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2008 WATER PRICE REVIEW

DRAFT DECISION VOLUME II:
GOULBURN VALLEY WATER

MARCH 2008

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Essential Services Commission 2008, *2008 Water Price Review Draft Decision Volume II: Goulburn Valley Water*, March.

1. Purpose of volume II of the draft decision

The Commission is required to issue a Draft Decision that proposes either to:

- (a) approve all of the prices which a regulated entity may charge for prescribed services, or the manner in which such prices are to be calculated or otherwise determined, as set out in the regulated entity's water plan, until the commencement of the next regulatory period or
- (b) refuse to give the approval referred to above and specifies the reasons for the Commission's proposed refusal (which may include suggested amendments to, or action to be taken in respect of, the Water Plan that, if adopted or taken, may result in the Commission giving that approval) and the date by which a regulated entity must resubmit a revised Water Plan or undertake such action as to ensure compliance.

This Volume of the Draft Decision summarises for each business the suggested amendments or actions that if adopted or taken may result in the Commission giving its approval to the relevant business's proposed prices or the manner in which such prices are to be calculated or otherwise determined. The main reasons for suggested amendments or actions are summarised. More detailed reasons for the Commission's suggested amendments are outlined in Volume I of the Draft Decision.

2. Actions to be taken in response to this draft decision

In response to this Draft Decision, Goulburn Valley Water should by 9 May 2008 resubmit:

- (a) its proposed schedule of tariffs to apply for each year of the regulatory period commencing 1 July 2008 that reflects:
 - (i) the revised revenue requirement set out in Table 3
 - (ii) the revised demand forecasts set out in Tables 11–13 and
 - (iii) any changes to tariff structure suggested by the Commission.
- (b) the service standards to apply over the regulatory period consistent with any revisions suggested by the Commission set out in Tables 1–2.

If a business does not submit a revised schedule of tariffs and/or the service standards to apply, or otherwise make a submission as to why it has not adopted the Commission's suggested amendments by the due date, the Commission will specify the prices, or manner in which prices are to be calculated or otherwise determined and the service standards to apply for the regulatory period 2008-09 to 2012-13 as part of its Final Determination.

3. Service standards

The Commission proposes to approve each of the service standards proposed in Goulburn Valley Water's Water Plan, except as indicated in table 1.

Table 1 Approved service standards

<i>Service standard</i>	<i>Draft decision – service standards</i>					
	<i>3yr Avg 2003-06</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Water						
Unplanned water supply interruptions (per 100km)	18.2	18.1	18.1	18.1	18.1	18.1
Average time taken to attend bursts and leaks (priority 1) (minutes)	7.0	30	30	30	30	30
Average time taken to attend bursts and leaks (priority 2) (minutes)	65.0	60	60	60	60	60
Average time taken to attend bursts and leaks (priority 3) (minutes)	301.5	300	300	300	300	300
Unplanned water supply interruptions restored within 5 hours (per cent) - proposed	98.0	98.00	98	98	98	98
Planned water supply interruptions restored within 5 hours (per cent)	96.3	99	99	99	99	99
Average unplanned customer minutes off water supply (minutes)	13.6	13.6	13.6	13.6	13.6	13.6
Average planned customer minutes off water supply (minutes)	6.2	6.00	6	6	6	6
Average frequency of unplanned water supply interruptions (number)	0.1	0.13	0.13	0.13	0.13	0.13
Average frequency of planned water supply interruptions (number)	0.1	0.05	0.05	0.05	0.05	0.05
Average duration of unplanned water supply interruptions (minutes)	94.7	100.00	100	100	100	100
Average duration of planned water supply interruptions (minutes)	108.7	113	113	113	113	113
Number of customers experiencing 5 unplanned water supply interruptions in	28.7	85	85	85	85	85

<i>Service standard</i>	<i>Draft decision – service standards</i>					
	<i>3yr Avg 2003-06</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
the year (number)						
Unaccounted for water (per cent)	9.4	9.8	9.6	9.4	9.2	9.0
Sewerage						
Sewerage blockages (per 100km)	26.0	25.3	25.3	25.3	25.3	25.3
Average time to attend sewer spills and blockages (minutes)	69.5	60.0	60.0	60.0	60.0	60.0
Average time to rectify a sewer blockage (minutes)	213.0	150.0	150.0	150.0	150.0	150.0
Spills contained within 5 hours (per cent)	99.7	100.0	100.0	100.0	100.0	100.0
Customers receiving 3 sewer blockages in the year (number)	0.0	0.0	0.0	0.0	0.0	0.0
Customer Service						
Complaints to EWOV (per 1000 customers)	0.4	0.4	0.4	0.4	0.4	0.4
Telephone calls answered within 30 seconds (per cent)	97.0	97.0	97.0	97.0	97.0	97.0
Minimum Flow Rates						
	<i>20mm</i>	<i>25mm</i>	<i>32mm</i>	<i>40mm</i>	<i>50mm</i>	
Flow rate (litres per minute)	20	31	51	80	125	

Note Data rounded to one decimal place. **n.p.** = Not provided.

The Commission has proposed to approve a target that appears inconsistent with the three year average performance for the number of customers experiencing 5 unplanned water supply interruptions in the year (number). Goulburn Valley Water explained that the target is higher than the average of 29 due to outlier results in 2002-03 and 2003-04 of 0, which are not indicative of underlying performance.

The Commission also notes that Goulburn Valley Water has proposed the additional service standards outlined in table 2.

Table 2 Additional service standards

<i>Service standard</i>	<i>3yr Avg 2003-06</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Drinking water quality total complaints (per 1000 connections)	6.4	5.8	5.7	5.5	5.3	5.2
Drinking water quality turbidity/colour complaints (per 1000 connections)	4.5	4.0	3.9	3.8	3.7	3.6
Drinking water quality taste/odour complaints (per 1000 connections)	0.8	0.9	0.9	0.8	0.8	0.8
Drinking water quality localities meeting E.coli Standard (per cent)	99.3	100.0	100.0	100.0	100.0	100.0
Drinking water quality localities meeting Turbidity Standard (per cent)	98.0	98.0	98.0	100.0	100.0	100.0
Drinking water quality localities meeting Disinfection Byproducts Standards (per cent)	91.3	94.0	98.0	100.0	100.0	100.0
Water pressure complaints (per 1000 connections)	3.6	3.6	3.6	3.5	3.5	3.4
Wastewater system odour complaints (per 1000 water connections)	1.4	1.2	1.2	1.1	1.1	1.0
Wastewater Management Facilities complying with EPA Licence (per cent)	91.3	100.0	100.0	100.0	100.0	100.0
Recycled water target (per cent)	73.0	73.0	73.0	72.0	76.0	76.0
Biosolids reuse (per cent)	3127.3	100.0	100.0	100.0	100.0	100.0
Small town scheme developed properties not connected to sewer (per cent)	76.0	91.0	93.0	95.0	95.0	95.0
Total CO2 Emissions (tonne)	57246.7	33700.0	33500.0	33630.0	33700.0	33700.0
Sewer backlog connections & Small Town Sewerage Scheme	6.4	0.0	0.0	0.0	0.0	0.0

Note Data rounded to one decimal place.

4. Guaranteed service level scheme

The business has not proposed to introduce a GSL scheme in the forthcoming period.

5. Revenue requirement

The Commission has adopted the following assumptions in relation to the revenue required over the regulatory period.

Table 3 **Breakdown of revenue requirement implied by ESC draft decision**
\$ million in January 2007 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-2012</i>	<i>2012-13</i>
Operating expenditure	31.37	32.18	32.75	32.98	33.31
Return on existing assets	8.88	8.54	8.21	7.87	7.53
Return on new investments	1.13	2.94	4.06	4.87	5.50
Regulatory depreciation	5.51	6.45	7.06	7.53	7.93
Tax liability	0.00	0.00	0.00	0.00	0.00
Total	46.89	50.11	52.07	53.25	54.27

6. Rolled forward regulatory asset base

The regulatory asset base as at 1 July 2005 has been rolled forward to reflect approved capital expenditures net of customer contributions (new customer and shareholder contributions) and disposals for the 2005-06 to 2007-08 period less any approved allowance for regulatory depreciation. The rolled forward values are shown in table 4.

Table 4 **Updated regulatory asset base**
\$ million in January 2007 prices

	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>
Opening RAB	113.90	115.68	131.81
<i>Plus</i> Gross Capital expenditure	14.94	23.41	23.22
<i>Less</i> Government contributions	0.00	0.00	0.00
<i>Less</i> Customer contributions	1.65	2.00	1.17
<i>Less</i> Proceeds from disposals	7.70	0.83	0.56
<i>Less</i> Regulatory depreciation	3.81	4.44	4.95
Closing RAB	115.68	131.81	148.35

The regulatory asset base as at 1 July 2007 will be rolled forward to reflect approved estimates of capital expenditure net of customer contributions (new customer and shareholder contributions) and disposals for the 2007-08 to 2012-13 period less any approved allowance for regulatory depreciation.

The Commission has adopted the following assumptions in relation to regulatory asset base over the regulatory period:

Table 5 **Rolled forward regulatory asset base**
\$ million in January 2007 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Opening RAB	148.4	179.8	196.7	205.3	212.3
<i>Plus</i> Gross Capital expenditure	39.5	25.8	18.2	17.1	13.1
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	1.9	1.9	2.0	1.9	1.9
<i>Less</i> Proceeds from disposals	0.6	0.6	0.6	0.6	0.6
<i>Less</i> Regulatory depreciation	5.5	6.4	7.1	7.5	7.9
Closing RAB	179.8	196.7	205.3	212.3	214.9

7. Weighted average cost of capital

The Commission has adopted a weighted average cost of capital (WACC) of 6.1 per cent for all water businesses. The table below outlines the individual components for the WACC.

Table 6 **Real post-tax WACC**

<i>Real risk free rate</i>	<i>Equity beta</i>	<i>Market risk premium</i>	<i>Debt margin</i>	<i>Financing structure</i>	<i>Franking credit value</i>	<i>WACC</i>
<i>(per cent)</i>	<i>(β)</i>	<i>(per cent)</i>	<i>(per cent)</i>	<i>(per cent)</i>	<i>(%)</i>	<i>(per cent)</i>
3.41	0.65	6.00	1.95	60	0.5	6.1

8. Operating expenditure

The Commission has made the following assumptions about operating expenditure forecasts over the regulatory period:

Table 6 Proposed and approved operating expenditure assumptions
\$ million in January 2007 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Proposed operating expenditure	31.17	31.70	32.18	32.45	32.81
Revisions and adjustments	0.20	0.48	0.57	0.53	0.50
Draft decision – operating expenditure	31.37	32.18	32.75	32.98	33.31

The Commission's assumptions reflect the following adjustments to Goulburn Valley Water's proposed operating expenditure forecasts:

Table 7 Adjustments to operating expenditure
\$ million in January 2007 prices

<i>Expenditure item</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Electricity increases	0.23	0.30	0.36	0.34	0.32
Labour increases	-0.09	0.18	0.26	0.29	0.33
Environmental contribution	0.09	0.04	-0.02	-0.07	-0.12
DHS licence fee	-0.03	-0.03	-0.03	-0.03	-0.03
Total	0.20	0.48	0.57	0.53	0.50

- (a) No business revisions were proposed after the submission of the Water Plan
- (b) Electricity expenditure was adjusted to reflect SKM's forecasts of electricity prices discussed in section 3 of their expenditure review
- (c) Business as usual labour expenditure was adjusted to reflect a real 1.25 per cent real annual increase labour rates as discussed in section 3 of the SKM expenditure review.
- (d) Advice was received from the Department of Human Service on their licence fees and the Department of Sustainability and Environment on the environmental contribution for the regulatory period. Adjustments were made so operating expenditure reflected the Department's advice (Draft Decision section 4.7)

9. Capital expenditure

The Commission has made the following assumptions about capital expenditure forecasts over the regulatory period:

Table 8 Proposed and approved capital expenditure assumptions
\$ million in January 2007 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Proposed capital expenditure	24.84	31.87	24.90	17.62	13.66
Draft decision – capital expenditure	39.50	25.84	18.25	17.07	13.06

The Commission's assumptions reflect the following adjustments to Goulburn Valley Water's proposed capital expenditure forecasts:

Table 9 Adjustments to capital expenditure
\$ million in January 2007 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Above ground asset replacement			-0.15	-0.15	-0.2
Unlined Cast Iron water mains replacement	-0.4	-0.4	-0.4	-0.4	-0.4
Broadford Pipeline	14.46	-6.23	-6.1		
Office Extension		0.6			
Water Treatment Plant - Filter rehabilitation	0.6				
Total ESC Adjustment	14.66	-6.03	-6.65	-0.55	-0.6

- (a) Above ground asset replacement – SKM recommended that this program's expenditure be maintained at existing levels, and potentially ramped up after Goulburn Valley Water has had an opportunity to more fully develop its asset management strategy (SKM, section 6.2).
- (b) Unlined Cast Iron water mains replacement – SKM recommended that the first years of the mains replacement program be used to more rigorously identify the benefits of the program. SKM also considered that the program has been historically quite small and therefore does not appear to be any urgency to accelerate the program. Therefore they recommended a reduction of \$0.4 million in each year of the regulatory period (SKM, section 6.2).
- (c) Broadford pipeline – Goulburn Valley Water since its Water Plan proposed that acceleration of the timeline for this project was necessary due to the need to reduce reliance on water carting in the future, which SKM considered was reasonable (SKM, section 6.2).
- (d) Office extension – Goulburn Valley Water has advised that it proposed to relocate its corporate office at an estimated cost of \$0.6 million, which SKM accepted as reasonable (SKM, section 6.2).
- (e) Water Treatment Plant – Filter rehabilitation – Goulburn Valley water proposed this project during the review process, which SKM considered was reasonable (SKM, section 6.2).

Goulburn Valley Water has identified the following key capital projects to be undertaken during the regulatory period.

Table 10 Key capital projects

	<i>Expected completion date</i>
Bonnie Doon WTP	2009-10
Broadford Pipeline	2008-09
Above ground Asset Replacement	2012-13
Alexandra Eildon pipeline	2009-10
Unlined Cast Iron Asset Replacement	2012-13
Asset acquisition – corporate assets	2012-13

10. Demand forecasts

- (a) The Commission has made the following assumptions about demand for various services over the regulatory period.
- (b) The Commission has adjusted proposed demand forecasts where shaded or otherwise indicated.

Table 11 Number of water connections

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Proposed connections	54,126	54,938	55,761	56,597	57,445
Draft decision — connections	54,126	54,938	55,761	56,597	57,445

Table 12 Number of sewerage connections

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Residential					
Proposed connections	40,184	40,907	41,643	42,392	43,155
Draft decision – connections	40,184	40,907	41,643	42,392	43,155
Non-residential					
Proposed connections	5,409	5,506	5,605	5,706	5,809
Draft decision – connections	5,409	5,506	5,605	5,706	5,809
Total	45,593	46,413	47,248	48,098	48,964
Draft decision – total connections	45,593	46,413	47,248	48,098	48,964

Table 13 Water consumption

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Proposed - total consumption	25,353	25,637	25,775	25,860	25,982
Draft decision – total consumption	25,209	25,492	25,629	25,713	25,835

The adjustments to water consumption reflect PWC's advice (see PWC, Assessment of Demand Forecast Report) to include an adjustment for price elasticity which was not included in Goulburn Valley Water's forecast.

11. Form of price control

- (a) The Commission proposes to approve individual price caps for Goulburn Valley Water.
- (b) Goulburn Valley Water should submit a schedule of prices to apply from 1 July 2008, as well as a process in which tariffs can be adjusted on an annual basis.
- (c) Goulburn Valley Water may apply for an adjustment to its prices or tariff strategy at the time of the annual price review. It would have to demonstrate in its application to the Commission that it has clearly articulated a new tariff strategy (or explained how the proposed price changes are consistent with its existing tariff strategy), undertaken appropriate customer consultation and addressed customer impacts. The average annual price increase across the range of tariffs could not be greater than the average increase calculated under a tariff basket approach. The Commission may then approve amended individual price caps for the remainder of the regulatory period.

12. Pass through mechanisms

Businesses may apply to the Commission to adjust their prices either at the end of the regulatory period or during the regulatory period for specified costs where these are materially different from the costs included for the purposes of the Determination. Pass through mechanisms may apply in the following cases:

- (a) Prices will be adjusted at the end of the regulatory period to reflect any difference between assumed and actual licence fees levied by the EPA, DHS and the ESC. To avoid any doubt, the assumed licence fees payable for each year of the regulatory period are set out in Table 14.

Table 14 **Approved licence fee assumptions^a**
\$ million in January 2007 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-2012</i>	<i>2012-2013</i>
Essential Services Commission	0.05	0.05	0.05	0.05	0.05
Environment Protection Authority	0.12	0.12	0.12	0.12	0.12
Department of Human Services	0.02	0.02	0.02	0.02	0.02

^a Included in forecasts of business as usual operating expenditure.

- (b) Prices will be adjusted at the end of the regulatory period to reflect the additional net operating costs associated with meeting changes in legislative obligations during the regulatory period where:
 - (i) the impact on costs is equivalent to at least 5 per cent of the business's revenue over the regulatory period
 - (ii) changes in costs relate to changes in primary Acts and legislative instruments, including regulations; in taxes (or fees or similar charges) excluding income tax, penalties and interest on taxes, stamp duty, financial institutions duty or similar taxes and levies; to EPA licence requirements; and/or to the Statement of Obligations
 - (iii) the change in legislative obligation was unforeseen and not already reflected in expenditure forecasts
 - (iv) additional capital costs will be rolled into the regulatory asset base at the beginning of the next regulatory period where the expenditure is assessed as being prudent and efficient, and prices will be adjusted to reflect any associated financing costs.
- (c) Prices may be adjusted during the regulatory period to reflect costs associated with catastrophic events, such as fire, earthquake or act of terrorism, where:
 - (i) the impact on costs is so significant as to prevent the business meeting its service requirements and obligations without compromising its financial viability during the period

- (ii) the business can demonstrate that it had taken appropriate steps to plan for or manage the potential impact of such an event.
- (d) Prices may be adjusted during the regulatory period to reflect expenditure relating to major capital projects where:
 - (i) the business has separately identified any uncertain major capital projects and excluded those projects from its expenditure forecasts
 - (ii) the Commission has identified the project as an uncertain major capital project in the Final Determination
 - (iii) the application process for determining the amount, nature and timing of any adjustment will be set out in the Final Determination.
- (e) Prices may be adjusted during the regulatory period to reflect any significant differences between actual and forecast demand levels where:
 - (i) the Commission determines that actual demand levels are significantly different from those forecast for the purposes of the Final Determination
 - (ii) the Commission finds a material impact on the business's revenues.

13. Retail water tariffs

The Commission proposes to approve Goulburn Valley Water's proposed tariff structure on the basis that it is consistent with the WIRO.

14. Retail sewerage tariffs

The Commission proposes to approve Goulburn Valley Water's proposed tariff structure on the basis that it is consistent with the WIRO.

15. Trade waste charges

- (a) The Commission proposes to generally approve Goulburn Valley Water's proposed trade waste tariff structure on the basis that it is consistent with the WIRO and the Commission's trade waste pricing principles.
- (b) Goulburn Valley Water is required to set out and apply specific trade waste pricing principles to apply to those customers for whom scheduled prices do not apply. The principles should be consistent with the following principles:
 - (i) volumetric and load based prices should, to the extent practicable, reflect the long run marginal cost (LRMC) of trade waste transfer, treatment and disposal
 - (ii) the total revenue received from each customer should be greater than the cost that would avoided from ceasing to serve that customer, and (subject to meeting avoidable cost) less than the stand alone cost of providing the service to the customer in the most efficient manner

- (iii) the methodology used to allocate common and fixed costs to that customer should be clearly articulated and be consistent with any guidance provided by the Commission
- (iv) prices should reflect reasonable assumptions regarding the volume and strength of trade waste produced by that customer
- (v) depreciation rates and rates of return used to determine prices should be consistent with those adopted by the Commission in this Determination.
- (vi) Customers should be provided with full details of the manner in which prices have been calculated. Where applying these principles results in significant changes to prices or tariff structures, arrangements for phasing in the changes may be considered and any transitional arrangements should be clearly articulated.

16. Recycled water

- (a) The Commission is proposing to approve Goulburn Valley Water's proposed pricing principles on the basis that they are consistent with the principles set out below.
- (b) The Commission considers that Goulburn Valley Water should set its recycled water prices according to a set of principles that ensure prices:
 - (i) have regard to the price of any substitutes and customers' willingness to pay
 - (ii) cover the full cost of providing the service (with the exception of services related to specified obligations or maintaining balance of supply and demand)
 - (iii) include a variable component.
- (c) Where a business does not propose to fully recover the costs associated with recycled water, it must demonstrate to the Commission that:
 - (i) it has assessed the costs and benefits of pursuing the recycled water project
 - (ii) it has clearly identified the basis on which any revenue shortfall is to be recovered
 - (iii) if the revenue shortfall is to be recovered from non-recycled water customers, either that the project is required by 'specified obligations' or that there has been consultation with the affected customers about their willingness to pay for the benefits of increased recycling.
- (d) Goulburn Valley Water is required to provide details of tariff arrangements for customers on individual contracts where scheduled prices do not apply on request during the regulatory period. This includes the charges and quantities contained within such contracts, how they have been calculated and how they comply with the pricing principles listed above.

17. Customer contributions

- (a) The Commission proposes to approve Goulburn Valley Water's proposed new customer contributions.
- (b) Approval is subject to an adjustment clarifying that recycled water services, due to their unique nature, will not be subject to a scheduled charge but rather will be regulated by the Commission's proposed pricing principles for recycled water.

Table 15 **New customer contributions charges**
\$ per lot

	<i>Category 1^a</i>	<i>Category 2^b</i>	<i>Category 3^c</i>
Water	550.00	1,100.00	2,200.00
Sewerage	550.00	1,100.00	2,200.00

^a For developments which are designed in a manner that will have minimal impacts on future water resource demands (lot sizes typically no greater than 450 square meters). ^b For water sensitive urban developments which will require further investment in infrastructure within a six year period to service these developments (lot sizes typically between 450 and 1,350 square metres). ^c For developments that will create demand for water resources over and above high-density, water efficient homes (lot sizes typically exceeding 1,350 square metres).

18. Miscellaneous charges

- (a) The Commission proposes to approve all core miscellaneous services proposed by Goulburn Valley Water, including proposed definitions and price adjustments over the regulatory period.
- (b) In response to this Draft Decision, Goulburn Valley Water is required to clarify how much of its miscellaneous revenue it expects to generate from its core set.
- (c) If required, Goulburn Valley Water should propose additional core miscellaneous services, so that the core set would be expected to generate at least 75 per cent of miscellaneous revenue.