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2008 WATER PRICE REVIEW

DRAFT DECISION VOLUME II:
LOWER MURRAY WATER

MARCH 2008

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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, Lower Murray 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 4
 - (ii) the revised demand forecasts set out in Tables 21–25 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

3.1 Urban service standards

The Commission proposes to approve each of the urban service standards proposed in Lower Murray 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)	47.2	43.4	42.2	41.1	40.1	39.2
Average time taken to attend bursts and leaks (priority 1) (minutes)	14.5	15.0	15.0	15.0	15.0	15.0
Average time taken to attend bursts and leaks (priority 2) (minutes)	18.0	20.0	20.0	20.0	20.0	20.0
Average time taken to attend bursts and leaks (priority 3) (minutes)	23.7	25.0	25.0	25.0	25.0	25.0
Unplanned water supply interruptions restored within 5 hours (per cent) - proposed	90.4	99.4	99.4	99.4	99.4	99.4
Planned water supply interruptions restored within 5 hours (per cent)	99.7	95.0	100.0	100.0	95.0	95.0
Average unplanned customer minutes off water supply (minutes)	10.1	9.0	8.6	8.2	7.9	7.6
Average planned customer minutes off water supply (minutes)	68.5	205.1	4.9	4.8	92.7	204.7
Average frequency of unplanned water supply interruptions (number)	0.2	0.2	0.2	0.2	0.2	0.2
Average frequency of planned water supply interruptions (number)	0.3	0.8	0.1	0.1	0.4	0.8
Average duration of unplanned water supply interruptions (minutes)	50.1	48.3	47.8	47.3	46.9	46.5
Average duration of planned water supply interruptions (minutes)	125.3	268.4	72.2	72.2	250.0	269.8

<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>
Number of customers experiencing 5 unplanned water supply interruptions in the year (number)	4584.0	4495.0	4455.0	4420.0	4387.0	4358.0
Unaccounted for water (per cent)	9.8	9.0	9.0	9.0	9.0	9.0
Sewerage						
Sewerage blockages (per 100km)	30.8	24.4	23.5	22.7	21.9	21.3
Average time to attend sewer spills and blockages (minutes)	18.0	20.0	20.0	20.0	20.0	20.0
Average time to rectify a sewer blockage (minutes)	96.0	105.0	105.0	105.0	105.0	105.0
Spills contained within 5 hours (per cent)	98.0	100.0	100.0	100.0	100.0	100.0
Customers receiving 3 sewer blockages in the year (number)	167.7	135.0	132.0	130.0	127.0	125.0
Customer Service						
Complaints to EWOV (per 1000 customers)	2.0 ^a	0.1 ^b	0.1 ^b	0.1 ^b	0.1 ^b	0.1 ^b
Telephone calls answered within 30 seconds (per cent)	94.2	99.0	99.0	99.0	99.0	99.0
Minimum Flow Rates						
	<i>20mm</i>	<i>25mm</i>	<i>32mm</i>	<i>40mm</i>	<i>50mm</i>	
Flow rate (litres per minute)	35.0	60.0	90.0	35.0	60.0	

Note Data rounded to one decimal place. **n.p.** = Not provided. ^a This is the actual number of complaints (i.e. not normalised per 1000 customers) ^b amended by the business in the lead up to the Draft Decision

Where the proposed service standard target deviated from Western Water's actual three year average performance or did not appear to make sense, the Commission sought further information from the business. The table above indicates which of the standards were amended by the business in the lead up to the Draft Decision.

The Commission is currently seeking further information on the proposed service standard target for the average time to rectify a sewer blockage (minutes).

The target proposed for this indicator is 10 per cent higher than the 2005-06 result (the only result reported so far). In its Water Plan, the business indicated that the implementation of the Road Management Act would adversely affect this service standard. The Commission notes that no other business has cited this. The business subsequently provided further comment and suggested that this was not the sole driver of the increased target but did not provide details.

The Commission has sought further information about other drivers of the proposed increase and how and why these drivers (including the implementation of the Road Management Act) will adversely affect this standard.

The Commission has proposed to approve some targets that appear inconsistent with the three year average performance. These are discussed in detail below.

Average planned customer minutes off supply, average planned frequency of interruptions & average duration of planned interruptions:

The business explained that the higher than average targets proposed (2008-09, 2011-12 and 2012-13) are based on Lower Murray Water's expected increase in planned air scouring activity. Interruptions caused by air scouring of water mains can result in long interruption periods.

The Commission also notes that Lower Murray 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>
Total CO2 Emissions (tonne)	45629 ^a	33500	33500	33500	33500	33500
Biosolids reuse (per cent)		30.0	50.0	70.0	70.0	70.0

Note Data rounded to one decimal place. ^a This is a two year average as data for 2003-04 is unavailable.

3.2 Rural service standards

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

Table 3 Approved service standards

<i>Service standard</i>	<i>Draft decision – service standards</i>				
	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Gravity Supply					
Irrigation water orders delivered on day requested (per cent)	95.00	95.00	95.00	95.00	95.00
Number of channel burst and leaks (per 100 km of channel)	n.p.	n.p.	n.p.	n.p.	n.p.
Unaccounted for water (per cent)	5.00	5.00	5.00	5.00	5.00
Pumped Supply					
Irrigation water orders delivered on day requested (per cent)	n.p.	n.p.	n.p.	n.p.	n.p.
Number of pipeline bursts and leaks (per 100 km of pipeline)	n.p.	n.p.	n.p.	n.p.	n.p.
Unaccounted for water (per cent)	n.p.	n.p.	n.p.	n.p.	n.p.
Irrigation drainage (by district/supply system)					
Availability of sub-surface drainage schemes (per cent)	95.00	95.00	95.00	95.00	95.00
Licensing/administration					
Applications for surface diversion, groundwater or supply-by-agreement licences determined within [X] days (per cent)	n.p.	n.p.	n.p.	n.p.	n.p.
Processing permanent transfer of surface diversion or groundwater licences within [X] days (per cent)	n.p.	n.p.	n.p.	n.p.	n.p.
Processing temporary transfer of water entitlement volumes within [X] days (per cent)	n.p.	n.p.	n.p.	n.p.	n.p.
Processing permanent transfer of water entitlement volumes within [X] days (per cent)	n.p.	n.p.	n.p.	n.p.	n.p.
Number of diversion licences metered or assessed for metering at 30	n.p.	n.p.	n.p.	n.p.	n.p.

<i>Service standard</i>	<i>Draft decision – service standards</i>				
	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
June (per cent)					
Volume of total surface water and groundwater entitlements metered at 30 June (per cent)	n.p.	n.p.	n.p.	n.p.	n.p.
Customer service					
Complaints to EWOV	10.00	10.00	10.00	10.00	10.00
Telephone calls answered within 30 seconds	99.00	99.00	99.00	99.00	99.00

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

The Commission notes that Lower Murray Water did not propose the full suite of core service standards (as shaded in Table 3). The Commission will work with Lower Murray Water to put forward targets for these standards prior to the Final Decision.

Furthermore, the Commission has sought further information in relation to the targets proposed for EWOV complaints.

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 4 Breakdown of revenue requirement implied by ESC draft decision – urban services
\$ 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	17.01	16.55	16.21	16.43	16.83
Return on existing assets	3.69	3.51	3.34	3.19	3.03
Return on new investments	0.77	1.89	2.41	2.72	3.02
Regulatory depreciation	2.84	3.27	3.30	3.56	3.76
Tax liability	0.00	0.00	0.00	0.00	0.00
Total	24.31	25.22	25.27	25.89	26.64

Table 5 **Breakdown of revenue requirement implied by ESC draft decision – rural services**
\$ 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	12.16	12.37	11.58	11.76	11.91
Return on existing assets	0.79	0.74	0.70	0.66	0.62
Return on new investments	0.44	1.00	1.24	1.47	1.70
Regulatory depreciation	0.59	0.85	1.00	1.14	1.28
Tax liability	0.00	0.00	0.00	0.00	0.00
Total	13.97	14.96	14.51	15.03	15.51

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 6.

Table 6 **Updated regulatory asset base – urban**
\$ million in January 2007 prices

	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>
Opening RAB	49.41	52.11	56.53
<i>Plus</i> Gross Capital expenditure	10.36	8.89	12.05
<i>Less</i> Government contributions	0.21	0.00	0.00
<i>Less</i> Customer contributions	4.85	1.67	0.87
<i>Less</i> Proceeds from disposals	0.48	0.48	2.99
<i>Less</i> Regulatory depreciation	2.11	2.32	2.79
Closing RAB	52.11	56.53	61.93

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 7 Rolled forward regulatory asset base — urban
\$ 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	61.9	84.2	92.7	96.1	97.6
<i>Plus</i> Gross Capital expenditure	27.0	13.6	8.5	6.8	8.9
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	1.4	1.4	1.4	1.4	1.4
<i>Less</i> Proceeds from disposals	0.5	0.5	0.5	0.5	0.5
<i>Less</i> Regulatory depreciation	2.8	3.3	3.3	3.6	3.8
Closing RAB	84.2	92.7	96.1	97.6	100.8

The same approach has also been undertaken for the rural side of the business, with these outcomes detailed in the tables below:

Table 8 Updated regulatory asset base — rural
\$ million in January 2007 prices

	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>
Opening RAB	1.88	3.06	1.93
<i>Plus</i> Gross Capital expenditure	3.26	3.89	26.70
<i>Less</i> Government contributions	0.61	4.63	14.78
<i>Less</i> Customer contributions	0.00	0.00	0.00
<i>Less</i> Proceeds from disposals	1.34	0.18	0.32
<i>Less</i> Regulatory depreciation	0.12	0.21	0.30
Closing RAB	3.06	1.93	13.24

Table 9 Rolled forward regulatory asset base — rural
\$ 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	13.2	26.9	30.2	33.4	36.4
<i>Plus</i> Gross Capital expenditure	21.1	4.5	4.5	4.5	4.5
<i>Less</i> Government contributions	0.5	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	6.1	0.0	0.0	0.0	0.0
<i>Less</i> Proceeds from disposals	0.3	0.3	0.3	0.3	0.3
<i>Less</i> Regulatory depreciation	0.6	0.9	1.0	1.1	1.3
Closing RAB	26.9	30.2	33.4	36.4	39.3

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 10 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

8.1 Urban

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

Table 11 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	17.48	16.94	16.62	16.91	17.31
Revisions and adjustments	-0.46	-0.38	-0.41	-0.49	-0.48
Draft decision – operating expenditure	17.01	16.55	16.21	16.43	16.83

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

Table 12 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>
Move permanent water right purchase to capex	-0.53	-0.53	-0.53	-0.53	-0.53
Move Koorlong reuse to prescribed	0	0.10	0.10	0.10	0.10
ESC Water Plan opex	0	0	0	-0.06	-0.03
Environmental contribution	0.07	0.05	0.02	0.00	-0.02
Total	-0.46	-0.38	-0.41	-0.49	-0.48

- (a) No business revisions were proposed after the submission of the Water Plan
- (b) Lower Murray Water had allocated purchase of permanent water entitlements to operating expenditure, where it should have been allocated to capital expenditure. Operational and capital expenditures have been adjusted to reassign the expenditure (CARDNO page 12)
- (c) Recycled water sourced from the Koorlong WWTW was put forward as non-prescribed. The Commission considers that it is a prescribed service and has included the associated operational expenditure in determining its revenue requirement (CARDNO page 12)
- (d) CARDNO considered that Lower Murray Water's proposed expenditure on Essential Services Commission related tasks, including water plan development, was excessive and recommended a reduction in the final two years of the regulatory period (CARDNO page 12)
- (e) The Commission adjusted environmental contribution based on advice from the Department of Sustainability and Environment (Draft Decision section 4.9). The total environmental contribution for Lower Murray Water was given as \$1.45 million per annum, with the Commission apportioning it 60 per cent to the urban and 40 per cent to the rural for the purposes of the draft decision.

8.2 Rural

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

Table 13 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	11.76	11.98	11.21	11.40	11.57
Revisions and adjustments	0.40	0.39	0.37	0.36	0.34
Draft decision – operating expenditure	12.16	12.37	11.58	11.76	11.91

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

Table 14 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>
Environmental contribution	0.40	0.39	0.37	0.36	0.34

- (a) No business revisions were proposed after the submission of the Water Plan
- (b) The Commission adjusted environmental contribution based on advice from the Department of Sustainability and Environment (Draft Decision section 4.9). The total environmental contribution for Lower Murray Water was given as \$1.45 million per annum, with the Commission apportioning it 60 per cent to the urban and 40 per cent to the rural for the purposes of the draft decision.

9. Capital expenditure

9.1 Urban

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

Table 15 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	27.14	7.47	8.05	6.36	8.38
Draft decision – capital expenditure	26.98	13.64	8.54	6.84	8.86

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

Table 16 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>
Koorlong Augmentation WWTW	-3.9	3.9			
Koorlong Recycling	3.5	1.5			
Nichols Point 1st Time Sewerage Scheme	-0.27	0.27			
Permanent Water Rights (transfer from opex to capex)	0.53	0.53	0.53	0.53	0.53
IT capex for new and replacement laptops and PCs	-0.03	-0.03	-0.04	-0.04	-0.05
Total ESC Adjustment	-0.17	6.17	0.49	0.49	0.48

- (a) Koorlong Waste Water Treatment Plant – Cardno recommended spreading expenditure for the Koorlong Waste Water Treatment Plant (\$13M) over the first two years of the regulatory period (Cardno, section 4.2).
- (b) Koorlong Recycling – Cardno recommended that the augmentation for recycled water for the Koorlong WWTW (\$5M) be included as prescribed expenditure and spread of over first two years of the regulatory period (Cardno, section 4.2).
- (c) Nichols Point - Cardno also recommended an 80:20 split of expenditure over 2008-09 and 2009-10 (Cardno, section 4.2).
- (d) Permanent Water rights – Permanent water rights are to be included as a capital expenditure item and have been transferred from the opex forecast (Cardno, section 4.2).
- (e) IT expenditure – Cardno considered that no assumption had been made for the computers being used after their replacement life has expired or for them being sold off. Cardno therefore recommended that a total five year spend of \$360,000 on new and replacement computers would be sufficient (Cardno, section 4.2).

Lower Murray Water has identified the following key capital projects to be undertaken during the regulatory period.

Table 17 Key capital projects

	<i>Expected completion date</i>
Koorlong WWTW	2008-09
Mildura Trunk Extension	2012-13
Kerang WWTP	2008-09
Relocation of 14 th Street Tower	2012-13
Red Cliffs WWTW Decommissioning	2009-10
Koorlong WWTW Recycling	2008-09
Sewer Rehabilitation/Replacement	ongoing
Water Renewals/Replacements	ongoing

9.2 Rural

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

Table 18 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	Gross	22.76	2.97	13.73	20.00	1.81
	Net	16.16	2.97	10.73	11.99	1.81
Draft decision – capital expenditure	Gross	21.13	4.52	4.51	4.50	4.52
	Net	14.53	4.52	4.51	4.50	4.52

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

Table 19 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>
Merbein Pipeline		0	-7	-15	
Smoothing of program	-1.63	1.55	-2.21	-0.48	2.71
Total ESC Adjustment	-1.63	1.55	-9.21	-15.48	2.71

- (a) Merbein channel replacement – expenditure for this project (\$22M) has been omitted from Lower Murray Water Rural's forecast due to uncertainty around the receipt of Federal Government funding. However if Federal funding is granted during the regulatory period this could be considered as reopening event during the period (Cardno, section 5.2).
- (b) Smoothing of program – Cardno recommended that based on actual historical expenditure, that expenditure should be smoothed over the period to make it more achievable (Cardno, section 5.2).

Lower Murray Water has identified the following key capital projects to be undertaken during the regulatory period.

Table 20 Key capital projects

	<i>Expected completion date</i>
Merbein Pipeline and Pumping Station	2012-13
Robinvale High Pressure System	2008-09
Red Cliffs Pumping Station Replacement	2012-13
Meter and water wheel replacement	2012-13

10. Demand forecasts

10.1 Urban

- (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 21 Number of water connections – urban

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Residential					
Proposed connections	27,200	27,570	27,940	28,310	28,680
Draft decision — connections	27,200	27,570	27,940	28,310	28,680
Non-residential					
Proposed connections	7,021	7,076	7,132	7,187	7,243
Draft decision — connections	7,021	7,076	7,132	7,187	7,243
Total	34,221	34,646	35,072	35,497	35,923
Draft decision — total connections	34,221	34,646	35,072	35,497	35,923

Table 22 Number of sewerage connections – urban

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Residential					
Proposed connections	23,706	24,076	24,446	24,816	25,186
Draft decision – connections	23,706	24,076	24,446	24,816	25,186
Non-residential					
Proposed connections	4,647	4,712	4,777	4,842	4,907
Draft decision – connections	4,647	4,712	4,777	4,842	4,907
Total	28,353	28,788	29,223	29,658	30,093
Draft decision – total connections	28,353	28,788	29,223	29,658	30,093

**Table 23 Residential water consumption
ML**

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Proposed average consumption (kL)	372	444	441	438	435
Draft decision – average consumption (kL)	246	444	441	438	435
Proposed total residential consumption	10,106	12,228	12,310	12,391	12,469
Draft decision – total residential consumption	6,684	12,228	12,310	12,391	12,469

- (c) Adjusted residential water consumption to reflect PWC's advice (see the PWC, Assessment of Demand Forecast Report) to reduce Lower Murray Water's forecast for the 2008-09 year to account for its revised restrictions forecast for 2007-08 and 2008-09. Lower Murray Water advised that its outlook for restrictions in these years had changed since it submitted its Water Plan to the Commission and it now expected stage 4 restrictions will remain in place until 2008-09.
- (d) Removed price elasticity for Lower Murray Water in the early years of the period in recognition of the high level restrictions in place. PwC considered that customers on stage 3 or 4 level restrictions had reduced their discretionary consumption to such a point that price increases will have little impact on usage.

Table 24 Non-residential water consumption
ML

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Proposed non-residential consumption	4,154	4,186	4,219	4,252	4,285
Draft decision – non residential consumption	4,154	4,186	4,219	4,252	4,285

Table 25 Total water consumption
ML

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-2013</i>
Proposed total consumption	14,260	16,414	16,530	16,643	16,754
Draft decision – total consumption	10,838	16,414	16,530	16,643	16,754

- (e) Reducing Lower Murray Water's forecast for the 2008-09 year to account for its revised restrictions forecast.

10.1 Rural

The Commission has made the following assumptions to demand for rural services over the regulatory period.

Table 26 Draft decision —revised forecasts, Lower Murray Water

<i>District</i>	<i>Description</i>	<i>Unit</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Merbein drainage	Div 1 Delivery Share Charge	ML VR	3,111	3,111	3,111	3,111	3,111
Merbein drainage	Div 4 Delivery Share Charge	ML VR	79	79	79	79	79
Red Cliffs drainage	Div 1 Delivery Share Charge	ML VR	4,396	4,396	4,396	4,396	4,396
Red Cliffs drainage	Div 4 Delivery Share Charge	ML VR	431	431	431	431	431
Robinvale drainage	Div 1 Delivery Share Charge	ML VR	2,521	2,521	2,521	2,521	2,521
Other stock and domestic (Irrigation)	1st Div	ha	4,797	4,797	4,797	4,797	4,797
Other stock and domestic (Irrigation)	2nd Div	ha	213	213	213	213	213
Merbein irrigation	Usage Charge	ML Supp	28,204	28,204	28,204	28,204	28,204
Red Cliffs irrigation	Usage Charge	ML Supp	39,957	39,957	39,957	39,957	39,957
Robinvale irrigation	Usage Charge	ML Supp	19,208	19,208	19,208	19,208	19,208
Millewa Rural (Irrigation)	Usage Charge	kL	633,659	633,659	633,659	633,659	633,659
Millewa Urban (Irrigation)	Usage Charge	kL	39,728	39,728	39,728	39,728	39,728
Merbein irrigation	Garden Fee unmetered	cust	189	179	169	159	149
Red Cliffs irrigation	Garden Fee unmetered	cust	310	295	280	265	250
Robinvale irrigation	Garden Fee unmetered	cust	96	91	86	81	76
Diversions (Irrigation)	Env levy per ML old water	ML WR	325,144	346,644	368,144	389,644	411,144

The Commission has on the advice of PwC adopted the following changes for Lower Murray Water's rural demand forecast:

- (a) Increasing forecast irrigation volumes to reflect a medium rainfall scenario. Lower Murray Water forecast irrigation volumes using data on irrigation flows from the last seven years. Given the dry conditions experienced over these years, PwC considered this approach resulted in forecasts based on a low rainfall scenario and re-forecast Lower Murray Water's irrigation volumes using historical data from 1997-98 to 2006-07.

- (b) Adjusting forecast stock and domestic volumes to account for the 14 months of volumes that were recorded in 2005-06. Lower Murray Water forecast that stock and domestic volumes would be consistent with volumes used over the last three years. However, the inclusion of 14 months of volumes in 2005-06 could bias the forecasts and thus Lower Murray Water advised PwC to base the forecasts on an average of the last five years. PwC recommended that the Commission make this adjustment.
- (c) Increasing Lower Murray Water's diversion forecasts. Lower Murray Water assumed that the volume of water taken by diverters increases at a rate of 20,000ML per annum. This was based on volumes over the last 3 years, which have increased at a rate of between 20,000 and 23,000ML per annum. PwC noted that the lower end of this range had been used to forecast volumes and that the business's water plan indicated the average annual increase since 2003 had been 21,659 ML per annum. PwC amended the forecasts so that the annual increase throughout the regulatory period was 21,500 ML.
- (d) Adjusting the number of connections. Lower Murray Water revised its projected metered and unmetered property numbers, which show that properties are being gradually changed from unmetered to metered properties. They also provided revised estimates for hectares and delivery share. PwC recommended adopting these revised forecasts.

11. Form of price control

- (e) The Commission proposes to approve individual price caps for Lower Murray Water's urban services and a revenue cap for its rural services.
- (f) Lower Murray Water should submit a schedule of prices to apply from 1 July 2008 for its urban and rural services, as well as a process in which its urban tariffs can be adjusted on an annual basis.
- (g) Lower Murray Water may apply for an adjustment to its urban 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 urban 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 27.

Table 27 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	0.02	0.02	0.02	0.02	0.03
Environment Protection Authority	0.08	0.08	0.08	0.08	0.08
Department of Human Services	0.01	0.01	0.01	0.01	0.01

^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

- (a) The Commission proposes to not approve Lower Murray Water's proposed tariff structure on the basis that it is not consistent with the WIRO.
- (b) The Commission is of the view that Lower Murray Water's seasonal inclining block tariff, with higher consumption allowances in the warmer months, does not accurately reflect the costs of providing services or provide appropriate signals to customers about using water resources in a sustainable manner.
- (c) Lower Murray Water should provide further justification for its seasonal inclining block tariff, including conservation objectives and the relationship to price patterns on the temporary market.

14. Retail sewerage tariffs

- (a) The Commission proposes to approve Lower Murray Water's proposed tariff structure on the basis that it is consistent with the WIRO.
- (b) The Commission is concerned that Lower Murray Water's proposed sewerage charges are not likely to be understood by customers. Lower Murray Water should consider amending its proposed sewerage tariff structure to simplify the basis for allocating fixed costs.
- (c) The Commission proposes not to approve Lower Murray Water's environmental contribution charge on the basis that it is not consistent with the WIRO, as it may not accurately reflect costs.
- (d) Lower Murray Water should recover revenue for the environmental contribution through general tariffs.

15. Trade waste charges

- (a) The Commission proposes to generally approve Lower Murray 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) Lower Murray 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 be 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 considers that Lower Murray Water should set its recycled water prices according to a set of principles that ensure that 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.
- (b) 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.

17. Customer contributions

- (a) The Commission proposes to approve Lower Murray 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 28 **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. Rural tariffs

- (a) The Commission proposes to approve Lower Murray Water's proposed tariff structures for its rural services.
- (b) The Commission proposes to not approve Lower Murray Water's price paths for rural services as the proposed price movements are too volatile.
- (c) The Commission considers that volatile price movements are not likely to be based on changes in cost and may lead to adverse customer impacts and customer confusion.
- (d) Lower Murray Water to required to ensure that its price paths do not contain unnecessary volatility when it resubmits its proposed tariffs in response to this Draft Decision.
- (e) Lower Murray Water is required to clarify whether it proposes to continue charging termination fees in the next regulatory period, including whether it proposes to continue calculating termination fees in the same manner.

19. Miscellaneous charges

- (a) Lower Murray Water did not identify a core set of miscellaneous services in its Water Plan, instead proposing a slightly revised version of its existing schedule.
- (b) In response to this Draft Decision, Lower Murray Water is required to submit:

- (i) a core set of miscellaneous services, which would be expected to generate at least 75 per cent of miscellaneous revenue.
- (ii) proposed prices for core miscellaneous services for 2008-09 and the manner in which they will be adjusted over the regulatory period.
- (iii) a brief definition of each core miscellaneous service, describing the nature of the service provided and the circumstances when the charge will apply.