[redacted]

From: Richard Koerner [rjkoerner@iinet.net.au]
Sent: Thursday, 17 November 2011 8:56 AM
To: Catherine Barker
Subject: Further supplementary information regarding 2011/12 SEQ Prices Monitoring
Attachments: Fedtreasury2.doc; Discounted Cash Flow Assessment.doc; Undertreasurer7(1).doc

Follow Up Flag: Follow up
Flag Status: Flagged

This email contains an attachment that may be work related and must be filed into the DMS. If you need assistance with the Executive Officer at xo@qca.org.au.

SEQ 2011/12 Prices Monitoring
Attn. Ms. Cath Barker,

Dear Ms. Barker,

I refer to the submission dated 3 August and contentions expressed in paragraph two, together with information provided in the third paragraph of the letter of 2 November to the Assistant Treasurer. To assist in QCA's consideration of this correspondence, a letter dated 17 October 2000 to the Maroochy Water Services Advisory Board (MWSAB) from Council's most senior financial officer (a Mr. Richard Hancock at that time) is attached. An edited version of this letter was later published as Appendix "B" to the MWSAB Agenda Reports of 26 October 2000.

Please note the critical information provided in the **highlighted** second paragraph of page 4 of this correspondence. Such emphasis was necessary because the definition of capital employed used as capital base for this discounted cash flow (DCF) analysis was the written down deprival value of the total assets of MWS rather than Regulatory Assets as properly defined in QCA's Statement of Regulatory Pricing Principles (December 2000). A corrected DCF analysis using more realistic estimates of Regulatory Assets is provided in the 12 April 2006 correspondence to the Under-Treasurer that is also attached.

It should also be noted that the edited version of the 17 October 2000 letter appearing as Appendix "B" Appendix "B" to the MWSAB Agenda Reports of 26 October 2000 omitted the highlighted second paragraph discussed above.

Kind regards,

Richard Koerner
Ps A copy of the letter dated 17 October 2000 was provided with Submission # DR 91* to the Productivity Commission's Urban Water Sector Inquiry for regard in the final report #55 under its Terms of Reference consideration #9.

----- Original Message -----
From: Richard Koerner
To: Cath Barker
Sent: Thursday, November 03, 2011 8:26 PM
Subject: Re: Public comment regarding 2011/12 SEQ Prices Monitoring

Dear Ms. Barker,

Attached for the QCA's information is correspondence to the Assistant Treasurer relating to failure by the Productivity Commission to adequately consider correspondence suggesting refusal of the Queensland Government to uphold NWI Pricing Principle commitments in Report # 55.

Kind regards,

Richard Koerner

----- Original Message -----
From: Cath Barker
To: Richard Koerner
Sent: Wednesday, August 03, 2011 10:47 AM
Subject: RE: Public comment regarding 2011/12 SEQ Prices Monitoring

Thankyou Mr Koerner for your submission.

Regards

Cath Barker
Queensland Competition Authority

From: Richard Koerner [mailto:rjkoerner@iinet.net.au]
Sent: Wednesday, 3 August 2011 10:21 AM
To: Cath Barker
Subject: Public comment regarding 2011/12 SEQ Prices Monitoring

This email contains an attachment that may be work related and must be filed into the DMS. If you need assistance wit
the Executive Officer at xo@qca.org.au.

Dear Ms. Barker,

Please consider the attached correspondence relating to Terms of Reference given the QCA by the Ministers.

Kind regards,

Richard Koerner

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Australian Government

The Treasury

Parliamentary Services Unit
The Treasury
Langton Crescent
Canberra ACT 2600

24 NOV 2011

Mr Richard J Koerner
31 Fauna Terrace
COOLUM BEACH QLD 4573

Dear Mr Koerner

Thank you for your letter of 2 November 2011 to the Assistant Treasurer and Minister for Financial Services and Superannuation concerning Australia's Urban Water Sector.

As the matter falls more directly within the portfolio responsibilities of the Minister for Sustainability, Environment, Water, Population and Communities, the correspondence has been referred to the Hon Tony Burke MP for his attention.

Yours sincerely

[redacted]

Kim Harrington
A/g Manager
Parliamentary Services Unit

To: **Maroochy Water Advisory Board**

From: **General Manager Corporate Services**

Subject: **Discounted Cash Flow Assessment**

Date: **17 October 2000**

INTRODUCTION

The advisory board has requested that:

- An update be performed on the discounted cash flow analysis (DCF) contained in a Deliotte Touche Tohmatsu report of 1997, with focus on real operating cash margins and the sensitivity of the terminal values of cash flows
- The likely real rate of return on capital employed from 98/99 forward be determined. This analysis will need to take into account relevant aspects of the overall DTT report.

This reports presents the results of the analysis.

APPROACH

The approach used was to assess the cash flows associated with each of the businesses of Maroochy Water and to relate these cash flows to the value of the assets in each of the business segments. The cash flow analysis considered the cash revenues and cash operating costs, and the net capital expenditures required in each of the business after providing for the projected growth in EP numbers until the present capacity to supply additional raw water was reached (2018).

In order to avoid the debate and doubt about the assessment of terminal values, the cash flows for each of the business segments were taken out some 50 years and discounted back to derive the derive the real rate of return on the projected cash flows.

To derive the cash flows in each of the business segments, the major components were assessed as follows:

1 Firstly, an unbundling of the **operating revenues and costs** to each of the business segments was required. These costs were then assessed as to fixed and variable components. Growth factors were applied to the variable components of expenditure and revenue based on the expected growth rates in equivalent population (EP) for water and sewerage to derive the forward projected cash flows for each of the segments. The projections for EP were sourced from the Strategic Planning Branch and average 3.2% annual compound population growth from 2001 to 2016.

2 Secondly, an assessment was made of the **net capital investment** in infrastructure to service the EP growth. This covered the projected level of capital investment to service the growth in EP demands, and the expected amounts of developer cash contributions and donated assets to fund the investment. Hence net capital expenditure investment amounts were derived for each of the 50 year cash flow period.

BASE CASE ASSUMPTIONS

Asset Values

The following values of employed assets were used in 6/99 dollars for the four business unit segments:

	$ millions
Water Wholesale	18.2
Water Retail	113.7
Sewerage Wholesale	71.1
Sewerage Retail	194.2
Total Business	**397.2**

These values were based on the optimal deprival value of the assets in each of the business segments.

Fixed / Variable Costs Profile

For each of the business segments an analysis was done to stratify the operating cost and revenue of the businesses into fixed and variable costs.

Overal, the ratios for fixed versus variable for 99/00 and 99/00 for the base case were 79.3% / 20.7% and 78.2% / 21.8% respectively. Various ratios applied for the business segments.

Population Growth Rates to 2005

For the base case the employed assets were assumed to have a built in growth component of **say 5 years up to 2005**. This means that the assets are sufficient to service equivalent population demands of up to:

- 127,000 for water, and
- 136,00 for sewerage.

This represents, on average, population growth rates of 2.9% for water and 2.5% for sewerage

Hence, the average costs for EP are:

	$
Water Wholesale	143
Water Retail	895
Sewerage Wholesale	523
Sewerage Retail	1428
Total Business	**2989**

Population Growth Rates – To 2018 years

For the purposes of the financial analysis, the system demand will be assumed to grow until present raw water supply capacity is fully committed at 2018, at which time EP demands will be:

- 175,000 for water, and
- 183,000 for sewerage, under the base case system growth forecasts.

Capital Expenditure Requirements

If the system were to service the EP demands in 2018, the following total additional capital expenditure investments would need to be put in place over the period 2005 to 2018:

	Value Required as at 2018 $6/99 millions	Additional Total Cap Exp $6/99 millions	2005 to 2013* Annual Cap Exp $6/99 millions
Water Wholesale	25.1	6.9	.8
Water Retail	156.7	43.0	2.8
Sewerage Wholesale	95.7	24.6	3.1
Sewerage Retail	261.3	67.1	3.2
Total Business	**538.8**	**141.6**	**9.9**

* assumes that the lead time for investment capacity to be taken up is 5 years.

Developer Contributions

The growth in infrastructure which is to funded through donated assets, or through developer cash contributions to MWS for headwork investments from 2005 to 2018 is assumed as follows:

	Cash Contributions $ millions	Donated Assets $ millions
Water Wholesale	0.5	0
Water Retail	1.7	1.6
Sewerage Wholesale	1.9	0
Sewerage Retail	2.0	3.2
Total Business	**6.1**	**4.8**

In determining the net capital investment for cash flow purposes, the net cash contribution fro developers has been offset against the capital investment undertaken by Maroochy Water to service the growth in demand.

In relation of donated assets, these progressively form part of the ongoing assets base, which is required to service the demand growth, but is not included in the cashflow analysis as these represents assets that are constructed by developers and are subsequently donated to Council as part of their development requirement.

Ongoing Capital Investment Post 2018

The capital investment required for maintaining ongoing service delivery **from 2018** is estimated at 80% annual depreciation of employed assets for each year at the following rates:

	$ millions	$ millions
Water Wholesale	1.5%	0.2
Water Retail	1.6%	2.0
Sewerage Wholesale	2.5%	1.5
Sewerage Retail	1.6%	3.3
Total Business	**538.8**	**7.0**

BASE CASE RESULTS

The results of the DCF analysis using the above assumptions are as follows:

Business Segment	DCF Rate of Return
Water Wholesale	14.0%
Water Retail	11.2%
Sewerage Wholesale	8.3%
Sewerage Retail	6.5%
Total Business	**8.6%**

A REAL DCFROR VALUE OF 8.6% FOR THE TOTAL BUSINESS IS ACCEPTABLE, AS THE REAL COST OF CAPITAL FOR MWS IS CURRENTLY FORECAST TO BE 8%. HOWEVER CALCULATIONS SUGGEST THE SEWERAGE BUSINESS AS A WHOLE WILL YIELD A REAL DCFROR OF 7%.

DIFFICULTY WITH THESE CONCLUSIONS IS THAT REAL RETURNS SHOULD BE ONLY ABOUT 4% BECAUSE PAST ASSETS HAVE BEEN DONATED AND/OR PURCHASED WITH DEBT. THE WDRV OF ASSETS USED IN THESE DCF CALCULATIONS GREATLY EXCEEDS THE REGULATORY CAPITAL BASE THUS UNDERSTATING DCF RESULTS.

SENSITIVITY ANALYSIS

Because for the difficulty associated with accurately predicting the forward growth profile for various elements that are critical in the cash flow analysis, a sensitivity analysis was performed for the following cases:

1 The assessed **split of fixed / variable costs** for the business segments was varied by increasing the variable component by **10%** over the base case assumption. Although this split was assessed in detail, it is appropriate to test the sensitivity of this ratio

2 In relation to **developer headworks contributions**, due to the high uncertainty about these revenue contributions that are subject to the property and economic cycles, **$2 million per annum** headwork contributions were assumed for the first 5 years, rather than $5.1 million, and 80% recovery of future MWS headwork investment by developer cash contributions, rather than 100% which is the base case assumptions

3 For population growth rates, in the past reasonably high growth rates have occurred in the region. However, recent trends have been more subdued, and therefore two scenarios were examined for impacts on the business returns.

- **A low population growth of 1.5%** per annum was assumed, rather than the base case average 3.2% growth assumption
- **A high population growth case of 5%** annual compound growth rate in EP was calculated

Under these scenarios the following results were obtained:

Business Segment DCF ROR	10% increase in variable cost cf Fixed Costs Ratio	$2m in developer contributions cf $5.1m	Low Population growth rates of 1.5%	High Population growth rates of 5% pa
Water Wholesale	13.4%	13.5%	11.8%	11.8%
Water Retail	11.4%	11.1%	10.3%	10.3%
Sewerage Wholesale	7.8%	7.8%	7.1%	7.1%
Sewerage Retail	6.4%	6.5%	5.5%	7.7%
Total Business	**8.5%**	**8.4%**	**7.6%**	**9.25%**

From the above analysis it appears that the sensitivities seem to be mainly in the area of population growth rates. This is not surprising given the capital intensive and high fixed cost nature of the business. However these results again highlight lower rates of return in the sewage business, and for the business as a whole should the low demand growth scenario eventuate.

CONCLUSIONS

Acceptable Returns
The conclusions from the above analysis are that acceptable returns are likely to be achieved for the water business segments, however the sewerage segment returns are lower than what could be expected.

As a general standard, each of the business segments should be yielding rates in excess of 8% real.

Focus to be on Optimisation of Asset Usage and New Capital Investment
In businesses that are capital intensive it is critical that existing infrastructure assets are used to optimal capacity and that new capital investment is tested as to its economic efficiency relating to take up rates of capacity utilisation.

Pricing Structure Review
Hence there should be a review of the pricing structure that would enable the sewerage businesses to return at least 8% on assets employed. For the water segments, it would be appropriate to draw comparisons to other similar authorities to test where Maroochy Water is in relation its level of pricing / rates per EP of property services. Given the influence of the Caloundra - Maroochy Water Board as both supplier and price setter for MWS it would be well to examine investment returns achieved by this entity in as much depth as for the business elements of MWS.

Population and Area Growth Forecasts
At present population and regional growth estimates are being prepared by the Strategic Planning area of Council.

However, in relation to the planning of infrastructure growth it is appropriate for Maroochy Water to take a more active profile in relation to population, EP number, and area growth forecasts, in order to better manage the level of infrastructure capacity being built to provide for future population demands. In order for MWS to be accountable for infrastructure investment efficiency, it is important that the responsibility for demand forecasting be vested with MWS management.

Developer Contributions
Further work needs to occur to ensure that the full level of cash contributions for developers is being received. This requires a review of the administrative system that are in place that record the total liability of developers up front, and that as the assets are constructed by Council, that proper accounting processes are in place to ensure receipt of the developer's funding liability.

Cross Subsidisation
Further work in the area of customer and business segment cross subsidies will need to take the results of this study into account when endeavouring to derive the operating costs and revenues associated with the respective elements of the pricing structure and the associated assets employed to the different demand components.

Caloundra Maroochy Water Supply Board
The equity investment in this authority has not been examined in this exercise from a return on assets point of view. However, the costs associated with Council's contribution to the precept and the costs of water purchase have been included in the wholesale costs of the water business.

At this stage until the return for the authority are assessed, it is possible that the return in theses operations are being passed through to Maroochy Water through lower cost price of the water purchase and the operating contributions requirements that could be the case if the return were being passed on directly to Council as a return on its equity.

Further work on the returns to Council from these operations need to be separately considered.

Coolum Beach Progress & Ratepayers Association Inc.
PO Box 121
Coolum Beach Q 4573

12 April 2006

The Under Treasurer
Queensland Government
GPO Box 611
Brisbane Qld. 4001
Reference: Queensland Competition Authority (QCA) TRO-06280

Re: Prices oversight investigation request - Maroochy Water Services (MWS)

Dear Mr.Bradley,

Thank you for the response of 3 March 2006 and provision of Council's Annual Report at the 4 April meeting with Treasury Officers at Noosa.

Further to the Association's letter of 27 January, it appears manipulation of regulatory capital financial data has also taken place in each of the three years reviewed by Treasury Officers. Asset values quoted in the Ministers letter of 25 September 2004 appear not to have been adjusted to reflect long term debt incurred by MWS for construction of water and sewerage infrastructure. As interest on infrastructure debt is considered in the calculation of NPAT, estimates of regulatory capital base for calculation of return on assets must surely deduct long term debt for each of the years considered.

Values of regulatory assets used by the Ministers for return on investment estimates quoted in TRO-06280 are:

	2000/01	2001/02	2002/03
$Millions	279.4	279.7	324.4

For the reasons discussed at the November 2004 meeting with Treasury Officers, the Association reaffirms our belief that the write up of long term assets in 2002/03 was unwarranted and a ploy to further manipulate the return on regulatory assets in that financial year. Setting aside that issue for the moment, more appropriate values of assets to be used in calculation of return on regulatory assets with infrastructure long-term debt deducted can now be determined from ROCE data as ($millions):

1999/00	2000/01	2001/02	2002/03	2003/04 (Target)	2004/05
114.3	105.6	123.6	161.5	125.5	102.0

According to financial data now also available in the public domain, actual values of NPAT for MWS are in fact:

	1999/00	2000/01	2001/02	2002/03	2003/04	04/05
$Millions	34.3	23.0	26.5	28.3	36.2	39.1

Average annual returns on regulatory assets are calculated at 25.5% for the years 1999/00 to 2004/05. Average annual MWS service charges in excess of ceilings permitted under LGA Financial Standards is $20.7 million, or about $450 per connected property per year.

Such an average return on regulatory value is significantly in excess of the range from 8.0 to 8.6 % considered reasonable, despite the contention to the contrary made in the Minister's letter of 16th June 2005. Total overcharging from 99/00 to 04/05 seems about $120 million

Since the declaration of MWS as a commercialising business entity in 98/99, Maroochy ratepayers connected to water and sewerage services appear to have suffered monopoly-pricing abuse of more than $100 million. It remains the Association's conviction that satisfactory resolution to the MWS prices oversight complaint mandates prompt referral of the matter to an independent entity such as the Queensland Competition Authority.

Yours sincerely,

Peter M. Brown
President

Cc: The Hon. Desley Boyle - Minister for Local Government and Planning