Essential Services Commission

Draft decision - 2013 Water Plan

Barwon Water Response

DATE: 2 May 2013

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The purpose of this document is to respond to the Essential Services Commission's (the Commission's) draft decision on Barwon Water's 2013 Water Plan and provide up to date information to the Commission. This information will form part of the Commission's final 2013 Water Plan period price decision which will set the maximum tariffs that Barwon Water can charge customers between July 2013 and June 2018.

Barwon Water would like to take this opportunity to thank the Commission for the opportunity to respond to its draft decision and for considering Barwon Water's response so as to come to a position on Barwon Water's 2013 Water Plan which is in the best long-term interest for customers.

Background

Barwon Water submitted its Draft 2013 Water Plan to the Commission in September 2012 for the regulatory period 2013-2018.

Since then Frontier Economics and Deloitte conducted an audit on Barwon Water's demand and expenditure forecasts respectively. In addition to supplementary information provided as part of these audits, Barwon Water also provided supplementary information on:

- new customer contributions (NCCs),
- proposed service standards targets and
- the inclusion of the Northern Victorian Rural Irrigation Renewal Project (NVIRP)

Between September 2012 and March 2013 the Commission considered Barwon Water's proposals, releasing its draft decision for the regional Victorian water businesses on the 26 March 2013.

Barwon Water met with the Commission on the 10 April 2013 to discuss key aspects of the draft decision which are addressed in this response.

About the structure of Barwon Water's response

Barwon Water has structured this response to the Commission's draft decision to aid the reading in referencing each section to the layout of the regional businesses' draft decision Volume I (March 2013)[1].

Each section of this response begins with a box summarising the Commission's draft decision and Barwon Water's response. The colour of Barwon Water's response will depend whether Barwon Water is seeking that the Commission review a part of its draft decision or whether the draft decision has been accepted or accepted with additional information provided.

COMMISSION'S DRAFT DECISION:
BARWON WATER REPONSE: Seek that Commission Review
BARWON WATER REPONSE: Accept / accept with additional information provided

What follows is a detailed response of each part of the draft decision stating Barwon Water's position and rationale where we ask the Commission to review any areas of the draft decision. Attachments of supporting information as referenced in this document are provided with this document.

[1] http://www.esc.vic.gov.au/getattachment/82f71903-fb8c-4462-9417-156e86793d88/Regional-water-price-review-2013-18-Draft-decision.pdf

DETAILED RESPONSE TO THE COMMISSION'S DRAFT DECISION

1. CUSTOMER BILLS AND PRICES

COMMISSION'S DRAFT DECISION:

The Commission proposed the following annual price changes on 26 March 2013.

as at 26 March	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Price Path (%)	-3.3	-2.0	-2.0	-2.0	-2.0	**-10.8**

COMMISSION'S DRAFT DECISION (*revised*)**:**

The Commission has proposed the following (revised) annual price changes on 27 March 2013.

as at 27 March	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Price Path (%)	-1.2	-1.2	-1.2	-1.2	-1.2	**-5.9**

BARWON WATER REPONSE: Seek that the Commission Review

Barwon Water is proposing the following annual price changes.

	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Price Path (%)	-1.0	-1.0	-1.0	-1.0	-1.0	**-5.1**

Barwon Water's proposed price path results from modelling all of the changes discussed in this response, including:

- change in potable demand, in light of the scheduled closure of major industrial customer (Fonterra)
- Northern Victoria Irrigation Renewal Project (NVIRP), and Goulburn and Murray headworks contributions payments
- Labour costs
- New Customer Contributions (NCCs)

Barwon Water's preference is to adopt a smooth price path as it is easier to communicate to customers.

1.1 Price Path

The Commission's draft decision released on 26 March 2013 proposed the following percentage change to customer prices (price path) for Barwon Water.

Original Commission draft decision price path

as at 27 March	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Price Path (%)	-3.3	-2.0	-2.0	-2.0	-2.0	**-10.8**

On review of the Commission's draft decision financial model, Barwon Water identified an anomaly in the class A recycled water volume forecasts. Barwon Water acknowledges the Commission's revised draft decision price path as per an email from the Commission on 27 March 2013. As a result the price path was revised as outlined below after reverting to Barwon Water's original recycled water demand forecasts. This is discussed further in section 8 of this response (Demand).

Revised Commission draft decision price path

as at 27 March	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Price Path (%)	-1.2	-1.2	-1.2	-1.2	-1.2	**-5.9**

Barwon Water proposes the following price path:

Final Barwon Water proposed price path

	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Price Path (%)	-1.04	-1.04	-1.04	-1.04	-1.04	**-5.1**

Barwon Water's proposed schedule of tariffs to apply over the 2013 Water Plan period, 2013-14 to 2017-18, is provided in Attachment 1.1 (Barwon Water proposed schedule of tariffs - 2013-18)

Barwon Water's preference is to adopt a smooth price path as it:

- Is simpler to communicate to customers,
- Reduces initial price shocks,
- Simplifies expenditure forecasting for businesses reliant on water as a factor of production.

Barwon Water's proposed price path results from modelling all of the changes discussed in this response, including:

- change in potable demand, in light of the scheduled closure of major industrial customer (Fonterra)
- Northern Victoria Irrigation Renewal Project (NVIRP), and Goulburn and Murray headworks contributions payments
- Labour costs
- New Customer Contributions (NCCs)

1.2 Customer Bills

Indicative residential customer bills based on the Commission's revised draft decision and Barwon Water's final proposals are given in the table below.

Indicative customer bills

	Current Bill (2013$)	Bills based on Draft Decision* (2013$)		Bills based on Final Barwon Water proposed Price Path (2013$)	
	2012/13	2013/14	2017/18	2013/14	2017/18
Residential Owner Occupied	1,049	1,011	933	1,045	1,002
Tenant	338	326	300	341	327

Indicative bills calculated using 2011-12 average consumption of 156kL.
**Based on 26 March draft decision price outcome of -10.8% over 5 years.*

2. SERVICE STANDARDS

COMMISSION'S DRAFT DECISION:

14 targets proposed by Barwon Water in its Water Plan were rejected by the Commission. 7 targets proposed were approved.

BARWON WATER REPONSE: Seek that Commission Review

Of the 14 targets rejected by the Commission, Barwon Water proposes to:

- improve 12 of the targets,
- lower the target for *Telephone calls answered within 30 seconds (Accounts Line) (% of Calls)*
- Include target for Unaccounted for water (%)

Barwon Water has reviewed the Commission's draft decision and supplementary appendix on service standards and has undertaken an in-depth analysis to propose new targets and supporting rationales that reflect:

- alignment of the targets within +/-5% of the five-year average for the majority of targets. Barwon Water has received verbal advice from the Commission that targets within +/-5% of the five-year average are reasonable. Those targets that are not within 5% of the five-year average are explained in more detail in Attachment 2.2.
- significant improvements to 2008 Water Plan target levels
- extensive operational, cost, climate, industry comparison and statistical considerations.

Given the above, Barwon Water proposes to improve 12 of the rejected targets by an average of 25% compared to their equivalent 2008 Water Plan targets.

Barwon Water proposes to lower the target for:

- *Telephone calls answered within 30 seconds (Accounts Line)* from 95% to 90%.

A summary of the final proposed 2013 Water Plan Service Standards targets is given in the table below.

Summary of final proposed 2013 Water Plan Service Standards targets

	Core Service Standard	5 year ave.	2008 Water Plan target	2013 Water Plan target	▲
1	Unplanned water supply interruptions (per 100km main)	21.60	30	**25**	↑
2	Average minutes to respond to bursts and leaks (priority 1)	25.39	35	**27**	↑
3	Average minutes taken to attend bursts and leaks (priority 2)	41.34	68	**43.4**	↑
4	Average minutes taken to attend bursts and leaks (priority 3)	215.17	360	**225**	↑
5	Unplanned water supply interruptions restored within 5 hours (per cent)	96.78	96.5	**96.5**	=
6	Planned water supply interruptions restored within 5 hours (per cent)	88.73	80	**85**	↑
7	Average unplanned customer minutes off water supply (minutes per customer)	16.29	20	**20.0**	=
8	Average planned customer minutes off water supply (minutes per customer)	40.41	46.2	**42**	↑
9	Average unplanned frequency of water supply interruptions (per customer)	0.15	0.20	**0.16**	↑
10	Average planned frequency of water supply interruptions (per Customer)	0.22	0.22	**0.22**	=
11	Average duration of unplanned water supply interruptions (minutes)	107.27	100	**125**	↓
12	Average duration of planned water supply interruptions (minutes)	188.6	210	**210**	=
13	Customers experiencing >5 unplanned water supply interruptions in the year	0.50	150	**1.0**	↑
14	Unaccounted for water (%)	8.8	8.00	**9**	↓
15	Sewer Blockages per 100km of Sewer Main (per 100km main)	35.12	43	**37.0**	↑
16	Average time to attend sewer spills and blockages (minutes from notification)	49.94	80	**52.5**	↑
17	Average time to rectify a sewer blockage (minutes from notification)	169.76	250	**175**	↑
18	Spills contained within 5 hours (per cent of Spills) (Priority 1)	99.33	100	**100**	=
19	Customers receiving more than 3 sewer blockages in the year	0.40	3	**1.0**	↑
20	Complaints to EWOV (per 1000 customers)	0.50	0.50	**0.65**	↓
21	Telephone calls answered within 30 seconds (Accounts Line) (% of Calls)	95.84	95	**90**	↓

Key: Targets already approved via the Draft Determination

Attachment 2.1 - Confirmation from the ESC on approved targets (Email 30 April 2013)

Attachment 2.2 - Barwon Water's detailed rationale of the proposed Service Standards targets.

Despite largely accepting an approximate 5-year average for service standards, Barwon Water would like to note that the 5-year average approach may present a number of difficulties:

- The 5-year average does not take into account the risks arising from uncontrollable externalities, e.g. climate variability, which may lead to targets not being met. Barwon Water has provided rationales in Attachment 2.2 that comment on the effects of climate for each relevant indicator which should be considered when approving targets.
- If the Commission proposed to roll the same methodology forward into Water Plan 4, this would continue to increase performance while increasing cost, assuming that Barwon Water meets or exceeds its targets. The marginal cost may then exceed the marginal customer benefit.
- The cost to meet higher service levels would increase compared to the forecast operating expenditure proposed in this response.

Barwon Water has consulted with customers who are satisfied with these levels of service. This is reflected in Barwon Water's original 2013-18 Water Plan consultation and 2012 Customer Perception Survey as provided in Attachment 2.3.

3. GUARANTEED SERVICE LEVELS (GSLs)

COMMISSION'S DRAFT DECISION:

The Commission proposes to approve the GSL schemes proposed by Barwon Water.

BARWON WATER REPONSE: Accept

Barwon Water accepts the Commission's draft decision. No action required.

Barwon Water's proposed GSLs are given in the table below:

Service attribute	Guaranteed level of service	Payment 2013$
Water supply reliability	No more than five unplanned water supply interruptions per customer per year	$72
Sewerage service reliability	No more than three unplanned sewerage service interruptions to a customer's property per year	$72
Sewerage service reliability	No more than two sewer spills on a customer's property per year	$553
Hardship	Customer contact prior to restriction and legal action	$300

4. OVERVIEW OF REVENUE REQUIREMENT

COMMISSION'S DRAFT DECISION:

The Commission proposes to revise revenue requirements to $880.6m as a result of weighted average cost of capital (WACC), operating and capital expenditure and new customer contributions amendments.

BARWON WATER REPONSE: Seek that the Commission Review

Barwon Water proposes a revenue requirement of $887.0m over the 2013 Water Plan period.

4.1 Revised Revenue requirement

The revised revenue requirement reflecting updates proposed in this document is given in the table below:

Revenue requirement

2013$m	2013-14	2014-15	2015-16	2016-17	2017-18
Operating expenditure	94.7	94.7	94.7	95.4	95.2
Return on existing assets	47.2	45.8	44.4	43.0	41.6
Return on new investments	2.0	5.3	7.8	10.3	12.2
Regulatory depreciation	28.9	29.5	30.4	31.4	32.3
Total (887.00 over five years)	**172.9**	**175.3**	**177.3**	**180.2**	**181.3**

Barwon Water's proposed revenue requirement results from proposed changes (compared to the Commission's draft decision totalling $880.6m over five years) to Barwon Water's forecast operating and capital expenditure. These are explained in Sections 5 and 6 respectively below. In addition, Barwon Water has provided supplementary information with regard to a number of capital projects, as discussed in Section 7 (financing capital investments).

5. OPERATING EXPENDITURE

COMMISSION'S DRAFT DECISION:

The Commission proposes to reduce operating expenditure by a total of $6.09m over the 5 years of the 2013 Water Plan to $474.23million compared to Barwon Water's original proposals. It proposes adjustments to labour, energy, environmental contribution and licence fees expenditure offset by an allowance for defined benefits.

BARWON WATER REPONSE:

Barwon Water proposes the following operating expenditure for the 2013 Water Plan period.

2013$m	2013/14	2014/15	2015/16	2016/17	2017/18	Total
	94.72	94.74	94.66	95.43	95.21	**474.77**

Partial Acceptance:

Barwon Water accepts the adjustments to energy, defined benefits, environmental contribution and licence fees.

Seek that the Commission review:

Barwon Water does not agree with Deloitte's calculation of labour expenditure. Barwon Water seeks that the Commission's amends the proposed adjustment for labour to reflect the correct timing and impacts of the Enterprise Agreement (EA).

Barwon Water would like to highlight that Barwon Water's original forecasts (and accepted forecasts as part of this response) imply a productivity hurdle considerably in excess of the Commission's 1 per cent per annum minimum. Barwon Water has estimated a productivity hurdle of 2.4% per cent per annum. Barwon Water's original and revised forecasts are, by this measure, extremely low. Barwon Water would like to highlight possible methodological shortcomings with Deloitte's approach to forecasting operating expenditure, which "cherry picked" a number of operational expenditure items that it considers are likely to be over-forecast in a bottom-up analysis.

5.1 Labour

Barwon Water accepts the methodology that Deloitte has applied in forecasting labour expenditure. However, Barwon Water notes that Deloitte has misinterpreted when the new Enterprise Agreement (EA) commences. This misinterpretation was highlighted to Deloitte in Barwon Water's response to the Draft Expenditure Audit Recommendations submitted 25 January 2013. Deloitte assumed the EA commences from 1 March each year when the previous EA expires. However, the time at which salary increases are applied is in December 2013 once employees' performance plans have been undertaken to determine whether the business targets set out in the EA have been met, as shown in the relevant pages of Attachment 3.1.

Barwon Water provided new calculations for labour using Deloitte's labour modelling as a base, which corrected the labour increase for 2012/13, 2013/14 and 2014/15 to align with the timing of the EA. Deloitte's labour model is provided in Attachment 3.2.

In the Draft Determination workings from Deloitte, the 2014/15 labour increase has been adjusted to account for the timing of the EA as per Barwon Water's workings, however the 2012/13 and 2013/14 years have not been corrected by Deloitte. Therefore the calculations are now inconsistent both in 2012/13 and 2013/14, and also in each subsequent year, due to the compounding effect that the error has on the labour figures.

Therefore, based on Deloitte's labour modelling but adjusting the timing of when the new EA impacts the labour costs, Barwon Water's labour costs should be increased, as outlined in the table below.

Labour operating expenditure

Operating expenditure item (2013$m)	Water Plan forecast					
	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Barwon Water's Water Plan proposals	38.86	39.61	40.43	41.27	42.13	202.30
Deloitte's proposed labour costs	39.73	39.86	39.86	39.86	39.86	199.17
Barwon Water's adjustment due to timing of commencement of new EA	39.78	39.92	39.92	39.92	39.92	199.45
BW proposed reduction to Water Plan numbers	**- 0.92**	**- 0.31**	**0.51**	**1.35**	**2.21**	**2.85**
Variance to Deloitte's proposed labour costs	0.06	0.06	0.06	0.06	0.06	0.28

To accompany this response, Barwon Water has provided workings to the commission using Deloitte's labour model to support the figures above in Attachment 3.2.

5.2 Defined Benefits

Barwon Water notes Deloitte's reasons for allowing businesses to include additional expenditure to pay for the superannuation call up, along with the increase in the assumed borrowing rate from 5.5% to 5.75% to reflect industry advice on current borrowing rates.

Barwon Water agrees with the consistent approach of allowing all water businesses to include the expenditure during the 2013 Water Plan, regardless of how the contribution was paid by each water business.

5.3 Energy Expenditure

Subsequent to the submission of the Water Plan, Barwon Water has received the new electricity contract from Procurement Australia. Based on initial modelling, the new contract reflects that prices will be lower than originally forecast as part of the WSAA indices forecast.

Barwon Water is satisfied that the approach and the amount removed by Deloitte for electricity costs are reasonable, based on more up-to-date forecasts than available to Barwon Water at the time of the Water Plan submission.

5.4 Environmental Contribution

Barwon Water accepts the adjustment made by the Commission for the environmental contribution, based on revised forecasts made to the Commission by the Department of Sustainability and Environment that were not available at the time of the Water Plan submission.

5.5 Licence Fees

Barwon Water accepts the adjustment made by the Commission for licence fees, based on more revised information from the Department of Health and the Environmental Protection Agency that was not available at the time of the Water Plan submission.

5.6 Methodological shortcoming in Deloitte's operational expenditure forecasting approach

Barwon Water accepts the revised expenditure forecasts contained within the Commission's draft decision, other than with regard to minor adjustments to labour forecasts as discussed above, because it considers that the revised forecasts are achievable and are therefore in the interest of customers.

However, Barwon Water would like to highlight that Barwon Water's original forecasts and accepted forecasts as part of this response imply a productivity hurdle considerably in excess of the Commission's 1 per cent per annum minimum hurdle. Barwon Water's original and revised forecasts are, by this measure, extremely low.

Deloitte has "cherry picked" a number of operational expenditure items that it considers are likely to be over-forecast in a bottom-up analysis. We accept its conclusions that the net amounts of those items were not forecast as efficient. However, the overall top-down assessment shows Barwon Water's original forecast to be considerably better than the Commission's minimum productivity hurdle. Had Deloitte done a full bottom-up analysis of Barwon Water's entire operational proposal it would have concluded that the gross proposed operational expenditure is efficient.

6. CAPITAL EXPENDITURE

COMMISSION'S DRAFT DECISION:

The Commission is proposing to defer the majority of the $25 million of capital expenditure for the Colac water source expansion, but accepted the proposed expenditure for future options analysis and community consultation.

The Commission also proposes to change expenditure for a number of other capital projects.

BARWON WATER REPONSE:

Barwon Water has used the following capital expenditure adjustments to its Water Plan 3 proposals in order to calculate the revenue requirement and price proposed in this response to the Commission:

	2013$m	2013-14	2014-15	2015-16	2016-17	2017-18	WP3 TOTAL
	WP3 proposal	101.75*	63.93	68.9	85.94	45.44	360.04
Adjustments	Sewer Mains replacement/rehab	-1.52	0.38^	0.38^	0.38^	0.38^	0.00
	Colac Water Source Aug				-25.34		-25.34
	Inverleigh Low Level FM			-0.31	0.34	-0.01	0.02
	Total	**94.31**	**64.31**	**68.97**	**61.32**	**45.81**	**340.63**

**96.04m less 0.21m for MGP plus 5.92m for NVIRP payment adjustment*
^The Commission's draft decision showed 0.34 which was incorrect.

Sewer mains replacement/rehabilitation: Barwon Water seeks that the Commission review

Barwon Water proposes changes to the sewer mains replacement/rehabilitation expenditure to that proposed by the Commission. This change is the result of a correction of a miscalculation by Deloitte.

Colac Water Source Augmentation: Barwon Water acknowledges the Commission's position

Barwon Water agrees with the Commission that the planning and design work for the Colac water source augmentation is required to be undertaken early in Water Plan 3.

Barwon Water's most up-to-date technical analysis of the Colac water source augmentation indicates that:

1. The required timing for completion of construction of the Colac supply augmentation is 2017/18 based on delivering the agreed level of supply security to customers in Colac, taking into account reasonable timeframes for consultation with customers, investigations, design and construction.
2. A recent announcement of the closure of a major industrial customer in Colac in 2013 will improve supply security for Colac customers, however, supply security targets, as endorsed by the Water Minister in Barwon Water's Water Supply Demand Strategy (2012), will still not be met in 2017/18.
3. The basis for the Commission's decision to remove the expenditure relating to the Colac augmentation from the upcoming regulatory period is due to misunderstanding by Deloitte of underlying supply and demand modelling.

Barwon Water acknowledges the Commission's position on the deferral of the construction expenditure relating to the Colac supply augmentation. Barwon Water has used the Commission's position to calculate the revenue requirement and the price path it proposes for customers within this response to the Commission. However, based on current forecasts, Barwon Water will not deliver the target level of water security to customers in Colac in 2017/18 without the supply augmentation. Barwon Water will monitor the water security outlook for the Colac supply system and may elect to proceed with construction of the supply augmentation in Water Plan 3 if risks to service standards become unacceptable.

Inverleigh Low Level Feeder Main: Barwon Water accepts the Commission's draft decision

Barwon Water accepts the adjustment to the Inverleigh Low Level Feeder Main based on Barwon Water's latest cost estimates and timings for these projects.

NVIRP contribution payment: Barwon Water seeks that the Commission review

As per supplementary information provided to the Commission on 7 December 2012, Barwon Water proposes to add $5.92 million to Barwon Water's 2013-14 RAB for the Northern Victorian Rural Irrigation Renewal Project (NVIRP).

6.1 Correction of Sewer mains - replacement / rehabilitation adjustment

Barwon Water would like to note that the capital expenditure adjustment in the draft decision is incorrect and proposes to adjust the capital expenditure of the Sewer Mains rehabilitation expenditure as per the table below.

Correction to Sewer Mains rehabilitation capital expenditure

2012$m	2013-14	2014-15	2015-16	2016-17	2017-18	WP3 TOTAL
Commission draft decision	-1.524	0.343	0.343	0.343	0.343	**-0.151**
Barwon Water proposed	-1.524	0.381	0.381	0.381	0.381	**0.00**
Change	**0**	**0.038**	**0.038**	**0.038**	**0.038**	**0.151**

The goal of the initial adjustment proposed by Deloitte was to spread the $1.524m in 2013-14 over the remaining four years of the 2013 Water Plan period. The net result over the 2013 Water Plan would have been $0. The table above shows that the Commission's draft decision proposes a net change resulting in -$0.151 over the 2013 Water Plan period due to a *miscalculation of the spread amount $0.343*. The correct spread amount is $0.381.

6.2 Colac Water Supply Project ($25.5m)

Capital expenditure for option selection, development and design

Barwon Water agrees with the Commission that adequate expenditure allowance is provided in 2013 Water Plan for option selection, development and design. This will enable the project construction to commence early in 2018 Water Plan (Water Plan 4), or earlier if climate conditions require.

Deloitte's stated basis of deferment of construction expenditure incorrect

Barwon Water strongly disagrees with Deloitte's stated rationale for deferment of the construction of Colac water source expansion project. It is based on misunderstandings of Barwon Water's supply and demand modelling. The key areas of misunderstanding by Deloitte are outlined below:

Deloitte's comment	Barwon Water response
'The supply reliability target of no restrictions 95% of time is not a specifically legislated target and does not have majority local or wider community support.'	As required by the State Government, Barwon Water undertook comprehensive consultation with its customers in relation to level of service as part of the development of its Water Supply Demand Strategy (2012). The Level of Service was set as required by DSE Guidelines approved by the Water Minister, Honourable Peter Walsh MP. This was a requirement of Barwon Water's Statement of Obligations while preparing the Water Supply Demand Strategy (WSDS). The service levels agreed through this process were: 1. No restrictions 95% of time; and 2. Supply continuity during severe drought based on: o Application of water restrictions using stages 1 to 4, and o Use of back up water sources if available (none available for Colac system)

	These service levels have been adopted for all of Barwon Water's supply areas. The Minister for Water has endorsed Barwon Water's 2012 Water Supply Demand Strategy and associated service level targets. Based on Barwon Water's current demand forecasting, Barwon Water will not meet these targets in the 2013 Water Plan if this project is deferred, and hence will be in breach of its service standards as set in accordance with the Statement of Obligations, its wider obligations as set by the Minister, and be non-compliant with community expectations.
'The modelling analysis undertaken to determine the need for, and timing of, this project, does not appear to account for the impact of water restrictions, beyond permanent water saving measures, which could have a significant impact on demand'	This statement is incorrect. Application of water restrictions in accordance with restriction rule curves is fully accounted for in the modelling. Barwon Water highlighted this error to Deloitte when reviewing Deloitte's draft report, however, Deloitte reproduced the error in its final report.
'A continuously repeated 1997-99 climate, was the worst recorded inflow period in Victoria and in this situation, water restrictions would have been implemented and should therefore have been assessed in the model'	This statement is incorrect or misleading on a number of counts: 1. Application of water restriction in accordance with restriction rule curves is fully accounted for in the modelling undertaken by Barwon Water. Barwon Water stated this fact to Deloitte in writing and Deloitte did not seek any further evidence. 2. Barwon Water has not assumed a continuously repeated 1997-99 climate. It has used this real climate period to model how the current Colac supply storages would behave during a single dry period should this single dry period occur on one occasion in the future. Every year (including in the 1997-1999 period) the Colac supply system is replenished to (or very near to) 100% over the wetter months of the year, and drawn down upon from this point over the drier months. The impact of the previous year's inflow over the period of the year is largely irrelevant to the supply security, as the supply is replenished (in full or very near to full) over the wet period of the year. 3. This modelling showed that, even with the application of water restrictions as per the restriction rule curves, the storages would be rapidly drawn down and 'reserve storage levels' would be breached. These reserve storage levels allow for 'dead storage' and storage required to ensure water quality is treatable. At less than 25% storage level, customers would likely become alarmed as action would need to start to be taken to prepare for water rationing (clear breach of service level target 2 that was endorsed by the Water Minister). 4. This is not the worst recorded inflow period in Victoria. It is, however, the three years of actual climate data that results in the greatest draw down of storages in the Colac supply system in the dry months. It is important to model this as a test to ensure reserve storage levels are not breached (assuming restrictions are applied) and ensure that the WSDS service level target of supply continuity during severe drought can be met at Colac.

To accompany this response, Barwon Water has provided to the Commission the information it provided to Deloitte which disputes Deloitte's findings in Attachment 4.1.

Major customer closure does not materially impact the forecast timing of the Colac supply augmentation

Between the submission of Barwon Water's Water Plan, Fonterra, a major customer in the Colac region, announced its closure. An article announcing the Fonterra closure published in the Weekly Times on 1 October 2012 is provided in Attachment 4.2. The closure was also confirmed verbally to Barwon Water management on 30 April 2013. This closure will reduce annual Colac water demand by a forecast average of 267 ML. This reduced demand will improve water security in Colac, however, Barwon Water's latest modelling indicates that it will still not meet the following service levels included in Barwon Water's Water Supply Demand Strategy, endorsed by the Minister and produced in accordance with the Statement of Obligations.

As such, Barwon Water maintains that the Colac supply augmentation needs to be completed by 2017/18, based on its current forecasts.

Barwon Water's position with regard to the Colac supply augmentation construction expenditure

Based on Barwon Water's latest technical analysis and modelling (including taking into account the closure of Fonterra), deferring construction of this project to early in Water Plan 4 should result in Barwon Water not delivering the target level of water security to customers in Colac for an additional year. Barwon Water would expose customers to an unacceptable risk of not meeting the second service level target of supply continuity during severe drought should climate conditions of 1997, 1998 or 1999 occur again.

Barwon Water acknowledges the Commission's position with regards to the construction expenditure for the Colac supply augmentation, and has used the Commission's position to propose the revenue requirement and price path in this response. However, Barwon Water will monitor the water security outlook for the Colac supply system and may elect to proceed with construction of the supply augmentation in Water Plan 3 if the risk to customers' security of supply is unacceptable.

Correct messaging in relation to this project is important

Barwon Water is currently undertaking a comprehensive consultation program in Colac in relation to the final selection of the preferred water source expansion option. Incorrect or misleading statements in the Commission's final determination or associated supporting reports have the potential to create confusion and undermine the consultation process.

Barwon Water therefore seeks that the Commission reviews the statements in relation to the deferment of this project for accuracy, including seeking a correction to the errors in Deloitte's review report.

6.3 Inverleigh Low Level Feeder Main

Barwon Water accepts the Commission's draft decision with regard to the Inverleigh Low Level Feeder Main, based on Barwon Water's latest modelling for the cost and timing of the project.

6.4 Added NVIRP contribution payment

As per the supplementary information provided to the Commission on 7 December 2012, Barwon Water proposes to add $5.92 million to Barwon Water's 2013-14 RAB as per Attachment 5.1 (Supporting letter for NVIRP contribution payment).

Due to the tradable nature of the asset, it will be treated to have a life of infinite years which means that no depreciation will be recovered, only a perpetual regulated rate of return.

7. FINANCING CAPITAL INVESTMENTS

COMMISSION'S DRAFT DECISION:

The revenue requirement that the Commission has proposed to approve for Barwon Water is subject to:

a) Profiling depreciation to better align cost recovery with asset utilisation.

b) Provision of additional cost- benefit analysis information in relation to the Meredith Water Supply Improvement project.

c) Provision of additional information in relation to the Black Rock Recycled Water Plant, the Armstrong Creek Recycled Water Transfer and Distribution project, and Torquay Recycled Water Dual Pipe project that demonstrates the costs for these projects will be borne by the beneficiaries.

d) Further possible changes to the regulatory rate of return between the Commission's draft and final decisions.

BARWON WATER REPONSE: Accept with additional information provided

Barwon Water has provided additional justification and supporting information requested by the Commission to ensure that the above listed projects are rolled into the RAB at the start of the upcoming regulatory period.

a) **Depreciation -** Barwon Water is of the strong opinion that the Commission's RAB calculation methodology outlined in section '8.3 Determining the opening value of the opening RAB at 1 July 2013' of the Commission's Guidance on Water Plans October 2011 paper addresses the Commission's concerns with profiling depreciation and proposes that no further changes are made to the depreciation profile of the assets in question.

b) **Meredith Water Supply Improvement project –** additional cost-benefit information has been provided to accompany this response.

c) **Recycled Water Projects** - The Armstrong Creek and Torquay north recycled water projects provide water for all new customers connected to the Geelong supply system and, assuming that the Colac supply system is linked to the Geelong supply system, 98% of the forecast new connections in Barwon Water's service area will benefit from the Armstrong Creek and Torquay north recycled water projects through contributing to meeting the growth in water demand due to new customers. The new framework for new customer contributions ensures that the costs of the recycled water scheme are attributed fairly to the beneficiaries.

d) **Rate of Return** – Barwon Water supports the Commission's position that it will reassess the rate of return as part of the Final Determination decision. Barwon Water considers a higher figure may be more appropriate as it would better take into account possible future increases in interest rates during the 5 year time frame.

7.1 Depreciation

Barwon Water is of the strong opinion that the Commission's RAB calculation methodology outlined in section 8.3 of its Guidance on Water Plans (October 2011) to determine the opening value of the opening RAB at 1 July 2013 addresses the Commission's concerns with profiling depreciation to better align with project utilisation for cost recovery proposes. Section 8.3 states that:

> *"The Commission's preferred approach for determining the opening RAB at 1 July 2013 uses actual capital expenditure, contributions (from government and customers), and proceeds from disposals from the commencement of the second regulatory period to 2011-12, and the* ***forecasts of capital expenditure, contributions and disposals used in the 2008 and 2009 price reviews for 2012-13. An adjustment will be made for any difference between assumed and actual net capital expenditure for 2012-13 when the opening RAB is calculated for the fourth regulatory period."*** (Barwon Water's emphasis)

Importantly, the Commission's RAB calculation methodology includes using assumed capital expenditure for 2012/13 as forecast at the time of the last determination, rather than actual capital expenditure incurred (or currently forecast to be incurred).

Barwon Water believes it is very important to note the table below which demonstrates that for the three highlighted projects, the majority (62%) of the unexpected expenditure incurred in Water Plan 2 was incurred in 2012/13, and hence will not be rolled into the RAB until the start of Water Plan 4 (as per the Commission's RAB calculation methodology). The result is that Barwon Water will absorb this foregone depreciation and return on capital through efficiencies until the start of Water Plan 4. The overall impact of this on the revenue requirement and price over the 2013 Water Plan period is -$20.34 million and -0.81% respectively.

Net Capital Expenditure (2013$m)	**2008 Water Plan Forecast**	**2008 Water Plan actual (2008/09 – 2011/12) and latest forecast (2012/13)**	**2012-13 Forecast** NOT RECOVERED UNTIL 2018-19	**Effect of not recovering until 2018-19**	
				Revenue requirement impact*	Price path impact*
Black Rock Recycled Water	0	42.0	19.55	-6.96	-0.28%
Armstrong Creek Recycled Water	0	38.1	27.59	-9.82	-0.39%
Torquay Recycled Water Dual Pipe	0	11.1	10.02	-3.57	-0.14%
TOTAL	**0**	**91.20**	**57.16** (62%)	**-20.34**	**-0.81%**

**Over 5 years*

The intended effect of the Commission's request in the draft determination was to delay the depreciation of these assets until their utilisation was higher. Notwithstanding our reservations about such an approach, detailed below, the intended outcome sought by the Commission is already present as a result of the large majority of the unexpected expenditure being incurred in 2012/13. As a result, we consider that no further adjustment to the depreciation rates of these assets is required.

Furthermore, when considering depreciation it is important to note that all assets will be used when the projects are commissioned via:

- the supply of both recycled water and potable water through the recycled water pipes, and
- the commencement of the functions of the Black Rock recycled water plant in 2013 that enable the commissioning of the Northern Water Plant and the associated benefits from this plant.

The beneficiaries of these projects discussed in Section 7.3 should also be considered when making an assessment on this issue.

Other points supporting non-divergence from straight line depreciation include:

- Straight line depreciation is consistent with the depreciation methodology used for all of Barwon Water's assets, noting in particular, that many assets are not used continually, such as borefields and other more expensive water supply options such as the Melbourne to Geelong pipeline, but these all continue to be depreciated as they provide customers with the security of supply.

- Straight line depreciation is an industry standard, both in private and public organisations, and therefore is more transparent and simple to explain and understand by customers and stakeholders. Other methods such as units of use depreciation are rarely used and are less simple to explain. Units of use depreciation could also be seen to penalise customers for using a water supply option when in fact they are assisting in meeting the water supply demand balance and taking the pressure off potable water supply.
- The complexity and the subjectivity of the alternative methods applied causes opportunity for questioning the method applied and the potential for differing views on how the depreciation should be calculated.
- The costs of using this approach outweigh the benefits due to the difficulty and questionable assumptions made when calculating and the administrative burden of carrying this methodology forward into future regulatory periods.

In summary, Barwon Water considers that the Commission's opening RAB determination mechanism addresses any depreciation profiling concerns and proposes that straight line depreciation is applied to the minority of the expenditure related to these assets rolled into the RAB at the start of Water Plan 3.

Breakdown of completion dates and expenditure of significant capital projects

Barwon Water has updated the financial model to explicitly separate the top 10 projects asset lives, year the project becomes operational and ensure the correct depreciation profile is being applied. The information provided in the model is consistent with the information outlined on page 62 of Barwon Water's Final Water Plan submission.

7.2 Provision of additional cost-benefit analysis information in relation to the Meredith Water Supply Improvement Project.

The business case for Meredith Water Supply Improvements has been provided to Deloitte as supplementary information for the expenditure audit and is provided in Attachment 6.1.

The options selection summary table from the business case is reproduced below, with additional information provided on the net present cost of the options. The detailed technical report that informed the business case was prepared for Barwon Water by consultant GHD, provided in Attachment 6.2 (GHD Final Report Meredith WTP Investigation March 2009).

Table-2 Summary of Options Assessment against criteria

Criteria	Option 1		Option 2			Option 3	
	Upgrade Meredith WTP		Pipe Water from Moorabool WTP			Tanker Water from Moorabool WTP	
	Option 1A high climate change	Option 1B low climate change	Option 2A 4.5km pipe part way	Option 2B 6.8km pipe part way	Option 2C 11.5km pipe all way to Meredith **Preferred**	Option 3A Cont. water restrict'ns	Option 3B No water restrict'ns
Cost (Net Present Cost) $M (20 years)	XX $12.00	X $9.60	✓✓ $3.60	✓✓ $4.70	✓ **$7.40**	XX $12.70	XX $16.00
Reliability of supply	X?	X?	✓	✓✓	✓✓	✓	✓
Water Quality	✓	✓	✓?	✓?	✓✓	✓	✓
Environment (wastes)	X	X	✓✓	✓✓	✓✓	✓	✓
Sustainability	✓	✓	✓✓	✓✓	✓✓	X	X
Flexibility of growth	✓	✓	✓	✓✓	✓✓	X	X
Risk of damage to existing pipeline	✓✓	✓✓	?	✓?	✓✓	✓✓	✓✓
Overall Ranking	**5**	**4**	**3**	**2**	**1**	**6**	**6**

Option 2C was assessed to be the preferred option. This was based on the fact that all the different sub-Option 2's were demonstrated to be significantly superior to Options 1 and 3 through a financial analysis. Option 2C was preferred over options 2A and 2B due to lower risk in relation to:

- Water quality compliance with Safe Drinking Water Act – easier to maintain a chlorine residual in the water supply with piping directly to the Meredith clear water storage compared to options 2A and 2B (adequate turn-over of water in the Meredith water storage would be difficult to achieve with options 2A and 2B)
- Damage to existing assets / pipe bursts – does not increase pressure on existing pipe system compared to options 2A and 2B (50% increase in pressure in option 2A and 60% increase in pressure in option 2B. In addition, dynamic pressure surges associated with pump operation in option 2A and 2B would increase pressures even higher). The preferred option 2C does not increase pressure in existing pipelines.
- Unlike Option 2A and 2B, Option 2C involves a separate transfer pipeline to the Meredith water storage. This is independent of the reticulation pipework and enables future maintenance/repair work to be undertaken on the proposed transfer pipeline without interruption of supply to customers in the Meredith area.

The two lower NPC options would result in unacceptable risk of Barwon Water not meeting obligations in relation to provision of safe drinking water and for meeting service level targets for reliability of water supply to customers in the Meredith region. The costs of mitigating these risks were not included in the financial assessment.

7.3 Provision of additional information in relation to the Black Rock Recycled Water Plant, the Armstrong Creek Recycled Water Transfer and Distribution project, and Torquay Recycled Water Dual Pipe project that demonstrates the costs for these projects will be borne by the beneficiaries.

System interconnectedness and customer beneficiaries

The Armstrong Creek and north Torquay dual pipe recycled water schemes provide water for future new connections to the Geelong Water supply network:

- directly through supply of recycled water to customers in Armstrong Creek and north Torquay, and
- indirectly to the other new customers connected to the Geelong water supply network by the freeing up of potable water (potable substitution).
- Barwon Water's Geelong water supply network is highly interconnected, meaning more than 96% of the forecast new connections in Barwon Water's service area will benefit from the Armstrong Creek and Torquay north recycled water projects through its contribution to maintaining a water supply and demand balance.

This is no different to a water source expansion option such as the Melbourne Geelong Pipeline (MGP). The MGP supplies water to just to the Lovely Banks zone of the Geelong water supply network, but indirectly benefits new connections to the other zones of the Geelong water supply network by freeing up water for use by new customers in other zones that would otherwise have been used in the Lovely Banks supply zone.

Part of the function of the Black Rock Recycled Water Plant is to control salinity impacts associated with the commencement of operation of the Northern Water Plant. Therefore beneficiaries of the Black Rock Water Recycling Plant include the following:

- Shell (receives low salinity water from the Northern Water Plant)
- Existing sewerage customers (contributes to bringing the Geelong Trunk Sewer System into compliance with the State Environment Protection Policy in relation to flow containment during storm events)
- Future sewerage customers (contributes to freeing up capacity in the Geelong Sewerage system for new sewerage connections).

The costs and beneficiaries are mapped in the table below (in 2013$m):

Project	WP2 Cost**	Gov't / Shell contributions received in WP2	Net cost in WP2	Beneficiaries / portion of net cost	Portion of Net cost
Black Rock Recycled Water Plant (Stage 1)	42.0	9.7 Govt 2.3 Shell	30.0	New customers (water) New customers (sewer) Shell Existing customers compliance (sewer)	15.0 (50%) 7.5 (25%) 0* 7.5 (25%)
Armstrong Creek Dual Pipe	42.7	0	42.7	New customers (water)	42.7
North Torquay Dual Pipe	8.3	3.4	4.9	New customers (water)	4.9

* $2.3m Shell contribution matches Shell benefit so no further contribution required from Shell

** based on Dec 2012 NCC submission to the Commission

Based on forecast growth in recycled water demand in Armstrong Creek and north Torquay, the Stage 1 Black Rock Recycled Water Plant capacity utilisation will increase from 27% in 2013 to 100% utilised by 2020 when stage 2 augmentation is proposed to be implemented. Expenditure of this nature is very rarely 100% utilised upon commissioning – and instead expenditure is efficiently incurred prior to full demand being in place (to accommodate what demand is present at the time of commissioning).

New customer contribution framework

The new framework for new customer contributions ensures that costs are fairly attributed to the beneficiaries. The new framework requires the net capital expenditure to be added to the RAB. The portion of this net cost associated with providing services to new customers is used as an input to the calculation of the NCCs and the forecast NCC revenue is netted off the RAB. This ensures no double counting. Therefore new customers contribute in full to the return on assets component of the revenue requirement associated with new projects, including the projects in question.

Barwon Water's attribution of costs was assessed to be reasonable by the Commission's independent reviewer, SKM: *"… the balance of the MGP and all WP2 / current water recycling projects in aggregate provide for meeting the water demands of future growth and the needs of new customers. Thus the apportionment of the capex for these projects to growth/new customers is reasonable."*

Expenditure relating to growth of the projects in question has also been included in the NCC calculation, and hence the cost is being borne by the beneficiaries through the NCC.

Location based tariffs

As indicated above, Barwon Water's Geelong water supply network is highly interconnected with more then 96% of forecast new connections benefitting from the provision/freeing up of water for growth that is associated with the Black Rock Recycled Water projects.

Service outcomes for customers in Armstrong Creek and north Torquay dual pipe areas are no different to other areas. They receive water for toilet flushing and garden watering just like new customers in areas that do not have dual pipes. There is no basis for attributing costs of a water resource project that benefits all new customers to just customers in the dual pipe areas. This would be equivalent to attributing all the costs of the MGP to customers in the Lovely Banks zone of Geelong, even though this project frees up water for growth in areas that don't/won't directly receive the water from the MGP.

Further discussion on location based standardised NCC's is provided in Section 14.

7.4 Rate of Return

The Commission proposes to adopt a real post-tax weighted average cost of capital of 4.7 per cent.

Barwon Water supports the Commission's position that it will reassess the rate of return as part of its final decision. Barwon Water considers a higher figure may be more appropriate as it would better take into account possible future increases in interest rates during the 5 year time frame.

8. DEMAND

COMMISSION'S DRAFT DECISION:

The Commission has approved Barwon Water's demand proposals with the exception of recycled water volume

Barwon Water has made a revised decision for recycled water, which aligns with Barwon Water's original Water Plan submission.

BARWON WATER REPONSE: Seek that Commission review

- Barwon Water accepts the Commission's draft decision for potable, sewage, and trade waste demand
- Barwon Water accepts the Commission's draft decision *revised* recycled water demand (2,226ML over 5 years) which aligns with Barwon Water's original September Water Plan submission.
- In conjunction with removing the Colac water supply capital expenditure project, Barwon Water proposes to amend the potable water demand forecast by -267ML per annum to reflect the closure announcement of Fonterra, a major non-residential customer.

8.1 Potable, sewage and trade waste demand

Barwon Water accepts the Commission's draft decision for potable, sewage, and trade waste demand

8.2 Recycled water demand

Barwon Water accepts the Commission's draft decision *revised* recycled water demand (2,226ML over 5 years) which align with Barwon Water's original September Water Plan submission.

8.3 Fonterra demand adjustment

Closure of Fonterra, the largest non-residential water customer in Colac has recently been announced. Closure is expected to occur in October 2013, and as a result this will reduce demand by 266ML/yr, the equivalent of approximately $525,000 in revenue per annum which is based on Fonterra's average water usage over the past 5 years**.** This closure was also confirmed verbally to Barwon Water management on 30 April 2013. Barwon Water proposes an amendment to the potable water demand to account for this business closure.

An article announcing the Fonterra closure published in the Weekly Times on 1 October 2012 is provided in Attachment 4.2.

This results in the following non-residential demand profile over the 2013 Water Plan period.

	2013-14	2014-15	2015-16	2016-17	2017-18
September 2012 submission (kL)	8,202,439	8,388,459	8,569,371	8,715,985	8,885,030
Final Barwon Water proposed (kL)	8,003,163	8,122,758	8,303,670	8,450,284	8,619,329
Variance	-199,276*	-265,701	-265,701	-265,701	-265,701

*assuming that Fonterra will close at the beginning of Quarter 2 2013-14, therefore calculating three quarters of full reduction

9. FORM OF PRICE CONTROL

COMMISSION'S DRAFT DECISION: The Commission has approved Barwon Water's proposal.
BARWON WATER REPONSE: Accept Barwon Water accepts the Commission's draft decision. No action required.

10. RETAIL WATER SERVICE TARIFFS

COMMISSION'S DRAFT DECISION: The Commission has approved Barwon Water's proposal.
BARWON WATER REPONSE: Accept Barwon Water accepts the Commission's draft decision. No action required.

11. RECYCLED WATER TARIFFS

COMMISSION'S DRAFT DECISION: The Commission has approved Barwon Water's proposal.
BARWON WATER REPONSE: Accept Barwon Water accepts the Commission's draft decision. No action required.

12. RETAIL SEWERAGE SERVICE TARIFFS

COMMISSION'S DRAFT DECISION: The Commission has approved Barwon Water's proposal.
BARWON WATER REPONSE: Accept Barwon Water accepts the Commission's draft decision. No action required.

13. TRADE WASTE

COMMISSION'S DRAFT DECISION: The Commission has approved Barwon Water's proposal.
BARWON WATER REPONSE: Accept Barwon Water accepts the Commission's draft decision. No action required.

14. NEW CUSTOMER CONTRIBUTIONS

COMMISSION'S DRAFT DECISION:

Subject to all regional urban water businesses amending their NCC proposals consistent with the specific actions required by the Commission described below (and detailed for each business in volume II of the Commission's draft decision) the Commission proposes to approve the manner in which Barwon Water's NCC charges are determined.

The Commission requires all regional urban water businesses to:

(a) Assess how they can improve the cost reflectivity of their NCC proposal and to present options on offering more location specific NCC. If the option is a uniform or combined NCC then the water business must demonstrate that there is little material difference between NCC calculated for specific locations or services.

(b) Confirm that all NCC charges have been calculated in accordance with the core pricing principles.

(c) Improve the transparency of their NCC proposal by providing maps to show the boundaries around the areas (or towns) within which standard NCC apply. Or define any threshold that must be met in order for an NCC to be levied.

(d) Clearly describe the circumstances (i.e. eligibility criteria) under which NCC will be negotiated and confirm that it will apply the core pricing principles when such NCC are negotiated.

(e) Consult with other water businesses to develop a best practice negotiating framework.

(f) Consult with other regional urban water businesses to propose a common water industry timeframe to estimate capital costs.

(g) Make other modelling adjustments:

- Update calculations of standard NCC with any relevant expenditure adjustments arising from the draft decision
- Update calculations of standard NCC with any relevant demand adjustments arising from the draft decision
- Review NCC calculations and only include tax rates in the model only for the years the business expects to pay tax
- Update calculations of standard NCC with the Commission's draft

BARWON WATER REPONSE: Seek that Commission review

With regard to each of the issues highlighted above, Barwon Water summarises its response below:

(a) Barwon Water proposes separate standardised NCC charges for different geographic areas. For Area 1 a standardised uniform NCC has been proposed, and for Areas 2 to 5 standardised uniform charges will be developed during the 2013 Water Plan, when more certainty about extent, timing and incremental cost of servicing these future growth areas becomes available.

- **Area 1**: For existing planned growth areas and including infill (excluding Areas 2-5), Barwon Water proposes a standardised uniform NCC – a map is provided showing areas eligible for this Area 1 standardised uniform NCC charge. Justification for a standardised uniform NCC charge for this Area is reiterated below.
- **Area 2 (Fyansford):** Barwon Water proposes a geographical based uniform NCC for this growth area to be developed during the 2013 Water Plan by applying core pricing principles once more certainty around development timing in this difficult to service location is available.
- **Area 3 (Lovely Banks Further Investigation Growth Area):** Barwon Water proposes a geographic based uniform NCC for this potential growth area to be developed by applying core pricing principles should planning support for this area to be confirmed and when there is more certainty around extent and timing of this difficult to service area.
- **Area 4 (Batesford South Further Investigation Growth Area):** Barwon Water proposes a geographic based uniform NCC for this potential growth area to be developed by applying core pricing principles should planning support for this area to be confirmed and

when there is more certainty around extent and timing of this difficult to service area.

- **Area 5 (Bell Post Hill West Further Investigation Growth Area):** Barwon Water proposes a geographic based uniform NCC for this potential growth area to be developed by applying core pricing principles should planning support for this area to be confirmed and when there is more certainty around extent and timing of this difficult to service area.

(b) Barwon Water confirms that core pricing principles are applied for all NCCs.

(c) Maps of eligible areas for standardised NCCs are provided as attachments.

(d) Eligibility criteria for negotiated NCC are provided as attachments. Barwon Water confirms that core pricing principles will be applied for all negotiated NCCs.

(e) Barwon Water confirms that further consultation with other water businesses has occurred to improve the consistency of the Negotiating Framework. This has resulted in minimal changes to the Negotiating Framework submitted by Barwon Water in December 2012.

(f) Barwon Water's proposed timeframes for estimation of the capital costs remain unchanged from the Water Plan submission following consultation with other water businesses via VicWater (i.e. including unutilised growth related capital costs from Water Plan 2 and forecast growth related capital costs from 2013 Water Plan and Water Plan 4).

(g) Barwon Water has made modelling assumptions for the Area 1 standard uniform NCC. Charges and NCC revenue have been recalculated.

Revised documentation of Barwon Water's approach to application of the new NCC framework, including Barwon Water's Negotiation Framework is provided. This includes:

- Revisions arising from Draft Determination
- Revisions arising from the consultation undertaken by Barwon Water with the land development industry between December 2012 and February 2013.

Barwon Water's approach to application of the new NCC framework is consistent with Section 14(1)(v)(B) of the WIRO regarding the provision of appropriate incentives and signals to customers or potential customers about the costs associated with servicing a new development in a particular location. This is achieved by:

1. Standardised charges for 5 designated geographic areas are directly related to the increment cost and revenue from new customers in those areas;
2. All New Customers having an ability to request a negotiated NCC charge for their specific development, subject to this charge being consistent with the NCC pricing principles, and
3. Application of 'bring forward' charges for 'out of sequence' developments to cover the financing costs of providing infrastructure earlier than planned (this aspect of the NCC framework is considered to provided the most powerful locational incentive/signal to developers).

a) Location/area based NCC charges

Barwon Water proposes separate standardised NCC charges for the following geographic areas:

- **Area 1**: Existing planned growth areas, including infill but excluding Fyansford
- **Area 2**: Fyansford
- **Area 3**: Lovely Banks Further Investigation Growth Area
- **Area 4**: Batesford South Further Investigation Growth Area
- **Area 5**: Bell Post Hill West Further Investigation Growth Area

The basis for proposing separate standard NCCs for each of these areas is as follows:

- **Area 1** contains the large majority of existing planned growth areas in the Barwon Water's service area, including infill, but excluding the planned growth area of Fyansford (Area 2). The justification for inclusion of a uniform NCC charge for new connections in all Area 1 locations is:

- Barwon Water's Geelong water supply network is highly interconnected, between 96% and 98% of new connections in Area 1 will be linked to the Geelong water supply network and the significant new water resource / recycling investments made by Barwon Water will equally benefit all of these new connections.
- A core objective of geographically based NCCs is to provide signals to developers for efficient development. Much growth in Area 1 already has significant commitment from developers, with limited scope to alter planning decisions. Areas 2-5, which are less advanced in the development process, are more suitable for geographically based NCC which may influence planning decisions.
- Apollo Bay is included in Area 1 but is not linked to the Geelong water supply network. Barwon Water does not support a separate geographic based NCC for Apollo Bay due to:
    - The distortion effect of 'postage stamp pricing' for general tariffs resulting in the calculated geographic based NCC being an inaccurate reflection (overestimate) of net incremental cost than it would be if the general tariff was also geographically cost reflective. If discrete pricing for Apollo Bay was adopted, general tariffs would be higher at Apollo Bay and NCCs would be lower. Further detail of this distortion effect is discussed by SKM in its independent review report.
    - Application of a separate NCC for Apollo Bay would result in an extremely high water NCC estimated to be $48,900 / lot. The extreme magnitude of these charges for this remote community would likely stall development/economic development opportunities.
    - Small number of new customers forecast for Apollo Bay (estimated to be less than 1% of forecast new connections), and the administrative burden that separate NCC charges creates
- Colac is included in Area 1 but is currently not linked to the Geelong water supply network. Barwon Water does not support a separate geographic based NCC for Colac due to the following reasons:
    - Expansion of the Colac water supply is required in the next 5 to 6 years and this may result in it being linked to the Geelong water supply network.
    - As with Apollo Bay, the distortion effect of 'postage stamp pricing' for general tariffs resulting in the calculated geographic based NCC being an inaccurate reflection (overestimate) of net incremental cost than it would be if the general tariff was also geographically cost reflective. If discrete pricing for Colac was adopted, general tariffs would be higher at Colac and NCCs would be lower.
    - Application of a separate NCC for Colac would result in an extremely high water NCC estimated to be 8,700 / lot. This charge is likely to be unacceptably high in a community known to contain significant social disadvantage.
    - A separate NCC charge would not support the G21 Regional Growth Plan objective of supporting growth in this regional centre. The regional growth plan also recommended identifying incentives to drive growth in Colac. (G21 Regional Growth Plan was recently endorsed by the 5 participating Councils and signed off by the Planning Minister).

Significant consultation has been undertaken by Barwon Water with the land development industry in relation to the designation of the Area 1 geographic boundaries.

- **Area 2** is complex to service and there is currently uncertainty around the timing, lot numbers and cost of servicing this area. A standardise NCC charge will be developed for this geographic area by applying the core pricing principles during 2013 Water Plan once there is more certainty of the timing, scale and cost of servicing growth in this area.

- **Areas 3-5** have been identified in the G21 Regional Growth plan as Further Investigation Areas for medium to long term growth of Geelong. Each of these areas will be complex and costly to service compared to the existing planned growth areas contained in Area 1. It is proposed that a geographic based standardised NCC charge will be developed for each of these areas by applying

the core pricing principles should planning support for growth in these areas be confirmed and when there is more certainty around extent and timing of commencement of growth.

Barwon Water proposes to undertake a further review of the distribution of geographic based charges well in advance of Water Plan 4 to provide adequate time for consultation with land developers.

The standard charge for connection applicants in Area 1 that has been proposed by Barwon Water has been used as the basis for Barwon Water's NCC revenue forecasts in Water Plan 3. The standard charge for each of the geographic areas 2 to 5 will be determined by application of the core pricing principles once there is more certainty around the timing of rezoning and the costs of servicing these areas. Barwon Water is not forecasting new connections in Areas 2 to 5 during Water Plan 3 and the magnitude of the Area 2-5 charges is therefore not required to be estimated for the purpose of Water Plan 3 NCC revenue forecasting.

b) Confirmation of application of core pricing principles

Barwon Water confirms that Barwon Water has applied the core pricing principles as documented in its NCC Negotiation Framework when calculating standardised NCCs.

This has been confirmed by the Commission's independent reviewer, SKM.

c) Map showing areas eligible for standard NCCs

A map showing the geographic areas eligible for standardised NCC's is included in Barwon Water's document, "New Customer Contributions – Application of Commission's new framework for New Customers Contributions". The latest version of this document is provided in Attachment 7.1.

d) Negotiated NCC eligibility and application of core pricing principles

Barwon Water confirms that it will apply the core pricing principles as documented in its NCC Negotiation Framework when negotiating an NCC.

The circumstances (eligibility criteria) for application of standardised NCC's are documented in Barwon Water's Document "New Customer Contributions – Application of Commission's new framework for New Customer Contributions". An updated version of this document is provided in Attachment 7.2 (Barwon Water NCC Negotiating Framework Revised April 2013).

Any Connection Applicant is able to request a Negotiated NCC, however, it is envisaged that this will mainly occur when alternative water / sewerage solutions are being proposed by a Connection Applicant or when the proposed connection is not within an area designated as being eligible for a standardised charge. This is because in the vast majority of cases, Barwon Water expected the applicant to favour a standardised NCC charge within Area 1. This will be applied relatively quickly in-line with the negotiating framework (max 45 days). If the customer wishes to negotiate and there is additional information required, under the framework this will take up to 120 days. In addition to this, in accordance with the principles, the bounds of the NCC are such that the negotiated charge is unlikely to be less than the standardised charge.

e) Consultation with other water businesses in relation to proposed Negotiation Framework

Since the release of the draft determination by the Commission, Barwon Water has consulted with other water corporations via VicWater to develop a template for an NCC Negotiation Framework.

The template developed by VicWater is largely based on Barwon Water's NCC Negotiation Framework submitted to the Commission in December 2012. It is envisaged that each water corporation will modify this template to ensure consistency with their own land development processes.

Barwon Water's proposed NCC Negotiation Framework is included in the attached document "New Customer Contributions – Application of Commission's New Framework for New Customer Contributions April 2013" Attachment 7.1.

f) Timeframes for estimation of capital costs

Barwon Water's timeframes for estimation of capital costs are 5 years back and 10 years forward. Barwon Water does not propose to change these timeframes.

g) Modelling adjustments

Barwon Water has undertaken modelling adjustments based on the draft determination and on revisions arising from Barwon Water's consultation with the land development industry. These include:

- Revised general tariff price path
- Revised capital expenditure based on the Commission's draft decision
- Revised WACC based on the Commission's draft decision
- Tax included in model only in the period when Barwon Water is forecasting to be paying tax
- Transition to higher water NCCs over a one year period (this transition was implemented in response to feedback from the land development industry during the consultation undertaken by Barwon Water)

The revised standard NCC's for Geographic Area 1 are tabulated below:

	2013/14	2014/15	2015/16	2015/17	2017/18
December 2012 Submission					
- Water	$3,340	$3,340	$3,340	$3,340	$3,340
- Sewerage	$1,100	$1,100	$1,100	$1,100	$1,100
Revised Submission					
- Water	$1,883	$2,549	$2,549	$2,549	$2,549
- Sewerage	$821	$821	$821	$821	$821

The reduction in revised NCC charges is in line with expectations after updating modelling to reflect a lower WACC (4.7% instead of 5.1%), and the latest proposed price path of -1.0% per annum.

Barwon Water Consultation with Land Development Industry

Barwon Water has undertaken structured consultation program with the land development industry in its service area in relation to the new NCC framework between December 2012 and February 2013.

This consultation included:

- Distribution of a discussion paper on Barwon Water's proposed approach to application of the new NCC framework and invitation of submissions on the paper
- Developer forum in January 2013 (attended by approximately 30 developer representatives)
- Face to face meetings with individual developers and their consultants.

A summary of the key themes from the consultation and Barwon Water's response to these is summarised in Attachment 7.3 (New Customer Contributions - Consultation Outcomes Summary - Apr 2013). The feedback from the consultation is that overall there was support for our NCC proposal.

15. MISCELLANEOUS CHARGES

COMMISSION'S DRAFT DECISION:

The Commission proposes to approve the miscellaneous services fees and charges proposed by Barwon Water.

In response to this draft decision, Barwon Water is required to submit:

(a) definitions and proposed charges for connection fees, information fees and meter reading fees, if these are not already included in its core set of miscellaneous services.
(b) if proposing any miscellaneous charges for developers:
- the name all charges relating to developers
- explain how these charges relate to NCCs
- define the services that will be provided for these charges.

BARWON WATER REPONSE: Accept with additional information provided

Additional information as requested by the Commission provided in tables below.

a) The connection fees, information fees and meter reading fees will be included in Barwon Water's core set of miscellaneous services and is provided below.

Miscellaneous Charge	Definition	Charge
Meter connection	The installation of a meter to the property by Barwon Water	$45.31
Information statements	Provision of a property information statement as required under section 158 of the Water Act 1989.	$22.42
Tenant meter read	This fee provides for the recording of two enter readings (when a tenancy commences and then on termination of the tenancy arrangement)	$26.13

b) Barwon Water proposing any miscellaneous charges relating to developers

Charge	Definition / Relation to NCC
Preparation of works offer	Preparation of a works offer
Preparation of non works offer	Preparation of a non works offer
Design plan audit 1-20 lots - up to 3 audits Sewer	Auditing of sewer design plans up to 3 audits 1-20 lot development
Design plan audit >20 lots - up to 3 audits Sewer	Auditing of sewer design plans up to 3 audits >20 lot development
Design plan audit 1-20 lots - up to 3 audits Water	Auditing of water design plans up to 3 audits 1-20 lot development
Design plan audit >20 lots - up to 3 audits Water	Auditing of water design plans up to 3 audits >20 lot development
Design plan audit 1-20 lots - up to 3 audits Recycled Water	Auditing of recycled water design plans up to 3 audits 1-20 lot development
Design plan audit >20 lots - up to 3 audits Recycled Water	Auditing of recycled water design plans up to 3 audits >20 lot development
Developer Works asset recording fee, 1-20 lots Water	Recording water assets for 1-20 lots
Developer Works asset recording fee, >20 lots Water including major infrastructure	Recording water assets for >20 lots water including major infrastructure
Developer Works asset Recording Fee, 1-20 lots Sewer	Recording sewer assets for 1-20 lots

Charge	Definition / Relation to NCC
Developer Works asset Recording Fee, > 20 lots Sewer including major infrastructure	Recording water assets for >20 lots sewer including major infrastructure
Developer Works asset recording fee, 1-20 lots Recycled Water	Recording recycled water assets for 1-20 lots
Developer Works asset recording fee, >20 lots Recycled Water including major infrastructure	Recording recycled water assets for >20 lots recycled water including major infrastructure
Developer Works r construction audit 1-20 Lots sewe	Undertake sewer construction audits for developer works 1-20 Lots
Developer Works construction audit >20 Lots sewer including major infrastructure	Undertake sewer construction audits for developer works >20 Lots Sewer including major infrastructure
Developer Works construction audit 1-20 Lots water	Undertake water construction audits for developer works 1-20 Lots
Developer Works construction audit >20 Lots water including major infrastructure	Undertake water construction audits for developer works > 20 Lots including major infrastructure
Developer Works construction audit 1-20 Lots recycled water	Undertake recycled water construction audits for developer works 1-20 Lots
Developer Works construction audit >20 Lots recycled water including major infrastructure	Undertake recycled water construction audits for developer works >20 Lots including major infrastructure

16. MELBOURNE POOL COSTS

COMMISSION'S DRAFT DECISION:

The Commission proposes to approve the pass through event proposed by Barwon Water relating to any unforeseen requirement for water from the Melbourne pool via the Melbourne Geelong Pipeline. This approval is subject to Barwon Water providing further detail regarding the implementation of this pass through mechanism should it be triggered. The Commission proposes not to approve other pass throughs proposed by Barwon Water.

BARWON WATER REPONSE: Seek that Commission review

Barwon Water proposes a pass through mechanism whereby an approximation of the actual bulk water cost incurred by Barwon Water is passed through to customers.

Using current estimates of residential and non-residential variable demand and Melbourne Water's forecast bulk water charge, this would result in a maximum increase of 27* cents per kL applied to the residential and non-residential variable water tariff. Barwon Water will undertake appropriate customer communications and consultation prior to any adjustments.

**calculated using Melbourne Water's draft 2013 Water Plan price path forecast and maximum take-up of 16GL per annum from the Melbourne to Geelong Pipeline over the 2013 Water Plan.*

Barwon Water proposes that an up-to-date approximation of the actual costs incurred by Barwon Water be passed through to residential and non-residential customers in their variable water charge.

The cost increase per customer would be calculated and applied, over the period over which the order for water is made, as follows:

$$P = \frac{(V_a - V_f) \times C_a}{D_f}$$

Where:

- P is the price increase per kL of water over the period that the order is made, applied to residential and non-residential variable water charges
- V_a is the actual volume of water (in kL) ordered through the MGP in that period
- V_f is the Commission's final decision volume of water (in kL) supplied through the MGP (currently 0GL in the draft decision)
- C_a is the actual cost per volume of water (in kL) of bulk water charges from Melbourne Water
- D_f is Barwon Water's most up to date forecast of demand at the time the order for water through the MGP is made

The most up-to-date forecast of demand is used to calculate the price increase to most accurately align the revenue received from the increase in price with the cost increase to Barwon Water from the MGP water order.

Using current estimates of residential and non-residential variable demand and Melbourne Water's forecast bulk water charge, this would result in a maximum increase of 27 cents per kL applied to the residential and non-residential variable water tariff (calculated using Melbourne Water's draft 2013 Water Plan price path forecast and maximum take-up of 16GL per annum from the Melbourne to Geelong Pipeline over the 2013 Water Plan). Barwon Water will undertake appropriate customer communications and consultation prior to any adjustments.

17. OTHER MODEL ADJUSTMENTS

INFORMATION ONLY:

Barwon Water has updated the model accordingly and attached as part of the final response on 2 May 2013.

Details of key updates are discussed below.

17.1 Goulburn and Murray headworks contributions payments

Barwon water received a letter from Yarra Valley Water on 15 April 2013, Attachment 8.1 (Supporting letter for Goulburn and Murray headworks contributions payments), stating that Barwon Water is obliged to pay a share of the Goulbourn Murray Water's water storage costs as stated by clause 17.1 under Barwon Water's Bulk Entitlement Order 2010. The quantum of the contribution is shown below.

(2013$)	2013-14	2014-15	2015-16	2016-17	2017-18
Goulburn and Murray headworks contributions (to Yarra Valley)	$16,535	$20,156	$24,722	$30,513	$33,518

Barwon Water proposes to recover these costs though core tariffs.

17.2 Other Financial Model updates

All updates are highlighted PURPLE for transparency purposes and key updates are listed in the "*BARWON WATER tracking*" sheet.

18. LIST OF ATTACHMENTS

Attachment 1.1 - Barwon Water proposed schedule of tariffs - 2013-18

Attachment 2.1 - Confirmation from the ESC on approved targets (Email 30 April 2013)

Attachment 2.2 - Barwon Water's detailed rationale of the proposed Service Standards targets.

Attachment 2.3 – 2012 Customer Perception Survey – Customer Service

Attachment 3.1 – Barwon Water Enterprise Agreement 2011 – Pay increase timing

Attachment 3.2 – Deloitte's labour model supporting Barwon Water's proposed labour expenditure

Attachment 4.1 – Information provided to Deloitte disputing Colac Water Supply Project findings (Information request number 2.2.7)

Attachment 4.2 - Fonterra Closure Announcement (Weekly Times)

Attachment 5.1 - Supporting letter for NVIRP contribution payment

Attachment 6.1 – Supplementary information provided to Deloitte: Meredith Water Supply Improvement business case

Attachment 6.2 – GHD Final Report Meredith WTP Investigation March 2009

Attachment 7.1 - Barwon Water Application of New Framework for New Customer Contributions April 2013

Attachment 7.2 - Barwon Water NCC Negotiating Framework Revised April 2013.

Attachment 7.3 - New Customer Contributions - Consultation Outcomes Summary - Apr 2013

Attachment 8.1 - Supporting letter for Goulburn and Murray headworks contributions payments