboratory (non-regulated service).

Description	Water	Wastewater	Trade Waste	Recycled Water	Total
Licences - Software and Hardware	215.2	300.4	44.0	0.0	559.7
Internal Tipping Charges	282.1	189.0	0.0	44.4	515.5
Health and Safety Equipment and Supplies	147.1	232.9	27.5	0.0	407.5
IT and Communications Services	134.2	187.4	27.5	0.0	349.1
Security and Protective Services	146.9	192.2	0.4	0.0	339.5
Consultancies - Environmental and Waste	82.7	235.4	16.9	0.0	335.0
Grit Removal	0.0	331.0	0.0	0.0	331.0
Mobile Phone Charges	56.4	201.3	14.8	0.0	272.5
Other Expenses	79.8	167.5	12.2	0.0	259.6
Telecommunication Equipment and Supplies	92.3	132.8	18.9	0.0	244.0
Hardware Supplies	96.3	137.2	8.1	1.0	242.6
Consultancies - IT and Communications	84.6	118.1	17.3	0.0	220.0
Plumbing Supplies	60.5	107.0	0.0	0.0	167.5
Health and Safety Services	57.7	94.5	11.8	0.0	164.0
Purchased Assets - Major Equipment and F	57.7	80.5	11.8	0.0	150.0
Others	480.2	724.2	29.2	35.0	1,268.5
Total	**10,069.8**	**19,891.7**	**965.1**	**240.4**	**31,167.0**

The data provided in the detailed 2013-14 budget (shown in Table 4-38) is consistent with the Information Template proposed costs (shown in Table 35) and constitutes a 7.9% reduction in costs from the adjusted 2012-13 expenditure.

SKM also notes that within the overall 7.9% reduction in costs for 2013-14, there are certain cost items that exhibit significant movements (>$250,000). The cost items that have major changes in cost are shown in Table 4-39.

Table 39 : Major movements in other materials and services expenditure budget ($'000)

Description	2012-13	2013-14	% change	Difference
SLA Plant, Fleet & Equipment	6,893.0		-100%	-6,893.0
Pipes and Pipe Fittings	2,181.7	725.9	-66.7%	-1,455.8
Consultancies - Engineering and Construction	3,351.0	1,901.0	-43.3%	-1,450.0
Maintenance Services - Other	4,929.8	3,777.0	-23.4%	-1,152.8
Vehicle Parts and Accessories	944.6	1.6	-99.8%	-943.0
Wastewater Treatment Charges[25]	4,000.0	3,138.6	-21.5%	-861.5
Consultancies - Environmental and Waste	1,140.0	335.0	-70.6%	-805.0
Consultancies - Other	958.0	587.0	-38.7%	-371.0
Security and Protective Services	5.0	339.5	6690.1%	334.5
Licences - Software and Hardware	223.3	559.7	150.6%	336.4
IT and Communications Services	-	349.1		349.1
Maintenance Services - Parks and Landscaping	317.2	844.7	166.3%	527.5
Tankerage Services	43.0	655.0	1423.3%	612.0
Internal SS Revenue - GCW charges[26]	-	833.6		833.6

Description	2012-13	2013-14	% change	Difference
Consultancies - Managerial, Strategy and	70.0	1,025.0	1364.3%	955.0
Rental/Hire - Fleet, Plant and Equipment	1,344.8	3,477.0	158.6%	2,132.2
Internal Plant Hire Settlement WO	-	3,928.4		3,928.4

These large movements in costs are largely due to the limited availability of information from Allconnex Water that was used to prepare the initial 2012-13 budget. According to the Gold Coast City Council, significant "guesswork" was involved in its preparation. Since the return of the water businesses to Council, Gold Coast City Council has undertaken significant work to refine its estimates.

In many cases, individual cost items were substantially understated (eg Telecommunications Costs) and the estimate for 2013-14 has increased substantially. As part of the expense in 2013-14, there have been significant costs included for some IT systems not previously been identified as transitioning to Gold Coast City Council from Allconnex Water. These include Integrated Management System, SCADA, Telemetry systems, and Trade Waste Management System.

Additionally, as part of Gold Coast City Council's continual improvement process, there has been additional funding provided in the telecommunications area for business process improvement and establishing data warehousing capability to facilitate future performance reporting needs.

The 2014-15 budget for "Other Materials and Services" is forecast to increase by 0.3%. Both the 2013-14 and 2014-15 budget growth for this cost category are significantly below the average inflation rate. This growth rate is also significantly below the allowed escalation rate provided for in the Escalation Guide.[27]

Market conditions

No specific information has been provided with which to assess the market conditions for Other Materials and Services. Gold Coast City Council has stated that their procurement of materials and other services are undertaken by the Gold Coast City Council and is in accord with the general council's procurement policy. The aim of the procurement policy is to ensure that the Gold Coast City Council:

- Obtains value for money
- Promotes open and effective competition
- Encourages the development of competitive local business and industry
- Ensures environmental protection and
- Promotes ethical behaviour and fair dealing

SKM considers that Gold Coast City Council's procurement policies and procedures are in accordance with good industry practice and are robust. This is likely to result in a fair market value for that item being realised.

Efficiencies and economies of scale

No specific efficiency target has been provided nor has Gold Coast City Council stated how economies of scale are being addressed. Gold Coast City Council has indicated that all procurement has to be undertaken by Council and thus it is likely that some economies of scale have been achieved as the Council is a relatively large entity.

Gold Coast City Council stated in its submission that a 2% productivity factor adjusted for growth has been applied for forecasts. However, no further information has been provided as to how this factor has been applied to its various operating cost categories in general and to other materials and services expenses in particular.

[27] *Gold Coast Water, Escalation Guideline – 2013*, City of Gold Coast, P8

4.7.5 Summary

Gold Coast City Council has demonstrated that the expenditure is required to fulfil the operating and maintenance activities in order to deliver the regulated services. The expenditure is therefore assessed by SKM as prudent.

SKM has identified discrepancies with the calculation of costs for 2012-13. Notwithstanding these discrepancies, SKM is of the opinion that the proposed expenditure for 2013-14 and 2014-15 is efficient. SKM understands that the data that accompanied the transfer of assets from Allconnex did not enable Gold Coast City Council to adequately undertake the 2012-13 budget and as a result, the 2013-14 budget exhibited significant movements from the previous budget. As the 2013-14 budget was undertaken with more rigour, SKM is confident that it shows a better understanding of the costs involved in operating the water and wastewater business.

SKM is of the opinion that Gold Coast City Council's approach to procurement of the services follows good industry practice and prices achieved for this cost category is likely to reflect market conditions. However, there is insufficient information provided to assess savings targets or economies of scale.

Table 28 below classifies the documentation received and identifies any further information required to adequately review each section.

Table 40 : Other Materials and Services Expenses quality of information provided

Section of OPEX review	Documentation Status	Additional Information Required
Prudency		
Cost driver		
Efficiency		
Calculation of costs		
Market conditions		Provide additional information discussion market conditions face by Gold Coast City Council
Saving targets		Details on identified savings due to productivity improvements and efficiencies of scale.

4.8 Summary assessment of operational expenditure

In general, SKM is of the opinion that the 2012-13 budget submitted by the Gold Coast City Council is not robust and numerous adjustments needed to be made to the 2012-13 budget. This is largely due to the transition from Allconnex as the quality and quantity of information accompanying the transfer was lacking. The 2013-14 budget however does appear to be more robust as they were based on information and parameters set by Council.

SKM concludes that Gold Coast City Council's budgeted corporate costs are prudent but not efficient. The SAP system related corporate costs increase should be offset by efficiency gained through business process improvements as the Council's corporate functions are now operating under an advanced ERP system.

SKM considers that the staffing levels proposed by Gold Coast City Council are reasonable and reflects the current asset management approach. Adopting a more proactive maintenance approach in the future is likely to result in higher staffing levels. However, the forecast employee expenditure has been considered by SKM to be not efficient. Gold Coast City Council has proposed a 4% increase in 2013-14 based on the adjusted 2012-13 expense (rather than the 2012-13 expense provided in the template). In 2014-15, the Council has proposed an increase of 4.3%. SKM recommends a reduction in the rate of increase to 4% for 2014-15. This amounts to a reduction of $128,000 to the employee expenses allocation in the 2014-15 forecast (based on the 4% cost category escalation from the adjusted 2012-13 baseline).

While the manner in which Gold Coast City Council has forecast its electricity expenses is relatively simplistic, given the recent fluctuations in electricity contract prices, SKM acknowledges that future prices are difficult to predict. Nevertheless, the proposed price increase of 11.86% for 2013-14 falls within and is central to the range SKM believes is reasonable. The actual application of the carbon tax was around $21/MWh rather than the $24/MWh proposed. SKM recommends using the actual rate, recognising also that the applicability of the carbon tax after 2013-14 is uncertain. SKM is also of the opinion that the 2% load growth assumed by the Gold Coast City Council is unsupported and recommends basing the load growth rate on the OESR's population growth rate as a proxy. Between 2011 and 2016, the OESR projects that the Gold Coast population would grow at 2.42% pa.

Significant movements occur within the other materials and services expenses between 2012-13 and 2013-14. This is largely due to the fact that the preparation of the 2012-13 budget was undertaken with very limited information from Allconnex and as a consequence there was significant 'guesswork' involved. Since the water and wastewater business returned to Council, significant work has been undertaken to refine the estimates. As a result, the 2013-14 budget is significantly lower than the initial budget prepared for 2012-13.

4.8.1 Recommended adjustments to operational expenditure

SKM notes the recommendations for the 2013-14 and 2014-15 forecasts:

- Corporate Costs – Efficiency savings should be capable of being achieved through business process improvements while operating under an advanced ERP system. Therefore, SKM has recommended a downward adjustment of $1.31 million in 2013-14 and $1.33M in 2014-15 to account for adjustments to information services.
- Employee Expenses – SKM proposes a 4% increase in 2013-14 based on the adjusted 2012-13 expense (rather than the 2012-13 expense provided in the template). SKM recommends a reduction in the rate of increase from 4.3% to 4% for 2014-15 which equates to $128,000.
- Electricity – a reduction of $101,900 is proposed for the 2013-14 forecast and an increase of $106,000 is proposed for the 2014-15 forecast.
- Other Materials and Services - SKM has identified discrepancies with the calculation of costs for 2012-13. Notwithstanding these discrepancies, SKM is of the opinion that the proposed expenditure for 2013-14 and 2014-15 is efficient.

Table 41 : Summary of reductions to 2013/14 operating expenditure forecast (values in nominal $'000s)

Category	2013/15 submission	Recommended reduction	Revised 2013/14 budget	Variance
Corporate Costs	22,193	-1,305	20,888	-5.88%
Employee Expenses	37,293	-9	37,283	-0.03%
Electricity	8,577	-102	8,475	-1.19%
Other Materials and Services	31,170	0	31,170	0.00%
Total 2013/14 forecast[28]	246,984	-1,416	245,568	-0.57%

Table 42 : Summary of reductions to 2014/15 operating expenditure forecast (values in nominal $'000s)

Category	2013/15 submission	Recommended reduction	Revised 2013/14 budget	Variance
Corporate Costs	22,758	-1,338	21,420	-5.88%
Employee Expenses	38,902	-128	38,775	-0.33%
Electricity	8,963	106	9,069	1.18%
Other Materials and Services	31,263	0	31,263	0.00%

[28] There are other categories included in the total 2013/14 forecast, and therefore these values are not the summation of the individual categories shown

Category	2013/15 submission	Recommended reduction	Revised 2013/14 budget	Variance
Total 2014/15 forecast[29]	269,791	-1,360	268,431	-0.50%

[29] There are other categories included in the total 2014/15 forecast, and therefore these values are not the summation of the individual categories shown

5. Capital expenditure

This section contains a review of prudency and efficiency of Gold Coast City Council's proposed capital expenditure for the 2013-15 financial years. The section includes the following sub-sections:

- Overview of Gold Coast City Council's capital expenditure for 2013-15
- The Authority's sample selection
- Overview of prudency and efficiency of capital expenditure
- Summary prudency and efficiency reviews of the each selected sample
- Summary and recommendations

5.1 Overview of capital expenditure

The Authority required that to assess the prudency of capital expenditure, Gold Coast City Council must attribute one or more of the following drivers to the capital expenditure projects submitted:

- **Growth** – capital expenditure designed to provide an increase in the capacity or capability of an asset or construction of new assets in response to increased demand, growth or variations required by a customer. Capital expenditure to provide increased security of supply should be included in growth.
- **Renewals** – capital expenditure associated with the replacement and or enhancement of an asset that currently meets service performance standards and legislative requirements but faces an unacceptable risk of future non-compliance. The renewal will maintain existing levels of service over the life cycle of the asset.
- **Improvements** – capital expenditure associated with upgrading service outcomes to improve asset efficiency, reliability or increase the anticipated life of an asset to prevent service non-compliance or capacity shortfall. It must achieve an increase in the reliability of the quality of supply that is explicitly endorsed or desired by customers, external agencies or participating councils.
- **Compliance** – capital expenditure associated with the replacement and or enhancement of an asset to prevent a non-compliance with legislative requirements such as (but not limited to) the Water Act, South-East Queensland Water (Distribution and Retail Restructuring) Act, Water Supply (Safety and Reliability) Act and OH&S.

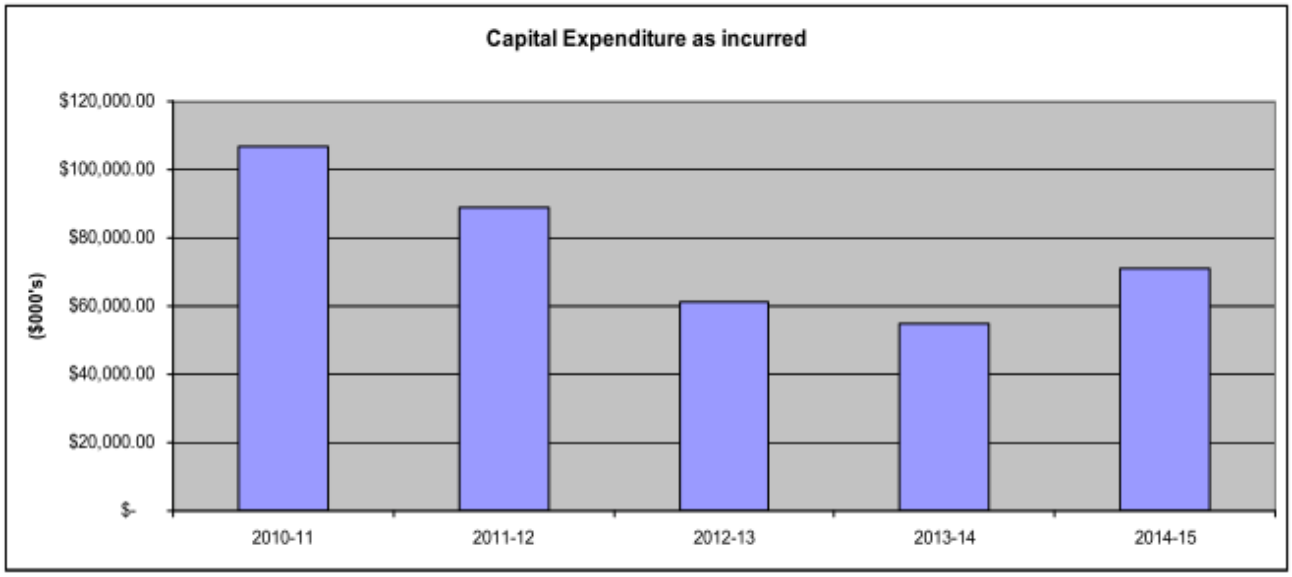
Gold Coast City Council has reported of $126 million budgeted expenditure in the two years to the end of the financial year 2014-15.

Table 43 : Capital Expenditure ($ M) (Gold Coast City Council, 30 September 2013)

Expenditure	**2013-14**	**2014-15**	**Total ($ M)**	Total **(%)**
Water	15.76	11.42	27.18	**22%**
Wastewater	39.34	59.74	99.08	**78%**
Total Capital expenditure	55.10	71.16	126.26	**100%**

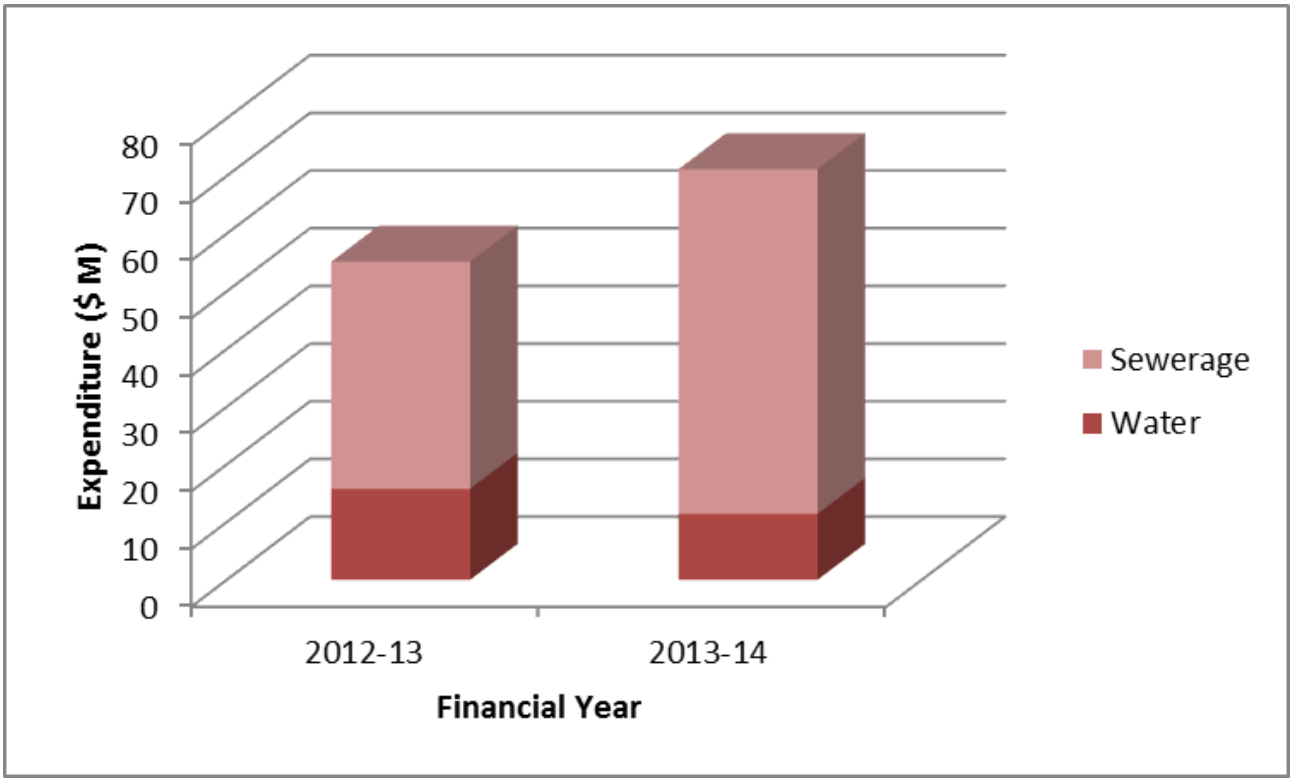
The 2013-14 capital works programme is at its lowest level in several years, resulting from a combination of low growth and improved planning, as outlined in **Figure 2-1**.

Figure 2-1: Capital expenditure as incurred from 2010-11 and proposed to 2014-15 (Gold Coast City Council, 30 September 2013)



A breakdown of capital expenditure by product for the 2012-13 to 2014-15 financial years' budgets can be seen below in **Figure 2-2** below.

Figure 2-2: Forecast capital expenditure for 2012-13 to 2014-15 by product (Gold Coast City Council, 30 September 2013)



A breakdown of the total expenditure product is shown in **Table 2-2**.

Table 44 : Capital expenditure - by product ($ M) (Gold Coast City Council, 30 September 2013)

Product	2013-14 [f]	2014-15 [f]	Total
Water	15.66	10.11	**44.74**
Wastewater	39.34	59.74	**139.52**
Recycled Water	0.10	1.32	**2.01**
Total	**55.10**	**71.17**	**186.27**

Note: a = actual; f = forecast

Review of the expenditure by region and product reveals that:

- The majority (78%) of expenditure over the three year reported period is incurred in respect of wastewater assets; water supply assets account for a further 22%
- There is a slightly greater focus on water services in 2013-14 with an increase to 29% of the total capital expenditure; this is offset by a reduction in expenditure proportioned to wastewater assets (71%)
- In 2014-15 there a greater focus on wastewater services with an increase to 84% of the total capital expenditure; which is offset by a reduction in in expenditure proportioned to water assets (16%)

The allocation of capital expenditure incurred in relation to each of the drivers is shown in **Table 2-3**.

Table 45 : Capital expenditure - by driver ($ M) (Gold Coast City Council, 30 September 2013)

Driver	2012-13[a]	2013-14 [f]	2014-15 [f]	Total
Renewals and compliance	38.38	35.90	32.72	**107.00**
Growth	21.62	19.20	38.45	**79.27**
Total	**60.00**	**55.10**	**71.17**	**168.27**

Note: a = actual; f = forecast

Review of the expenditure by region and product reveals that:

- Expenditure over the five year reported period is principally driven by renewals and compliance (57%) with growth accounting for approximately 43%
- For 2013-14 the predominate driver is renewals and compliance (65%) with growth accounting the remaining 35%; while for 2014-15 the predominate driver is growth (54%) with renewals and compliance accounting the remaining 46%

5.2 Sample selection

A sample capital expenditure projects and programs for detailed analysis and review was selected by the Authority.

The capital expenditure projects and programs chosen for review are shown below in **Table 2-5**.

Table 46 : Capital expenditure programs reviewed – as commissioned ($'000s) (Gold Coast City Council, 13 August 2013)

Project Name	Programme	Primary Driver/s	2013-14 ($'000)	2014-15 ($'000)	Total ($'000)
OX26 Pump Station	N/A	Growth	4,074	-	**4,074**
RM & GM for Burleigh Waters PS B47	N/A	Growth, Compliance & Improvement	8,140	-	**8,140**

Project Name	Programme	Primary Driver/s	2013-14 ($'000)	2014-15 ($'000)	Total ($'000)
Western Force Wastewater Main Replacement on Falconer Street	WW Mains Renewal	Renewals	2,234	-	**2,234**
Sewer Pump Station Mechanical Electrical Minor Works 2013-14	WWPS Mech/Elec Upgrade Programme	Renewals	850	950	**1,800**
Coombabah WWTP Process Tanks Refurbishment	STP Civil Upgrade Programme	Compliance	2,848	-	**2,848**
Water Main Replacement 2013-14	Water Main Renewal Programme	Renewals	2,500	-	**2,500**
Total Sample (6 Projects)			**20,646**	**950**	**21,597**

5.3 Detailed investigations

The findings of the detailed investigations for each of the projects or programs reviewed are summarised in the following sections. Detailed reports for each project outlining the base assumptions for the below findings are presented in **Appendix A** to **Appendix F**.

5.3.1 OX26 pump station

The OX26 Pump Station project involves the construction of a new pump station and associated infrastructure, to cater for growth and replace aging infrastructure to address environmental issues. The project includes the construction of new pump station (OX45), the decommissioning of two existing pump stations (OX26 and OX3) and associated changes to the network.

SKM considers the drivers of growth, renewal and compliance are appropriate for this project as the current pump station is undersized, operating beyond its intended operational life and is currently experiencing breaches of environmental compliance. The proposed works will ensure adequate capacity exists to prevent spills from occurring. SKM notes that that DEHP has accepted the council's strategy to meet the licence requirements to demonstrate compliance with the Desired Standards of Service. SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate. As such, SKM concludes that the project is prudent.

SKM considers that an appropriate tendering process has been used for the award of the detailed design and construction phases of the project. Based on the tender process used for construction component of the project, SKM finds that the project costs for these are in line with market conditions.

Overall, SKM finds that the project is prudent and efficient.

5.3.2 RM & GM for Burleigh Waters PS B47

The Elanora Wastewater Treatment Plant (WWTP) treats wastewater from the southern Gold Coast (from Coolangatta in the south to Mermaid Beach in the north). The treatment plant has reached its capacity and will require augmentation if allowed to operate under existing conditions and accommodate predicted growth. This project will involve the construction of 1.5 km of rising/gravity main along Christine Avenue through to the connection point at shaft 22/1, where a steep section of gravity sewer will connect the main to the Bermuda Street Tunnel. Modifications to pump station B47 will also be undertaken. The flow to be diverted from the B47 catchment to Merrimac WWTP is of the order of 5 ML/day.

SKM reviewed the project as part of the *2011-12 SEQ Interim Price Monitoring* review for the Authority and found it to be prudent and efficient. SKM note that subsequent to this review, the total budget for the project increased from $7.69 million to $8.14 M, including $90,000 on design costs in 2010-11.

SKM finds the drivers of growth, compliance and improvement to be appropriate for this project given the anticipated growth in the catchment and the historic licence non-compliances. SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate. As such SKM concludes that the project is prudent.

SKM considers that an appropriate tendering process has been undertaken for the award of the design and construction phases of the project and that the costs are in line with market conditions.

During the tender process, there were two tenders submitted by the preferred contractor; a conforming tender ($5.92 M) and non-conforming tender ($5.58 M). The Central Procurement Office of Gold Coast City Council made a recommendation to proceed with the alternative tender option, prior to the completion of the review of the design. This recommendation has resulted in difficulties during the construction phase of the project, including higher design and construction costs. SKM notes that there were also errors found within the design. However, SKM understands that no additional fees have been paid to the design consultant for any redesign work required to rectify the original design shortcomings.

SKM notes that the current contract value of the project ($6.27 M) is similar to that which would have been achieved, should the conforming tender have been accepted ($6.23 M).

SKM concludes that the lack of appropriate processes between Central Procurement Office of Gold Coast City Council and Gold Coast Water has resulted in inefficiencies in the project. As such, SKM recommends a reduction in project costs of $42,000 (the difference between the contract cost for the conforming and non-conforming tender).

SKM recommends that a process be developed by Gold Coast City Council to handle situations where the recommendation to and the proposed decision of the Governance Administration and Finance Committee do not align.

Overall, SKM considers the project to be prudent and partially efficient.

5.3.3 Western Force Wastewater Main Replacement on Falconer Street

The Western Force Main (WFM) is one of the major rising mains in the wastewater network delivering wastewater to Coombabah Wastewater Treatment Plant (WWTP). In the past 5-6 years, the main had several failures that had the potential of damaging the environment and breaching (the then) DERM guidelines. These failures occurred around Gas Release Valves (GRV) due to degradation of lining/steel possibly due to malfunctioning of GRVs. The project involves the replacement of sections of the main.

SKM considers the driver of renewal appropriate for this project given the number of failures and issues experienced with the main. The pipeline is a direct replacement of an existing asset that is in use and useful. SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate for the purpose described. As such SKM concludes that the project is prudent.

SKM believes the delivery of Stage 1 by internal staff to be appropriate given the urgency of the repair. SKM considers that an appropriate tendering process has been undertaken for the award of Stage 2 of the project and that therefore the costs are in line with market conditions. The project is anticipated to be completed in the 2013-14 financial year. However, given that the tender has been awarded it is highly likely that it will be delivered in the 2013-14 financial year.

SKM considers the standards used for this project are appropriate. SKM finds that the project costs for Stage 2 are in line with market conditions given the competitive tendering process adopted and are therefore efficient. SKM notes that the costs for Stage 1 are above market rates. However, as the works were undertaken in emergency conditions, SKM considers that the costs are reasonable.

Overall, SKM considers the project to be both prudent and efficient.

5.3.4 Sewer Pump Station Mechanical Electrical Minor Works 2013-14

The Sewer Pump Station Mechanical Electrical Minor Works 2013-14 project involves the replacement and refurbishment of minor mechanical and electrical equipment at sewage pump stations due to condition, age and obsolescence.

SKM considers the drivers of renewal, compliance and improvement to be appropriate for this project as the mechanical and electrical components have reached the end of their useful life and failure to replace could result in licence non-compliances. In addition, SKM considers the process used for the identification and prioritisation of works to be completed appropriate. As such SKM concludes that the project is prudent.

SKM finds that the delivery method adopted is appropriate for the scope of work. However SKM considers that further investigation should be undertaken into the potential cost savings associated with the bulk purchase of required pumps, including the costs associated with storage and inventory management to determine if efficiency gains can be made.

SKM considers that the standards used for this project are appropriate.

SKM considers the use of quotes and tenders and unit rates from recent similar projects is an appropriate process. SKM considers the estimated cost for the 2013-14 and 2014-15 programmes to be appropriate and in line with market conditions.

Overall, SKM considers the project to be prudent and partially efficient.

5.3.5 Coombabah WWTP Process Tanks Refurbishment

The Coombabah WWTP Process Tank Refurbishment project is the continuation of the clarifier refurbishments at Coombabah WWTP. The scope generally includes taking tanks offline, internal inspection to determine a detailed scope of works, concrete repairs where necessary and painting and replacement of metalwork.

SKM considers the drivers of compliance, renewal and improvement to be appropriate for this project as the assets have reached the end of their useful life and without refurbishment the plant's capacity will be reduced, potentially leading to failure to meet licence conditions. SKM finds that the process used by Gold Coast City Council in the determination of the scope of work for the refurbishment of the tanks to be appropriate. SKM recommends that findings from the historic refurbishment of tanks be used to inform the scoping of works for the remaining tanks. As such, SKM considers that the project is prudent.

From its review, SKM considers that an appropriate tendering process has been undertaken for the award of the project. SKM considers that the project will be completed and commissioned within the review period and that the standards used for this project are appropriate.

SKM notes that, whilst there have been a number of change request and variations on the project; the costs have not exceeded the original budget. In addition, as the scope was not fully understood prior to the issuing of the contract (as it was part of the contracted works to finalise the scope following contractor inspection of the existing assets), it is to be expected that there would be some risk of variations as the scope of works was determined. SKM considers that the project costs are in line with market conditions and therefore efficient.

Overall, SKM considers the project to be both prudent and efficient.

5.3.6 Water Main Replacement 2013-14

The water supply reticulation network consists of over 3,000 km of water pipes and part of it is over 60 years of age. These pipes are primarily Asbestos Cement (AC), Cast Iron Cement Lined, UPVC and Ductile Iron Cement Lined pipes. A number of water mains have been identified that experience frequent failures or are at risk of failure. If these water mains are not replaced, the number of unplanned interruptions will increase, resulting in a decrease in service quality and increased water loss. The water main replacement programme has been

formulated to address the issue. Water main replacements have been underway for the last five years as a rolling programme.

SKM considers that the driver of renewal is appropriate for this project as failure to replace the mains could result in service interruptions and income loss. SKM considers the process used for the identification and prioritisation of works to be completed appropriate. SKM notes that no evidence of the implementation of the process for the selection and prioritisation of water main replacement projects have been provided. Nevertheless, SKM finds that the project is prudent.

SKM considers Gold Coast City Council's project management, contract supervision, tendering and O&M costs, as a percentage of direct costs, to be low but reasonable.

Gold Coast City Council competitively tendered a contract to undertake the work in 2011-12. The duration of the schedule of rates contract was one year but include the option for three further extensions for the 2012-13, 2013-14 and 2014-15 financial years. SKM considers that the unit rates used by Gold Coast City Council are high, when compared to unit rates used by a similar water entity and therefore not consistent with prevailing market conditions. SKM recommends a reduction in costs of 8% of the programme costs (approximately $200,000) from $2.5 million to $2.3 M.

Overall, SKM finds the 2013-14 programme of works to be prudent and partially efficient.

5.4 Overall sample capital project review summary

A sample of six projects was assessed as a representative sample of the capital expenditure programme Gold Coast City Council for the 2013 to 2015 period. These projects have been assessed these against the Authority's definitions of prudency, in particular the relevant driver and the decision making process; and efficiency, including the standards of service, scope of work, timeliness of delivery and the costs. Table 2-5 provides an overview of the final assessment made for each project or programme.

Table 47 : Overview of prudency and efficiency of capital expenditure sample selection ($'000)

Project Name	Assessment			Gold Coast City Council Proposed[1]		Proposed Adjustment		SKM Recommended	
	Prudent	Efficient	Comment	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
OX26 Pump Station	✓	✓	Project considered prudent and efficient.	4,074	0	0	0	4,074	0
RM & GM for Burleigh Waters PS B47	✓	✗	Project considered prudent, but only partially efficient. Reduction to reflect lack of governance processes resulting in inefficiencies	8,140	0	-42	0	8,098	0
Western Force Wastewater Main Replacement on Falconer Street	✓	✓	Project considered prudent and efficient.	2,234	0	0	0	2,234	0
Sewer Pump Station Mechanical Electrical Minor Works 2013-14	✓	✓	Project considered prudent and efficient.	850	950	0	0	850	950
Coombabah WWTP Process Tanks Refurbishment	✓	✓	Project considered prudent and efficient.	2,848	0	0	0	2,848	0
Water Main Replacement 2013-14	✓	✗	Project considered prudent, but only partially efficient. Reduction to reflect lower unit rates.	2,500	0	-200	0	2,300	0
Total				**20,646**	**950**	**-242**	**0**	**20,404**	**950**

[1] *TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013* (Gold Coast City Council, 13 August 2013)

5.5 Asset lives

Gold Coast City Council has provided an information return outlining nominal asset lives for use in economic regulation to depreciate at the asset class level.

The Authority's information requirement template allows information to be provided on the following two sheets.

- 5.8.1.1 Asset Lives Details for Regulatory Asset Base
- 5.8.1.2 Asset Lives Details for Regulatory Asset Base - Tax Purposes

These categories are considered below.

5.5.1 Useful lives for new assets

Information on asset lives for all asset types, including reservoirs, treatment and pump stations have been provided in Gold Coast City Council's submission to the Authority. Asset lives for new assets are shown in **Table 2-6**.

Table 48 : Asset lives for new assets (Gold Coast City Council, 2014) (Gold Coast City Council, 2013)

Asset	Drinking water	Other core Water Services	Wastewater via Sewer	Trade waste
Reservoirs	70	70	70	70
Pump stations	25	25	25	25
Treatment	40	40	40	40
Associated telemetry and control systems	20	20	20	20
Meters	15	15	15	15
Billing systems	5	5	5	5
Corporate systems	5	5	5	5
Sundry property, plant and equipment	5	5	5	5
Land	0	0	0	0
Building other than infrastructure housing	60	60	60	60
Distribution infrastructure not included in another category	15	15	15	15
Support services	5	5	5	5
Mains	70	70	70	70
Establishment Costs	5	5	5	5
Unallocated cash contribution	55	55	55	55

SKM has compared the provided asset lives to available benchmarks. The Water Services Association of Australia (WSAA), the Pressure Sewerage Code of Australia (WSA 07-2007 V1.1) and the WSAA Water Supply Code of Australia (WSA 03-2011) provide benchmarks for asset lives.

Table 2-7 presents benchmarks of selected asset lives and a comparison with those used by Gold Coast City Council.

Table 49 : Benchmarking of asset lives

Asset	Benchmark	Comment
Water and Wastewater Distribution infrastructure	The WSA 07-2007 Pressure Sewerage Code of Australia V1.1 suggests a nominal asset design life of 100 years for pressure sewers and laterals and property discharge lines, 20 -30 years valves. The WSA 03-2011 Water Supply Code of Australia suggests a typical asset design life of 100 years for water mains, 30 years for valves.	A 70 year asset life for water infrastructure and wastewater infrastructure is reasonable.
Reservoirs	The WSA 03-2002 Water Supply Code of Australia suggests a typical asset design life of 50 years for reservoirs.	Compared to benchmarks, the assumption of a 70 year asset life is high. However from SKM's knowledge, many reservoirs are in service for longer than 50 years. The inclusion of an asset life for reservoir assets for wastewater and trade waste is assumed to be an error. [30]
Treatment	No combined treatment asset life is provided.	Treatment consists of a number of civil, mechanical and electrical assets. A combined asset life of 40 years is reasonable.
Pump stations	The WSA 03-2011 Water Supply Code of Australia suggests a typical asset design life of 20 years for pumps (note that this contributes to the mechanical component only).	The assumption of a 25 year asset life for water and wastewater pump stations is reasonable.
Telemetry & SCADA	The WSA 03-2011 Water Supply Code of Australia suggests a typical asset design life of 15 years for SCADA.	The assumption of a 20 year asset life is reasonable.

5.5.2 Useful lives for new assets for tax purposes

Information on asset lives for major assets, such as reservoirs, treatment and pump stations have been provided in the Authority's templates. As with the useful lives for new assets the same categories were not completed.

The TR 2013/4 Taxation Ruling Income tax: effective life of depreciating assets (applicable from 1 July 2013) discusses the methodology used by the Commissioner of Taxation in making determinations of the effective life of depreciating assets under section 40-100 of the Income Tax Assessment Act 1997 (ITAA 1997). The effective life of a depreciating asset is used to work out the asset's decline in value. (ATO, 2013)

The Commissioner makes a determination of the effective life of a depreciating asset by estimating the period (in years, including fractions of years) it can be used by any entity for a taxable purpose. In the Commissioners' determination, a number of factors are considered including:

- The physical life of the asset
- Engineering information
- The manufacturer's specifications
- The way in which the asset is used by an industry
- The level of repairs and maintenance adopted by users of the asset
- Industry standards
- The use of the asset by different industries

[30] Gold Coast City Council acknowledges this to be an error in completion of the Information Templates and does not have reservoir assets for wastewater or trade waste. It is noted that no asset values were recorded against these classes.

- Retention periods
- Obsolescence
- Scrapping or abandonment practices
- If the asset is leased, the period of the lease
- Economic or financial analysis indicating the period over which that asset is intended for use
- An analysis of the decline of market value of an asset class

It is important to note that the Commissioner does not consider that the physical life of an asset is necessarily its effective life because, all the factors must be considered before an estimate of effective life is made. A consideration of these factors may often indicate that an asset's effective life is a period shorter than its physical life. (ATO, 2013)

SKM cross referenced the effective tax lives provided by Gold Coast City Council with the 'Effective lives (Industry Categories)' Table A as at 1 July 2013 provided in the TR 2013/4 Taxation Ruling (ATO, 2013), where applicable and relevant.

Table 50 : Review of effective life

Asset	Drinking water	Other core water services	Wastewater via Sewer	Trade waste	Revised Effective Life (Tax)†
Reservoirs	70	70	70	70	80
Pump stations	25	25	25	25	25
Treatment	40	40	40	40	Comprised of a number of individual assets
Associated telemetry and control systems	20	20	20	20	10
Meters	15	15	15	15	20
Mains	70	70	70	70	80

† Determined through review of Australian Government TR2013/4 Taxation Ruling: Income Tax, effective life of depreciating assets (applicable from 1 July 2013)

The Authority template refers to an asset class as opposed to individual assets, ie for treatment plants, sundry plant and equipment and establishment costs, which cannot be cross referenced with TR 2013/4 Taxation Ruling. Without a breakdown of individual asset types within the groups a revised effective tax life cannot be determined.

For the treatment plants asset group the components of an 'average' wastewater treatment plant were selected and assessed to determine the average effective life of the group of assets. The 'average' treatment plant assessed included pre-treatment comprising of sewer mains, pump station, screening and grit removal; secondary treatment comprising of biological nutrient removal assets (aerators and blowers, BNR tanks and mixers) and secondary clarifiers; and tertiary treatment comprising of UV disinfection, aerobic digesters, sludge thickening tanks, belt presses and sludge aerators and blowers. Additional assets incorporated for the overall operation of the plant included valves, chemical dosing pumps, flow meters, telemetry, variable speed drives, chlorine residual analysers, pH meters, dissolved oxygen probes, level sensors, etc. Based on a simplistic calculation, including one of each asset type, the median effective life is 25 years. This is lower than the 40 years suggested by Gold Coast City Council. It should be noted that this calculation was performed to determine a relative figure. For a more accurate determination the Authority information requirement template would need to be modified to include all asset types, and the quantities, at each treatment plant.

Effective lives for systems such as billing and corporate are not covered by the taxation ruling and therefore cannot be assessed, however as a billing system would largely comprise of computer equipment SKM considers that a life of three to four years would be reasonable. Buildings do not have any direct correlation with

any asset and life included in the TR 2013/4 Taxation Ruling, therefore a revised effective tax life cannot be determined.

It should also be noted that whilst SKM offers advice based on publicly available information and our interpretation is based on experience, the above should not be interpreted by either the Authority or by Gold Coast City Council as tax advice. Therefore, although SKM can advise that effective lives do not correlate to TR 2013/4 Taxation Ruling guidance; it is recommended that Gold Coast City Council seeks guidance from its accountants/auditors regarding estimates of effective asset lives for tax purposes.

Subsequent to the issue of SKM's Draft Report, Gold Coast City Council advised that the "effective lives for taxation purposes that were included in the Information Template were the same lives that Allconnex Water had used previously. It is Gold Coast City Council's understanding that this was appropriate for consistency with regard to MAR calculations etc. Gold Coast City Council's actual tax effective lives for the purposes of completing its company taxation return were reviewed and re-set by their tax accountant upon return to council in accordance with the relevant taxation ruling guidance and advice from KPMG".

5.6 Summary assessment of capital expenditure

In general for the six sampled projects reviewed in detail, SKM has found that:

- The sampled projects demonstrate that Gold Coast City Council has followed its robust policies and procedures for capital delivery, including production of feasibility studies, procurement strategies and business cases and independent estimates and third party reviews where required
- All projects have documentation clearly identifying the key driver for the project and demonstrating a thorough review of project options to address the project need including financial analysis
- All projects demonstrate a consideration of risk and asset management

On the basis of the detailed review undertaken in respect of the six sampled projects, the following four projects have been demonstrated to be prudent and efficient:

- OX26 Pump Station project ($4.07 M)
- Western Force Wastewater Main Replacement on Falconer Street ($2.23 M)
- Coombabah WWTP Process Tanks Refurbishment ($2.85 M)
- Sewer Pump Station Mechanical Electrical Minor Works 2013-14 project ($1.80 M)

SKM has recommended that the allowed 2013-15 expenditure be reduced for:

- The RM & GM for Burleigh Waters PS B47 project to reflect Gold Coast City Council's lack of governance processes, and or adherence to existing processes, which are concluded to have resulted in inefficiencies
- The Water Main Replacement 2013-14 project to reflect the high unit rates

SKM recommends that 2013-15 forecast expenditure in respect of the sampled projects is reduced by $0.242 M, which represents a 1.1% reduction in the forecast expenditure ($21.6 M) for those projects.

6. Conclusions and recommendations

6.1 Policies and procedures

The outcomes of the policies and procedures review are summaries in Table 3.1.

Table 51 : Summary of compliance of capital and operating expenditure policies

Requirements	Capital expenditure policies and procedures	Operating expenditure policies and procedures
Has a standardised approach to cost estimating	Compliant and robust	Not applicable
A summary document is prepared	Compliant and robust	Not applicable
An implementation strategy is prepared	Compliant and robust	Not applicable
Has a gateway review process	Compliant and robust	Not applicable
Includes detailed analysis of options for major projects	Compliant and robust	Not applicable
Has a benefits realisation assessment process	Compliant and robust	Not applicable
Includes requirements to comply with relevant legislation	Not compliant	Not compliant
Includes requirements to take account of regional issues.	Not compliant	Not compliant
Only commissioned capital expenditure from 1 July 2010 is included in the RAB	Compliant	Not applicable
Overall expenditure programme and delivery processes	Not compliant, due to the legislative compliance and regional issues above	Not compliant, due to the legislative compliance and regional issues above
Asset management in accordance with good industry practice	Not compliant	Not compliant
Procurement in accordance with good industry practice	Compliant and robust	Compliant and robust
Budget formation in accordance with good industry practice	Compliant and robust	Compliant and robust

6.2 Operating costs

In general, SKM is of the opinion that the 2012-13 budget submitted by the Gold Coast City Council is not robust and numerous adjustments needed to be made to the 2012-13 budget. This is largely due to the transition from Allconnex as the quality and quantity of information accompanying the transfer was lacking. The 2013-14 budget however does appear to be more robust as they were based on information and parameters set by Council.

SKM concludes that Gold Coast City Council's budgeted corporate costs are prudent but not efficient. The SAP system related corporate costs increase should be offset by efficiency gained through business process improvements as the Council's corporate functions are now operating under an advanced ERP system.

SKM considers that the staffing levels proposed by Gold Coast City Council are reasonable and reflects the current asset management approach. Adopting a more proactive maintenance approach in the future is likely to result in higher staffing levels. However, the forecast employee expenditure has been considered by SKM to be not efficient. Gold Coast City Council has proposed a 4% increase in 2013-14 based on the adjusted 2012-13 expense (rather than the 2012-13 expense provided in the template). In 2014-15, the Council has proposed an

increase of 4.3%. SKM recommends a reduction in the rate of increase to 4% for 2014-15. This amounts to a reduction of $128,000 to the employee expenses allocation in the 2014-15 forecast (based on the 4% cost category escalation from the adjusted 2012-13 baseline).

While the manner in which Gold Coast City Council has forecast its electricity expenses is relatively simplistic, given the recent fluctuations in electricity contract prices, SKM acknowledges that future prices are difficult to predict. Nevertheless, the proposed price increase of 11.86% for 2013-14 falls within and is central to the range SKM believes is reasonable. The actual application of the carbon tax was around $21/MWh rather than the $24/MWh proposed. SKM recommends using the actual rate, recognising also that the applicability of the carbon tax after 2013-14 is uncertain. SKM is also of the opinion that the 2% load growth assumed by the Gold Coast City Council is unsupported and recommends basing the load growth rate on the OESR's population growth rate as a proxy. Between 2011 and 2016, the OESR projects that the Gold Coast population would grow at 2.42% pa.

Significant movements occur within the other materials and services expenses between 2012-13 and 2013-14. This is largely due to the fact that the preparation of the 2012-13 budget was undertaken with very limited information from Allconnex and as a consequence there was significant 'guesswork' involved. Since the water and wastewater business returned to Council, significant work has been undertaken to refine the estimates. As a result, the 2013-14 budget is significantly lower than the initial budget prepared for 2012-13.

6.2.1 Recommended adjustments to operational expenditure

SKM notes the recommendations for the 2013-14 and 2014-15 forecasts:

- Corporate Costs – Efficiency savings should be achieved through business process improvements while operating under an advanced ERP system. Therefore, SKM has recommended a downward adjustment of $1.31 million in 2013-14 and $1.33M in 2014-15 to account for adjustments to information services.
- Employee Expenses – SKM proposes a 4% increase in 2013-14 based on the adjusted 2012-13 expense (rather than the 2012-13 expense provided in the template). SKM recommends a reduction in the rate of increase from 4.3% to 4% for 2014-15 which equates to $128,000.
- Electricity – a reduction of $101,900 is proposed for the 2013-14 forecast and an increase of $106,000 is proposed for the 2014-15 forecast.
- Other Materials and Services - SKM has identified discrepancies with the calculation of costs for 2012-13. Notwithstanding these discrepancies, SKM is of the opinion that the proposed expenditure for 2013-14 and 2014-15 is efficient.

Table 52 : Summary of reductions to 2013/14 operating expenditure forecast (values in nominal $'000s)

Category	2013/15 submission	Recommended reduction	Revised 2013/14 budget	Variance
Corporate Costs	22,193	-1,305	20,888	-5.88%
Employee Expenses	37,293	-9	37,283	-0.03%
Electricity	8,577	-102	8,475	-1.19%
Other Materials and Services	31,170	0	31,170	0.00%
Total 2013/14 forecast[31]	246,984	-1,416	245,568	-0.57%

Table 53 : Summary of reductions to 2014/15 operating expenditure forecast (values in nominal $'000s)

Category	2013/15 submission	Recommended reduction	Revised 2013/14 budget	Variance
Corporate Costs	22,758	-1,338	21,420	-5.88%
Employee Expenses	38,902	-128	38,775	-0.33%

[31] There are other categories included in the total 2013/14 forecast, and therefore these values are not the summation of the individual categories shown

Category	2013/15 submission	Recommended reduction	Revised 2013/14 budget	Variance
Electricity	8,963	106	9,069	1.18%
Other Materials and Services	31,263	0	31,263	0.00%
Total 2014/15 forecast[32]	269,791	-1,360	268,431	-0.50%

6.3 Capital expenditure

In general for the six sampled projects reviewed in detail, SKM has found that:

- The sampled projects demonstrate that Gold Coast City Council has followed its robust policies and procedures for capital delivery, including production of feasibility studies, procurement strategies and business cases and independent estimates and third party reviews where required
- All projects have documentation clearly identifying the key driver for the project and demonstrating a thorough review of project options to address the project need including financial analysis
- All projects demonstrate a consideration of risk and asset management

On the basis of the detailed review undertaken in respect of the six sampled projects, the following four projects have been demonstrated to be prudent and efficient:

- OX26 Pump Station project ($4.07 M)
- Western Force Wastewater Main Replacement on Falconer Street ($2.23 M)
- Coombabah WWTP Process Tanks Refurbishment ($2.85 M)
- Sewer Pump Station Mechanical Electrical Minor Works 2013-14 project ($1.80 M)

SKM has recommended that the allowed 2013-15 expenditure be reduced for:

- The RM & GM for Burleigh Waters PS B47 project to reflect Gold Coast City Council's lack of governance processes which have resulted in inefficiencies
- The Water Main Replacement 2013-14 project to reflect the high unit rates

SKM recommends that 2013-15 forecast expenditure in respect of the sampled projects is reduced by $0.242 M, which represents a 1.1% reduction in the forecast expenditure ($21.6 M) for those projects.

6.3.1 Recommended adjustments to capital expenditure

Table 54 : Overview of prudency and efficiency of capital expenditure sample selection ($'000)

Project Name	Assessment			Gold Coast City Council Proposed[1]		Proposed Adjustment		SKM Recommended	
	Prudent	Efficient	Comment	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
OX26 Pump Station	✓	✓	Project considered prudent and efficient.	4,074	0	0	0	4,074	0

[32] There are other categories included in the total 2014/15 forecast, and therefore these values are not the summation of the individual categories shown

Project Name	Assessment			Gold Coast City Council Proposed[1]		Proposed Adjustment		SKM Recommended	
	Prudent	Efficient	Comment	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
RM & GM for Burleigh Waters PS B47	✓	✗	Project considered prudent, but only partially efficient. Reduction to reflect lack of governance processes resulting in inefficiencies	8,140	0	-42	0	8,098	0
Western Force Wastewater Main Replacement on Falconer Street	✓	✓	Project considered prudent and efficient.	2,234	0	0	0	2,234	0
Sewer Pump Station Mechanical Electrical Minor Works 2013-14	✓	✓	Project considered prudent and efficient.	850	950	0	0	850	950
Coombabah WWTP Process Tanks Refurbishment	✓	✓	Project considered prudent and efficient.	2,848	0	0	0	2,848	0
Water Main Replacement 2013-14	✓	✗	Project considered prudent, but only partially efficient. Reduction to reflect lower unit rates.	2,500	0	-200	0	2,300	0
Total				**20,646**	**950**	**-242**	**0**	**20,404**	**950**

[1] *TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013* (Gold Coast City Council, 13 August 2013)

Appendix A. OX26 Pump Station

A.1 Project description

The OX26 Pump Station project involves the construction of a new pump station and associated infrastructure, to cater for growth and replace aging infrastructure to address environmental issues.

The project includes the construction of new pump station (OX45), the decommissioning of two existing pump stations (OX26 and OX3) and associated changes to the network.

A.2 Proposed capital expenditure

Table A.1shows the proposed cost of the OX26 Pump Station project within the 2013-15 budget.

Table A.1: OX26 Pump Station project proposed capital expenditure ($'000)

Source	Previous years ($'000)	2013-2014 ($'000)	2014-2015 ($'000)	Subsequent years ($'000)	Total ($'000)
5.6.2 Capital Expenditure Projects and Programmes of SEQ Revenue Monitoring - Information Requirement Template	2,474	1,600	0	0	4,074
TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spread sheet	0	4,074	0	0	4,074
Budget Timeline for OX26 Project (Gold Coast Water, no date)*	2,478	1,700	0	0	4,178

* 2013/14 Budget following Q1 Review

The total costs for the project are identical between the different information sources.

A.3 Documentation reviewed

The key reference documents used for this review are:

- *OX26 Pump Station Gantt Chart* (Gold Coast City Council, 11 October 2013)
- *OX45 Pump Station Cost Plan* (Gold Coast City Council, 30 September 2013)
- *Change Request – Various Project* (Gold Coast City Council, 19 August 2013)
- *Sewerage Pumping Station OX26 Upgrades – Business Case QP-2206* (Gold Coast Water, September 2013)
- *Budget Timeline for OX26 Project* (Gold Coast Water, no date)
- *Adopted Report of the Governance Administration & Finance Committee Meeting* (Gold Coast City Council, 11 December 2012)
- *Change Request – Various Project* (Allconnex Water, 6 November 2012)
- *Change Request – WWPS OX26 Augmentation* (Allconnex Water, 10 February 2012)
- *Change Request – WWPS OX26 Augmentation* (Allconnex Water, 7 October 2011)
- *QP-2201 Project Initiation Form – Wastewater Headworks – 2011/2012 – WWPS OX26 Upgrade* (Allconnex Water, July 2011)
- *Augmentation of Lift Station OX26 – Options Assessment – Final Report* (KBR, 3 December 2010)

A.4 Key drivers

The primary cost driver identified by the Gold Coast City Council for this project is growth, with renewal and compliance as secondary drivers.

The OX26 pump station is located adjacent to the intersection of Kopps Road and Michigan Drive in Oxenford, near Movie World. The station was constructed in 1995 as a temporary sewerage pump station, with an initial operational life of four years. It experiences frequent spills during wet weather events, and occasionally during dry weather, draining to Saltwater Creek, which is unacceptable to the public.

The OX26 pump station has an existing single pump capacity of 59 L/s and dual pump capacity of 118 L/s, and services a catchment of over 4,000 ETs with a ADWF of 41.1 L/s and PWWF of 205 L/s. Augmentation of the pump station or alternative infrastructure is required to service the current and future sewer flows and meet Gold Coast City Council's Desired Standards of Service (DSS) 2009. The DSS benchmark the minimum standards of service provision of the council's sewerage network.

SKM considers the drivers of growth, renewal and compliance are appropriate for this project as the current pump station is undersized, operating beyond its intended operational life and is currently experiencing breaches of environmental compliance. The proposed works will ensure adequate capacity exists to prevent spills from occurring. SKM note that that DEHP has accepted the council's strategy to meet the licence requirements to demonstrate compliance with the DSS.

A.5 The scope of works

A.5.1 Solutions development

Five alternatives options were assessed in the *Augmentation of Lift Station OX26 – Options Assessment – Final Report* (KBR, 3 December 2010). The options were evaluated during a workshop where a comparison of the advantages and disadvantages was undertaken. Analysis of the options included staging of the works to ultimate flows and consideration of adjoining infrastructure.

Eight options were considered in the *Sewerage Pumping Station OX26 Upgrades – Business Case QP-2206* (Gold Coast Water, September 2013). These were:

- Option 1 – Augment OX26 pump station
- Option 2 – PX26 to inject to OX3 rising main
- Option 3 – Redirection of OX26 catchment to OX2 pump station
- Option 4 – Redirection of OX26 catchment to OX39 gravity sewer main
- Option 5 – Inter-connection transfers from OX26 catchment
- Option 6 – Helensvale Road system only and Northern Network
- Option 7 – Helensvale Road flow splitting
- Option 8 – Do nothing/non-infrastructure option

Options 6 and 7 were taken forward for detailed analysis based on workshop outcomes and consultation with stakeholders including Planning, Modelling, Operations & Maintenance, Infrastructure Delivery and Asset Management department with council. Detailed cost estimates and NPC assessment were carried out. From this analysis the Northern Network and Helensvale Road Flow Splitting option was selected as the preferred option as it was determined to be more beneficial to the performance, effectiveness and financial status of the overall strategy. (Gold Coast Water, September 2013)

The scope of the works includes:

- Construction of a new pump station, OX45, (single pump capacity of 192.6 L/s at 24 m and dual pump capacity of 275.2 L/s at 37 m), including emergency storage (150 m of DN2,250 HDPE main)
- Installation of a new injector rising main (110 m of DN450) between the new OX26 pump station and pump station OX3 rising main (OX26 to inject on the discharge side of pump station OX3)
- Installation of 675 m of DN300 rising main to the existing single DN375 rising main (downstream of the twin DN300 rising mains from OX3/OX26)
- Installation of a new inlet 65 m of DN675 sewer main from access pit S092-00683M to the new collection manhole adjacent to the new OX26 pumping station
- Installation of 100 m of DN525 gravity main from OX3 to OX26
- Decommissioning of the existing OX26 pump station and rehabilitation of the area
- Decommissioning of the existing OX3 pump station and rehabilitation of the area
- Decommissioning of 90 m of DN300 OX26 pump station gravity sewer main
- Testing, commissioning and handover of the work
- The provision of “As Constructed” drawings and other documentation (Gold Coast Water, September 2013)

SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate for the purpose described.

Given that the project is in the construction phase, SKM believes that there would be merit in a review of the final design report or similar documentation to be undertaken to confirm that there have been no significant changes to project scope following the options assessment.

A.5.2 Project delivery

The project is being delivered through separate design and construction contracts.

For the detailed design element, ten consultants were invited to tender for the works on 14 September 2011. The tender period closed on 3 October 2011. At the close of the tender period seven tenders were received. Following an initial evaluation of all tenders, the two lowest priced tenders were shortlisted for further consideration. The two shortlisted tenders were than assessed on quotation submission content and presentation (including any provisional items), programme of works, previous experience and adherence to conditions of Contract 178/10/01. The lowest priced tender, SMEC, was awarded the contract for the value of $268,568 (incl. GST). (Allconnex Water, no date) SKM considers that an appropriate tendering process has been undertaken for the award of the detailed design of the project and that the costs are in line with market conditions.

For the construction element, tenders were invited by advertising in the Gold Coast Bulletin and Courier Mail on 22 September 2012 and LG Tender Box on 24 September 2012. The tender period closed on 17 October 2012. At the close of the tender period seven tenders were received. The tenders were evaluated using a three gate evaluation process, with the first gate being mandatory criteria, the second gate being non-cost criteria and the third gate being cost. Evaluations were undertaken by three officers of Council, attended by one observer and the result was reviewed independently by an additional officer. (Gold Coast City Council, 11 December 2012).

One tenderer was found to non-conforming with the first gate criteria, resulting in six tenderers proceeding to the second gate. The second gate of the evaluation process considered relevant experience, availability and suitability of staff and subcontractors; programme and methodology; technical/product capability; and local content. Based on the documentation SKM is unable to determine the weighting of the criteria. From the evaluation documentation it can be seen that the tenders are evaluated both with and without the consideration of the local content criteria. SKM considers the remaining three criteria to be typical non-cost criteria for tender

evaluation. Five tenderers moved through to the third evaluation gate. The lowest priced tenderer was awarded the contract. (Gold Coast City Council, 11 December 2012).

Rob Carr Pty Ltd was awarded the construction contract in December 2012 for a total of $3,358,626 (Gold Coast City Council, 11 December 2012).SKM considers that an appropriate tendering process has been undertaken for the award of the construction phase of the project and that the costs are in line with market conditions.

According to the *OX26 Pump Station Gantt Chart* (Gold Coast City Council, 11 October 2013) the construction of the project should be completed in October 2013, with commissioning and project closure in November 2013.

From SKM's review of the Gantt chart, SKM considers that the project will be completed and commissioned within the review period.

A.6 Standards of service

The *Augmentation of Lift Station OX26 – Options Assessment – Final Report* (KBR, 3 December 2010) was undertaken in accordance with the following standards and specifications:

- Allconnex Water Desired Standards of Service 2009 (previously Gold Coast Water DSOS)
- Gold Coast City Council Policy 11: Land Development Guidelines (2008)
- Gold Coast City Council Policy 11: Land Development Guidelines - SS1- Specification for Construction of Sewerage Mains and Associated Works (2005 edition, amended September 2008)
- Gold Coast City Council Policy 11: Land Development Guidelines - SS12 - Specification for Electrical Installations (2005 edition)
- Gold Coast City Council Policy 11: Land Development Guidelines - SS14 - Specification for Mechanical Installations (2003 edition). (KBR, 3 December 2010)

SKM recognises that Gold Coast Water have not adopted that the current *SEQ Water Supply and Sewerage Design and Construction Code* (Gold Coast City Council, Logan City Council, Queensland Urban Utilities, Redland Water and Unitywater, July 2013). However given the construction of the project is expected this year, SKM considers that the use of the 2009 Desired Standards of Service appropriate.

A.7 Project cost

The *OX45 Pump Station - Cost Plan* (Gold Coast City Council, 30 September 2013) includes the following breakdown of costs.

Table A.2: OX45 Pump Station Cost Plan (Gold Coast City Council, 30 September 2013)

Component	Total ($)	Percentage of direct costs (%)
Sewage Construction (Contract 2 - Rob Carr)	3,453,544[1]	
Design (Contract 1 - SMEC)	308,931[2]	8.95%
Project Management	190,258	5.51%
Construction Management	45,550	1.32%
Procurement (incl. Qleave fee 0.525%)	25,992	0.75%
Fees & Approvals	1,002	0.03%
NR/SC Day Labour Costs (eg.Shutdowns)	35,596	1.03%
Tankering	15,027	0.44%
AS Admin (4% of Project Budget)	93,556	2.71%

Component	Total ($)	Percentage of direct costs (%)
Contingency (Balancing Item)	0	0%
Total	**4,169,454**	

1. Including $94,918 of variations over the original contract award
2. Including $64,778 of variations over the original contract award

SKM considers Gold Coast City Council's design costs, as a percentage of direct costs, to be high based on a comparison of the percentage of design costs against direct costs for a number of comparable projects.

SKM understands that the AS Admin costs are a distribution of personnel expenses across the capital programme. The personnel include the Office of the Superintendent, Manager Asset Solutions as well as the capital works programme management team. SKM understands that the role of these officers is oversight and management of the delivery of around 80% of Gold Coast City Council's capital programme. The costs are distributed among all capital projects administered by these officers. SKM agrees that it is considered appropriate for these costs to be included as part of the cost for delivery of the various capital projects. Gold Coast City Council has confirmed that the labour costs for the Asset Solutions Branch Management team is not accounted for within the employee expenses budget amount included within Gold Coast City Council's operating expenses.

Limited information has been provided regarding how these costs are calculated and distributed. SKM notes that this cost has been also applied to the RM & GM for Burleigh Waters PS B47, but cannot determine whether this cost has also been applied to the rolling programs.

For the SMEC design contract, the *OX45 Pump Station - Cost Plan* indicates that two variations were approved to a value of $64,778, for a total contract value of $308,931. However, seven variation approvals (V11 V2, V3, V5, V6, V7 and V8)[33] were provided to SKM. For the Rob Carr Pty Ltd construction contract, three variations have been approved, as outlined below.

Table A.3: Project variations (Gold Coast City Council, 30 September 2013)

Contract	Variation Number	Value ($) (incl. GST)	Reason
SMEC design contract[†]	V1	$0	Time delay due to errors in KBR report
	V2	$31,510	Additional design work due to errors in KBR report
	V3	$11,509	Investigation of alternative PS locations at request of Warner Village Theme Parks
	V4	NA	Not provided
	V5	$9,945	Design drawings for pad mount transformer
	V6	$7,464	Additional easement drawings, structural/geotechnical advice for transformer site
	V7	$5,436	Modification of access road and emergency storage design
	V8	$0	Time delay
Total		**$65,864**	
Rob Carr Pty Ltd construction contract	1	$36,673	Wet Well Design Change & Sewer Relocation
	2	$37,475	Movie World Sewer Relocation
	3	$20,770	Realign pipe and install air valve
Total		**$94,918**	

[33] Gold Coast City Council advised there was no variation 4 as it was deleted and the system doesn't allow a variation number to be reassigned once deleted.

† As per Variation/EOT Certificates

The variations on the SMEC design contract increased the contract value by approximately $66,000 or 27%. The variations on the Rob Carr Pty Ltd construction contract increased the contract value by approximately $95,000 or 3%. For the construction contract, SKM considers that 3% variation is within an acceptable range to be covered by contingency allowance. The 27% variation on the design contract exceeds what would be expected for such a relatively simple design contract. However, SKM considers that the reasons for the variations are justified.

From its evaluation of the tender process used for construction component of the project, SKM finds that the project costs for this element are in line with market conditions.

A.8 Efficiency gains

No efficiency gains have been identified for this project.

A.9 Implications for operating expenditure

The Business Case (Gold Coast Water, September 2013) states:

> *"The upgrade of the sewerage pumping station OX26 to cater for increased capacity requires larger pumps to be installed which may increase electricity consumption. However the opportunity to decommission Lift Station OX26 & OX3 pump station and the augmentation of sewerage mains will introduce improved efficiencies and therefore cost savings. No changes are expected to operating expenses during the implementation phase of the first stage of this project, the 2011 Network Upgrade which is the subject of this business case."*

A.10 Policies and procedures

Table A.4 below identifies how the project has complied with the appropriate policies and procedures.

Table A.4: OX26 Pump Station project compliance with the Authority's criteria

Initiative	Achievement (Yes/No/Partial)	Comment
Consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective	Yes	The Business Case considered a number of options which looked at transferring the sewage to different catchments.
Consideration of alternative investments, the substitution possibilities between operating costs and capital expenditure, and non-network alternatives such as demand management.	Yes	The Business Case considered a do nothing/non infrastructure solution which was deemed inappropriate as it identified that the option would not meet minimum DSS.
A standardised approach to cost estimating, including a standardised approach to estimates for items such as contingency, preliminary and general items, design fees and contractor margins, so that there is uniformity of cost estimating across all proposed major projects	Yes	The use of units rates for cost estimation is appropriate and in line with Gold Coast City Council's policies and procedures. The competitive tendering ensures actual project costs are in line with market conditions.
A summary document to be prepared for identified major projects so as to facilitate standardised reporting	Yes	Sewerage Pumping Station OX26 Upgrades – Business Case QP-2206 (Gold Coast Water, September 2013)
An implementation strategy to be developed for each major project	Yes	*Wastewater Pump Station OX26 Augmentation Project - Significant Procurement Plan* (Allconnex Water, 20 August 2011) and *QP-2207 Project Plan - WWPS OX26 Augmentation* (Allconnex Water, 11 November 2011)

Initiative	Achievement (Yes/No/Partial)	Comment
A 'toll gate' or 'gateway' review process to be implemented so that appropriate reviews are undertaken at milestone stages for selected projects	Yes	Gold Coast City Council's policies and procedures require: • Project Brief • Business Case • Project Delivery/Implementation Plan All of these documents (or similar) have been provided for this project.
Information on the compatibility with existing and adjacent infrastructure and consideration of modern engineering equivalents and technologies.	Yes	As the project involves the construction of a new pump station and main from an existing pump station site which injects into the existing network, the project took into consideration of existing infrastructure.
Includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices	Yes	

A.11 Prudency and efficiency

SKM considers the drivers of growth, renewal and compliance are appropriate for this project as the current pump station is undersized, operating beyond its intended operational life and is currently experiencing breaches of environmental compliance. The proposed works will ensure adequate capacity exists to prevent spills from occurring. SKM note that that DEHP has accepted the council's strategy to meet the licence requirements to demonstrate compliance with the DSS. SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate. As such, SKM considers that the project is prudent.

SKM considers that an appropriate tendering process has been used for the award of the detailed design and construction phases of the project. SKM considers that the project will be completed and commissioned within the review period. SKM considers that the standards used for this project were appropriate given the timing of the work. Based on the tender process used for construction component of the project, SKM finds that the project costs for these are in line with market conditions.

SKM finds that the project is prudent and efficient.

A.12 Assessment of reported expenditure

Table A.5 below identifies the revised capital expenditure for the OX26 Pump Station project.

Table A.5: OX26 Pump Station project revised capital expenditure

Project	Previous years ($'000)	2013-2014 ($'000)	2014-2015 ($'000)	Subsequent years ($'000)	Total ($'000)
OX26 Pump Station	0	4,074	0	0	4,074
SKM proposed value	0	4,074	0	0	4,074
Variation (to QCA submitted value)	0	0	0	0	0

A.13 Extrapolation to other projects

Given the unique nature of this project and the fact that no systemic issue has been identified with the processes applied by Gold Coast City Council, SKM does not consider that the findings from this project can be extrapolated to other projects.

Appendix B. RM & GM for Burleigh Waters PS B47

B.1 Project description

The Elanora Wastewater Treatment Plant (WWTP) treats wastewater from the southern Gold Coast (from Coolangatta in the south to Mermaid Beach in the north). The treatment plant has reached its capacity and will require augmentation if allowed to operate under existing conditions and accommodate predicted growth. Rationalisation of the Elanora and Merrimac catchments, to reduce flows to the Elanora WWTP, has been the subject of several reports and investigations. A detailed wastewater master plan for the Merrimac East catchment was developed which planned for the diversion of northern Elanora catchment to the Merrimac East catchment as a cost effective way to manage growth in both catchments. The proposed diversion was planned in two stages. The first of these diversions (to divert flows from the B47 catchment) is now required, and the second is due in 2021. This project will deliver the first diversion (B47 catchment). (Allconnex Water, 28 July 2011).

This project will involve the construction of 1.5 km of rising/gravity main along Christine Avenue through to the connection point at shaft 22/1, where a steep section of gravity sewer will connect the main to the Bermuda Street Tunnel. Modifications to pump station B47 will also be undertaken. The flow to be diverted from the B47 catchment to Merrimac WWTP is of the order of 5 ML/day. (Allconnex Water, 28 July 2011).

SKM reviewed the project as part of the *2011-12 SEQ Interim Price Monitoring* review for the Authority and found it to be prudent and efficient. SKM note that subsequent to this review, the total budget for the project increased from $7.69 million to $8.14 M, including $90,000 on design costs in 2010-11.

B.2 Proposed capital expenditure

Table B.1 shows the proposed cost of the Rising Main and Gravity Main for Burleigh Waters PSB47 project within the 2013-15 budget.

Table B.1: Rising Main and Gravity Main for Burleigh Waters PSB47 project proposed capital expenditure ($'000)

Source	Previous years ($'000)	2013-2014 ($'000)	2014-2015 ($'000)	Subsequent years ($'000)	Total ($'000)
5.6.2 Capital Expenditure Projects and Programmes of SEQ Revenue Monitoring - Information Requirement Template	3,540	4,600	0	0	**8,140**
TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spread sheet	0	8,140	0	0	**8,140**

The total costs for the project are identical between the two information sources.

B.3 Documentation reviewed

The key reference documents used for this review are:

- *RM & GM Burleigh Waters PS Gantt Chart* (Gold Coast City Council, 11 October 2013)
- *Change Request 5 - Rising Main & Gravity Main Burleigh Waters B47 WWPS* (Gold Coast City Council, April 2013)
- *Adopted Report of the Governance Administration & Finance Committee Meeting* (Gold Coast City Council, 29 November 2012)
- *Council Decision Action Request - Contract N O LG314/1211/13/001 - Sewage Diversion and Pump Station Upgrade at Burleigh Waters* (Gold Coast City Council, 7 December 2012)

- *Allconnex Water Board Meeting of 28 July 2011: Matter for Approval - Wastewater Pump Station B47 Diversion Project* (Allconnex Water, 28 July 2011)
- *B47 Wastewater Pump Station Diversion Project – Significant Procurement Plan*, Version 6, (Allconnex Water, June 2011)
- *Burleigh Waters Sewer Diversion for Pump Station B47 – Options Analysis* (MWH, December 2010)

B.4 Key drivers

The primary cost drivers identified by Gold Coast City Council for this project are growth, compliance and improvement.

The Elanora catchment has a growth projection from 38,464 ET in 2011 to an ultimate population of 54,290 ET, 42 ML/d, in 2056 (54% growth). Using the revised wastewater load generation rate of 770 L/ET/d of Gold Coast City Council's Desired Standards of Service (DSS), which has gone down based on the recent observations, the catchment is still estimated to generate a load of 29.6 ML/d, more than the Elanora WWTP can handle (20.7 ML/d). The actual 2010/11 ADWF was approximately 25 ML/d. (Allconnex Water, July 2011).

To manage growth within Elanora catchment, either the capacity of the Elanora WWTP needs to be increased or the load has to be diverted to neighbouring Merrimac catchment. The diversion of flow from the northern Elanora catchment to the Merrimac East system (Bermuda St Tunnel) was identified as the most efficient method of catering for growth within the catchment. (Allconnex Water, 28 July 2011).

The B47 diversion was been identified in the Priority Infrastructure Elanora Wastewater Financial Catchment Planning Report and the Priority Infrastructure Merrimac Wastewater Financial Catchment Planning Report. Implementation of the B47 diversion project will meet the PIP identified augmentation planning. (Allconnex Water, 28 July 2011).

Elanora WWTP has had a history of exceeding HACCP trigger limits, especially in wet weather. This has occurred at flows much less than 3 x ADWF and impacts on effluent quality. In the 2010-11 financial year the turbidity limit in the final effluent (> 3 NTU for > 24 hours) was breached on 15 occasions, the ammonia limit (> 4.0 mg/L for > 12 hours) was exceeded on three occasions and the faecal coliform limit was exceeded on two occasions. (Allconnex Water, 28 July 2011).

In the 2010-11 financial year the Elanora WWTP also reported a number of excursions to DERM including two lagoon overflow exceedences and ten exceedences for low dissolved oxygen (DO) in the effluent lagoon. (Allconnex Water, 28 July 2011).

Diversion of B47 catchment to Merrimac will reduce the hydraulic load to Elanora WWTP thereby addressing the above operational deficiencies. (Allconnex Water, 28 July 2011).

SKM considers the driver of growth, compliance and improvement are appropriate for this project given the anticipated growth in the catchment and the historic licence non-compliances.

B.5 The scope of works

B.5.1 Solutions development

A number of planning reports were completed that investigated options for the management of wastewater flows from Elanora Wastewater catchment including:

- Traditional planning without any inter-catchment diversions – this option involves upgrading existing infrastructure including an upgrade of the Elanora WWTP
- Diversion of B47 and B49 pump stations from the Elanora Wastewater Catchment to the Merrimac Wastewater Catchment with upgrades to the Merrimac WWTP

- The staged diversion of Elanora North Wastewater Catchment to the Merrimac Catchment with upgrades to the Merrimac WWTP (Allconnex Water, 28 July 2011)

After undertaking a Multi-Criteria Analysis (MCA), the option of diverting Elanora North in stages was selected. Over the last few years, significant work components of the recommended option have been completed such as upgrading of Merrimac WWTP and completion of the first section of the B47 diversion to Merrimac catchment. (Allconnex Water, 28 July 2011).

To complete the diversion of B47, a remaining section of wastewater infrastructure from a rising main constructed from PS B47 to a DN1,200 gravity tunnel along Bermuda Street is required. Several design options have been investigated for this work and includes:

- Option 1 – New DN600 sewage rising main (SRM) from B47 to drop connection at shaft 22/1 (excluding connections from surrounding pump stations B7, SS9 and SS10)
- Option 2 – New DN600 SRM from B47 to DN900 steep gravity sewer connecting to shaft 22/1 (excluding connections from surrounding pump stations B7, SS9 and SS10)
- Option 3 – New DN600 SRM from B47 to drop connection at shaft 22/1 (including connections from surrounding pump stations B7, SS9 and SS10)
- Option 4 – New DN600 SRM from B47 to DN900 steep gravity sewer connecting to shaft 22/1 (including connections from surrounding pump stations B7, SS9 and SS10)
- Option 5 – New DN600 SRM from B47 to a point west of the Miami Lakes Bridge followed by a DN900 gravity sewer to shaft 22/1 (including connections from surrounding gravity catchments of decommissioned pump stations SS9 and SS10 and lift stations SS46 and SS8). (MWH, December 2010)

An MCA was undertaken on the five design options available. The MCA considered weighted options for: cost; construction; asset life; community impact; and environmental impact with Option 4 being the recommended option. (MWH, December 2010).

The scope of the project is the design and construction of:

- Approximately 1,240 m of 600 mm DICL rising main
- Approximately 260 m of DN900 gravity main
- Upsizing the impellers of the B47 pumps

SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate for the purpose described.

Given that the project is in the construction phase, SKM believes that there would be m**e**rit in a review of the final design report or similar documentation to be undertaken to confirm that there have been no significant changes to project scope following the options assessment.

B.5.2 Project delivery

The project is being delivered through separate design and construction contracts.

Ten consultants were approached and requested to submit a tender offer for the Burleigh Waters Sewage Diversion for Waste Water Pump Station B47 project. Quotes were received from all ten consultants. The tenders were evaluated on tender submission and methodology (20%), technical (40%), geotechnical investigations (15%), survey (15%) and social/environment (10%). Based on the evaluation of the cost and non-cost criteria AECOM Australia Pty Ltd was awarded the contract for a value of $376,160. SKM notes that variations amounting to approximately $82,000 were received on the project, taking the total contract value to approximately $458,000.-

For the construction element, tenders were invited by advertising in the Gold Coast Bulletin and Courier Mail on 25 August 2012 and LG Tender Box on 27 August 2012. The tender period closed on 19 September. At the close of the tender period ten tenders were received. (Gold Coast City Council, 29 November 2012).

The tenders were evaluated using a three gate evaluation process, with the first gate being mandatory criteria, the second gate being non-cost criteria and the third gate being cost. Evaluations were undertaken by three officers of Council, attended by one observer and the result was reviewed independently by an additional officer (Gold Coast City Council, 29 November 2012).

Three tenders were found to be non-conforming with the first gate criteria, resulting in seven tenderers proceeding to the second gate. The second gate of the evaluation process considered relevant experience, availability and suitability of staff and subcontractors; programme and methodology; technical/product capability; and local content. Two tenders progressed through to the third evaluation gate. These two tenders were submitted by the same contractor, Rob Carr Pty Ltd, a conforming tender and an alternative tender (trenchless construction). (Gold Coast City Council, 29 November 2012).

During the tender process, significant difficulties were experience between Gold Coast Water and the Central Procurement Office (CPO) of Gold Coast City Council.

The *Adopted Report of the Governance Administration & Finance Committee Meeting* (Gold Coast City Council, 29 November 2012) states:

> *"It is recommended that Council resolves as follows.*
>
> *1 That Council enter into a contract with Rob Carr Pty Ltd for a maximum amount of $5,923,836.30 (excluding GST) without rise and fall in respect of Contract No. LG314/1211/13/001 for Sewage Diversion and Pump Station Upgrade at Burleigh Waters.*

The *Council Decision Action Request - Contract N O LG314/1211/13/001 - Sewage Diversion and Pump Station Upgrade at Burleigh Waters* (Gold Coast City Council, 7 December 2012) states that the committee recommendation is:

> *1 That Council enter into a contract with Rob Carr Pty Ltd (alternative offer) for a maximum amount of $5,583,636.30 (excluding GST) without rise and fall in respect of Contract No. LG314/1211/13/001 for Sewage Diversion and Pump Station Upgrade at Burleigh Waters.*

This recommendation for the lower cost, alternative tender from Rob Carr Pty Ltd, rather than the conforming offer, is contrary to the original recommendation submitted to the committee by Gold Coast Water.

Rob Carr Pty Ltd was awarded the construction contract in December 2012 for a total of $ 5,583,636 excluding GST.

SKM notes that AECOM were engaged to review the alternate tender submission viability in terms of alignment, access for maintenance and impact/conflict with existing services. AECOM recommended a preferred alignment for the construction of the alternative (trenchless) offer. Subsequent to AECOM's review it was identified that the alignment was not constructible and that there were manhole omissions and potential design differences. (Gold Coast City Council, April 2013).

Within the Change Request 5 - Rising Main & Gravity Main Burleigh Waters B47 WWPS (Gold Coast City Council, April 2013) documentation states:

- *"CPO denied requests from Asset Solutions to complete the design review/update and finalise costing prior to award of contract;*
- *Validity period almost expired due to lengthy analysis process. As a result the CPO didn't investigate extension of tender validity period which would of allowed GCW to complete design in the tendering phase*

- *Design Consultant finalised 'for construction' design and since submission of the initial for construction Rev 0 drawing set, the design consultant has re-issued seven revisions (to date) of the detailed design drawings with numerous changes amending designer error and constructability of design issues… One of these major design error changes was to avoid a service conflict which required deepening of the gravity main up to 2.2 metres deeper, which in turn had not only added costs due to the additional depth but has also added costs due to the altering the construction methodology required to construct some of these works at the new total depth, as well as increasing the nominal diameter.*
- *Since a portion of the variation costs were attributed to design error rectified post award of contract, approximately $338,000… would also have been attributed to the conforming tender price. Hence as a comparison the revised alternate current contract value is $6,273,202 excl. GST while the conforming tender value would have been approximately $6,231,109 excl. GST.*
- *In summary if GCW was made aware that the gravity section alignment proposed by the tenderer and recommended by the design consultant in fact was NOT constructible then we would have recommended to award the conforming tender and then discuss with the Contractor post award of contract regarding additional tunnelling of the rising main to reduce impact on the community."*

Following the issue of SKM's Draft Report, Gold Coast City Council further clarified the fourth dot point above as follows:

> *"Even if the original conforming tender had been accepted there was some $338,000 worth of works (out of a total of $758,522 (Incl. GST)… resulting from the design changes that would have been required as variations to the original conforming tender price to enable a "like for like" comparison to be made with the total revised contract value based on the accepted alternative tender. These comparison amounts being $6,231,109 (exc. GST) based on the conforming tender and $6,273,202 (exc. GST) for the revised alternative tender.*
>
> *Hence the final contract cost for the option constructed, following all the design reviews is basically the same, irrespective of which tender was originally accepted. As a consequence, there is not considered to be any material additional construction costs incurred as a result of the "design errors".*

The recommendation to proceed with the alternative tender option without fully investigating the design has resulted in difficulties during the construction phase of the project, including higher design and construction costs. On the basis of the clarification above, it is concluded that the overall cost of the project is similar to that which would have been achieved, should the conforming tender have been accepted.

In the case of design errors, SKM's Draft Report challenged whether appropriate attempts have been made to recoup additional costs from the consultant. Gold Coast City Council responded that "no additional fees have been paid to the design consultant for any redesign work required to rectify the original design shortcomings".

According to the *RM & GM Burleigh Waters PS Gantt Chart* (Gold Coast City Council, 11 October 2013) the construction of the project should be completed in November 2013, with commissioning and project closure in January 2014.

From SKM's review of the Gantt chart, SKM considers that the project will be completed and commissioned within the review period.

B.6 Standards of service

Design criteria for the Options Analysis were based on the then current Allconnex Water DSOS. The applicable criteria are summarised below.

Table B.2: Design criteria (MWH, December 2010)

	Design Criteria	**Standard**
Wastewater System Capacity	Average Dry Weather Flow (ADWF)	770 L/ET/day

	Design Criteria	Standard
	Peak Dry Weather Flow (PDWF)	2.4 x ADWF
	Peak Wet Weather Flow (PWWF)	5 x ADWF
Gravity System Pipe Velocity	Minimum velocity at PDWF	0.6 m/s
	Depth of flow at PWWF	75% full
Wastewater Pump Station Design	Single pump capacity (both duty and standby)	C1 x ADWF (where C1 = 12.79 x $ET^{-0.1587}$; C1 = 3.5 to 5)
	Total SPS capacity (all pumps operating)	PWWF
Rising Main Design	Minimum velocity	0.75 m/s (to occur a minimum once per day)
	Maximum velocity	2.0 m/s (proposed systems)

From SKM's review of the above, SKM considers that the standards used for this project are appropriate given they were the adopted standards at the time of design.

As the detailed design documentation has not been provided SKM cannot comment of the standards used for the development of the final design.

B.7 Project cost

The estimated project budget in the *Allconnex Water Board Meeting of 28 July 2011: Matter for Approval - Wastewater Pump Station B47 Diversion Project* (Allconnex Water, 28 July 2011) is outlined below.

Table B.3: Project Budget Estimate ($ M) (Allconnex Water, 28 July 2011)

2010/11	2011/12	2012/13	Total
$0.09	$1.45	$6.15	$7.69

To date six variations have been received for the contract, with a combined total value of approximately $690,000 or 12% of the original contract price. The *Change Request 5 - Rising Main & Gravity Main Burleigh Waters B47 WWPS* (Gold Coast City Council, April 2013) states:

> *"A major variation has arisen due to the design changes made from the alternative tender offer under the contract compared to the current 'for construction' drawings (Rev 5) issued. These changes can be attributed to constraints on the extent of review of the alternative tender during the evaluation process and design errors by the consultant.*
>
> *As far as contract administration is concerned all variations submitted are considered to be a latent condition to the contract, as the functionality or scope is not changed."*

The following breakdown of project costs was extracted from the *Cost Plan - Burleigh Waters Sewage Diversion for Wastewater Pump Station B47* (Gold Coast City Council, 5 August 2013).

Table B.4: Breakdown of project costs (Gold Coast City Council, 5 August 2013)

Item		Estimated total project cost (excl. GST)	Percentage of construction contract (%)
Construction Contract	Original Contract Value	$5,583,636	
	Variation 1 - Odour Units	$51,441	

Item		Estimated total project cost (excl. GST)	Percentage of construction contract (%)
	Variation 2 - Change of design at gravity end, using temp shafts and manhole construct as oppose to caissons, plus 2 additional MH's, and at additional depths	$577,169	
	Variation 3 - Additional traffic control requirements LR2, LR3 and gravity section	$38,114	
	Variation 4 - Reduction in pump size	$2,552	
	Variation 5 - Reduction in scope - Turfing & Tree Planting -Confirm Scope required from RCPL	$0	
	Variation 6 - SS10 connection & road crossing from LR2	$25,393	
	Sub-Total	**$6,278,305**	
Indirect Costs (Common Costs)	Project Management	$178,021	2.8%
	Public consultations/inquiries	$55	0.0%
	Investigations testing (flow monitoring)	$5,000	0.1%
	Procurement (ie Incl. Qleave fee 0.525%)	$52,374	0.8%
	Contract Administration (& inspector/s)	$122,599	2.0%
	Indirect project provisional amount	$150,000	2.4%
	Contract Superintendency	$20,000	0.3%
	O&M (incl. shutdowns/tankering)	$55,410	0.9%
	Sub-Total	**$583,459**	**9.3%**
Any other indirect budgeted Items/costs	Fees and approvals	$37,229	0.6%
	Outsourced services	$0	0.0%
	Indirect Business Costs (AS)/Project Admin	$161,409	2.6%
	Consultancy	$45,020	0.7%
	Landscape consultants/reveg	$21,206	0.3%
	Detailed Design and Preliminaries	$589,234	9.4%
	Sub-Total	**$854,098**	**13.6%**
Total		**$7,715,862**	

Change Request 5 - Rising Main & Gravity Main Burleigh Waters B47 WWPS (Gold Coast City Council, April 2013) notes that the original budget for the project on completion of the detailed design was $9 M, which was reduced by $2 million to $7 million on award of the contract.

The variations received on the project are not insubstantial. However given the decision made by the Governance Administration and Finance Committee to proceed with the alternative tender prior to substantiation of the design, the requirement for variations is not unexpected.

At the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013), Gold Coast City Council stated that they did not consider that the acceptance of Rob Carr Pty Ltd.'s conforming offer would have resulted in an lower overall project cost. The delivery of the project through trenchless construction has resulted in a better overall solution at a similar cost.

As previously noted, in the case of design errors, SKM understands that no additional fees were paid to the design consultant for any redesign work required to rectify the original design shortcomings.

SKM understands that lessons learnt from this project have been implemented and that systems are now in place to manage the processes and communication with the CPO.

B.8 Efficiency gains

Gold Coast City Council (then Allconnex) considered that the value of the project on its own was substantial enough to achieve competitive tenders, and that bundling with other project/s unless they were of significant value, would not improve the 'economies of scale' which may lower the overall cost for each project. Additionally, significantly raising the value of the contract may change the targeted size of contractors from being medium to a larger size of firm, which may have higher overheads and ultimately may in fact increase costs, rather than reducing the project costs compared to other strategies. (Allconnex Water, 28 July 2011)

B.9 Implications for operating expenditure

Gold Coast City Council (then Allconnex) considered that the diversion of flow from the Elanora catchment to the Merrimac catchment would result in some operational costs at Elanora WWTP being transferred to Merrimac WWTP. The cost to treat per kilolitre at the two plants is comparable despite their differing sizes. In the 2009-10 financial year, Elanora WWTP cost an average of $0.32 per kilolitre of wastewater treated, while Merrimac WWTP was slightly less at $0.28 per kilolitre of wastewater treated. (Allconnex Water, 28 July 2011).

The diversion of a portion of the Elanora WWTP load to the Merrimac WWTP enables Gold Coast City Council to defer the need to upgrade the Elanora WWTP.

B.10 Policies and procedures

Table B.5 below identifies how the project has complied with the appropriate policies and procedures.

Table B.5: Rising Main and Gravity Main for Burleigh Waters PSB47 project compliance with the Authority's criteria

Initiative	Achievement (Yes/No/Partial)	Comment
Consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective	Yes	The project involves the transfer of a portion of wastewater from Elanora WWTP to the Merrimac WWTP and as such defers the requirement to upgrade the Elanora WWTP
Consideration of alternative investments, the substitution possibilities between operating costs and capital expenditure, and non-network alternatives such as demand management.	Yes	Operating costs have been considered in the options selection process.
A standardised approach to cost estimating, including a standardised approach to estimates for items such as contingency, preliminary and general items, design fees and contractor margins, so that there is uniformity of cost estimating across all proposed major projects	Yes	The use of units rates for cost estimation is appropriate and in line with Gold Coast City Council's policies and procedures. The competitive tendering ensures actual project costs are in line with market conditions.
A summary document to be prepared for identified major projects so as to facilitate standardised reporting	Yes	A copy of the Board Report presented to the Allconnex Water Board and a copy of the Prudency & Efficiency Test were provided for this project
An implementation strategy to be developed for each major project	Yes	*B47 Wastewater Pump Station Diversion Project – Significant Procurement Plan, Version 6* (Allconnex Water, June 2011)
A 'toll gate' or 'gateway' review process to be implemented so that appropriate reviews are undertaken at milestone stages for selected projects	Yes	Gold Coast City Council's policies and procedures require: • Project Brief • Business Case • Project Delivery/Implementation Plan All of these documents (or similar) have been provided for this project.

Initiative	Achievement (Yes/No/Partial)	Comment
Information on the compatibility with existing and adjacent infrastructure and consideration of modern engineering equivalents and technologies.	Yes	As the project was to involve the construction of new mains for the diversion of wastewater from the current catchment, the infrastructure the main is connecting to is of importance.
Includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices	Yes	

B.11 Prudency and efficiency

SKM considers the driver of growth, compliance and improvement are appropriate for this project given the anticipated growth in the catchment and the historic licence non-compliances. SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate. As such SKM considers that the project is prudent.

SKM considers that an appropriate tendering process has been undertaken for the award of the design and construction phases of the project and that the costs are in line with market conditions.

During the tender process, there were two tenders submitted by the preferred contractor; a conforming tender ($5.92 M) and non-conforming tender ($5.58 M). The Central Procurement Office of Gold Coast City Council recommended to proceed with the alternative tender option, prior to completing a review of the design. This recommendation has resulted in difficulties during the construction phase of the project, including higher design and construction costs. SKM notes that there were also errors found within the design. However, SKM understands that no additional fees have been paid to the design consultant for any redesign work required to rectify the original design shortcomings.

SKM notes that the current contract value of the project ($6.27 M) is similar to that which would have been achieved, should the conforming tender have been accepted ($6.23 M).

SKM concludes that the lack of appropriate processes between Central Procurement Office of Gold Coast City Council and Gold Coast Water has resulted in inefficiencies in the project. As such, SKM recommends a reduction in project costs of $42,000 (the difference between the contract cost for the conforming and non-conforming tender).

B.12 Assessment of reported expenditure

Table B.6 below identifies the revised capital expenditure for Rising Main and Gravity Main for Burleigh Waters PSB47 project.

Table B.6: Rising Main and Gravity Main for Burleigh Waters PSB47 project revised capital expenditure

Project	2013-2014 ($'000)	2014-2015 ($'000)	Total ($'000)
Rising Main and Gravity Main for Burleigh Waters PSB47	8,140	0	**8,140**
SKM proposed value	8,098	0	**8,098**
Variation (to QCA submitted value)	-42	0	**-42**

B.13 Extrapolation to other projects

Given the unique nature of this project and the fact that no systemic issue has been identified with the processes applied by Gold Coast City Council, SKM does not consider that the findings from this project can be extrapolated to other projects.

Appendix C. Western Force Wastewater Main Replacement on Falconer Street

C.1 Project description

The Western Force Main (WFM) is one of the major rising mains in the wastewater network delivering wastewater to Coombabah Wastewater Treatment Plant (WWTP). In the past 5-6 years, this main had several failures that had the potential of damaging the environment and breaching (the then) DERM guidelines. These failures occurred around Gas Release Valves (GRV) due to degradation of lining/steel possibly due to malfunctioning of GRVs. (Gold Cost City Council, 10 August 2012).

In September and December 2011, two similar failures occurred at Falconer Street, Southport. The failed sections were replaced and the main returned to normal operation. Further investigations carried out subsequent to the failures, revealed that the section of the main (approximately 86 m) immediately upstream of GRV where the recent repairs were carried out, and two sections of main totalling approximately 232 m at the second GRV at the upstream end of Falconer Street were in a very poor condition and required rehabilitation. (Gold Cost City Council, 10 August 2012).

This review covers both the emergency works (ie the replacement of the 86 m of main) and the subsequent works (ie the replacement of the 232 m of main).

C.2 Proposed capital expenditure

Table C.1 shows the proposed cost of the Western Force Wastewater Main Replacement on Falconer Street project within the 2013-15 budget.

Table C.1: Western Force Wastewater Main Replacement on Falconer Street project proposed capital expenditure ($'000)

Source	Previous years ($'000)	2013-2014 ($'000)	2014-2015 ($'000)	Subsequent years ($'000)	Total ($'000)
5.6.2 Capital Expenditure Projects and Programmes of SEQ Revenue Monitoring - Information Requirement Template	1,064	1,170	0	0	2,234
TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spread sheet	0	2,234	0	0	2,234

The total costs for the project are identical between the two information sources.

C.3 Documentation reviewed

The key reference documents used for this review are:

- *Memorandum: Approval to replace a section DN960 WFM with OD1000 PE pipe, Falconer Street Southport* (Gold Cost City Council, 10 August 2012)
- *Replacement of 232m Section of the Western Force Main, Falconer Street - Concept Design Report* (SMEC, 31 May 2012)
- *Western Force Wastewater Main Repairs on Falconer Street – Project Delivery Plan* (Allconnex Water, January 2012)
- *QP-2201 Project Initiation Form - Western Force Wastewater Main Repairs on Falconer Street* (Allconnex Water, January 2012)
- *Adopted Report of the Governance Administration & Finance Committee Meeting* (Gold Coast City Council, 23 April 2013)

- *70430 - Western Force Main Falconer Street – Summary of Change Requests* (Gold Coast Water, no date)

C.4 Key drivers

The primary cost driver identified by Gold Coast City Council for this project is renewal.

There were 12 failures in the WFM over the last 5 to 10 years. Rehabilitation works are required to ensure that significant spills and expenses are not encountered. CCTV inspection reports indicate that liner deterioration (apparent localised spalling) appears to have occurred indicating that hydrogen sulphide (H_2S) build-up is likely. (Allconnex Water, January 2012).

SKM considers the driver of renewal to be appropriate for this project given the number of failures and issues experienced with the main. The pipeline is a direct replacement of an existing asset that is in use and useful.

C.5 The scope of works

C.5.1 Solutions development

This project includes two stages:

- Stage 1 – Approximately 86 m of OD960 mm MSCL main was replaced with an OD960 mm Fusion Bonded Polythene (FBPE) coated and lined main located adjacent, parallel and at the same level and gradient as the existing main
- Stage 2 – Repair/replace approximately 232 m of OD960 mm MSCL

Due to the urgency to replace the 86 m long section, the replacement work and construction was completed in May 2012.

SMEC Australia Pty Ltd was commissioned to carry out the investigation, development of concept design options and details design for the preferred concept design for Stage 2.

Four concept design options were developed:

- Option 1: Replace main at the existing alignment with mild steel medium-density polyethylene (MDPE) lined and coated or high-density polyethylene (HDPE) or glass-reinforced plastic (GRP) pipes by open trenching.
- Option 2: Construct the new section of the main adjacent to the existing main at the same grade and level as the existing main with mild steel MDPE lined and coated or HDPE or GRP pipe.
- Option 3: Rehabilitate the main by installing non-structural/structural liner
- Option 4: Install a smaller diameter pipe using the existing main as the host pipe. (SMEC, 31 May 2012)

Analysis carried out on the options developed concluded that Option 2 is best suited for this project and is subjected to further detailed analysis. Three sub-options were developed:

- Option 2A – Construct the entire 232 m replacement section of WFM using Mild Steel Fusion Bonded Medium Density Polyethylene (MDPE) lined and coated pipes by open cut trenching
- Option 2B – Construct the 96 m section of the main downstream of the gas release valve using Mild Steel Fusion Bonded Medium Density Polyethylene (MDPE) lined and coated pipes by open cut trenching. Construct the 136 m section of the main upstream of the gas release valve utilising directional drilling techniques with High Density Polyethylene (HDPE) pipe
- Option 2C – Construct the 232 m section of the main upstream of the gas release valve utilising directional drilling techniques with High Density Polyethylene (HDPE) pipe (SMEC, 31 May 2012)

The construction estimates indicated that Option 2B is marginally cheaper than Option 2C with Option 2A significantly higher in costs. There is only 3.3% difference in construction estimates between Options 2B and 2C and as such the relative merits of these options are dependent on risks associated with each construction type and any potential future changes in marketplace costs. Option 2B significantly increases the risks associated conflicts with power lines and other public utility plant over the other options and also increases stakeholder inconvenience. SMEC concluded that whilst Option 2B has a marginal benefit over Option 2C for construction costs, the significant benefits associated with constructability and stakeholder convenience provided by Option 2C makes it the preferred option. (SMEC, 31 May 2012).

The scope of works for the preferred concept design (Option 2C) is a 270 m long OD 1000 HDPE Class PN 12.5 pipe installed by directional drilling if the ground conditions are suitable. (Gold Cost City Council, 10 August 2012)

SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate for the purpose described.

At the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013), Gold Coast City Council stated that an odour control system will be installed to allow for operation of the GRVs and prevent further issues associated with H_2S.

Given that the project is in the construction phase, SKM believes that there would be merit in a review of the final design report or similar documentation to confirm that there have been no significant changes to project scope following the options assessment.

C.5.2 Project delivery

Due to the urgency of the Stage 1 of the project, it was delivered by internal staff and completed in May 2012.

For the Stage 2, an invitation to tender for the replacement of the DN960 sewer rising main at Falconer Street was advertised on 28 January 2012. At the close of the tender period eight tenders had been received. The tenders were evaluated based on both price and non-price criteria. Five tenders were shortlisted for further analysis. Further assessment indicated that all five shortlisted tenders were able to complete the works and therefore the lowest cost tender, Bothar Boring and Tunnelling Operations Pty Ltd, was considered the most advantageous for the delivery and was selected as the preferred supplier. (Gold Coast City Council, 23 April 2013).

Bothar Boring and Tunnelling Operations Pty Ltd were awarded the contract for a value of $1,289,358 (excl. GST).

SKM considers the delivery of Stage 1 through internal staff appropriate given the urgency of the repair. SKM also considers that an appropriate tendering process has been undertaken for the award of the Stage 2 of the project and that therefore the costs are in line with market conditions.

The project is anticipated to be completed in the 2013-14 financial year. Given that the tender has been awarded and given the scope of the work and likely times to complete it is highly likely that it will be delivered in the 2013-14 financial year.

C.6 Standards of service

As the project involves the replacement of a section of rising main, the new section of main will need to be designed to integrate with the existing main.

The design objective for the replacement pipeline section is to maximise the expected service life and minimise future maintenance and repair costs. Current practice requires a minimum design life in the order 75-100 years for buried pipelines. (SMEC, 31 May 2012).

SKM considers the standards used for this project are appropriate.

C.7 Project cost

The Cost Breakdown for the project included in the *Western Force Wastewater Main Repairs on Falconer Street – Project Delivery Plan* (Allconnex Water, January 2012) has been replicated below.

Table C.2: Project costs (Allconnex Water, January 2012)

Aspect	Value ($)	Percentage of direct costs (%)
Contract Costs	$1,855,000	
Project Management	$70,000	4%
Tender and Design	$181,000	10%
Contract Administration	$50,000	3%
Services (eg. O&M)	$250,000	13%
Total	**$2,406,000**	

It is noted that the higher than expected cost for the Service (eg. O&M) is related to the significant tankering diversion works that will be required as part of the project.

Three Change Requests have been submitted for this project. The dates received, amounts and how they affected the project spend profile is outlined below.

Table C.3: Financial summary of change requests (Gold Coast Water, no date)

Document	Date	2011-12 ($)	2012-13 ($)	2013-14 ($)	Total ($)
Project Initiation Form	Feb-12	1,200,000	-	-	**1,200,000**
Project Delivery Plan	Jun-12	1,011,000	1,395,000	-	**2,406,000**
Original Budget	2012-13	758,959	1,500,000	-	**2,258,959**
Change Request 1	Nov-12	758,959	1,287,000	213,000	**2,258,959**
Change Request 2	Mar-13	758,959	330,000	1,170,000	**2,258,959**
Original Budget	2013-14	758,959	305,469	1,170,000	**2,234,428**
QCA Submission	Sep-13	758,959	305,469	1,170,000	**2,234,428**
Change Request 3	Sep-13	758,959	305,469	1,405,000	**2,469,428**

SKM considers that, although there have been a number of change request on the project, the extent of the change requests, including Change Request 3 is less than 3% higher than the budget allowed in the project delivery plan.

Gold Coast City Council has not advised if any variations have been submitted by the constructor.

The breakdown of the project costs by stage is outlined below.

Table C.4: Expenditure by Stage (Gold Coast Water, no date)

Stage	2011-12 ($)	2012-13 ($)	2013-14 ($)	Total ($)	Cost per meter ($/m)
Stage 1	758,959	37,601	-	**796,560**	9,262
Stage 2	-	267,868	1,170,000	**1,437,868**	6,198
Total	**758,959**	**305,469**	**1,170,000**	**2,234,428**	6,812

From its analysis SKM concludes that the project costs for Stage 2 are in line with market conditions given the competitive tendering process adopted and are therefore efficient. SKM notes that the costs for Stage 1 are above market rates. However, as the works were undertaken in emergency conditions, SKM considers that the costs are reasonable.

C.8 Efficiency gains

No efficiency gains have been identified for this project.

C.9 Implications for operating expenditure

The replacement of these sections of rising main should mitigate the risk of further failures and operational costs associated with the repair. These costs have not been quantified.

C.10 Policies and procedures

Table C.5 below identifies how the project has complied with the appropriate policies and procedures.

Table C.5: Western Force Wastewater Main Replacement on Falconer Street project compliance with the Authority's criteria

Initiative	Achievement (Yes/No/Partial)	Comment
Consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective	Not applicable	The consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective is not applicable to this project. As this project involved the renewal of local infrastructure only.
Consideration of alternative investments, the substitution possibilities between operating costs and capital expenditure, and non-network alternatives such as demand management.	Not applicable	Alternative investments such as the substitution between operating costs and capital expenditure are not applicable to this project as it involved the renewal of an existing asset.
A standardised approach to cost estimating, including a standardised approach to estimates for items such as contingency, preliminary and general items, design fees and contractor margins, so that there is uniformity of cost estimating across all proposed major projects	Yes	The use of units rates for cost estimation is appropriate and in line with Gold Coast City Council's policies and procedures. The competitive tendering ensures actual project costs are in line with market conditions.
A summary document to be prepared for identified major projects so as to facilitate standardised reporting	Yes	*QP-2201 Project Initiation Form - Western Force Wastewater Main Repairs on Falconer Street* (Allconnex Water, January 2012)
An implementation strategy to be developed for each major project	Yes	*Western Force Wastewater Main Repairs on Falconer Street – Project Delivery Plan* (Allconnex Water, January 2012)
A 'toll gate' or 'gateway' review process to be implemented so that appropriate reviews are undertaken at milestone stages for selected projects	Yes	Gold Coast City Council's policies and procedures require: • Project Brief • Business Case • Project Delivery/Implementation Plan SKM notes that no Business Case was provided for this project. However Gold Coast City Council advise that as it is a 'like for like' renewals project, the AMP does not require a business case to be completed. A project brief is completed to identify the specific projects to be undertaken in the specific year.
Information on the compatibility with existing and adjacent infrastructure and consideration of modern engineering equivalents and technologies.	Yes	As the project involves the replacement of a section of wastewater rising main, the new pipeline must take into consideration existing, adjacent infrastructure.
Includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices	Yes	

C.11 Prudency and efficiency

SKM considers the driver of renewal appropriate for this project given the number of failures and issues experienced with the main. The pipeline is a direct replacement of an existing asset that is in use and useful. SKM considers that an appropriate options evaluation process has been undertaken and the scope of work is appropriate for the purpose described. As such SKM considers that the project is prudent.

SKM considers the delivery of Stage 1 by internal staff appropriate given the urgency of the repair. SKM considers that an appropriate tendering process has been undertaken for the award of the Stage 2 of the project and that therefore the costs are in line with market conditions. The project is anticipated to be completed in the 2013-14 financial year. However, given that the tender has been awarded it is highly likely that it will be delivered in the 2013-14 financial year. SKM considers the standards used for this project are appropriate.

SKM considers that the project costs for Stage 2 are in line with market conditions given the competitive tendering process adopted and are therefore efficient. SKM notes that the costs for Stage 1 are above market conditions. SKM notes that the costs for Stage 1 are above market rates. However, as the works were undertaken in emergency conditions, SKM considers that the costs are reasonable.

SKM considers the project to both prudent and efficient.

C.12 Assessment of reported expenditure

Table C.6 below identifies the revised capital expenditure for the Western Force Wastewater Main Replacement on Falconer Street project.

Table C.6: Western Force Wastewater Main Replacement on Falconer Street project revised capital expenditure

Project	2013-2014 ($'000)	2014-2015 ($'000)	Total ($'000)
Western Force Wastewater Main Replacement on Falconer Street	2,234	0	2,234
SKM proposed value	2,234	0	2,234
Variation (to QCA submitted value)	0	0	0

C.13 Extrapolation to other projects

Given the unique nature of this project and the fact that no systemic issue has been identified with the processes applied by Gold Coast City Council, SKM does not consider that the findings from this project can be extrapolated to other projects.

Appendix D. Sewer Pump Station Mechanical Electrical Minor Works 2013-14

D.1 Project description

The Sewer Pump Station Mechanical Electrical Minor Works 2013-14 project involves the replacement and refurbishment of minor mechanical and electrical equipment at sewage pump stations due to condition, age and obsolescence.

D.2 Proposed capital expenditure

Table C.1 shows the proposed cost of the Sewer Pump Station Mechanical Electrical Minor Works 2013-14 project within the 2013-15 budget.

Table D.1: Sewer Pump Station Mechanical Electrical Minor Works 2013-14 project proposed capital expenditure ($'000)

Source	Previous years ($'000)	2013-2014 ($'000)	2014-2015 ($'000)	Subsequent years ($'000)	Total ($'000)
5.6.2 Capital Expenditure Projects and Programmes of SEQ Revenue Monitoring - Information Requirement Template	0	850	988	0	1,838
TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spread sheet	0	850	950	0	1,800

The total project costs vary depending on the source of the information provided to SKM. SKM understands from advice from Gold Coast City Council that the TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spread sheet represents the latest and hence most accurate project costs.

D.3 Documentation reviewed

The key reference documents used for this review are:

- *Condition Assessment Active Assets* (Gold Coast City Council, 22 July 2013)
- *Project Brief – Sewer Pump Station Mechanical and Electrical Equipment Minor Works 2013-15* (Gold Coast City Council, January 2013)
- *Mechanical and Electrical Conditional Assessment Template* (Gold Coast City Council, no date)
- *Maintenance Strategy* (Gold Coast City Council, no date)
- *Pump Upgrade 13-14 Progress spreadsheet* (Gold Coast City Council, 2013)
- *Sewerage Pumping Station Pump Replacement 2013-2014 - Part 1 of Phase 1* (Gold Coast City Council, 23 July 2013)
- *Sewerage Pumping Station Pump Replacement 2013-2014 - Part 1 of Phase 2* (Gold Coast City Council, 23 September 2013)
- *Proposed Sewerage Pump Replacement Scope for 2014-15* (Gold Coast City Council, 2013)

D.4 Key drivers

The primary cost drivers identified by Gold Coast City Council for this project are renewal, compliance and improvement.

Sewage pump stations have a large number of mechanical and electrical components, which are programmed on a preventative maintenance schedule. Assets deteriorate over time to such an extent that the asset will no longer be economical to maintain; failure rates increase leading ultimately to total failure of the asset and hence unplanned cessation of the pump station operation. (Gold Coast City Council, January 2013).

These items are critical to pump station operation. In most circumstances it is not appropriate to run equipment to failure, and a proactive approach to replacing equipment based on age, performance, condition, implications of risk of failure and maintenance history is appropriate. (Gold Coast City Council, January 2013).

Mechanical and electrical assets to be included in the programme are identified through a scheduled condition assessment programme and feedback from the Mechanical/Electrical Operations and Maintenance team. The conclusion of these assessments is that the assets are considered to be at the end of their useful life, rendering the asset uneconomical to repair. (Gold Coast City Council, January 2013).

SKM considers the drivers of renewal, compliance and improvement are appropriate for this project as the mechanical and electrical components have reached the end of their useful life and failure to replace could result in licence non-compliances.

D.5 The scope of works

D.5.1 Solutions development

The *Gold Coast City Council Maintenance Strategy* (Gold Coast City Council, no date) identifies the methodology by which asset condition inspections and ratings, criticality ratings and risk ratings are determined. SKM considers the process adopted by Gold Coast City Council to be in line with good industry practice as it takes into consideration asset condition and risk and consequence of failure.

Condition ratings are applied to mechanical, electrical and civil assets during preventative maintenance activities. The condition assessments are attached to the maintenance sheets and while the maintenance is carried out a visual inspection is completed. The rating is a numerical value from 1 to 5. The assessing staff member is required to provide comments to clarify a rating, especially for 4s or 5s, or add any further information relevant to the condition/criticality/risk/operability of the asset. Whilst it is recognised that there are many advanced techniques to establish condition of assets the simple approach of tradesman's knowledge is used to establish a baseline for the condition of assets. (Gold Coast City Council, no date).

Condition Index	Condition	Remaining Life %	Condition Description
1	Very Good	> 80%	Brand new or very good. Providing a very high level of service
2	Good	60% to 80%	Good condition, providing good levels of service
3	Fair	40% to 60%	Fair condition providing adequate level of service
4	Poor	20% to 40%	Poor condition, will need to replace or renewal within the next 2 years
5	Very Poor	< 20%	Very poor condition, replacement or renewal immediately

Criticality ratings are applied to assets to enable informed decisions when scheduling maintenance. Sewerage Pump Stations are given a criticality rating number between 2 and 4 where 2 is low criticality and 4 is high criticality. These ratings depend on agreed limits for the following criteria:

- Total ET – the population served by the asset

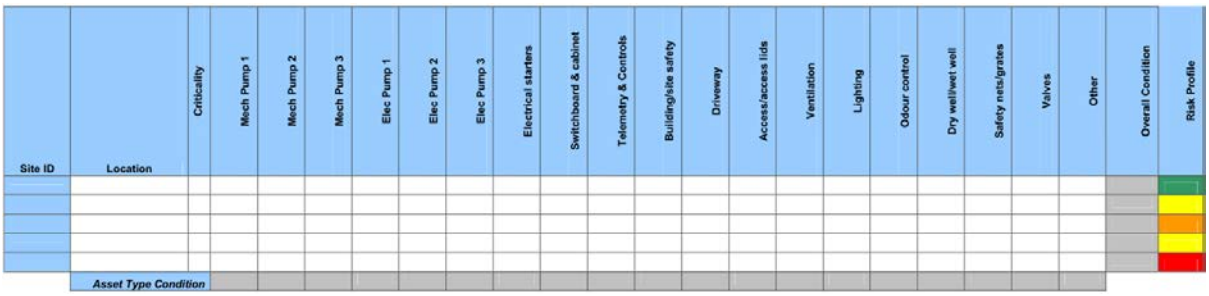
- Retention time (at sewage pump stations) – the time available before a spill will occur during average dry weather flow
- Overflow Location – the impact on the public or the environment from a potential spill (Gold Coast City Council, no date)

Criticality		Total ET
Safety & Environment	5	
Cat A	4	>4000-10,000
Cat B	3	>1500-4000
Cat C	2	>350-1500
	1	0-350
Criticality		**Retention time**
Safety & Environment	5	
Cat A	4	0-2hrs
Cat B	3	2-10hrs
Cat C	2	>10hrs
	1	
Criticality		**Overflow Location**
Safety & Environment	5	
Cat A	4	Canals, Waterways, Rivers Private Property, Building Basement, Wetland, Conservation Zone (Ramsar)
Cat B	3	Roads, Footpaths etc
Cat C	2	Bushland, Park/Gravity Sewer
	1	

The rating is then multiplied by a figure (Impact percentage) to provide a single rating for the asset. A high impact figure indicates the effect on the business for that criticality rating. (Gold Coast City Council, no date).

Criteria	Impact
Total ET	20%
Retention time	30%
Overflow Location	50%

The risk profile of an asset, asset location or group of assets can be a good indicator for maintenance scheduling. The risk profile is found by collecting the condition data for an asset or a group of assets and tabulating. Taking the average condition and the criticality for the site and inserting these values into the risk matrix the risk profile can be assigned. (Gold Coast City Council, no date).



Criticality		Condition: Very Good	Good	Fair	Poor	Very Poor
		1	2	3	4	5
Safety & Environment	5	5	10	15	20	25
Cat A	4	4	8	12	16	20
Cat B	3	3	6	9	12	15
Cat C	2	2	4	6	8	10
	1	1	2	3	4	5

Low | Medium | High | Extreme

Over maintenance of assets puts an unreasonable financial burden on operational budgets. Capital projects have been created to allow assets to be replaced where necessary. These projects roll over each financial year which will eventually reduce the age of the asset base in turn reducing the requirement for unplanned corrective maintenance. (Gold Coast City Council, no date).

Maintenance should stop and assets should be replaced where:

- Condition of the asset forces elevated maintenance to provide the required level of service
- Safety is compromised due to changing regulations and legislation
- Performance of the asset falls below the required level of service
- Levels of service change rendering the asset unfit for purpose (undersized or oversized or an alternative asset required)
- Assets become obsolete due to changing technology or spares availability (Gold Coast City Council, no date)

For each pump station in the 2013-14 renewal programme a network modelling assessment was undertaken to determine the future demand over the life of the pumps/switchboards that are to be replaced. The *Sewerage Pumping Station Pump Replacement 2013-2014 - Part 1 of Phase 1* (Gold Coast City Council, 23 July 2013) and the *Sewerage Pumping Station Pump Replacement 2013-2014 - Part 1 of Phase 2* (Gold Coast City Council, 23 September 2013) reports provides the detailed assessment, outcomes, determines the capacity of replacement pumps and recommends the replacement strategy applying a 20 years of design life for a pump. Overall 47 pump stations were assessed. The assessments found that three of the pump stations required larger pumps to be installed than currently existed, nine pump station required smaller pumps to be installed than currently existed, 30 pump station required “like for like” replacement of pumps and it was identified that five pump stations could be removed from the programme due to new pumps recently being installed or the pump station is to be decommissioned. (Gold Coast City Council, 23 July 2013; Gold Coast City Council, 23 September 2013).

From the *Sewerage Pumping Station Pump Replacement 2013-2014* reports (Gold Coast City Council, 23 July 2013; Gold Coast City Council, 23 September 2013), SKM understands that the 2013-14 programme includes the replacement of 92 pumps in 52 minor pump stations. From the *Proposed Sewerage Pump Replacement Scope for 2014-15* (Gold Coast City Council, 2013), the 2014-15 programme includes the replacement of 7 pumps in 4 major pump stations and the replacement of 84 pumps in 42 minor pump stations.

The pumps in the major pump stations are being replaced in general due to age. The pumps in the minor pump stations are being replaced due to advice provided by ABS which stated that spare parts will no longer be available for their older range of pump models (AF-15, AF-22, AF-30, AF-60 and AF-70). All of the pumps in the minor pump stations currently utilise these model pumps.

SKM considers the process used for the identification and prioritisation of works to be completed to be appropriate. In addition, evidence of the implementation of the *Maintenance Strategy* for selection and prioritisation for this programme has been provided.

D.5.2 Project delivery

At the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 2013), Gold Coast City Council advised that the programme is generally delivered by internal staff, with the procurement of pumps bundled on a timing of delivery basis (with maximum of two to four pumps ordered in bulk at a time).

In correspondence provided subsequent to the meeting Gold Coast City Council states:

> *"We are not purchasing the pumps as a bulk order for the following reasons;*
>
> - *A number of the identified stations require extra work before the new pumps can be fitted e.g. pump pedestals and pipe work need to be replaced due to poor condition and the concrete at the base of some wells need to be modified to physically fit the new pumps.*
> - *Quite a few new pumps require adaptor pieces to be machined and fitted so they can locate on existing pedestals located in the well.*
> - *I don't think the modelling on all of the pump stations in scope has been completed.*
>
> *This is all time consuming work and if all of the pumps were purchased in bulk, there would be a storage and inventory issue during this process."*

SKM considers the delivery method adopted appropriate for the scope of work. However SKM considers that further investigation should be undertaken to investigate the potential cost savings associated with the bulk purchase of required pumps and the costs associated with storage and inventory management to determine if efficiency gains can be made. SKM considers that Gold coast City Council should investigate the potential to purchase in bulk from a supplier/suppliers with staged delivery of pumps as required.

D.6 Standards of service

The *Project Brief – Sewer Pump Station Mechanical and Electrical Equipment Minor Works 2013-15* (Gold Coast City Council, January 2013) states that the works must comply with:

- The South East Queensland Water Supply and Sewerage Design and Construction Code, 1 July 2013
- AS/NA 3000 and any other relevant standards

For the network modelling assessments (Gold Coast City Council, 23 July 2013; Gold Coast City Council, 23 September 2013) the following assumptions were used:

- Average Dry Weather Flow (ADWF) = 210 L/EP/d = 573 L/ET/day as per proposed *SEQ Design and Construction Code 2012*
- Peak Wet Weather Flow (PWWF) = 5 x ADWF (unless otherwise specified)
- IDM_2004 v5.6 and IDM_2012 were compared for population forecast for the design year

SKM considers that the standards used for this project are appropriate.

D.7 Project cost

The estimated project cost in the *Project Brief – Sewer Pump Station Mechanical and Electrical Equipment Minor Works 2013-15* (Gold Coast City Council, January 2013) is outlined below.

Table D.2: Estimate Project Cost ($) (Gold Coast City Council, January 2013)

Aspect	2013-14	2014-15
Internal	$90,000	$90,000
External	$760,000	$860,000
Total	**$850,000**	**$950,000**

The project brief states that the project costs were developed based on quotes and tenders and unit rates from recent similar projects. Source cost information was not provided to SKM.

Based on SKM's understanding of the scope of works (as discussed in **Section D.5**), the information provided in the *Pump Upgrade 13-14 Progress* spread sheet (Gold Coast City Council, 2013), and unit rates from recent projects, SKM developed a cost estimate for the 2013-14 and 2014-15 programs. An allowance of 17% for project, contract management and contingency was included. A comparison of SKM's estimated cost and Gold Coast City Council budget in presented below.

Table D.3: Comparison of pump replacement cost estimate

Programme	Gold Coast City Council	SKM	Difference	
			Value	Percentage
2013-14	$850,000	$756,616	-$93,384	-11%
2014-15	$950,000	$898,560	-$51,440	-5%

As can be seen from the **Table D.3**, SKM's estimated cost for the 2013-14 programme is approximately 11% lower than Gold Coast City Council's estimate, while for the 2014-15 programme, SKM's estimated cost is approximately 5% lower that the estimate developed by Gold Coast City Council.

SKM considers that the use of quotes and tenders and unit rates from recent similar projects is an appropriate process. SKM considers the estimated cost for the 3013-14 and 2014-15 programmes to be appropriate and in line with market conditions.

D.8 Efficiency gains

No efficiency gains have been identified for this project.

D.9 Implications for operating expenditure

It is anticipated that new modern pump would have a greater operational efficiency, and therefore used less electricity, than the older pumps they are replacing.

D.10 Policies and procedures

Table C.5 below identifies how the project has complied with the appropriate policies and procedures.

Table D.4: Sewer Pump Station Mechanical and Electrical Equipment Minor Works 2013-15 project compliance with the Authority's criteria

Initiative	Achievement (Yes/No/Partial)	Comment
Consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective	Not applicable	The consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective not applicable to this programme.

Initiative	Achievement (Yes/No/Partial)	Comment
Consideration of alternative investments, the substitution possibilities between operating costs and capital expenditure, and non-network alternatives such as demand management.	Not applicable	Alternative investments such as the substitution between operating costs and capital expenditure are not applicable to this programme.
A standardised approach to cost estimating, including a standardised approach to estimates for items such as contingency, preliminary and general items, design fees and contractor margins, so that there is uniformity of cost estimating across all proposed major projects	Yes	The use of units rates for cost estimation is appropriate and in line with Gold Coast City Council's policies and procedures. The competitive tendering ensures actual project costs are in line with market conditions.
A summary document to be prepared for identified major projects so as to facilitate standardised reporting	Yes	*Project Brief – Sewer Pump Station Mechanical and Electrical Equipment Minor Works 2013-15* (Gold Coast City Council, January 2013)
An implementation strategy to be developed for each major project	No	No evidence of a documented implementation strategy has been provided.
A 'toll gate' or 'gateway' review process to be implemented so that appropriate reviews are undertaken at milestone stages for selected projects	No	Gold Coast City Council's policies and procedures require: • Project Brief • Business Case • Project Delivery/Implementation Plan SKM notes that no Business Case was provided for this project. However Gold Coast City Council advise that as it is a 'like for like' renewals project, the AMP does not require a business case to be completed. A project brief is completed to identify the specific projects to be undertaken in the specific year. No Project Delivery Plan or Project Implementation Plan (or similar) was provided for this project.
Information on the compatibility with existing and adjacent infrastructure and consideration of modern engineering equivalents and technologies.	Yes	As the project involves the replacement of pumps within existing pump stations, the compatibility of new pumps with the existing infrastructure is a significant consideration.
Includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices	Yes	

D.11 Prudency and efficiency

SKM considers the drivers of renewal, compliance and improvement are appropriate for this project as the mechanical and electrical components have reached the end of their useful life and failure to replace could result in licence non-compliances. SKM considers the process used for the identification and prioritisation of works to be completed appropriate. As such SKM considers that the project is prudent.

SKM considers the delivery method adopted appropriate for the scope of work, however SKM considers that further investigation should be undertaken into the potential cost savings associated with the bulk purchase of required pumps, the use of a limited range of standard sized pumps and the costs associated with storage and inventory to determine if efficiency gains can be made. SKM considers that the standards used for this project are appropriate.

SKM considers the use of quotes and tenders and unit rates from recent similar projects is an appropriate process. SKM considers the estimated cost for the 3013-14 and 2014-15 programmes to be appropriate and in line with market conditions.

D.12 Assessment of reported expenditure

Table C.6 below identifies the revised capital expenditure for Sewer Pump Station Mechanical and Electrical Equipment Minor Works 2013-15 project.

Table D.5: Sewer Pump Station Mechanical and Electrical Equipment Minor Works 2013-15 project revised capital expenditure

Project	2013-2014 ($'000)	2014-2015 ($'000)	Total ($'000)
Sewer Pump Station Mechanical & Electrical Equipment Minor Works 2013-15	850	950	1,800
SKM proposed value	850	950	1,800
Variation (to QCA submitted value)	0	0	0

[1] TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spreadsheet

D.13 Extrapolation to other projects

Given the unique nature of this project and the fact that no systemic issue has been identified with the processes applied by Gold Coast City Council, SKM does not consider that the findings from this project can be extrapolated to other projects.

Appendix E. Coombabah WWTP Process Tanks Refurbishment

E.1 Project description

The Coombabah WWTP Process Tank Refurbishment project is the continuation of the clarifier refurbishments at Coombabah WWTP. The scope generally includes taking tanks offline, internal inspection to determine a detailed scope of works, concrete repairs where necessary and painting and replacement of metalwork. (Allconnex Water, March 2011).

Gold Coast City Council's aim for the project is to keep all of the treatment tanks at the Coombabah WWTP in an operational condition. Gold Coast City Council's objective of the project is to ensure that the plant is able at all times to achieve a level of treatment which conforms to legislative requirements (Allconnex Water, March 2011).

E.2 Proposed capital expenditure

Table C.1 shows the proposed cost of the Coombabah WWTP Process Tank Refurbishment project within the 2013-15 budget.

Table E.1: Coombabah WWTP Process Tank Refurbishment project proposed capital expenditure ($'000)

Source	Previous years ($'000)	2013-2014 ($'000)	2014-2015 ($'000)	Subsequent years ($'000)	Total ($'000)
5.6.2 Capital Expenditure Projects and Programmes of SEQ Revenue Monitoring - Information Requirement Template	2,048	800	0	0	2,848
TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spreadsheet	0	2,848	0	0	2,848
70421 - Coombabah WWTP Process Tank Refurbishment – Financial summary of change requests (Gold Coast Water, no date)	2,048	900	0	0	2,948

The total costs for the project are identical between the different information sources.

E.3 Documentation reviewed

The key reference documents used for this review are:

- *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, 8 October 2013)
- *70421 - Coombabah WWTP Process Tank Refurbishment – Financial summary of change requests* (Gold Coast Water, no date)
- *Change request – Various* (Gold Coast City Council, 19 August 2013)
- *Change request/ Exception report 2 - Various* (Allconnex Water, 6 November 2012)
- *Change request/ Exception report 1 - Various* (Allconnex Water, 29 August 2012)
- *Change request/ Exception report 2 - Coombabah WWTP Process Tank Refurbishment 12-13* (Allconnex Water, 31 July 2012)
- *Change request/ Exception report 1 - Coombabah WWTP Process Tank Refurbishment 11-12* (Allconnex Water, 18 May 2012)

- *QP-2201 Project Initiation Form – 2011/12 Project – Coombabah WWTP Process Tank Refurbishments* (Allconnex Water, March 2011)
- *QP-2207 Project Plan - Coombabah WWTP Refurbishment of Clarifiers A to D and Associated RAS Pumps* (Gold Coast Water, 15 June 2008)

E.4 Key drivers

The primary cost drivers identified by Gold Coast City Council for this project are compliance and renewal, with improvement as a secondary driver.

The Coombabah WWTP was constructed in stages commencing in 1980. The plant includes aeration tanks and clarifiers as well as a range of smaller tanks and pump stations. All items have been subject to corrosion and need to be refurbished periodically to ensure their continued serviceability.

A programme of refurbishment of the process tanks has been running for several years. To date the following have been completed:

- DAF tanks
- Clarifier A
- Clarifier B
- Aeration tank B (partial)

If these projects are not carried out eventually there will be a structural failure of the steelwork, resulting in the inability to use that particular tank for wastewater treatment.

SKM considers the drivers of compliance, renewal and improvement to be appropriate for this project as the assets have reached the end of their useful life and without refurbishment the plant's capacity may be reduced, leading to failure to meet licence conditions.

E.5 The scope of works

E.5.1 Solutions development

At the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013) Gold Coast City Council stated that the process used for the determination of the scope of work included:

- Determination of the potential scope of works from inspection of the full tanks
- Award of a contractor to drain and inspect the tanks
- Review of the findings of the inspections to determine the actual scope of works, ie assessment of renewal versus replacement
- Completion of the required works by the contractor

As discussed at the meeting on the 8th October 2013 (Gold Coast City Council, 8 October 2013), an alternative process would inovlve the emptying of a tank, conducting a full inspection to determine the exact scope of works, re-filling the tank, preparation of tender documents and completeion of the tendering process, award of a contractor and then re-emptying of the tank for the completeion of the works.

The original scope of the project was the refurbishment of Clarifier D and Bioreactor D only. The refurbishment process includes:

- Emptying, cleaning and disinfection
- Detailed internal inspection to determine detailed scope

- Refurbishment of concrete structure and all metalwork
- Repainting of concrete
- Replacement of seals, rubber strips etc. where not in good condition (clarifier only)
- Replacement of slip rings (clarifier only)
- Replacement of bearings (clarifier only)
- Installation of launder pumps (clarifier only)
- Recommissioning (Allconnex Water, March 2011)

Change request 1 (Allconnex Water, 18 May 2012) added the refurbishment of Clarifier E2, Clarifier C and Aeration Basin C to the scope of work.

SKM considers that the process used by Gold Coast City Council in the determination of the scope of work for the refurbishment of the tanks to be appropriate given the need to maintain operation of the plant and minimise interruptions to wastewater treatment. SKM recommends that findings from the refurbishment of the previously refurbished tanks be used to inform the scoping of works for the remaining tanks.

E.5.2 Project delivery

An invitation to tender for the refurbishment works was advertised by Allconnex Water on 28 January 2012. The tender was comprised of four separate contracts (relating to ten separable portions), two of which related to the Coombabah WWTP tank refurbishment works (one for clarifiers and one for aeration basins). The remaining two contracts related to the refurbishment of tanks at Elanora WWTP.

At the close of the tender period seven tenders had been received. The tenders were evaluated based on both price and non-price criteria. Four tenders were shortlisted for detailed analysis. Analysis of the tenders determined that The Electrical Workshop Pty Ltd was considered the most advantageous for the delivery of both contracts relating to the Coombabah WWTP.

Two contracts were awarded to The Electrical Workshop Pty Ltd on 19 April 2012. One for the refurbishment of Clarifiers C, D, E1 and E2 valued at $2.19 million and the second for the refurbishment of Aeration Basins C and D valued at $0.43 M.

SKM considers that an appropriate tendering process has been undertaken for the award of the project.

The duration of the project was anticipated to be one year, with the works completed in the 2011-12 financial year (Allconnex Water, March 2011). However variations to the scope of works resulted in an extension to the delivery of the project. The project is anticipated to be completed in the 2014 financial year. Based on SKM's review of this programme, SKM considers that the project will be completed and commissioned within the review period.

E.6 Standards of service

The standard of work that the refurbishment must comply to is outlined in *QP-2201 Project Initiation Form – 2011/12 Project – Coombabah WWTP Process Tank Refurbishments* (Allconnex Water, March 2011). The main requirements the refurbishment work shall comply with include:

- AS1627
- AS/NZ 2312:2002
- AS3750
- AS1627.7
- AS 3894.5

SKM considers that the standards used for this project are appropriate and in line with Australian national requirements.

E.7 Project cost

The estimated project cost in the Project Initiation Form (Allconnex Water, March 2011) is $1 M. A breakdown of the cost is shown below.

Table E.2: Estimated project costs (Allconnex Water, March 2011)

Aspect	Value	Percentage of direct costs (%)
Contract costs	800,000	
Project management	40,000	5%
Tender process	16,000	2%
Contract administration	80,000	10%
Services (eg. O&M)	64,000	8%
Total	**1,000,000**	

SKM notes that the contract administration and services cost as a percentage of the direct costs are high when compared to normalised project benchmarks. However SKM considers that they are reasonable given the unknown scope of works at award of the contract and the need to keep the plant operational for the duration of the works.

Five Change Requests have been submitted for this project. The dates received, amounts and how they affected the project spend profile is outlined below.

Table E.3: Financial summary of change requests (Gold Coast Water, no date)

Document	Date	2011-12	2012-13	2013-14	Total
Project Initiation Form	Jun-11	$1,000,000	$1,000,000*	$1,000,000*	**$3,000,000**
Change Request 1	May-12	$250,000	$2,550,000	$0	**$2,800,000**
Change Request 2	Jul-12	$273,000	$2,480,000	$0	**$2,753,000**
Change Request 3	Aug-12	$273,000	$2,480,000	$0	**$2,753,000**
Change Request 4	Nov-12	$271,249	$1,880,000	$600,000	**$2,751,249**
QCA Submission	Sep-13	$271,249	$1,777,197	$800,000	**$2,848,445**
Change Request 5	Sep-13	$271,249	$1,777,197	$900,000	**$2,948,445**

* As advised by Gold Coast City Council at the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013)

From the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013), SKM understands that although the expenditure was not included in the *QP-2201 Project Initiation Form – 2011/12 Project – Coombabah WWTP Process Tank Refurbishments* (Allconnex Water, March 2011) there was notional $1 million anticipated expenditure for 2012-13, 2013-14 and 2014-15.

SKM notes that, whilst there have been a number of change request and variations on the project; the costs have not exceeded the original budget. In addition, as the scope was not fully understood prior to the issuing of the contract, (as it was part of the contracted works to finalise the scope following inspection of the existing assets) it would have been expected that there would be some risk of variations as the scope of works was determined.

SKM considers that the project costs are in line with market conditions and therefore efficient.

E.8 Efficiency gains

No efficiency gains have been identified for this project.

E.9 Implications for operating expenditure

No implications for operating expenditure have been identified for this project.

E.10 Policies and procedures

Table C.5 below identifies how the project has complied with the appropriate policies and procedures.

Table E.4: Coombabah WWTP Process Tank Refurbishment project compliance with the Authority's criteria

Initiative	Achievement (Yes/No/Partial)	Comment
Consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective	Yes	The tendering for the delivery of the refurbishment works for Coombabah WWTP was bundled with refurbishment works for Elanora WWTP.
Consideration of alternative investments, the substitution possibilities between operating costs and capital expenditure, and non-network alternatives such as demand management.	Yes	Consideration of renewal versus replacement for the tanks.
A standardised approach to cost estimating, including a standardised approach to estimates for items such as contingency, preliminary and general items, design fees and contractor margins, so that there is uniformity of cost estimating across all proposed major projects	Yes	The use of units rates for cost estimation is appropriate and in line with Gold Coast City Council's policies and procedures. The competitive tendering ensures actual project costs are in line with market conditions.
A summary document to be prepared for identified major projects so as to facilitate standardised reporting	Yes	*QP-2201 Project Initiation Form – 2011/12 Project – Coombabah WWTP Process Tank Refurbishments* (Allconnex Water, March 2011)
An implementation strategy to be developed for each major project	Yes	*QP-2207 Project Plan - Coombabah WWTP Refurbishment of Clarifiers A to D and Associated RAS Pumps* (Gold Coast Water, 15 June 2008)
A 'toll gate' or 'gateway' review process to be implemented so that appropriate reviews are undertaken at milestone stages for selected projects	Yes	Gold Coast City Council's policies and procedures require: • Project Brief • Business Case • Project Delivery/Implementation Plan SKM notes that no Business Case was provided for this project. However Gold Coast City Council advise that as it is a 'like for like' renewals project, the AMP does not require a business case to be completed. A project brief is completed to identify the specific projects to be undertaken in the specific year.
Information on the compatibility with existing and adjacent infrastructure and consideration of modern engineering equivalents and technologies.	Yes	As the project involves the refurbishment of existing tank within an operational WWTP consideration of compatibility with existing adjacent infrastructure was essential.
Includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices	Yes	

E.11 Prudency and efficiency

SKM considers the drivers of compliance, renewal and improvement to be appropriate for this project as the assets have reached the end of their useful life and without refurbishment the plant's capacity will be reduced, leading to failure to meet licence conditions. SKM considers that the process used by Gold Coast City Council in the determination of the scope of work for the refurbishment of the tanks to be appropriate. SKM recommends

that findings from the refurbishment of the previously refurbished tanks be used to inform the scoping of works for the remaining tanks. As such, SKM considers that the project is prudent.

From its review, SKM considers that an appropriate tendering process has been undertaken for the award of the project. SKM considers that the project will be completed and commissioned within the review period. SKM considers that the standards used for this project are appropriate.

SKM notes that, whilst there have been a number of change request and variations on the project; the costs have not exceeded the original budget. In addition, as the scope was not fully understood prior to the issuing of the contract (as it was part of the contracted works to finalise the scope following contractor inspection of the existing assets), it is to be expected that there would be some risk of variations as the scope of works was determined. SKM considers that the project costs are in line with market conditions and therefore efficient.

E.12 Assessment of reported expenditure

Table C.6 below identifies the revised capital expenditure for the Coombabah WWTP Process Tank Refurbishment project.

Table E.5: Coombabah WWTP Process Tank Refurbishment project revised capital expenditure

Project	2013-2014 ($'000)	2014-2015 ($'000)	Total ($'000)
Coombabah WWTP Process Tank Refurbishment	2,848	0	2,848
SKM proposed value	2,848	0	2,848
Variation (to QCA submitted value)	0	0	0

E.13 Extrapolation to other projects

Given the unique nature of this project and the fact that no systemic issue has been identified with the processes applied by Gold Coast City Council, SKM does not consider that the findings from this project can be extrapolated to other projects.

Appendix F. Water Main Replacement 2013-14

F.1 Project description

The water supply reticulation network consists of over 3,000 km of water pipes and part of it is over 60 years of age. These pipes are primarily constructed of Asbestos Cement (AC), Cast Iron Cement Lined, UPVC and Ductile Iron Cement Lined. There are water mains that experience frequent failures or are at risk of failure. If these water mains are not replaced, the number of unplanned interruptions will increase, resulting in a decrease in service quality and increased water loss. The water main replacement programme has been formulated to address the issue.

Water main replacements have been underway for the last five years as a rolling programme. The Water Main Replacement Programme for 2013-14 has been selected for review by the Authority.

F.2 Proposed capital expenditure

Table C.1 shows the proposed cost of the Water Main Replacement Programme 2013-14 within the 2013-15 budget.

Table F.1: Water Main Replacement Programme 2013-14 proposed capital expenditure ($'000)

Source	Previous years ($'000)	2013-2014 ($'000)	2014-2015 ($'000)	Subsequent years ($'000)	Total ($'000)
5.6.2 Capital Expenditure Projects and Programmes of SEQ Revenue Monitoring - Information Requirement Template	0	2,500	0	0	2,500
TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spread sheet	3,745*[A]	2,500	2,110*	2,110*	10,465

* Prog WR3 - Water Main Replacement

[A] Actual expenditure for 2012-13 programme

SKM understands from advice from Gold Coast City Council that the TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013 spread sheet represents the latest and hence most accurate project costs. SKM notes that the 2013-14 and subsequent years expenditure is outside the scope of the project but has been included for completeness.

F.3 Documentation reviewed

The key reference documents used for this review are:

- *Water Main Replacement Programme 2013-14 - Project Delivery Plan* (Gold Coast City Council, 20 August 2013)
- *Project Brief – 2013/2014 Water Main Renewals* (Gold Coast City Council, January 2013)
- *Contract No AX 170/2012/01-01 - Tender submission Prices - Water Main Replacement & Augmentation Program 2011/12* (Allconnex Water, no date)
- *Tender Analysis – Contract AX 170/2012/01-01 Water Main Replacement & Augmentation Program Gold Coast , Logan and Redland Districts* (Allconnex Water, November 2011)
- *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013)

F.4 Key drivers

The primary cost driver identified by Gold Coast City Council for this project is renewal.

This is a rolling programme to replace water mains which have a history of failures or are in a category of high risk of failure. Projects are identified based on history of failure, risk based desk top analysis, and customer service standards.

SKM considers the driver of renewal is appropriate for this project as failure to replace the mains could result in service interruptions and income loss.

F.5 The scope of works

F.5.1 Solutions development

The water main renewal programme is developed by application of the following method:

1) A prioritised list of renewals based on a history of failures causing water interruptions and water loss
2) A risk based desktop analysis of water mains
3) Water mains that are constructed of AC and are located near a canal or waterway (Gold Coast City Council, January 2013)

The primary focus of the programme is to replace those water mains with a history of failures or that have a higher than normal potential to fail due to material type, age and location. (Gold Coast City Council, January 2013).

SKM considers that the process used for the identification and prioritisation of works to be completed is appropriate. SKM notes that no evidence of the implementation of the process for the selection and prioritisation of water main replacement projects have been provided. Hence, whilst SKM considers that the method is appropriate, it cannot comment on Gold Coast City Council's compliance with this method in its planning and implementation of the works.

The 2013-14 scope of works includes 25 new sub-projects and five sub-projects that were carried over from 2012-13 programme. Five sub-projects from 2013-14 scope have been put on hold due to budget limitations (requires an additional $370,000 to complete all sub projects). (Gold Coast City Council, 20 August 2013).

The scope of work includes:

- Design and construction of replacement water mains
- Replacement of water mains
- Decommissioning of the existing water main and fittings
- Obtaining of all necessary approvals
- Obtaining any instruments of land such as easements
- Providing project documentation in accordance with the corporate project management methodology
- Provision of As Constructed information and facilitating the update of GIS and SAP system with any changes to the network (Gold Coast City Council, 20 August 2013)

F.5.2 Project delivery

An invitation to tender for a schedule of rates contract for the design and construction of water reticulation main replacements was advertised on 24 September 2011. It was comprised of three separate portions for the three districts covered by Allconnex Water (Gold Coast, Logan and Redland). At the close of the tender period, 16 tenders had been received. The tenders were assessed on the total of the tendered rates and total price for a

typical sub project. The three lowest cost conforming tenders were shortlisted for further assessment. The schedules submitted with the tender (Price Schedule, Preference Schedule, Capacity Schedule, Capability Schedule, Commitment Schedule and Technical Schedule) were assessed to determine if they complied with the requested requirements and represented limited risk to Gold Coast City Council (then Allconnex). Other aspects taken into consideration were the tender submission, the programme of works, previous experience, references, commercial and safety performance, local content, demonstrated environmental sensitivity, quality systems and method statement and technical specification. The assessment indicated that all three shortlisted tenders were able to complete the works and therefore the lowest cost tender, National Tapping Services Pty Ltd, was selected as the preferred. (Allconnex Water, November 2011). SKM considers the criteria used for the assessment of the tenders to be appropriate and good industry practice.

The duration of the schedule of rates contract was one year but include the option for three further extensions for the 2012-13, 2013-14 and 2014-15 financial years (Allconnex Water, November 2011).

SKM considers that, given the scale of the works, an appropriate tendering process has been undertaken for the award of the works. At the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013) Gold Coast City Council advised that 2013-14 would be the last year that this contract would be used.

The *Water Main Replacement Program 2013-14 - Project Delivery Plan* (Gold Coast City Council, 20 August 2013) identified the following schedule for the completion of activities in the programme.

Table F.2: Milestone completion (Gold Coast City Council, 20 August 2013)

Milestones	Principle activities/milestones	Estimated completion date
1	2012-13 carry over sub projects	09/10/13
2	Preliminary investigations and concept design reports	06/12/13
3	Detail designs and approvals	31/01/14
4	Water main installation and testing	13/03/14
5	Connections to network, service connections and reinstatement	04/04/14
6	As constructed drawings	18/04/14
7	Project completion report	09/05/14

From SKM's review of the above, SKM considers that the works will be completed and commissioned within the review period.

F.6 Standards of service

As the project involves the replacement of a section of water main, the new section of main will need to be designed to the same gradient as the existing main and will be required to comply with the *SEQ Water Supply and Sewerage Design and Construction Code* (Gold Coast City Council, Logan City Council, Queensland Urban Utilities, Redland Water and Unitywater, July 2013).

From SKM's review of the above, SKM considers that the standards used for this project are appropriate.

F.7 Project cost

The estimated project cost in the *Project Delivery Plan* (Gold Coast City Council, 20 August 2013) is $2.5 M. This cost estimate is based on unit rates from recent similar projects with an accuracy of ±10%. A breakdown of the cost is shown below.

Table F.3: Current project costs (Gold Coast City Council, January 2013)

Aspect	Value ($)	Percentage of direct costs (%)
Project Management	100,000	4
Contract Supervision	50,000	2
Tendering	25,000	1
O&M Costs	25,000	1
Construction	2,300,000	
Total	**2,500,000**	

SKM considers Gold Coast City Council's project management, contract supervision, tendering and O&M costs, as a percentage of direct costs, to be low but reasonable as SKM would expect some of the costs to be built into the unit rates.

The unit rates used by Gold Coast Water in the development of the budget exceed the average rate submitted by National Tapping Services Pty Ltd in response to *Contract No AX 170/2012/01-01 - Tender submission Prices - Water Main Replacement & Augmentation Program 2011/12* (Allconnex Water, no date). The rates submitted by National Tapping Services Pty Ltd for a 150 mm diameter main ranged from $275/m to $398/m for DN 150 design and construction depending on the situation, ie turfed footpath verge/nature strip, concrete footpath, road. SKM notes that for water mains less than 50 m a factor of 1.4 was to be applied to the cost ($557/m) and for water mains greater than 500 m a factor of 0.85 was to be applied ($338/m).

SKM has compared the unit rates used by Gold Coast City Council, in the development of the estimated programme costs, with those used by Logan City Council in the development of its Water Reticulation Main Replacement programme, as outlined below.

Table F.4: Comparison of unit rates

Pipe diameter (mm)	Unit Rate ($/m)		
	Gold Coast City Council[+]	National Tapping Services Pty Ltd	Logan City Council
50	506	NA	NA
100	506	NA	350 to 400[†]
150	598	275 (385) to 398 (557)[•]	450
250	690	NA	NA

[+] Based on contract payment costs from Attachment I of Gold Coast City Council's response to SKM's Draft Report

[†] If pipe length is less than 300 m - $400/m; if pipe length is greater than 300 m - $350/m

[•] Price dependant on situation in which the work is to be undertaken and the length of the pipe, the value in brackets indicates the cost for mains less than 50 m long

SKM developed a cost estimate for the programme of works based on the 2013-14 programme based on the scope of works and the maximum unit rates submitted by National Tapping Services Pty Ltd, as the conditions in which the works are to be undertaken is unknown by SKM.

National Tapping Services has indicated that an additional factor of 1.4 would be applied to water mains less than 50 m long. From review of the water mains to be replaced in the 2013-14 programme, SKM notes that approximately 5% of the programme is comprised of mains less than 50 m long.

SKM also developed a cost estimate using the unit rates used by Logan City Council in the development of its Water Reticulation Main Replacement programme. These rates were developed from analysis of the 2012-13 replacement projects and therefore considered to be in line with market conditions.

Table F.5: Comparison of cost estimates

Unit Rate Source	Direct Cost ($)	Difference (from Gold Coast City Council)	
		Value ($)	Percentage (%)
Gold Coast City Council	2,291,721		
National Tapping Services Pty Ltd	1,845,012	-446,709	-19
Logan City Council	1,806,737	-484,984	-21

As can be seen from **Table F.5**, the application of the National Tapping Services Pty Ltd and the Logan City Council unit rates result in cost estimates approximately 20% less than the unit rates applied by Gold Coast City Council.

SKM notes that in response to SKM's Draft Report Gold Coast City Council provided the following statement:

> *"With regard to the unit rates utilised in the preparation of the budget estimate for this project, GCW advises that, as identified by SKM, Contract AX170/2012/01-01 is a schedule of rates Design and Construct Contract which was developed for Logan, Redland and GCW areas under Allconnex Water. The contract is structured such that a schedule of rates is used to 'build' the cost of each mains replacement based on various elements defined in the schedule of rates. For example the cost of replacing 150 m of 150 mm main in a turfed footpath might be made up of;*
>
> - *Pipe: $275 x 150 m = $41,250*
> - *Bore under driveway 8 (of) x 3 m (width) x 24 m: $875 x 24 = $21,000*
> - *Replace 8 short water service: $307 x 8 = $ 2,456*
> - *Replace 8 long water service: $589 x 8 = $ 4,712*
> - *Replace 150 mm valve x 2 (ea): $830 x 2 = $ 1,660*
> - *Replace fire hydrant x 2 (ea): $690 x 2 = $ 1,380*
> - *Restore standard conc driveway 4 (ea) x 12 m^2: $100 x 12 x 4 = $ 1,200*
> - *Connection 150 main to existing 2 (ea): $2,953 x 2 = $ 5,906*
> - *Main disconnection 150 main 2 (ea): $625 x 2 = $ 1,250*
> - *Grout filling 150 main 150 m: $150 x 30 = $ 4,500*
> - *Total = $85,314*
>
> *For this particular example, the direct costs of the job represent an average unit rate of $569/m ($85,314/150 m). Once overheads are applied (project management, contract supervision, tendering and compliance costs), all jobs of the same type (pipe size and material) are averaged. In determining the average rate used in GCW's budget estimate, an averaged meterage rate for actual work carried out on previous projects is calculated, utilising the methodology outlined above."*

SKM acknowledges the reason for Gold Coast City Council's unit rates to be higher than the National Tapping Services Pty Ltd rates.

The Logan City Council unit rates are derived from a total lump sum amount and include all preliminary works, supply and installation, restoration works, testing and commissioning and disposal of AC pipes. However, SKM notes that Logan City Council's overheads were significantly higher than Gold Coast City Council (25% of direct costs as opposed to 8% as shown in Table F.3). SKM has therefore, subsequent to its issue of the draft report, recommended a reduction in Logan City Council's overhead costs.

Overall, SKM does not consider that the costs for the programme are consistent with prevailing market conditions. SKM recommends a reduction in costs of 8% of the programme costs ($198,584) from $2.5 million to $2.3 M.

SKM notes that the *TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013* spread sheet includes a budget of $2.11 million for the 2014-15 financial year. As review of the 2014-15 programme is outside of the scope of this review, no scope of works has been provided. Due to this limitation, SKM cannot determine if the reduction is attributed to a reduction in scope or a reduction in the expected unit rates.

F.8 Efficiency gains

By cross referencing with Network Planners, Gold Coast City Council identified that several sub-projects required upgrade of water main sizes to address fire flow capacity problems. These water mains will be upgraded opportunistically, as part of the project (Gold Coast City Council, 20 August 2013).

F.9 Implications for operating expenditure

It is anticipated that the completion of this project will reduce the whole of life cost of the failure of water mains and water waster loss as a result of water main failures (Gold Coast City Council, January 2013). The extent of these losses and associated costs has not been quantified.

F.10 Policies and procedures

Table C.5 below identifies how the project has complied with the appropriate policies and procedures.

Table F.6: Water Main Replacement Programme 2013-14 compliance with the Authority's criteria

Initiative	Achievement (Yes/No/Partial)	Comment
Consideration of prudency and efficiency of capital expenditure from a regional (whole-of-entity and whole-of-sector) perspective	Yes	Consideration is giving to other proposed works and its timing prior to inclusion in the programme.
Consideration of alternative investments, the substitution possibilities between operating costs and capital expenditure, and non-network alternatives such as demand management.	Yes	The failure history of a main is a key factor in the determination of mains to be included in the programme especially those resulting in water interruptions and water loss.
A standardised approach to cost estimating, including a standardised approach to estimates for items such as contingency, preliminary and general items, design fees and contractor margins, so that there is uniformity of cost estimating across all proposed major projects	Yes	The use of units rates for cost estimation is appropriate and in line with Gold Coast City Council's policies and procedures. The competitive tendering ensures actual project costs are in line with market conditions.
A summary document to be prepared for identified major projects so as to facilitate standardised reporting	Yes	*Project Brief – 2013/2014 Water Main Renewals* (Gold Coast City Council, January 2013)
An implementation strategy to be developed for each major project	Yes	*Water Main Replacement Program 2013-14 - Project Delivery Plan* (Gold Coast City Council, 20 August 2013)
A 'toll gate' or 'gateway' review process to be implemented so that appropriate reviews are undertaken at milestone stages for selected projects	Yes	Gold Coast City Council's policies and procedures require: • Project Brief • Business Case • Project Delivery Plan • Project Implementation Plan SKM notes that no Business Case was provided for this project. However Gold Coast City Council advise that as it is a 'like for like' renewals project, the AMP does not require a business case to be completed. A project brief is completed to identify the specific projects to be undertaken in the specific year.

Initiative	Achievement (Yes/No/Partial)	Comment
Information on the compatibility with existing and adjacent infrastructure and consideration of modern engineering equivalents and technologies.	Yes	As the project involves the replacement of sections of main, the new pipeline must take into consideration existing, adjacent infrastructure.
Includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices	Yes	

F.11 Prudency and efficiency

SKM considers that the driver of renewal is appropriate for this project as failure to replace the mains could result in service interruptions and income loss. SKM considers the process used for the identification and prioritisation of works to be completed appropriate. SKM notes that no evidence of the implementation of the process for the selection and prioritisation of water main replacement projects have been provided. Nevertheless, SKM considers that the project is prudent.

SKM considers that an appropriate tendering process has been undertaken for the award of the works. At the *Gold Coast Price Monitoring Review Meeting* (Gold Coast City Council, Gold Coast Price Monitoring Review Meeting, 8 October 2013) Gold Coast City Council advised that 2013-14 would be the last year that this contract would be used. SKM considers that the works will be completed and commissioned within the review period. SKM therefore concludes that the standards used for this project are appropriate.

SKM considers Gold Coast City Council's project management, contract supervision, tendering and O&M costs, as a percentage of direct costs, to be low but reasonable as SKM would expect some of the costs to be built into the unit rates. SKM considers that the unit rates used by Gold Coast City Council are high and not in line with their current contract rates or those used by Logan City Council. As such, SKM does not consider that the costs for the programme are consistent with prevailing market conditions. SKM therefore recommends a reduction in costs of 8% of the programme costs (approximately $200,000) from $2.5 million to $2.3 M.

SKM notes that the *TRACKS-#41450134-v1-2013_CAPEX_FOR_QCA_DRAFT_-_13-8-2013* spread sheet includes a budget of $2.11 million for the 2014-15 financial year. As review of the 2014-15 programme is outside of the scope of this review, no scope of works has been provided. Due to this period SKM cannot determine if the reduction is attributed to a reduction in scope or a reduction in the expected unit rates.

SKM finds the 2013-14 programme of works to be prudent and partially efficient.

F.12 Assessment of reported expenditure

Table C.6 below identifies the revised capital expenditure for Water Main Replacement Programme 2013-14.

Table F.7: Water Main Replacement Programme 2013-14 revised capital expenditure

Project	2013-2014 ($'000)	2014-2015 ($'000)	Total ($'000)
Water Main Replacement Programme 2013-14	2,500	0	2,500
SKM proposed value	2,300	0	2,300
Variation (to QCA submitted value)	-200	0	-200

F.13 Extrapolation to other projects

Given the unique nature of this project and the fact that no systemic issue has been identified with the processes applied by Gold Coast City Council, SKM does not consider that the findings from this project can be extrapolated to other projects.

Appendix G. Terms of Reference

Terms of Reference

2013-15 SEQ Price Monitoring

Assessment of Operating and Capital Costs

1. Project Background

1.1 Queensland Competition Authority

The Queensland Competition Authority (the Authority) is an independent statutory body responsible for assisting with the implementation of competition policy for government owned business entities in Queensland.

1.2 Retail Water Price Monitoring in South-East Queensland

The monopoly distribution and retail water and wastewater activities of Unitywater, Queensland Urban Utilities (QUU), Logan City Council, Redland City Council and Gold Coast City Council (the entities) have been referred to the Authority for a price monitoring investigation for the two-year period 1 July 2013 to 30 June 2015. A copy of the Ministers' Referral Notice (the Notice) is available on the Authority's website.[1]

The price monitoring investigation for 2013-15 follows and must build on three years of annual interim price monitoring from 2010-13.

The Authority has identified the information requirements for 2013-15 and issued each of the entities with information templates that indicate the form and nature of information required for price monitoring.

2. Purpose of Consultancy

The purpose of this consultancy is to assist the Authority to assess operating and capital expenditure of each entity based on the following approach:

(a) assess the existence of robust policies and procedures having regard to good industry practice, as well as compliance, using a sample of capital expenditure projects and operating expenditure categories;

(b) assess the robustness of the operating and capital expenditure program planning and delivery processes in an overall sense and identify any areas for improvement; and

(c) form a view on the prudency and efficiency of capital and operating expenditure, focussing on any areas of significant cost increase and identifying the reasons why.

The consultancy shall consist of two components.

2.1 Component 1 – Sample Selection

The consultancy must be based on each entity's policies and procedures, and planning and delivery processes, and a detailed review of a sample of capital projects and operating costs.

[1] The Ministers' Referral Notice is accessible at http://www.qca.org.au/water/SEQRetailPriceMon201315/.

Operating Expenditure

The sample operating expenditure categories for detailed review are employee expenses (including contractors), electricity, other materials and services, and corporate overheads. The consultant must identify the areas of significant cost increase within these categories.

Capital Expenditure

The Authority will select the capital expenditure sample for review in consultation with the consultant. As per the Notice, the capital expenditure sample will include six projects per entity (30 in total).

The actual sample size may differ, depending on each entity's submission (see worksheet 5.6.2 of the information template). To this end, the consultant is required to provide an indicative unit rate per additional forecast project and a unit rate per previously reviewed project.

2.2 Component 2 - Prudency and Efficiency of Costs

The consultant must assess whether each of the entities' operating and capital expenditure from 1 July 2013 is prudent and efficient.

Operating Expenditure

The consultant must assess whether each of the entities' operating costs from 1 July 2013 are prudent and efficient. In doing so, the consultant must:

(a) assess whether the entities' policies and procedures for operating expenditure are robust having regard to good industry practice, as well as compliance, for the four sampled expenditure categories;

(b) assess whether the operating program planning and delivery processes is robust and identify any areas for improvement; identify any efficiencies sought or achieved by the entities;

(c) report on the entities' progress against the savings targets set by the Authority in its previous interim price monitoring reports. For councils, the most recent relevant report is for 2011-12 in relation to Allconnex Water;

(d) for the sample of operating expenditures identified in Component 1 above:

  (i) describe the drivers of significant increases in 2013-15 operating expenditure relative to 2012-13 and 2011-12 including whether the expenditure is driven by legal obligations, new growth (see (d) below), operations and maintenance of existing infrastructure, or it achieves an increase in the standard of service that is explicitly endorsed by customers, external agencies or participating councils;

  (ii) assess whether the unit rates and indexes used to escalate costs are consistent with prevailing market conditions and historical trends;

  (iii) assess whether each of the sampled cost items are prudent and efficient. Operating expenditure is prudent if it is required to meet the entities' requirements relating to its legal and regulatory obligations or its contracts with customers. Operating expenditure is efficient if it is undertaken in a least-cost manner over the life of the relevant assets and is consistent with relevant benchmarks. The relevant benchmarks are to be agreed with the Authority; and

(iv) identify the value of any expenditure considered not to be prudent or efficient;

(e) where relevant, liaise with the Authority and its consultants appointed for the review of demand to ensure that consistent advice is provided to the Authority; and

(f) identify the value of any further savings that could be made, including from recent Government initiatives intended to relieve cost pressures on the entities.

Capital Expenditure

The consultant must follow the process and criteria set out in section 4.7 of the Final Report – SEQ Interim Price Monitoring Framework (April 2010)[2], and:

(a) assess whether the entities' policies and procedures for capital expenditure are robust having regard to good industry practice, as well as compliance, using the six sampled projects per entity. In particular, the policies and procedures should reflect strategic development plans, integrate risk and asset management planning, corporate directives, regional priorities, be consistent with external drivers, and incorporate robust procurement practices;

(b) the review of policies and procedures should also report on whether the entity:

(i) considers the prudency and efficiency of expenditure from a regional perspective;

(ii) includes only commissioned capital expenditure from 1 July 2010 in the regulatory asset base (RAB) and therefore prices;

(iii) applies a standardised approach to cost estimating, including for items such as indexation, contingency, preliminary and general items, design fees and contractor margins;

(iv) prepares a summary document and implementation strategy for major projects and programs; and

(v) includes a 'toll gate' or 'gateway' review process at relevant milestone stages;

(c) assess the robustness of each entity's capital expenditure program and delivery processes in an overall sense and identify any areas for improvement;

(d) form a view on the prudency and efficiency of sampled capital expenditure, focussing on areas of significant cost increase and identifying the reasons why.

Capital expenditure is:

(i) prudent if it is required as a result of a legal obligation, new growth, renewal of existing infrastructure, or it achieves an increase in the reliability or the quality of supply that is explicitly endorsed or desired by customers, external agencies or participating councils;

(ii) efficient (cost-effective), if:

– the scope of the works (which reflects the general characteristics of the capital item) is the best means of achieving the desired outcomes after

[2] Available for download at http://www.qca.org.au/water/SEQinterim-price/finalreports.php.

having regard to the options available, including more cost-effective regional solutions, the substitution possibilities between capital and operational expenditure and non-network alternatives such as demand management;

– the standard of the works conforms with technical, design and construction requirements in legislation, industry and other standards, codes and manuals. Compatibility with existing and adjacent infrastructure is relevant as is consideration of modern engineering equivalents and technologies. Compliance with regulatory obligations (e.g. water netserv plans[3]) is likely to be highly relevant; and

– the cost of the defined scope and standard of works is consistent with conditions prevailing in the markets for engineering, equipment supply and construction. The consultant must substantiate its view with reference to relevant interstate and international benchmarks and information sources. For example, the source of comparable unit costs and indexes must be given and the efficiency of costs justified. The consultant should identify the reasons for any costs higher than normal commercial levels;

(e) identify the value of any sampled expenditure considered not to be prudent or efficient and whether the savings can be extrapolated;

(f) liaise with the Authority and its consultants appointed for the review of demand to ensure that consistent advice is provided to the Authority;

(g) identify any efficiency gains or economies of scale sought or achieved by the entities, and identify a prudent and efficient level of future gains with reference to appropriate benchmarks; and

(h) assess the regulatory asset lives for capital expenditure in 5.8.1.1, and the tax asset lives for capital expenditure in 5.8.1.2, against relevant benchmarks.

3. Resources/Data Provided

The consultant will be required to source information from the entities' information returns in the first instance, and will be required to liaise with the entities, the Authority and other stakeholders as appropriate to source further information.

To facilitate the flow of information, the consultant should consider:

(a) setting up a secure online portal for the provision of large documents from the entities;

(b) allowing for a number of days on site with each entity to ask follow up questions;

(c) keeping a weekly record of outstanding information for the entities and the Authority.

The Authority expects that the consultant will be familiar with:

(a) previous submissions and Authority price monitoring reports in 2010-13;

(b) SEQ Price Monitoring Information Requirements for 2013-15;

[3] Refer to the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld).

(c) the Authority's SEQ Interim Price Monitoring Framework (April 2010); and

(d) the assessment of prudency and efficiency in other water reviews (including in other jurisdictions) and relevant approaches and benchmarks from these reviews.

4. Project Time Frame

4.1 Submissions and sample selection

As per the Notice, submissions from:

(a) Unitywater and QUU are due by 30 June 2013;

(b) Logan, Redland and Gold Coast City Councils are due by 30 September 2013.

Submissions will be provided to the consultant following appointment.

The consultant will be required to report on Component 1 within three business days of receiving the information returns.

4.2 Deliverables and report timeframes

The primary deliverables include:

(a) a report for each entity, one week after the consultant's visit, outlining preliminary findings for at least one sampled capital expenditure project and one sample operating expenditure category;

(b) staged delivery of the remaining items within the scope of the consultancy, culminating in a draft report by:

(i) Friday 2 August 2013 for Unitywater and QUU; and

(ii) Friday 1 November 2013 for Logan, Redland and Gold Coast City Councils.

(c) consultation with stakeholders following the release of the draft report (one week following the due dates of the preliminary draft report) which provides the last opportunity for stakeholders to provide further information; and

(d) a final report that addresses the views of stakeholders arising from consultation, by

(i) Friday 16 August 2013 for Unitywater and QUU; and

(ii) Friday 15 November 2013 for Logan, Redland and Gold Coast City Councils.

The consultant may also be required to provide further advice following the receipt of submissions on the Authority's Draft Report. The extent and scope of this work will depend on the nature of submissions. If required, this work will form a separate item under the contract (with separate terms of reference) to be charged at the agreed hourly rates.

5. Proposal Specifications and Fees

The proposal should:

- include the name, address and legal status of the tenderer;

- provide the proposed methods and approach to be applied;
- provide a fixed price quote for the provision of the services detailed herein; and
- nominate the key personnel who will be engaged on the assignment together with the following information:
  - name;
  - professional qualifications;
  - general experience and experience which is directly relevant to this assignment;
  - expected time each consultant will work on the project; and
  - standard fee rates for any contract variations.

The fixed price quoted is to be inclusive of all expenses and disbursements. A full breakdown of consultancy costs is required with staff costs reconciled to the consultancy work plan.

The consultant should invoice the lower of the fixed price quote or a time and materials cost.

A progress payment of 50% of the expected total payment can be made within 28 days of receiving an invoice following the Authority's acceptance of a satisfactory Draft Report. Total payment will be made within 28 days of receiving an invoice at the conclusion of the consultancy.

6. Contractual Arrangements

This consultancy will **only** be offered in accordance with the Authority's standard contractual agreement.

This agreement can be viewed at http://www.qca.org.au/about/consultancyagreement.php

7. Reporting

The consultant must provide its assessment in a clear and comprehensive manner to allow for ease of use in Authority reports.

The Authority requires reasoned and substantiated assessments, inclusion the provision of a high standard of detailed information. The Authority expects the consultant to substantiate and justify its conclusions with reference to relevant benchmarks and information sources.

The consultant should advise at earliest opportunity any critical issues that may impede progress of the consultancy, particularly issues that impact on the successful delivery of the Purpose of Consultancy outlined in Section 2 above.

The consultant may be required to provide the Authority with a formal presentation to all Authority staff on the findings of the draft and final reports. An electronic version of the final report is required, saved in Microsoft© Word with any numeric data in Microsoft© Excel.

8. Confidentiality

Under no circumstance is the selected consultant to divulge any information obtained from The Entities or the Authority for the purposes of this consultancy to any party other than with the express permission of the Entity and the Authority.

9. Conflicts of Interest

For the purpose of this consultancy, the consultant is required to affirm that there is no, and will not be any, conflict of interest as a result of this consultancy.

10. Authority Assessment of Proposal

The proposal will be assessed against the following criteria:

(a) understanding of the project;

(b) skills and experience of the firm and team;

(c) the proposed methods and approach;

(d) capacity to fulfil the project's timing requirements; and

(e) value for money.

In making its assessment against the criteria, the Authority will place most weight on relevant experience of the team members involved and the proposed method for the completion of the task.

11. Insurance

The consultant must hold all necessary work cover and professional indemnity insurance.

12. Quality Assurance

The consultant is required to include details of quality assurance procedures to be applied to all information and outputs provided to the Authority.

13. Grievances

If during the course of your engagement you wish to raise any grievances or make a complaint, please contact Mrs Robyn Farley-Sutton, Director Corporate Services, on (07) 3222 0505 or robyn.farley-sutton@qca.org.au

14. Lodgement of Proposals

Proposals are to be lodged with the Authority by **Monday 17 June 2013**.

For further information concerning this consultancy, please contact Shannon Murphy on (07) 3222 0592 or shannon.murphy@qca.org.au.

Proposals should be submitted to:

Director Water
Queensland Competition Authority

GPO Box 2257
Brisbane Qld 4001

Phone: (07) 3222 0555
Fax: (07) 3222 0599
Email: seqwater@qca.org.au