

Gosford City Council Wyong Shire Council Prices of Water Supply, Wastewater and Stormwater Services

From 1 July 2006 to 30 June 2009

Draft Determination

The Tribunal members for this review are:

Dr Michael Keating AC, Chairman Mr James Cox, CEO and Full Time Member Ms Cristina Cifuentes, Part Time Member

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Independent Pricing and Regulatory Tribunal of New South Wales

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REQUEST FOR SUBMISSIONS

The Tribunal invites interested parties to comment on this draft report and determination. Submissions are due by mid-day 28 April 2006. Following consideration of submissions, the Tribunal expects to issue a final determination in the second half of May 2006.

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The Tribunal exercises its discretion not to exhibit any submissions based on their length or content (containing material that is defamatory, offensive, or in breach of any law).

Submissions must be made in writing and should be sent to the postal address, fax number or email address below. Where possible, submissions should be provided in a computer readable format (eg, word processor, PDF or spreadsheet) either on disk, CD or by email.

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Draft Determination No 2, 2006

Section 11(1)
Independent Pricing and Regulatory Tribunal Act 1992

Gosford City Council

Independent Pricing and Regulatory Tribunal of New South Wales

Reference No 05/517

1. Background

- (1) Section 11 of the *Independent Pricing and Regulatory Tribunal Act* 1992 permits the Tribunal to conduct investigations and make reports to the Minister on the determination of the pricing for a government monopoly service supplied by a government agency specified in Schedule 1 of the IPART Act.
- (2) Water supply authorities constituted under the *Water Management Act 2000* are listed as government agencies for the purposes of schedule 1 of the IPART Act. Under the *Water Management Act 2000*, Gosford City Council (the **Council**) is listed as a water supply authority. The services of the Council declared as monopoly services (**Monopoly Services**) under the *Independent Pricing and Regulatory Tribunal (Water, Sewerage and Drainage Services) Order* 1997 (**Order**) are:
 - (a) water supply services;
 - (b) sewerage services;
 - (c) stormwater drainage services;
 - (d) trade waste services;
 - (e) services supplied in connection with the provision or upgrading of water supply and sewerage facilities for new developments and, if required, drainage facilities for such developments;
 - (f) ancillary and miscellaneous customer services for which no alternative supply exists and which relate to the supply of services of a kind referred to in paragraphs (a) to (e);
 - (g) other water supply, sewerage and drainage services for which no alternative supply exists.

Accordingly, the Tribunal may determine the prices for the Council's Monopoly Services.

- (3) In investigating and reporting on the pricing of the Council's Monopoly Services, the Tribunal has had regard to a broad range of matters, including the criteria set out in section 15(1) of the IPART Act.
- (4) In accordance with section 13A of the IPART Act, the Tribunal has fixed the maximum price or set a methodology for fixing the maximum price for the Council's Monopoly Services.
- (5) Under section 18(2) of the IPART Act, the Council may not fix a price below that determined by the Tribunal without the approval of the Treasurer.

2. Application of this determination

- (1) This determination fixes the maximum prices (or sets a methodology for fixing the maximum prices) that the Council may charge for the Monopoly Services.
- (2) This determination commences on the later of 1 July 2006 and the date that it is published in the NSW Government Gazette (Commencement Date).
- (3) The maximum prices in this determination apply from the Commencement Date to 30 June 2009. The maximum prices in this determination prevailing at 30 June 2009 continue to apply beyond 30 June 2009 until this determination is replaced.

3. Replacement of Determination No. 1 of 2005

Determination No. 1 of 2005 is replaced by this determination from the Commencement Date. The replacement does not affect anything done or omitted to be done, or rights or obligations accrued, under that determination prior to its replacement.

4 Monitoring

The Tribunal may monitor the performance of the Council for the purposes of:

- (a) establishing and reporting on the level of compliance by the Council with this determination; and
- (b) preparing a periodic review of pricing policies in respect of the Monopoly Services supplied by the Council.

5. Schedules

Schedules 1-5 (inclusive) and the Tables in those Schedules set out the maximum prices that the Council may charge for the Monopoly Services specified in the Schedules.

6 Definitions and Interpretation

Definitions and interpretation provisions used in this determination are set out in Schedule 6.

Water Supply Services

1. Application

This Schedule sets the maximum prices that the Council may charge for the Monopoly Services under paragraph (a) of the Order (water supply services).

2. Categories for pricing purposes

Prices for water supply services have been determined for 3 categories:

- (a) a Metered Property;
- (b) Vacant Land; and
- (c) an Unmetered Property.

2.1 Charges for water supply services to Metered Properties

The maximum price that may be levied by the Council for the provision of water supply services to a Metered Residential Property or a Metered Non Residential Property (each connected to the Water Supply System) is the sum of the following:

- (a) the water service charge in Table 1, corresponding to the Meter size; and
- (b) the water usage charge in Table 2, per kL of water used.

2.2. Charges for water supply services to Vacant Land

The maximum price that may be levied by the Council for the provision of water supply services to Vacant Land (whether there is a Meter on that Vacant Land or not) which is not connected to the Water Supply System but is reasonably available for connection to the Water Supply System is the water service charge in Table 3.

2.3. Charges for water supply services to Unmetered Properties

The maximum price that may be levied by the Council for the provision of water supply services to an Unmetered Property which is connected or reasonably available for connection to the Water Supply System is:

- (a) the water service charge in Table 1 (with that Unmetered Property taken to have a Meter size of 20mm); and
- (b) the water usage charge in Table 2, per kL of water used, as if the water used by that Unmetered Property was equal to the average water consumption of all the Properties located on the same street as that Unmetered Property.

3. Levying water supply service charges on Multi Premises

3.1 Water supply charges for Multi Premises

- 3.1.1 Clause 3 of this schedule prescribes how the maximum prices in this schedule are to be levied on Multi Premises.
- 3.1.2 Clause 2.1 of this schedule does not apply to Metered Properties if this clause 3 is capable of applying to those Properties.

3.2 Multi Premises (other than a Retirement Village)

For a Multi Premises (other than a Retirement Village):

- (a) which is connected to the Water Supply System; and
- (b) which has a Common Water Meter or multiple Common Water Meters,

the maximum price that may be levied by the Council for the provision of water supply services to a Property within that Multi Premises is the sum of the following:

- (c) the water service charge in Table 1 (with that Property taken to have a Meter size of 20mm); and
- (d) the water usage charge in Table 2, as if the water used by that Property was determined by the following formula:

$$WU = \frac{A}{B}$$

Where:

WU - water used by that Property

A - total quantity of water used by that Multi Premises

B - number of Properties within that Multi Premises.

3.3 Retirement Village

For a Retirement Village:

- (a) which is connected to the Water Supply System; and
- (b) which has a Common Water Meter or multiple Common Water Meters, the maximum price for each Common Water Meter that may be levied by the Council on that Retirement Village for the provision of water supply services to that Retirement Village is the sum of the following:
 - (c) the water service charge in Table 1, corresponding to the Meter size; and
 - (d) the water usage charge in Table 2, per kL of water used.

Tables 1, 2 and 3

Table 1 Water service charges for a Metered Residential Property or a Metered Non Residential Property

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Water supply charge (per year) – Meter size			
20mm	83.24	83.24 x (1+∆CPI ₁)	83.24 x (1+ΔCPI ₂)
25mm	130.06	130.06 x (1+∆CPI ₁)	130.06 x (1+ΔCPI ₂)
32mm	213.09	213.09 x (1+∆CPI ₁)	213.09 x (1+ΔCPI ₂)
40mm	332.96	332.96 x (1+∆CPI ₁)	332.96 x (1+ΔCPI ₂)
50mm	520.25	520.25 x (1+∆CPI ₁)	520.25 x (1+∆CPI ₂)
65mm	879.22	879.22 x (1+∆CPI ₁)	879.22 x (1+ΔCPI ₂)
80mm	1,331.84	1,331.84 x (1+∆CPI ₁)	1,331.84 x (1+∆CPI ₂)
100mm	2,081.00	2,081.00 x (1+∆CPI ₁)	2,081.00 x (1+ΔCPI ₂)
150mm	4,682.25	4,682.25 x (1+∆CPI ₁)	4,682.25 x (1+∆CPI ₂)
200mm	8,324.00	8,324.00 x (1+∆CPI ₁)	8,324.00 x (1+ΔCPI ₂)
For Meter sizes not specified above, the following formula applies	(Meter size) ² x 20mm charge/400	(Meter size) ² x 20mm charge/400	(Meter size) ² x 20mm charge/400

Table 2 Water usage charge for a Metered Residential Property or a Metered Non Residential Property

Charge	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Water usage charge, per kilolitre of water used	1.12	1.33 x (1+∆CPI₁)	1.57 x (1+∆CPI ₂)

Table 3 Water service charge for a Vacant Land

Charge	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Water service charge (per year)	83.24	83.24 x ((1+∆CPI₁)	83.24 x (1+ΔCPI ₂)

Sewerage services

1. Application

This Schedule sets the maximum prices that the Council may charge for the Monopoly Services under paragraph (b) of the Order (sewerage services).

2. Categories for pricing purposes

Prices for sewerage services have been determined for 4 categories:

- (a) Residential Properties;
- (b) Non Residential Properties;
- (c) Vacant Land; and
- (d) Unmetered Properties.

2.1. Charges for sewerage services to Residential Properties connected to the Sewerage System

The maximum price that may be levied by the Council for sewerage services to a Residential Property connected to the Sewerage System is the sewerage service charge in Table 4.

2.2. Charges for sewerage services to Non Residential Properties connected to the Sewerage System

The maximum price that may be levied by the Council for sewerage services to a Non Residential Property connected to the Sewerage System is the higher of:

- (a) the sewerage service charge in Table 5; and
- (b) the sum of:
 - (i) the sewerage service charge in Table 6, corresponding to the Meter size; and
 - (ii) the sewerage usage charge in Table 7, per kilolitre of water used.

2.3 Charges for sewerage services to Vacant Land

The maximum price that may be levied by the Council for sewerage services to Vacant Land which is not connected to the Sewerage System but is reasonably available for connection to the Sewerage System is the sewerage service charge in Table 8.

2.4 Charges for sewerage services to Unmetered Property

The maximum price that may be levied by the Council for sewerage services to an Unmetered Property which is connected or reasonably available for connection to the Sewerage System is the sewerage service charge in Table 4 (if the Unmetered Property is a Residential Property) and the sewerage service charge in Table 5 (if the Unmetered Property is a Non Residential Property).

3. Levying sewerage service charges on Multi Premises

3.1 Water supply charges for Multi Premises

- 3.1.1 Clause 3 of this schedule prescribes how the maximum prices in this schedule are to be levied on Multi Premises.
- 3.1.2 Clauses 2.1 and 2.2 do not apply to Properties connected to the Sewerage System if this clause 3 is capable of applying to those Properties.

3.2 Multi Premises (other than a Retirement Village)

- (a) For a Multi Premises (other than a Retirement Village):
 - (i) which is connected to the Sewerage System; and
 - (ii) which has a Common Water Meter or multiple Common Water Meters; and
 - (iii) where the majority of the Properties in that Multi Premises are Residential Properties,

the maximum price that may be levied by the Council for the provision of sewerage services to a Property within that Multi Premises is the sewerage service charge in Table 4 (with that Property taken to have a Meter size of 20mm).

- (b) For a Multi Premises (other than a Retirement Village):
 - (i) which is connected to the Sewerage System;
 - (ii) which has a Common Water Meter or multiple Common Water Meters; and
 - (iii) where the majority of the Properties in that Multi Premises are Non Residential Properties,

the maximum price that may be levied by the Council for the provision of sewerage services to a Property within that Multi Premises is the higher of:

- (iv) the sewerage service charge in Table 5; and
- (v) the sum of:
 - (i) the sewerage service charge in Table 6 (with that Property taken to have a Meter size of 20mm); and
 - (ii) the sewerage usage charge in Table 7, per kilolitre of water used.

3.3 Retirement Village

For a Retirement Village:

- (a) which is connected to the Sewerage System; and
- (b) which has a Common Water Meter or multiple Common Water Meters, the maximum price for each Common Water Meter that may be levied by the Council on that Retirement Village for the provision of sewerage services to that Retirement Village is the greater of:
 - (c) the sewerage service charge in Table 5; and
 - (d) the sum of:
 - (i) the sewerage service charge in Table 6, corresponding to the Meter size; and
 - (ii) the sewerage usage charge in Table 7, per kilolitre of water used.

Tables 4, 5, 6, 7 and 8

Table 4 Sewerage service charge for a Residential Property

Charge	Commencement	1 July 2007 to	1 July 2008 to
	Date to 30 June 2007	30 June 2008	30 June 2009
	\$	\$	\$
Sewerage service charge (per year)	374.91	374.91 x (1+∆CPI₁)	374.91 x (1+∆CPI ₂)

Table 5 Sewerage service charge for a Non Residential Property

Charge	Commencement	1 July 2007 to	1 July 2008 to
	Date to 30 June 2007	30 June 2008	30 June 2009
	\$	\$	\$
Sewerage service charge (per year)	374.91	374.91 x (1+ΔCPI₁)	374.91 x (1+∆CPI₂)

Table 6 Sewerage service charge for a Non Residential Property

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Sewerage service charge (per year) – Meter size			
20mm	280.08	280.08 x (1+ ΔCPI ₁)	280.08 x (1+ ΔCPI ₂)
25mm	437.63	437.63 x (1+ ΔCPI ₁)	437.63 x (1+ ΔCPI ₂)
32mm	717.00	717.00 x (1+ ΔCPI ₁)	717.00 x (1+ ΔCPI ₂)
40mm	1,120.32	1,120.32 x (1+ ∆CPI₁)	1,120.32 x (1+ ΔCPI ₂)
50mm	1,750.50	1,750.50 x (1+ ∆CPI₁)	1,750.50 x (1+ ΔCPI ₂)
65mm	2,958.35	2,958.35 x (1+ ΔCPI ₁)	2,958.35 x (1+ ΔCPI ₂)
80mm	4,481.28	4,481.28 x (1+ ΔCPI ₁)	4,481.28 x (1+ ΔCPI ₂)
100mm	7,002.00	7,002.00 x (1+ ΔCPI ₁)	7,002.00 x (1+ ΔCPI ₂)
150mm	15,754.50	15,754.50 x (1+ ΔCPI ₁)	15,754.50 x (1+ ΔCPI ₂)
200mm	28,008.00	28,008.00 x (1+ ΔCPI ₁)	28,008.00 x (1+ ΔCPI ₂)
For Meter sizes not specified above, the following formula applies	(Meter size) ² x 20mm charge/400	(Meter size) ² x 20mm charge /400	(Meter size) ² x 20mm charge /400

Table 7 Sewerage usage charge for a Non Residential Property

Charge	Commencement	1 July 2007 to	1 July 2008 to
	Date to 30 June 2007	30 June 2008	30 June 2009
	\$	\$	\$
Sewerage usage charge, per kilolitres of water used	0.80 x df%	0.80 x (1+ΔCPI ₁) x df%	0.80 x (1+∆CPl₂) x df%

^{*}Note - a Discharge Factor is applied to the charge based on the volume of water discharged into the Sewerage System.

Table 8 Sewerage service charge for Vacant Land

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Sewerage service charge (per year)	281.18	281.18 x (1+ΔCPI₁)	281.18 x (1+ΔCPI ₂)

Stormwater drainage services

1. Application

This Schedule sets the maximum prices that the Council may charge for services under paragraph (c) of the Order (stormwater drainage services).

2. Charges for stormwater drainage services to Residential Properties, Non Residential Properties, Vacant Land or Unmetered Properties

The maximum charge that may be levied by the Council for stormwater drainage services to a Metered Residential Property, a Metered Non Residential Property, a Multi Premises with a Common Water Meter, Vacant Land or an Unmetered Property is the stormwater drainage charge in Table 9.

Table 9 Stormwater drainage charge for Residential Properties, Non Residential Properties, Vacant Land and Unmetered Properties

Charge	Commencement	1 July 2007 to	1 July 2008 to
	Date to 30 June 2007	30 June 2008	30 June 2009
	\$	\$	\$
Stormwater drainage charge (per year)	55	56.1 x (1+∆CPI₁)	57.22 x (1+∆CPI ₂)

Trade Waste Services

1. Application

This Schedule sets the maximum prices that the Council may charge for the Monopoly Services under paragraph (d) of the Order (Trade Waste Services).

2. Categories for pricing purposes

Prices for trade waste services have been determined for 3 categories:

- (a) Category 1 Trade Waste Discharge;
- (b) Category 2 Trade Waste Discharge; and
- (c) Category 3 Trade Waste Discharge.

2.1 Category 1 Trade Waste Discharge

The maximum price for Category 1 Trade Waste Discharge that may be levied by the Council is represented by the following formula:

$$TW1 = A + I$$

Where:

TW1 - maximum price for Category 1 Trade Waste Discharge

A - Trade waste agreement fee (\$)

I - Liquid trade waste re-inspection fee (\$) (if applicable)

each as set out in Table 10.

2.2. Category 2 Trade Waste Discharge

The maximum price for Category 2 Trade Waste Discharge that may be levied by the Council is represented by the following formula:

$$TW2 = A + I + [(C \times TWDF) \times UCtw]$$

Where:

TW2 - maximum price for Category 2 Trade Waste Discharge

A - Trade waste agreement fee (\$)

I - Liquid trade waste re-inspection fee (\$) (if applicable)

UCtw - Trade waste usage charge (\$/kL) or the charge for lack of pre-treatment facility (\$/kL) (as the case may be)

each as set out in Table 10.

C - Customer annual water consumption (kL)

TWDF - Trade Waste Discharge Factor (%)

2.3 Category 3 Trade Waste Discharge

The maximum price for Category 3 Trade Waste Discharge that may be levied by the Council is the higher of the price as calculated by applying the formula in clause 2.2 above and the price as represented by the following formula:

TW3 = A + I + EMC

Where:

TW3 - maximum price for Category 3 Trade Waste Discharge

A - Trade waste agreement fee (\$)

I - Liquid trade waste re - inspection fee (\$) (if applicable)

each as set out in Table 10.

EMC - Total excess mass charge (\$) as set out in Table 11.

Tables 10 & 11

Table 10 Trade waste charges

Charge	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008	1 July 2008 to 30 June 2009
Trade waste usage charge (\$/kL)	1.33	1.33 x (1+ ΔCPI ₁)	1.33 x (1+ ΔCPI ₂)
Trade waste agreement fee (\$/year)	68.3	68.3 x (1+ ΔCPI ₁)	68.3 x (1+ ΔCPI ₂)
Liquid trade waste re- inspection fee (\$/year)	116.25	116.25 x (1+ ∆CPI₁)	116.25 x (1+ ΔCPI ₂)
Charge for lack of pre- treatment facility (\$/kL)	11.28	11.28 x (1+ ∆CPI₁)	11.28 x (1+ ΔCPI ₂)

Table 11 Excess mass charges

Pollutant	Commencement Date to 30 June 2007 \$/kg	1 July 2007 to 30 June 2008 \$/kg	1 July 2008 to 30 June 2009 \$/kg
Aluminium (AI)	0.55	0.55 x (1+ ΔCPI ₁)	0.55 x (1+ ΔCPI ₂)
Ammonia (as N)	1.64	1.64 x (1+ ∆CPI ₁)	1.64 x (1+ ∆CPI ₂)
Arsenic (As)	55.35	55.35 x (1+ ΔCPI ₁)	55.35 x (1+ ∆CPI ₂)
Barium (Ba)	27.68	27.68 x (1+ ΔCPI ₁)	27.68 x (1+ ΔCPI ₂)
Biological Oxygen Demand (BOD₅)	1.33	1.33 x (1+ ΔCPI ₁)	1.33 x (1+ ∆CPI ₂)
Boron (B)	0.55	0.55 x (1+ ΔCPI ₁)	0.55 x (1+ ΔCPI ₂)
Bromine (Br ₂)	11.28	11.28 x (1+ ΔCPI ₁)	11.28 x (1+ ΔCPI ₂)
Cadmium (Cd)	256.25	256.25 x (1+ ΔCPI ₁)	256.25 x (1+ ΔCPI ₂)
Chlorinated Hydrocarbons	27.68	27.68 x (1+ ΔCPI ₁)	27.68 x (1+ ΔCPI ₂)
Chlorinated Phenolics	1,127.50	1,127.50 x (1+ ΔCPI ₁)	1,127.50 x (1+ ΔCPI ₂)
Chloride	No charge	No charge	No charge
Chlorine (Cl ₂)	1.13	1.13 x (1+ ∆CPI ₁)	1.13 x (1+ ∆CPI ₂)
Chromium (Cr) (Total)#	18.45	18.45 x (1+ ∆CPI ₁)	18.45 x (1+ ∆CPI ₂)
Cobalt (Co)	11.28	11.28 x (1+ ΔCPI ₁)	11.28 x (1+ ΔCPI ₂)
Copper (Cu)	11.28	11.28 x (1+ ΔCPI ₁)	11.28 x (1+ ΔCPI ₂)
Cyanide	55.35	55.35 x (1+ ΔCPI ₁)	55.35 x (1+ ΔCPI ₂)
Flouride (F)	2.77	2.77 x (1+ Δ CPI ₁)	2.77 x (1+ ΔCPI ₂)
Formaldhyde	1.13	1.13 x (1+ ∆CPI ₁)	1.13 x (1+ ∆CPI ₂)
Grease	6.85	6.85 x (1+ ∆CPI ₁)	6.85 x (1+ ∆CPI ₂)
Herbicides/Weedicides/Fun gicides	553.50	553.50 x (1+ ΔCPI ₁)	553.50 x (1+ ΔCPI ₂)
Iron (Fe)	1.13	1.13 x (1+ ∆CPI ₁)	1.13 x (1+ ∆CPI ₂)
Lead (Pb)	27.68	27.68 x (1+ ΔCPI ₁)	27.68 x (1+ ΔCPI ₂)
Lithium (Li)	5.54	5.54 x (1+ ΔCPI ₁)	5.54 x (1+ ΔCPI ₂)
Methylene Blue Active Substances (MBAS)	0.55	0.55 x (1+ ΔCPI ₁)	$0.55 \times (1 + \Delta CPI_2)$
Manganese (Mn)	5.54	5.54 x (1+ ΔCPI ₁)	5.54 x (1+ ΔCPI ₂)
Mercury (Hg)	1,845.00	1,845.00 x (1+ ΔCPI ₁)	1,845.00 x (1+ ΔCPI ₂)

Pollutant	Commencement Date to 30 June 2007 \$/kg	1 July 2007 to 30 June 2008 \$/kg	1 July 2008 to 30 June 2009 \$/kg
Molybdenum (Mo)	0.55	0.55 x (1+ ΔCPI ₁)	0.55 x (1+ ΔCPI ₂)
Nickel (Ni)	18.45	18.45 x (1+ ∆CPI ₁)	18.45 x (1+ △CPI ₂)
Nitrogen (N) (Total Kjeldahl Nitrogen)	0.14	0.14 x (1+ ΔCPI ₁)	0.14 x (1+ ΔCPI ₂)
Pentachlorophenol	1,127.50	1,127.50 x (1+ ΔCPI ₁)	1,127.50 x (1+ ΔCPI ₂)
Pesticides – General	553.50	553.50 x (1+ ΔCPI ₁)	553.50 x (1+ ΔCPI ₂)
Pesticides – Organochlorine	553.50	553.50 x (1+ ΔCPI ₁)	553.50 x (1+ ΔCPI ₂)
Pesticides – Organophosphate	553.50	553.50 x (1+ ΔCPI ₁)	553.50 x (1+ ΔCPI ₂)
PCB	553.50	553.50 x (1+ ΔCPI ₁)	553.50 x (1+ ΔCPI ₂)
Petroleum Hydrocarbons (non-flammable)	1.85	1.85 x (1+ ∆CPI₁)	1.85 x (1+ ΔCPI ₂)
pH>10, or pH<7	0.55	$0.55 \times (1 + \Delta CPI_1)$	0.55 x (1+ ∆CPI ₂)
Phenolic Compounds (excluding chlorinated)	5.54	5.54 x (1+ ∆CPI₁)	5.54 x (1+ ΔCPI ₂)
Phosphorus (Total)	1.13	1.13 x (1+ ∆CPI ₁)	1.13 x (1+ ∆CPI ₂)
Polynuclear Aromatic Hydrocarbons (PAH)	11.28	11.28 x (1+ ∆CPI₁)	11.28 x (1+ ΔCPI ₂)
Selenium (Se)	38.95	38.95 x (1+ ∆CPI ₁)	38.95 x (1+ ΔCPI ₂)
Silver (Ag)	11.28	11.28 x (1+ ΔCPI ₁)	11.28 x (1+ ΔCPI ₂)
Sulphate (SO ₄)	0.11	$0.11 \times (1 + \Delta CPI_1)$	0.11 x (1+ ΔCPI ₂)
Sulphide (S)	1.13	1.13 x (1+ ∆CPI ₁)	1.13 x (1+ ∆CPI ₂)
Sulphite (SO ₃)	1.13	1.13 x (1+ ∆CPI ₁)	1.13 x (1+ ∆CPI ₂)
Suspended Solids (SS or NFR)	1.33	1.33 x (1+ ∆CPI₁)	1.33 x (1+ ΔCPI ₂)
Temperature	No charge	No charge	No charge
Tin (Sn)	5.54	5.54 x (1+ ∆CPI₁)	5.54 x (1+ ΔCPI ₂)
Total Dissolved Solids	0.04	0.04 x (1+ ∆CPI ₁)	0.04 x (1+ ∆CPI ₂)
Zinc (Zn)	11.28	11.28 x (1+ ∆CPI₁)	11.28 x (1+ ΔCPI ₂)

Ancillary and miscellaneous customer services

1. Application

1.1 This Schedule sets the maximum prices that the Council may charge for services under paragraph (f) of the Order (ancillary and miscellaneous customer services for which no alternative supply exists).

2. Ancillary and miscellaneous charges

- 2.1 The maximum charge that may be levied by the Council for an ancillary and miscellaneous service in column 2 of Table 12 is:
 - (a) **from the Commencement Date to 30 June 2007** the corresponding charge in column 3 of Table 12;
 - (b) **from 1 July 2007 to 30 June 2008** the corresponding charge in column 4 of Table 12 multiplied by $(1+ \Delta CPI_1)$; and
 - (c) **from 1 July 2008 to 30 June 2009** the corresponding charge in column 5 of Table 12 multiplied by $(1+ \Delta CPI_2)$.
- 2.2 A reference in Table 12 to "NA" means that the Council does not provide the relevant service.

Table 12 Charges for ancillary and miscellaneous services

Column 1	Column 2	Column 3	Column 4	Column 5
No.	Ancillary and miscellaneous service	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008	1 July 2008 to 30 June 2009
1	Conveyancing Certificate (Statement of Outstanding Charges) a) Over the Counter b) Electronic	\$26.00 NA	\$27.00 NA	\$28.00 NA
2	Property Sewerage Diagram- up to and including A4 size- (where available) (Diagram showing the location of the house-service line, building and sewer for a property)			
	a) Certifiedb) Uncertified	\$30.00	\$34.00	\$39.00
	i. Over the Counter ii. Electronic	r \$24.00 NA	\$26.00 NA	\$30.00 NA
3	Service Location Diagram (Location of sewer and/or Wate Mains in relation to a property's boundaries) a) Over the Counter b) Electronic		\$15.00 NA	\$15.00 NA
4	Special Meter Reading Statement	\$54.00	\$55.00	\$55.00
5	Billing Record Search Statement – up to and including 5 years.	\$17.70	\$17.70	\$17.70
6	Building over or Adjacent to Sewer Advice (Statement of Approval Status to existing Building Over or Adjacent to a Sewer)	\$0 for	\$0	\$0
7	Water Reconnection a) During business hours b) Outside business hours	\$52.00 \$110.00	\$54.00 \$120.00	\$56.00 \$130.00
8	Workshop Test of Water Mete (Removal of the meter by an accredited organisation at the customer's request to determine			
	the accuracy of the water meter (A separate charge relating to transportation costs and the full mechanical test which involves dismantling and inspection of meter components will also be payable)	5.		

Column 1	Column 2	Column 3	Column 4	Column 5
No.	Ancillary and miscellaneous service	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008	1 July 2008 to 30 June 2009
	20mm	\$134.00	\$134.00	\$134.00
	25mm	\$134.00	\$134.00	\$134.00
	32mm	\$134.00	\$134.00	\$134.00
	40mm	\$134.00	\$134.00	\$134.00
	50mm	\$134.00	\$134.00	\$134.00
	80mm	\$134.00	\$134.00	\$134.00
	100mm	NA	NA	NA
	150mm	NA	NA	NA
9	Water main disconnection a) Application for Disconnection- (all sizes) b) Physical Disconnection	\$39.00 NA	\$40.00 NA	\$41.00 NA
	b) i flysical Disconficction	IVA	INA	IVA
10	Application for Water Service Connection-(up to and including 25mm) (This covers the administration fee only. There will be a separate charge payable to the utility if they also perform the physical connection)	\$39.00	\$40.00	\$41.00
11	Application for Water Service Connection-(32-65mm) (This covers administration and system capacity analysis as required. There will be a separate charge payable to the utility if they also perform the physical connection)	\$39.00	\$40.00	\$41.00
12	Application for Water Service Connection-(80mm or greater) (This covers administration and system capacity analysis as required. There will be a separate charge payable to the utility if they also perform the physical connection)	\$39.00	\$40.00	\$41.00
13	Application to assess a Water main Adjustment (Moving a fitting and/or adjusting a section of water main up to and including 25 metres in length) This covers preliminary advice as to the feasibility of the project and will result in either: 1. A rejection of the project in which cases the fee covers the associated investigation costs Or 2. Conditional approval in which case the fee covers the administrative costs associated with the investigation and record amendment.	\$273.00	\$276.00	\$281.00

Column 1	Column 2	Column 3	Column 4	Column 5
No.	Ancillary and miscellaneous service	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008	1 July 2008 to 30 June 2009
14	Standpipe Hire			
	Security Bond (25mm)	\$596.00	\$600.00	\$600.00
	Security Bond (63mm)	\$596.00	\$600.00	\$600.00
15	Standpipe Hire			
	< 50mm	\$82.84	\$82.84	\$82.84
	>= 50mm	\$517.76	\$517.76	\$517.76
16	Standpipe Water Usage Fee - (\$ per kL)			
17	Backflow Prevention Device Application and Registration Fee (This fee is for initial registration of the backflow device)	\$60.00	\$60.00	\$60.00
18	Backflow Prevention Application Device Annual Administration Fee (This fee is for the maintenance of records including logging of inspection reports)	\$25.00	\$25.00	\$25.00
19	Major and Minor Works Inspections Fee. (This fee is for the inspection, for the purposes of approval of water and sewer mains, constructed by others, that are longer than 25 metres and/or greater than 2 metres in depth) Water Mains (\$ per metre) Sewer Mains (\$per Metre) Reinspection	\$10.00 \$10.00 \$114.00	\$10.00 \$10.00 \$117.00	\$10.00 \$10.00 \$118.00
20	Statement of Available Pressure and Flow (This fee covers all levels whether modelling is required or not)	\$114.00	\$117.00	\$117.00

Column 1	Column 2	Colun	nn 3	Colur	mn 4	Colun	nn 5	
No.	Ancillary and miscellaneous service	Date to 3	Commencement Date to 30 June 2007		1 July 2007 to 30 June 2008		1 July 2008 to 30 June 2009	
		Fixed	Hourly	Fixed	Hourly	Fixed	Hourly	
21	Cancellation Fee – Water and Sewerage Applications A fee charged to cancel an application for services and process a refund of water and sewer application fees.	\$51.25	NA	\$51.25	NA	\$51.25	NA	
22	Sales of Building Over Sewer and Water Guidelines A fee for undertaking a technical review of guidelines to ensure that current standards are applied when a proposal to build over or near council sewer and water mains is lodged.	\$10.10	NA	\$10.10	NA	\$10.10	NA	
23	Section 307 Certificate A fee for preparation of a Section 307 Certificate which states whether a development complies with the Water Management Act 2000. Dual Occupancies	\$89.00	NA	\$90.00	NA	\$91.00	NA	
	Commercial Buildings, Factories, Torrens Subdivision of Dual	φ09.00	INA	φ90.00	INA	φ91.00	INA	
	Occupancy	\$132.00	NA	\$134.00	NA	\$136.00	NA	
	Boundary Realign with Conditions Subdivisions, developments	\$215.00	NA	\$218.00	NA	\$220.00	NA	
	involving mains extensions	\$638.00	NA	\$646.00	NA	\$654.00	NA	
	Development without Requirement Fee	\$52.00	NA	\$53.00	NA	\$54.00	NA	
24	Inspection of Concrete Encasement and Additional Junction Cut-ins A fee charged by Council to inspect a developer's works to determine whether works are in accordance with Council standards. Inspection of concrete							
	encasement Additional inspection (due to non	\$143.00	NA	\$147.00	NA	\$151.00	NA	
	compliance) Inspection of concrete encasement greater than 10m	\$50.00 \$143 + \$14.3/m for each m > 10 m	NA NA	\$52.00 \$147 + \$14.7/m for each m > 10 m	NA NA	\$53.00 \$151 + \$15.1/m for each m > 10 m	NA NA	
25	Sale of Specification for Construction of Water and Sewerage Works by Private Contractors Contractors carrying out private works are required to purchase Council's "Specifications for Construction of Water and	\$79.00	NA	\$80.00	NA	\$80.60	NA	

Column 1	Column 2	Colur	nn 3	Colu	mn 4	Colur	mn 5	
No.	Ancillary and miscellaneous service	Date to 3	Commencement Date to 30 June 2007		Date to 30 June June 2008		1 July 2008 to 30 June 2009	
		Fixed	Hourly	Fixed	Hourly	Fixed	Hourly	
	Sewerage Works by Private Contractors"							
26	Private Developers Plan Resubmission	NA	\$59 first hr \$33 each hr after	NA	\$60 first hr \$36 each hr after	NA	\$61 first hr \$39 each hr after	
	A fee for Council review and approval of a developer's request for changes to a previously approved water or sewer plan.							
27	Approval of Developers Sewer Pump Station Rising Main Design A fee for Council review and approval of a private developer's proposal for provision of sewer; pump stations/rising mains. This fee covers assessment of: i) suitability for integration within the existing sewerage system.	\$223.00	NA	\$227.00	NA	\$229.00	NA	
28	ii) proposed works conform to both industry and Council standards. Approval of Private Internal Residential Sewer Pump Station Rising Main Design A fee for Council review of a property owner's proposal for provision of minor internal sewer; pump stations/rising mains. This fee covers assessment of: iii) suitability for integration within the existing sewerage system.	\$86.00	NA	\$87.00	NA	\$89.00	NA	
	iv) proposed works conform to both industry and Council standards.							
29	Approval of Extension of Sewer/Water Mains to Properties Outside Service Areas A fee for Council review and approval of a property owner's application for extension of sewer/water mains to properties outside service areas.	\$121.00	NA	\$122.00	NA	\$124.00	NA	
30	Sale of Sewer Plan Books A fee for purchase of Council							
	hardcopy set of sewer reticulation plans. A3 sheet in cardboard folder	NA	NA	NA	NA	NA	NA	

Column 1	Column 2	Colun	nn 3	Colu	mn 4	Colur	nn 5
No.	Ancillary and miscellaneous service	Commendate to 3	0 June	1 July 2007 to 30 June 2008		1 July 2008 to 30 June 2009	
		Fixed	Hourly	Fixed	Hourly	Fixed	Hourly
	A3 sheet in plastic pockets (3 folders) Annual charge for monthly	NA	NA	NA	NA	NA	NA
	updating service	NA \$66	NA NA	NA \$66	NA NA	NA \$66	NA NA
31	Trade Waste Approvals	\$180.00	NA	\$200.00	NA	\$220.00	NA
	A fee for Council inspection of a commercial or industrial development prior to approval for discharging into Council's sewers being granted.						
32	Sewer Connection fees						
	A fee for Council inspection of developments requiring connection to, or alteration to existing connection to Council's sewer to ensure protection of Council's sewerage system.						
	New sewer connection	\$178.00	NA	\$186.00	NA	\$192.00	NA
	Plus each additional WC	\$68.00	NA	\$70.00	NA	\$74.00	NA
	Alterations Units/Villas (1 WC each flat or	\$125.00	NA	\$129.00	NA	\$133.00	NA
	unit)	\$143.00	NA	\$146.00	NA	\$148.00	NA
	Plus for each additional WC	\$68.00	NA	\$70.00	NA	\$74.00	NA
	Caravan Connection Fee Sewer Re-Inspection Fee	\$84.00 \$95.00	NA NA	\$86.00 \$96.00	NA NA	\$89.00 \$96.00	NA NA
	Sewer Re-inspection Fee	φ95.00	INA	φ90.00	INA	φ90.00	INA
33	Location of Water and Sewer Mains Private developers/contractors request the on-site indication of the alignment, and often depth, of water and sewer mains and services.						
		\$177.00	NA	\$177.00	NA	\$177.00	NA
34	Water Service Connection Fee - (20-25mm meter) For meters greater than 25mm charges will be levied on the actual cost of the work involved plus	\$304.00	NA	\$308.00	NA	\$311.00	NA
	an admin fee	\$39.00	NA	\$40.00	NA	\$41.00	NA
35	Septic/Portaloo/Mobile						
55	Cleaning Charge	\$11.28	NA	\$11.28	NA	\$11.28	NA
36	Other liquid wastes transported by disposal						
	contractors (per kL)	\$1.23	NA	\$1.23	NA	\$1.23	NA

Definitions and Interpretation

1. Definitions

1.1 General definitions

In this determination:

Category 1 Trade Waste Discharge means:

- (a) an activity deemed by Council as requiring nil or minimal pre-treatment equipment and whose effluent is well defined and/or is a relatively benign nature;
- (b) such activity is being conducted on a Non Residential Property; and
- (c) the trade waste from such activity is being discharged into the Sewerage System.

Category 2 Trade Waste Discharge means:

- (a) an activity deemed by Council as requiring a prescribed type of liquid trade waste pre-treatment equipment and whose effluent is well characterised;
- (b) such activity is being conducted on a Non Residential Property; and
- (c) the trade waste from such activity is being discharged into the Sewerage System.

Category 3 Trade Waste Discharge means:

- (a) an activity deemed by Council as an industrial nature and/or which results in large volumes of liquid trade waste;
- (b) such activity is being conducted on a Non Residential Property; and
- (c) the trade waste from such activity is being discharged into the Sewerage System.

Common Water Meter means a Meter which is connected or available for connection to a Multi Premises, where the Meter measures the water usage to that Multi Premises but not to each relevant Property located on or within that Multi Premises.

Community Development Lot has the meaning given to that term under the *Community Land Development Act* 1989.

Company Title Building means a building owned by a company where the issued shares of the company entitle the legal owner to exclusive occupation of a specified dwelling within that building.

Company Title Dwelling means a dwelling within a Company Title Building.

Council means the Council as defined in clause 1(2) of section 1 (**Background**) of this determination.

df% or **Discharge Factor** means, in relation to a Property, the percentage of water supplied to that Property which the Council assesses or deems to be discharged into the Sewerage System.

GST means the Goods and Services Tax as defined in *A New Tax System* (Goods and Services Tax) Act 1999.

IPART Act means the *Independent Pricing and Regulatory Tribunal Act* 1992.

kL means kilolitre or one thousand litres.

Local Government Act means the *Local Government Act*, 1993 (NSW).

Meter means an apparatus for the measurement of water.

Metered Non Residential Property means a Non Residential Property that is serviced by a Meter.

Metered Property means a Metered Residential Property or a Metered Non-Residential Property.

Metered Residential Property means a Residential Property that is serviced by a Meter.

Monopoly Services means the Monopoly Services as defined in clause 1(2) of section 1 (**Background**) of this determination.

Multi Premises means land where there are two or more Properties (other than Properties which fall within paragraph (f) of the definition of 'Property') located on it, excluding land where there are hotels, motels, guest houses or backpacker hostels, each as defined in the Local Government Act, located on it.

Non Residential Property means a Property that is not a Residential Property or a Vacant Land or an Unmetered Property.

Order means the Order defined in clause 1(2) of section 1 (**Background**) of this determination and published in Government Gazette No. 18 on 14 February 1997.

Property includes:

- (a) a Strata Title Lot;
- (b) a Company Title Dwelling;
- (c) a Community Development Lot;
- (d) a Retirement Village Unit;
- (e) a part of a building lawfully occupied or available for occupation (other than a building to which paragraphs (a) to (d) inclusive apply); or
- (f) land.

Rateable Land has the meaning given to that term under the Local Government Act.

Residential Property means a Property where:

- (a) in the case of that Property being Rateable Land, that Property is categorised as:
 - (i) residential under section 516 of the Local Government Act; or
 - (ii) farmland under section 515 of the Local Government Act and such farmland is connected to the Water Supply System and the Sewerage System; or
- (b) in the case of that Property not being Rateable Land, the dominant use of that Property is residential applying the classifications in section 516 of the Local Government Act.

Retirement Village has the meaning given to that term under the *Retirement Villages Act*, 1999.

Retirement Village Unit means a unit located within a Retirement Village.

Sewerage System means the sewerage system owned and operated by the Council.

Strata Title Lot means a lot as defined under the *Strata Schemes (Freehold Development) Act* 1973.

Trade Waste Discharge Factor means the percentage of trade waste which the Council assesses or deems to be discharged into the Sewerage System.

Tribunal means the Independent Pricing and Regulatory Tribunal of New South Wales established under the IPART Act.

Unmetered Property means land (other than Vacant Land) which does not have a Meter located on it.

Vacant Land means land which has no capital improvements on it.

Water Supply System means the water supply system owned and operated by the Council.

1.2 Consumer Price Index

(a) **CPI** means the consumer price index All Groups index number for the weighted average of eight capital cities, published by the Australian Bureau of Statistics, or if the Australian Bureau of Statistics does not or ceases to publish the index, then CPI will mean an index determined by the Tribunal

(b)
$$\Delta CPI_{1} = \left(\frac{CPI_{Jun2006} + CPI_{Sep2006} + CPI_{Dec2006} + CPI_{Mar2007}}{CPI_{Jun2005} + CPI_{Sep2005} + CPI_{Dec2005} + CPI_{Mar2006}}\right) - 1$$

$$\Delta \mathbf{CPI}_{2} = \left(\frac{CPI_{Jun2007} + CPI_{Sep2007} + CPI_{Dec2007} + CPI_{Mar2008}}{CPI_{Jun2005} + CPI_{Sep2005} + CPI_{Dec2005} + CPI_{Mar2006}}\right) - 1$$

each as calculated by the Tribunal and notified in writing by the Tribunal to the Council.

(c) The subtext (for example Jun 2005) when used in relation to paragraph (b) above means the CPI for the quarter and year indicated (in the example the June quarter for 2005).

2. Interpretation

2.1 General provisions

In this determination:

- (a) headings are for convenience only and do not affect the interpretation of this determination;
- (b) a reference to a schedule, annexure, clause or table is a reference to a schedule, annexure, clause or table to this determination;
- (c) words importing the singular include the plural and vice versa;
- (d) a reference to a law or statute includes all amendments or replacements of that law or statute.

2.2 Explanatory notes and clarification notice

- (a) Explanatory notes do not form part of this determination, but in the case of uncertainty may be relied on for interpretation purposes.
- (b) The Tribunal may publish a clarification notice in the NSW Government Gazette to correct any manifest error in this determination as if that clarification notice formed part of this determination.

2.3 Prices exclusive of GST

Prices or charges specified in this determination do not include GST.

2.4 Billing cycle of Council

For the avoidance of doubt nothing in this determination affects when the Council may issue a bill to a customer for prices or charges under this determination.

Draft Determination No 3, 2006

Section 11(1)
Independent Pricing and Regulatory Tribunal Act 1992

Wyong Shire Council

Independent Pricing and Regulatory Tribunal of New South Wales

Reference No 05/517

1. Background

- (1) Section 11 of the *Independent Pricing and Regulatory Tribunal Act* 1992, permits the Tribunal to conduct investigations and make reports to the Minister on the determination of the pricing for a government monopoly service supplied by a government agency specified in Schedule 1 of the IPART Act.
- (2) Water supply authorities constituted under the *Water Management Act 2000* are listed as government agencies for the purposes of schedule 1 of the IPART Act. Under the *Water Management Act 2000*, Wyong Shire Council (the **Council**) is listed as a water supply authority. The services of the Council declared as monopoly services (**Monopoly Services**) under the *Independent Pricing and Regulatory Tribunal (Water, Sewerage and Drainage Services) Order* 1997 (**Order**) are:
 - (a) water supply services;
 - (b) sewerage services;
 - (c) stormwater drainage services;
 - (d) trade waste services;
 - (e) services supplied in connection with the provision or upgrading of water supply and sewerage facilities for new developments and, if required, drainage facilities for such developments;
 - (f) ancillary and miscellaneous customer services for which no alternative supply exists and which relate to the supply of services of a kind referred to in paragraphs (a) to (e);
 - (g) other water supply, sewerage and drainage services for which no alternative supply exists.

Accordingly, the Tribunal may determine the prices for the Council's Monopoly Services.

- (3) In investigating and reporting on the pricing of the Council's Monopoly Services, the Tribunal has had regard to a broad range of matters, including the criteria set out in section 15(1) of the IPART Act.
- (4) In accordance with section 13A of the IPART Act, the Tribunal has fixed the maximum price for the Council's Monopoly Services or has established a methodology for fixing the maximum price.
- (5) Under section 18(2) of the IPART Act, the Council may not fix a price below that determined by the Tribunal without the approval of the Treasurer.

2. Application of this determination

- (1) This determination fixes the maximum prices (or sets a methodology for fixing the maximum prices) that the Council may charge for the Monopoly Services.
- (2) This determination commences on the later of 1 July 2006 and the date that it is published in the NSW Government Gazette (**Commencement Date**).
- (3) The maximum prices in this determination apply from the Commencement Date to 30 June 2009. The maximum prices in this determination prevailing at 30 June 2009 continue to apply beyond 30 June 2009 until this determination is replaced.

3. Replacement of Determination No. 2 of 2005

Determination No. 2 of 2005 is replaced by this determination from the Commencement Date. The replacement does not affect anything done or omitted to be done, or rights or obligations accrued, under that determination prior to its replacement.

4 Monitoring

The Tribunal may monitor the performance of the Council for the purposes of:

- (a) establishing and reporting on the level of compliance by the Council with this determination; and
- (b) preparing a periodic review of pricing policies in respect of the Monopoly Services supplied by the Council.

5. Schedules

Schedules 1-4 (inclusive) and the Tables in those Schedules set out the maximum prices that the Council may charge for the Monopoly Services specified in the Schedules.

6. Definitions and Interpretation

Definitions and interpretation provisions used in this determination are set out in Schedule 5.

Water Supply Services

1. Application

This Schedule sets the maximum prices that the Council may charge for the Monopoly Services under paragraph (a) of the Order (water supply services).¹

2. Categories for pricing purposes

Prices for water supply services have been determined for 2 categories:

- (a) a Metered Property; and
- (b) Vacant Land.

2.1 Charges for water supply services to Metered Properties

The maximum price that may be levied by the Council for the provision of water supply services to a Metered Residential Property or a Metered Non Residential Property (each connected to the Water Supply System) is the sum of the following:

- (a) the water service charge in Table 1, corresponding to the Meter size; and
- (b) the water usage charge in Table 2, per kL of water used.

2.2. Charges for water supply services to Vacant Land

The maximum price that may be levied by the Council for the provision of water supply services to Vacant Land which is not connected to the Water Supply System but is reasonably available for connection to the Water Supply System is the water service charge in Table 3.

3. Levying water supply charges on Multi Premises

3.1 Water supply charges for Multi Premises

3.1.1 Clause 3 of this schedule prescribes how the maximum prices in this schedule are to be levied on Multi Premises, specifically how they are levied on persons who own, control or occupy those Multi Premises.

3.1.2 Clause 2.1 of this schedule does not apply to Metered Properties if this clause 3 is capable of applying to those Properties.

Please refer to section 8.3 of the Report [] 2006 for further information on the pricing decisions for the Council.

3.2 Strata Title Lot

For a Strata Title Lot within a Strata Title Building where that Strata Title Building:

- (a) is connected to the Water Supply System; and
- (b) has a Common Water Meter or multiple Common Water Meters,

the maximum price that may be levied by the Council on that Strata Title Lot for the provision of water supply services to that Strata Title Lot is the sum of the following:

- (c) the water service charge in Table 1 (with that Strata Title Lot taken to have a Meter size of 20mm); and
- (d) the water usage charge in Table 2, as if the water used by that Strata Title Lot was determined by the following formula:

$$WU = \frac{A}{B} x C$$

Where:

WU - water used by that Strata Title Lot

A - total quantity of water used by that Strata Title Building

B - total Unit Entitlement of that Strata Title Building

C- Unit Entitlement of that Strata Title Lot.

3.3 Company Title Dwelling

For a Company Title Building:

- (a) which is connected to the Water Supply System; and
- (b) which has a Common Water Meter or multiple Common Water Meters, the maximum price that may be levied by the Council for the provision of water supply services to:
 - (c) a Company Title Dwelling within that Company Title Building is the water service charge in Table 1 (with that Company Title Dwelling taken to have a Meter size of 20mm); and
 - (d) that Company Title Building is the water usage charge in Table 2, per kL of water used.

3.4 Community Development Lot

For a Community Development Lot within a Community Parcel where that Community Parcel:

- (a) is connected to the Water Supply System; and
- (b) has a Common Water Meter or multiple Common Water Meters,

the maximum price that may be levied by the Council on that Community Development Lot for the provision of water supply services to that Community Development Lot is the sum of the following:

(c) the water service charge determined by the following formula:

$$WSC = \frac{A}{B} x C$$

Where:

WSC - water service charge

A - water service charge in Table 1, corresponding to the Meter size;

B - total Unit Entitlement of that Community Parcel;

C- Unit Entitlement of that Community Development Lot;

and

(d) the water usage charge in Table 2, as if the water used by that Community Development Lot was determined by the following formula:

$$WU = \frac{A}{B} x C$$

Where:

WU - water used by that Community Development Lot;

A - total quantity of water used by that Community Parcel;

B - total Unit Entitlement of that Community Parcel;

C - Unit Entitlement of that Community Development Lot.

3.5 Retirement Village (which is not on Exempt Land)²

For a Retirement Village:

- (a) which is not on Exempt Land; and
- (b) which is connected to the Water Supply System; and
- (c) which has a Common Water Meter or multiple Common Water Meters,

the maximum price for each Common Water Meter that may be levied by the Council on that Retirement Village for the provision of water supply services to that Retirement Village is the sum of the following:

- (d) the water service charge in Table 1, corresponding to the Meter size; and
- (e) the water usage charge in Table 2, per kL of water used.

If a Retirement Village is on Exempt Land, this clause will not apply to that Retirement Village and Council will not charge that Retirement Village a water service charge or a water usage charge.

3.6 Multi Premises (which is not a Strata Title Building, a Company Title Building, a Community Parcel or a Retirement Village)

For a Multi Premises:

- (a) which is not a Strata Title Building, a Company Title Building, a Community Parcel or a Retirement Village; and
- (b) which is connected to the Water Supply System; and
- (c) which has a Common Water Meter or multiple Common Water Meters,

the maximum price for each Common Water Meter that may be levied by the Council on that Multi Premises for the provision of water supply services to that Multi Premises is the sum of the following:

- (d) the water service charge in Table 1, corresponding to the Meter size; and
- (e) the water usage charge in Table 2, per kL of water used.

Tables 1, 2 and 3

Table 1 Water service charges for a Metered Residential Property or a Metered Non Residential Property

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Water service charge (per year) - Meter size			
20mm	94.56	94.56 x (1+∆CPI₁)	94.56 x (1+ΔCPI ₂)
25mm	147.75	147.75 x (1+∆CPI₁)	147.75 x (1+∆CPI ₂)
40mm	378.24	378.24 x (1+∆CPI₁)	378.24 x (1+ΔCPI ₂)
50mm	591.00	591.00 x (1+∆CPI₁)	591.00 x (1+ΔCPI ₂)
80mm	1,512.96	1,512.96 x (1+∆CPI₁)	1,512.96 x (1+∆CPI ₂)
100mm	2,364.00	2,364.00 x (1+∆CPI₁)	2,364.00 x (1+ΔCPI ₂)
150mm	5,319.00	5,319.00 x (1+∆CPI₁)	5,319.00 x (1+ΔCPI ₂)
200mm	9,456.00	9,456.00 x (1+∆CPI₁)	9,456.00 x (1+ΔCPI ₂)
For Meter sizes not specified above the following formula applies	(Meter size) ² x 20mm charge/400	(Meter size) ² x 20mm charge/400	(Meter size) ² x 20mm charge/400

Table 2 Water usage charges for a Metered Residential Property or a Metered Non Residential Property

Charge	Commencement Charge Date to 30 June 2007 \$		1 July 2008 to 30 June 2009 \$
Water usage charge, per kilolitre of water used	1.12	1.31 x (1+∆CPI₁)	1.54 x (1+∆CPl ₂)

Table 3 Water service charge for a Vacant Land

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Water service charge (per year)	94.56	94.56 x (1+∆CPI₁)	94.56 x (1+∆CPI ₂)

Sewerage Services

1. Application

This Schedule sets the maximum prices that the Council may charge for the Monopoly Services under paragraph (b) of the Order (sewerage services)³.

2. Categories for pricing purposes

Prices for sewerage services have been determined for 4 categories:

- (a) a Residential Property(other than Vacant Land or Exempt Land);
- (b) a Non Residential Property (other than Vacant Land or Exempt Land);
- (c) Vacant Land; and
- (d) Exempt Land.

2.1 Charges for sewerage services to a Residential Property connected to the Sewerage System

The maximum price that may be levied by the Council for sewerage services to a Residential Property (other than Vacant Land or Exempt Land) connected to the Sewerage System is the sewerage service charge in Table 4.

2.2 Charges for sewerage services to a Residential Property not connected to the Sewerage System

The maximum price that may be levied by the Council for sewerage services to a Residential Property (other than Vacant Land or Exempt Land) not connected to the Sewerage System is the effluent and sludge removal charge in Table 5.

2.3 Charges for sewerage services to a Non Residential Property connected to the Sewerage System

The maximum price that may be levied by the Council for sewerage services to a Non Residential Property (other than Vacant Land or Exempt Land) connected to the Sewerage System is the greater of:

- (a) the sewerage service charge in Table 6; and
- (b) the sum of:

(i) the sewerage service charge in Table 7, corresponding to the Meter size; and

(ii) the sewerage usage charge in Table 8.

Please refer to section 8.3 of the Report [] 2006 for further information on the pricing decisions for the Council.

2.4 Charges for sewerage services to a Non Residential Property not connected to the Sewerage System

The maximum price that may be levied by Council for sewerage services to a Non Residential Property (other than Vacant Land or Exempt Land) that is not connected to the Sewerage System is the effluent and sludge removal charge in Table 9.

3. Charges for sewerage services to Vacant Land

The maximum price that may be levied by the Council for sewerage services to Vacant Land which is not connected to the Sewerage System but is reasonably available for connection to the Sewerage System is the sewerage service charge in Table 10.

4. Charges for sewerage services to Exempt Land

The maximum price that may be levied by the Council for sewerage services to Exempt Land is the sewerage service charge in Table 11.

5. Levying charges for sewerage services on Multi Premises

5.1 Water supply charges for Multi Premises

- 5.1.1 Clause 5 of this schedule prescribes how the maximum prices in this schedule are to be levied on Multi Premises, specifically how they are levied on persons who own, control or occupy those Multi Premises.
- 5.1.2 Clauses 2.1 and 2.3 do not apply to Properties connected to the Sewerage System if this clause 5 is capable of applying to those Properties.

5.2 Strata Title Lot (which is a Residential Property)

For a Strata Title Lot (which is a Residential Property) within a Strata Title Building where that Strata Title Building:

- (a) is connected to the Sewerage System; and
- (b) has a Common Water Meter or multiple Common Water Meters,

the maximum price that may be levied by the Council on that Strata Title Lot for the provision of sewerage services to that Strata Title Lot is the sewerage service charge in Table 4.

5.3 Strata Title Lot (which is a Non Residential Property)

For a Strata Title Lot (which is a Non Residential Property) within a Strata Title Building where that Strata Title Building:

- (a) is connected to the Sewerage System; and
- (b) has a Common Water Meter or multiple Common Water Meters,

the maximum price that may be levied by the Council on that Strata Title Lot for the provision of sewerage services to that Strata Title Lot is the greater of:

$$MP = \frac{A}{B} \times C$$

Where:

MP - maximum price;

A - sewerage service charge in Table 6;

B - total Unit Entitlement of that Strata Title Building; and

C - Unit Entitlement of that Strata Title Lot.

and

$$MP = \left(\frac{D + E}{F}\right) x G$$

Where:

MP - maximum price;

D - sewerage service charge in Table 7, corresponding to the Meter size;

E - sewerage usage charge in Table 8;

F - total Unit Entitlement of that Strata Title Building; and

G - Unit Entitlement of that Strata Title Lot.

5.4 Company Title Dwelling

For a Company Title Dwelling within a Company Title Building where that Company Title Building:

- (a) is connected to the Sewerage System; and
- (b) has a Common Water Meter or multiple Common Water Meters,

the maximum price that may be levied by the Council on that Company Title Dwelling for the provision of sewerage services to that Company Title Dwelling is the sewerage service charge in Table 4.

5.4 Community Development Lot

For a Community Development Lot within a Community Parcel where that Community Parcel:

- (a) is connected to the Sewerage System; and
- (b) has a Common Water Meter or multiple Common Water Meters, the maximum price that may be levied by the Council on that Community Development Lot for the provision of sewerage services to that Community Development Lot is:

$$MP = \frac{A}{B} \times C$$

Where:

MP - maximum price;

A - non residential sewerage service charge in Table 7, corresponding to the Meter size;

B - total Unit Entitlement of that Community Parcel; and

C - Unit Entitlement of that Community Development Lot.

5.5 Retirement Village (which is not on Exempt Land)⁴

For a Retirement Village:

- (a) which is not on Exempt Land; and
 - (b) which is connected to the Sewerage System; and
- (c) which has a Common Water Meter or multiple Common Water Meters, the maximum price for each Common Water Meter that may be levied by the Council on that Retirement Village for the provision of sewerage services to that Retirement Village is the greater of:
 - (d) the sewerage service charge in Table 6; and
 - (e) the sum of:
 - (i) the sewerage service charge in Table 7, corresponding to the Meter size; and
 - (ii) the sewerage usage charge in Table 8.

5.6 Multi Premises (which is not a Strata Title Building, a Company Title Building, a Community Parcel or a Retirement Village)

For a Multi Premises:

- (a) which is not a Strata Title Building, a Company Title Building, a Community Parcel or a Retirement Village; and
- (b) which is connected to the Sewerage System; and
- (c) which has a Common Water Meter or multiple Common Water Meters,

the maximum price for each Common Water Meter that may be levied by the Council on that Multi Premises for the provision of sewerage services to that Multi Premises is the greater of:

- (d) the sewerage service charge in Table 6; and
- (e) the sum of:

(i) the sewerage service charge in Table 7, corresponding to the Meter size; and

(ii) the sewerage usage charge in Table 8. **Tables 4, 5, 6, 7, 8, 9, 10 and 11**

If a Retirement Village is on Exempt Land, clause 4 of this schedule (and not this clause) will apply to that Retirement Village.

Table 4 Sewerage service charge for a Residential Property

Charge	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Sewerage service charge (per year)	380.75	384.46 x (1+∆CPI₁)	388.22 x (1+∆CPI ₂)

Table 5 Effluent and sludge removal charges for a Residential Property

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Fortnightly effluent removal and disposal service (per year)	876.70	885.47 x (1+∆CPI₁)	894.32 x (1+ΔCPI ₂)
Additional requested effluent removal and disposal service (per visit)	33.93	34.26 x (1+ΔCPI ₁)	34.61 x (1+ΔCPI ₂)
Sludge removal and disposal services: Septic tanks with a capacity up to 2750 litres (per service)	245.94	248.40 x (1+ΔCPI ₁)	250.89 x (1+ΔCPI ₂)
Septic tanks exceeding 2750 litres or AWTS with one tank (per service)	319.08	322.28 x (1+ΔCPI ₁)	325.50 x (1+ΔCPI ₂)
AWTS with more than one tank (\$ per system)	24.62	24.86 x (1+ΔCPI ₁)	25.11 x (1+ΔCPI ₂)
Chemical Closet Fortnightly service (per year)	475.99	480.75 x (1+ΔCPI ₁)	485.55 x (1+ΔCPI ₂)
Each requested weekly special service (per year)	1,263.57	1,276.21 x (1+∆CPI₁)	1,288.97 x (1+ΔCPI ₂)

Table 6 Sewerage service charge for a Non Residential Property

Charge	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Sewerage service charge (per year)	380.75	384.46 x (1+∆CPI₁)	388.22 x (1+∆CPI ₂)

Table 7 Sewerage service charges for a Non Residential Property

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Sewerage service charge (per year) - Meter size			
20mm	137.17	138.51 x (1+∆CPI₁) x df%	139.86 x (1+∆CPI ₂) x df%
25mm	214.33	216.42 x (1+∆CPI₁) x df%	218.53 x (1+ΔCPI ₂) x df%
40mm	548.68	554.04 x (1+∆CPI₁) x df%	559.44 x (1+∆CPI ₂) x df%
50mm	857.31	865.69 x (1+∆CPI₁) x df%	874.13 x (1+ΔCPI ₂) x df%
80mm	2,194.72	2,216.16 x (1+∆CPI ₁) x df%	2,237.76 x (1+ΔCPI ₂) x df%
100mm	3,429.25	3,462.75 x (1+∆CPI₁) x df%	3,496.50 x (1+∆CPI ₂) x df%
150mm	7,715.81	7,791.19 x (1+∆CPI₁) x df%	7,867.13 x (1+∆CPI ₂) x df%
200mm	13,717.00	13,851.00 x (1+∆CPI₁) x df%	13,986.00 x (1+∆CPI ₂) x df%
For Meter sizes not specified above the following formula applies	(Meter size) ² x 20mm charge/400	(Meter size) ² x 20mm charge/400	(Meter size) ² x 20mm charge/400

Note: A Discharge Factor is applied to the charge based on the volume of water discharged into the Sewerage System.

Table 8 Sewerage usage charge for a Non Residential Property

Charge	Commencement Date	1 July 2007 to	1 July 2008 to
	to 30 June 2007	30 June 2008	30 June 2009
	\$/kL	\$/kL	\$/kL
Sewerage usage charge, per kL of water used		0.69 x (1+∆CPI₁) x df%	0.70 x (1+∆CPI₂) x df%

Note: A Discharge Factor is applied to the charge based on the volume of water discharged into the Sewerage System.

Table 9 Effluent and sludge removal charges for a Non Residential Property

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Type of service			
Commercial effluent removal and disposal service (\$/ kL)	11.24	11.36 x (1+∆CPI₁)	11.47 x (1+ΔCPI ₂)
Sludge removal and disposal services: Septic tanks with a capacity up to 2750 litres (\$ per service)	245.94	248.40 x (1+ΔCPI ₁)	250.89 x (1+ΔCPI ₂)
Septic tanks exceeding 2750 litres or AWTS with one tank (\$ per service)	319.08	322.28 x (1+∆CPI₁)	325.50 x (1+ΔCPI ₂)
AWTS with more than one tank (\$ per system)	475.99	480.75 x (1+ΔCPI ₁)	485.55 x (1+ΔCPI ₂)
Sludge disposal only (collection organised by customer) (\$/kL)	26.50	26.77 x (1+ΔCPI ₁)	27.04 x (1+ΔCPI ₂)
Chemical Closet Fortnightly service (\$ per year)	1,263.57	1,276.21 x (1+∆CPI₁)	1,288.97 x (1+ΔCPI ₂)
Each requested weekly special service (\$ per service)	24.62	24.86 x (1+∆CPI₁)	25.11 x (1+ΔCPI ₂)

Table 10 Sewerage service charge for Vacant Land

Charge	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Sewerage service charge (per year)	285.56	288.35 x (1+∆CPI₁)	291.17 x (1+∆CPI ₂)

Table 11 Sewerage service charge for Exempt Land

Charge	Commencement Date to 30 June 2007 \$	1 July 2007 to 30 June 2008 \$	1 July 2008 to 30 June 2009 \$
Per water closet	53.73	54.27 x (1+∆CPI₁)	54.81 x (1+ΔCPI ₂)
Per cistern servicing a urinal	19.03	19.22 x (1+∆CPI₁)	19.41 x (1+ΔCPI ₂)

Trade waste services

1. Application

This Schedule sets the maximum prices that the Council may charge for the Monopoly Services under paragraph (d) of the Order (Trade Waste Services).

2. Categories for pricing purposes

Prices for trade waste services have been determined for 3 categories:

- (a) Category 1 Trade Waste Discharge;
- (b) Category 2 Trade Waste Discharge; and
- (c) Category 3 Trade Waste Discharge.

2.1 Category 1 Trade Waste Discharge

The maximum price that may be levied by the Council for a Category 1 Trade Waste Discharge is calculated as follows:

$$TW1 = C1 + T$$

Where:

TW1 - maximum price for Category 1 Trade Waste Discharge

C1 - Category 1 annual trade waste fee (\$)

T - Trade waste re-inspection fee (\$) (if applicable),

each as set out in Table 12.

2.2 Category 2 Trade Waste Discharge

The maximum price that may be levied by the Council for a Category 2 Trade Waste Discharge is calculated as follows:

2.2.1 With pre-treatment

$$TW2 = C2 + T + UFW$$

Where:

TW2 - maximum price for Category 2 Trade Waste Discharge (with pre-treatment)

C2 - Category 2 annual trade waste fee (\$)

T - Trade waste re-inspection fee (\$) (if applicable)

UFW - Trade waste usage fee (with pre-treatment) (\$/kL),

each as set out in Table 12.

2.2.2 Without pre-treatment

$$TW2 = C2 + T + UF0$$

Where:

TW2 - maximum price for Category 2 Trade Waste Discharge (without pre-treatment)

C2 - Category 2 annual trade waste fee (\$)

T - Trade waste re-inspection fee (\$) (if applicable)

UFO - Trade waste usage fee (without pre-treatment) (\$/kL),

each as set out in Table 12.

2.3 Category 3 Trade Waste Discharge

The maximum price that may be levied by the Council for a Category 3 Trade Waste Discharge is calculated as follows:

$$TW3 = C3 + T + EMC$$

Where:

TW3 - maximum price for Category 3 Trade Waste Discharge

C3 - Category 3 annual trade waste fee (\$)

T - Trade waste re-inspection fee (\$) (if applicable),

each as set out in Table 12.

EMC - Total excess mass charge (\$/kg) as set out in Table 13.

Tables 12 and 13

Table 12 Trade waste annual licence/ re-inspection fees

Charge	Commencement Date to 30 June 2007	1 July 2007 to 30 June 2008	1 July 2008 to 30 June 2009
Category 1 annual trade waste fee (\$ per year)	70.64	70.64 x (1+ΔCPI₁)	70.64 x (1+ΔCPI ₂)
Category 2 annual trade waste fee (\$ per year)	282.56	282.56 x (1+∆CPI₁)	282.56 x (1+ΔCPI ₂)
Category 3 annual trade waste fee (\$ per year)	474.64	474.64 x (1+∆CPI₁)	474.64 x (1+ΔCPI ₂)
Trade waste re- inspection fee (\$)	66.23	66.23 x (1+∆CPI₁)	66.23 x (1+ΔCPI ₂)
Trade waste usage fee (\$/kL)			
With pre- treatment	0.10	0.20 x (1+ΔCPI ₁)	0.30 x (1+ΔCPI ₂)
Without pre- treatment	4.05	8.10 x (1+∆CPI₁)	12.14 x (1+∆CPI ₂)

.

Table 13 Excess mass charge

Charge	Commencement Date to 30 June 2007 \$/kg	1 July 2007 to 30 June 2008 \$/kg	1 July 2008 to 30 June 2009 \$/kg
Biochemical Oxygen Demand	0.60	0.60 x (1+∆CPI₁)	0.60 x (1+ΔCPI ₂)
Suspended Solids	0.76	0.76 x (1+∆CPI₁)	0.76 x (1+∆CPI ₂)
Total Oil and Grease	1.07	1.07 x (1+∆CPI₁)	1.07 x (1+∆CPI ₂)
Ammonia (as Nitrogen)	0.60	0.60 x (1+∆CPI₁)	0.60 x (1+ΔCPI ₂)
Total Kheldhal Nitrogen	0.15	0.15 x (1+∆CPI₁)	0.15 x (1+∆CPI ₂)
Total Phosphorus	1.21	1.21 x (1+∆CPI₁)	1.21 x (1+∆CPI ₂)
Total Dissolved Solids	0.04	0.04 x (1+∆CPI₁)	0.04 x (1+∆CPI ₂)
Aluminium	0.60	0.60 x (1+∆CPI₁)	0.60 x (1+ΔCPI ₂)
Arsenic	0.60	0.60 x (1+∆CPI₁)	0.60 x (1+∆CPI ₂)
Barium	29.80	29.80 x (1+∆CPI₁)	29.80 x (1+ΔCPI ₂)
Boron	0.60	0.60 x (1+∆CPI₁)	0.60 x (1+∆CPI ₂)
Bromine	11.92	11.92 x (1+∆CPI₁)	11.92 x (1+∆CPI ₂)
Cadmium	275.95	275.95 x (1+∆CPI₁)	275.95 x (1+∆CPI ₂)

Charge	Commencement Date to 30 June 2007 \$/kg	1 July 2007 to 30 June 2008 \$/kg	1 July 2008 to 30 June 2009 \$/kg
Chloride	No charge	No charge	No charge
Chlorinated Hydrocarbons	29.80	29.80 x (1+∆CPI₁)	29.80 x (1+ΔCPI ₂)
Chlorinated Phenolics	1,192.12	1,192.12 x (1+∆CPI₁)	1,192.12 x (1+∆CPI ₂)
Chlorine	1.21	1.21 x (1+∆CPI₁)	1.21 x (1+∆CPI ₂)
Chromium	19.87	19.87 x (1+∆CPI₁)	19.87 x (1+∆CPI ₂)
Cobalt	12.14	12.14 x (1+∆CPI ₁)	12.14 x (1+∆CPI ₂)
Copper	12.14	12.14 x (1+∆CPI₁)	12.14 x (1+∆CPI ₂)
Cyanide	59.61	59.61 x (1+∆CPI₁)	59.61 x (1+∆CPI ₂)
Fluoride	2.98	2.98 x (1+∆CPI₁)	2.98 x (1+∆CPI ₂)
Formaldehyde	1.21	1.21 x (1+∆CPI₁)	1.21 x (1+∆CPI ₂)
Herbicides/defoliants	596.06	596.06 x (1+∆CPI₁)	596.06 x (1+∆CPI ₂)
Iron	1.21	1.21 x (1+∆CPI₁)	1.21 x (1+∆CPI ₂)
Lead	29.80	29.80 x (1+∆CPI₁)	29.80 x (1+ΔCPI ₂)
Lithium	5.96	5.96 x (1+∆CPI₁)	5.96 x (1+∆CPI ₂)
Manganese	5.96	5.96 x (1+∆CPI₁)	5.96 x (1+∆CPI ₂)
Mercaptans	59.61	59.61 x (1+∆CPI₁)	59.61 x (1+∆CPI ₂)
Mercury	1,986.86	1,986.86 x (1+∆CPI ₁)	1,986.86 x (1+∆CPI ₂)
Methylene Blue Active Substances (MBAS)	0.60	0.60 x (1+∆CPI ₁)	0.60 x (1+ΔCPI ₂)
Molybdenum	0.60	0.60 x (1+∆CPI₁)	0.60 x (1+∆CPI ₂)
Nickel	19.87	19.87 x (1+∆CPI₁)	19.87 x (1+∆CPI ₂)
Organoarsenic compounds	596.06	596.06 x (1+ΔCPI₁)	596.06 x (1+∆CPI ₂)
Pesticides general (excludes organochlorines and organophosphates)	596.06	596.06 x (1+ΔCPI ₁)	596.06 x (1+ΔCPI ₂)
Petroleum Hydrocarbons (non-flammable)	1.99	1.99 x (1+∆CPI₁)	1.99 x (1+∆CPI ₂)
Phenolic compounds (non-chlorinated)	5.96	5.96 x (1+ΔCPI ₁)	5.96 x (1+∆CPI ₂)
рН	0.33	0.33 x (1+∆CPI₁)	0.33 x (1+∆CPI ₂)
Polynuclear aromatic hydrocarbons (PAH's)	12.14	12.14 x (1+∆CPI ₁)	12.14 x (1+ΔCPI ₂)
Selenium	41.94	41.94 x (1+∆CPI₁)	41.94 x (1+ΔCPI ₂)
Silver	1.10	1.10 x (1+∆CPI₁)	1.10 x (1+∆CPI ₂)
Sulphate (as SO4)	0.12	0.12 x (1+ΔCPI₁)	0.12 x (1+∆CPI ₂)
Sulphide	1.21	1.21 x (1+∆CPI₁)	1.21 x (1+∆CPI ₂)
Sulphite	1.32	1.32 x (1+ΔCPI ₁)	1.32 x (1+∆CPI ₂)

Charge	Commencement Date to 30 June 2007 \$/kg	1 July 2007 to 30 June 2008 \$/kg	1 July 2008 to 30 June 2009 \$/kg
Thiosulphate	0.21	0.21 x (1+ΔCPI₁)	0.21 x (1+ΔCPI ₂)
Tin	5.96	5.96 x (1+∆CPI ₁)	5.96 x (1+∆CPI ₂)
Uranium	5.96	5.96 x (1+∆CPI ₁)	5.96 x (1+∆CPI ₂)
Zinc	12.14	12.14 x (1+∆CPI₁)	12.14 x (1+∆CPI ₂)

Ancillary and miscellaneous customer services

1. Application

This Schedule sets the maximum prices that the Council may charge for ancillary and miscellaneous customer services for which no alternative supply exists.

2. Ancillary and miscellaneous charges

- 2.1 The maximum charge that may be levied by the Council for an ancillary and miscellaneous service in column 2 of Table 14 is:
 - (a) **from the Commencement Date to 30 June 2007** the corresponding charge in column 3 of Table 14;
 - (b) **from 1 July 2007 to 30 June 2008** the corresponding charge in column 3 of Table 14 multiplied by (1+ΔCPI₁);
 - (c) **from 1 July 2008 to 30 June 2009** the corresponding charge in column 3 of Table 14 multiplied by $(1+\Delta CPl_2)$.
- 2.2 A reference in Table 14 to "NA" means that the Council does not provide the relevant service.

Table 14 Charges for ancillary and miscellaneous services

Column 1	Column 2	Column 3
No	Ancillary and miscellaneous services	Charge
1	Conveyancing Certificate	
	Statement of outstanding Charges a) Over the Counter	\$15.38
	b) Electronic	NA
2	Property Sewerage Diagram-up to and including A4 size- (where available)	
	(Diagram showing the location of the house-service line, building and sewer for a property)	
	a) Certified	\$15.38
	b) Uncertified	
	i. Over the Counter	\$15.38
	ii. Electronic	NA
3	Service Location Diagram	
	(Location of sewer and/or Water Mains in relation to a property's boundaries)	
	a) Over the Counter	\$15.38
	b) Electronic	NA
4	Special Meter Reading Statement	\$47.15
5	Billing Record Search Statement – up to and including 5 years.	\$15.38
6	Building over or Adjacent to Sewer Advice	NA
	(Statement of Approval Status for existing Building Over or Adjacent to a Sewer)	
7	Water Reconnection	
	a) During business hours	\$31.78
	b) Outside business hours	\$131.20
8	Workshop Test of Water Meter	
	(Removal and full mechanical test of the meter by an accredited organisation at the customer's request to determine the accuracy of the water meter. This involves dismantling and inspection of meter	
	components)	0457.05
	20mm 25mm	\$157.85
	32mm	\$157.85 \$157.85
	40mm	\$157.85
	50mm	\$157.85
	60mm	\$157.85
	80mm	\$157.85
	100mm	NA
	150mm	NA
9	Application for disconnection – all sizes	26.65
10	Application for Water Service Connection-(up to and including 25mm)	26.65

Column 1	Column 2	Column 3
No	Ancillary and miscellaneous services	Charge
	(This covers the administration fee only. There will be a separate charge payable to the utility if they also perform the physical connection)	
11	Application for Water Service Connection-(32-65mm)	\$26.65
	(This covers administration and system capacity analysis as required. There will be a separate charge payable to the utility if they also perform the physical connection)	
12	Application for Water Service Connection-(80mm or greater)	\$26.65
	(This covers administration and system capacity analysis as required. There will be a separate charge payable to the utility if they also perform the physical connection)	
13	Application to assess a Water main Adjustment	NA
	(Moving a fitting and/or adjusting a section of water main up to and including 25 metres in length)	
	This covers preliminary advice as to the feasibility of the project and will result in either:	
	A rejection of the project in which cases the fee covers the associated investigation costs Or	
	2. Conditional approval in which case the fee covers the administrative costs associated with the investigation and record amendment.	
14	Standpipe Hire	
	Security Bond (25mm)	\$324.93
	Security Bond (63mm)	\$625.25
15	Standpipe Hire	
	Annual Fee	See Note 1 ⁵
	Quarterly Fee	See Note 1 ³
	Monthly Fee	See Note 1 ³
16	Standpipe Water Usage Fee	As per water usage charge, per kilolitre of water used in Table 2
17	Backflow Prevention Device Application and Registration Fee	\$54.33
	(This fee is for initial registration of the backflow device)	
18	Backflow Prevention Application Device Annual Administration Fee	NA
	(This fee is for the maintenance of records including logging of inspection reports)	
19	Major Works Inspections Fee.	
	(This fee is for the inspection, for the purposes of approval of water and sewer mains, constructed by others, that are longer than 25 metres and/or greater than 2 metres in depth)	
	Water Mains (\$ per metre)	\$4.72
	Gravity Sewer Mains (\$ per metre)	\$6.30
	Rising Sewer Mains (\$ per metre)	\$4.72

-

Note 1: As per water availability charge based on meter size (pro rata for part of year)

Column 1	Column 2	Column 3
No	Ancillary and miscellaneous services	Charge
20	Statement of Available Pressure and Flow	\$114.80
	(This fee covers all levels whether modelling is required or not)	
21	Underground Plant Locations	
	Provision of uncertified plan showing location of underground mains:	••• • • • • • • • • • • • • • • • • •
	Council assists in on-site physical locations: Council undertakes on-site physical locations	\$63.04/hr for 1 st hour or part thereof then \$15.38 per 15 mins or part thereof thereafter \$105.06/hr for 1 st hour or part thereof then \$26.14 per 15 mins or part thereof thereafter
22	Plumbing and Drainage Inspection	
	Maximum of 2 inspections	
	Residential single dwelling, villas & units	\$127.10/unit
	Alterations, Caravan & Mobile Homes	\$64.06/permit
	Commercial and industrial	\$127.10 + \$36.90/wc
	Additional Inspections	\$47.15/inspection
23	Billings Record Search - Further Back than 5 Years	\$15.38/hr for 15 mins or part thereof then 10.25 per 15 mins or part thereof thereafter
24	Relocate Existing Stop Valve or Hydrant Price exclusive of plant hire charges, material costs and traffic control where applicable	\$105.06/hr for 1 st hour or part thereof then \$26.14 per 15 mins or part thereof thereafter
25	Provision of Water Services	
	Application for water service connection fee is also applicable.	
	Meter Only (20mm):	\$90.20
	Short service - 20mm:	\$547.35
	Long service - 20mm: Short service - 25mm:	\$547.35 \$664.20
	Long service - 25mm:	\$664.20 \$664.20
	Short service - 40mm:	\$1248.45
	Long service - 40mm:	\$1659.48
	Short service - 50mm:	\$1781.45
	Long service - 50mm: Larger services – provision of live main connection only. <i>Price exclusive of plant hire charges, material costs and traffic control where applicable</i>	\$2196.58 \$105.06/hr for 1 st hour or part thereof then \$26.14 per 15 mins or part thereof thereafter
26	Water Sample Analysis	\$64.06
	For testing of standard water quality parameters (Private supplies)	

Column 1	Column 2	Column 3
No	Ancillary and miscellaneous services	Charge
27	Raise / Lower / Adjust Existing Service No more than 2 metres from existing location 20mm service only - no materials: (Larger services >20mm – based on quote by Council)	\$105.58
28	Relocate Existing Services Short - 20mm: Long - 20mm: (Larger services >20mm – based on quote by Council)	\$266.50 \$415.13
29	Alteration from Dual Service to Single Service 20mm service only:	\$318.78
30	Sewerage Drainage Arrestor Approval: Annual Inspection:	\$86.10 \$26.14
31	Sewerage Junction Cut-in (150mm) No excavation, no concrete encasement removal, no sideline, junction within property. Excavation provided by customer	\$235.75
32	Sewerage Junction Cut-in (150mm) with sideline less than 3m No excavation, no concrete encasement removal, junction outside property. Excavation provided by customer	\$246.93
33	Sewerage Junction Cut-in (225mm) No excavation, no concrete encasement removal, no sideline, junction within property. Excavation provided by customer	\$551.63
34	Sewerage Junction Cut-in (225mm) with sideline less than 3m No excavation, no concrete encasement removal, junction outside property. Excavation provided by customer	\$582.38
35	Sewerage Junction Cut-in Greater than 225mm or where excavation or removal of concrete encasement required by Council	\$105.06/hr for 1 st hour or part thereof then \$26.14 per 15 mins or part thereof thereafter
36	Sewer Main Encasement with Concrete Encasement inspection fee when construction is not by Council (By quote when construction by Council)	\$79.67
37	Sewer Advance Scheme - Administration Charge	\$208.08
38	Raise & Lower Sewer Manholes Raise or lower manhole greater than 300mm (Price listed is for manhole adjustment inspection fee. Charges for actual physical adjustment is by quote)/	\$87.64

Column 1	Column 2	Column 3
No	Ancillary and miscellaneous services	Charge
39	Application fee:	
	Category 1 Trade Waste Discharge Category 2 Trade Waste Discharge Category 3 Trade Waste Discharge	\$40.40 \$51.42 \$788.42

Definitions and Interpretation

1. Definitions

1.1 General definitions

In this determination:

AWTS means the Aerated Wastewater Treatment System to treat sewage and liquid waste in a septic tank system.

Category 1 Trade Waste Discharge means an activity deemed by Council as requiring nil or minimal pre-treatment equipment and whose effluent is well defined or is a relatively low risk to the Sewerage System and where:

- (a) such activity is being conducted on a Non Residential Property; and
- (b) the trade waste from such activity is being discharged into the Sewerage System.

Category 2 Trade Waste Discharge means an activity deemed by Council as requiring a prescribed type of liquid trade waste pre-treatment equipment and whose effluent is well characterised and where:

- (a) such activity is being conducted on a Non Residential Property; and
- (b) the trade waste from such activity is being discharged into Sewerage System.

Category 3 Trade Waste Discharge means an activity deemed by Council as an industrial nature and/or which results in large volumes of liquid trade waste and where:

- (a) such activity is being conducted on a Non Residential Property; and
- (b) the trade waste from such activity is being discharged into Sewerage System.

[Council to provide a copy of the draft Trade Waste Policy]

Common Water Meter means a Meter which is connected or available for connection to Multi Premises, where the Meter measures the water usage to that Multi Premises but not to each relevant Property located on or within that Multi Premises.

Community Development Lot has the meaning given to that term under the *Community Land Development Act* 1989.

Community Parcel has the meaning given to that term under the *Community Land Development Act 1989*.

Company Title Building means a building owned by a company where the issued shares of the company entitle the legal owner to exclusive occupation of a specified dwelling within that building.

Company Title Dwelling means a dwelling within a Company Title Building.

Council means the Council as defined in clause 1(2) of section 1 (**Background**) of this determination.

df% or Discharge Factor means, in relation to a Property, the percentage of water supplied to that Property which the Council assesses or deems to be discharged into the Sewerage System.

Exempt Land means land described in Schedule 4 of the *Water Management Act* 2000.

GST means the Goods and Services Tax as defined in *A New Tax System* (Goods and Services Tax) Act 1999.

IPART Act means the *Independent Pricing and Regulatory Tribunal Act* 1992.

kL means kilolitre or one thousand litres.

Local Government Act means the *Local Government Act*, 1993 (NSW).

Meter means an apparatus for the measurement of water.

Metered Non Residential Property means a Non Residential Property that is serviced by a Meter.

Metered Property means a Metered Residential Property or a Metered Non Residential Property.

Metered Residential Property means a Residential Property that is serviced by a Meter.

Monopoly Services means the Monopoly Services as defined in clause 1(2) of section 1 (**Background**) of this determination.

Multi Premises means land where there are two or more Properties (other than Properties which fall within paragraph (f) of the definition of 'Property') located on it, excluding land where there are hotels, motels, guest houses or backpacker hostels, each as defined in the Local Government Act, located on it.

Non Residential Property means a Property that is not a Residential Property or Vacant Land.

Order means the Order defined in paragraph 1(2) of section 1 (Background) of this determination and published in the Government Gazette No.18 on 14 February 1997.

Property includes:

- (a) a Strata Title Lot;
- (b) a Company Title Dwelling;
- (c) a Community Development Lot;
- (d) a Retirement Village Unit;

- (e) a part of a building lawfully occupied or available for occupation (other than a building to which paragraphs (a) to (d) inclusive apply); or
- (f) land.

Rateable Land has the meaning given to that term under the Local Government Act.

Residential Property means a Property where:

- (a) in the case of that Property being Rateable Land, that Property is categorised as:
 - (i) residential under section 516 of the Local Government Act; or
 - (ii) farmland under section 515 of the Local Government Act; or
- (b) in the case of that Property not being Rateable Land, the dominant use of that Property is residential applying the classifications in section 516 of the Local Government Act.

Retirement Village has the meaning given to that term under the *Retirement Villages Act*, 1999.

Retirement Village Unit means a unit located within a Retirement Village.

Sewerage System means the sewerage system owned and operated by the Council.

Strata Title Building means a building that is subject to a strata scheme under the *Strata Schemes* (*Freehold Development*) *Act* 1973.

Strata Title Lot means a lot as defined under the *Strata Schemes* (*Freehold Development*) *Act* 1973.

Tribunal means the Independent Pricing and Regulatory Tribunal of New South Wales established under the IPART Act.

Unit Entitlement when applied to a Strata Title Lot, has the meaning given to that term under the *Strata Schemes (Freehold Development) Act 1973* and when used in relation to a Community Development Lot, has the meaning derived under the *Community Land Development Act 1989*.

Vacant Land means land with no capital improvements on it.

Water Supply System means the water supply system owned and operated by the Council.

1.2 Consumer Price Index

(a) **CPI** means the consumer price index All Groups index number for the weighted average of eight capital cities, published by the Australian Bureau of Statistics, or if the Australian Bureau of Statistics does not or ceases to publish the index, then CPI will mean an index determined by the Tribunal

(b)
$$\Delta CPI_{1} = \left(\frac{CPI_{Jun2006} + CPI_{Sep2006} + CPI_{Dec2006} + CPI_{Mar2007}}{CPI_{Jun2005} + CPI_{Sep2005} + CPI_{Dec2005} + CPI_{Mar2006}}\right) - 1$$

$$\Delta CPI_{2} = \left(\frac{CPI_{Jun2007} + CPI_{Sep2007} + CPI_{Dec2007} + CPI_{Mar2008}}{CPI_{Jun2005} + CPI_{Sep2005} + CPI_{Dec2005} + CPI_{Mar2006}}\right) - 1$$

each as calculated by the Tribunal and notified in writing by the Tribunal to the Council.

(c) The subtext (for example Jun 2005) when used in relation to paragraph (b) above means the CPI for the quarter and year indicated (in the example the June quarter for 2005).

2. Interpretation

2.1 General provisions

In this determination:

- (a) headings are for convenience only and do not affect the interpretation of this determination;
- (b) a reference to a schedule, annexure, clause or table is a reference to a schedule, annexure, clause or table to this determination;
- (c) words importing the singular include the plural and vice versa;
- (d) a reference to a law or statute includes all amendments or replacements of that law or statute.

2.2 Explanatory notes and clarification notice

- (a) Explanatory notes do not form part of this determination, but in the case of uncertainty may be relied on for interpretation purposes.
- (b) The Tribunal may publish a clarification notice in the NSW Government Gazette to correct any manifest error in this determination as if that clarification notice formed part of this determination.

2.3 Prices exclusive of GST

Prices or charges specified in this determination do not include GST.

2.4 Billing cycle of Council

For the avoidance of doubt nothing in this determination affects when the Council may issue a bill to a customer for prices or charges under this determination.

Gosford City Council Wyong Shire Council Prices of Water Supply, Wastewater and Stormwater Services

From 1 July 2006 to 30 June 2009

The Tribunal members for this review are:

Dr Michael Keating AC, Chairman Mr James Cox, CEO and Full Time Member Ms Cristina Cifuentes, Part Time Member

Inquiries regarding this review should be directed to:
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Independent Pricing and Regulatory Tribunal of New South Wales

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TABLE OF CONTENTS

1	INTRODUCTION				
	1.1	Overview of the determination	1		
		1.1.1 Regulatory/legal basis for determination	1		
		1.1.2 Drivers of pricing decisions	1		
		1.1.3 Pricing for 1 July 2006 to 30 June 2009	2		
		1.1.4 Implications for customers, the Councils and the environment	4		
		1.1.5 Length of determination period	6		
		1.1.6 Stormwater charges	6		
		1.1.7 Backlog sewerage	6		
	1.2	The Tribunal's approach to determining prices	7		
		Structure of this report	8		
2	ВА	CKGROUND AND CONTEXT FOR THIS REVIEW	9		
	2.1	Overview of each Council's business	9		
		Response to the drought	10		
		Length of determination period	11		
		Pricing and average bill comparisons	11		
		2.4.1 Comparison of prices for water and wastewater services	12		
		2.4.2 Long Run Marginal Cost	14		
3	SU	MMARY OF THE COUNCILS' PROPOSALS	15		
		Capital expenditure proposals	15		
	• • • •	3.1.1 Joint water supply projects	15		
		3.1.2 Gosford Council projects	17		
		3.1.3 Wyong Council projects	18		
	3.2	Operating expenditure proposals	19		
	·-	3.2.1 Gosford Council proposed operating expenditure	19		
		3.2.2 Wyong Council proposed operating expenditure	21		
	3.3	Pricing proposals	22		
	0.0	3.3.1 Gosford Council's pricing proposals	22		
		3.3.2 Wyong Council's pricing proposals	24		
	3 4	Water consumption forecasts	25		
	0	3.4.1 Gosford Council water consumption forecasts	26		
		3.4.2 Wyong Council forecast water consumption	26		
4		E TRIBUNAL'S ASSUMPTIONS ON METERED WATER SALES	27		
		Summary of Tribunal's draft findings on metered water sales	27		
		Key factors influencing water consumption	27		
	4.3	Tribunal's considerations on metered sales forecasts	28		
		4.3.1 Council forecasts, MMA findings and Tribunal's draft findings on metered			
		water sales forecasts	28		
5	CA	PITAL EXPENDITURE PROPOSALS AND DECISIONS	31		
	5.1	Summary of Tribunal's draft finding	31		
	5.2	Tribunal's approach to assessing capital expenditure	32		
	5.3	Prudence of past capital investment	33		
		Other factors	34		
		5.4.1 Project delivery	34		
		5.4.2 Asset management	35		
		5.4.3 Output measures	35		
	5.5	Efficient forecast capital expenditure for the 2006 determination period	35		
		5.5.1 Joint water supply forecast capital expenditure	36		
		5.5.2 Gosford Council's forecast capital expenditure	38		
		5.5.3 Wyong Council's forecast capital expenditure	40		

6	OP	ERATIN	IG EXPENDITURE PROPOSALS AND FINDINGS	43
	6.1	Summar	y of Tribunal's draft finding on operating expenditure	43
	6.2	Tribunal	's approach to assessing efficient operating costs	43
	6.3	Overviev	w of Councils' forecasts, expert findings and Tribunal's draft findings	
			ating expenditure	44
	6.4		's considerations in relation to Gosford Council's forecast operating	
		expendi		44
		6.4.1	Tribunal draft findings	45
		6.4.2	Overall effect of Tribunal's draft findings on forecast operating expenditure	47
	6.5		's considerations in relation to Wyong Council's forecast operating	40
		expendi		48
		6.5.1 6.5.2	Tribunal draft findings Overall effect of Tribunal's findings on forecast operating expenditure	49 52
		0.5.2	Overall effect of Tribuliar's fillulings of forecast operating experiuntile	32
7	RF	VFNUF	REQUIRED BY EACH COUNCIL	53
•			y of Tribunal's assessment of revenue requirements	53
			y of Tribunal's draft findings on notional revenue requirements	53
			forward the RAB	56
		7.3.1	Tribunal's draft findings on methodology used in rolling forward the RAB	56
		7.3.2	Initial RAB value for Gosford Council stormwater assets	57
		7.3.3	Resulting values for each Council's RAB	57
	7.4	Tribunal	's draft finding on rate of return	57
		7.4.1	Summary of the submissions made on the rate of return	58
		7.4.2	Summary of the Tribunal's draft findings on the rate of return	58
	7.5		's draft findings on depreciation method and asset lives	59
		7.5.1	Depreciation method	59
		7.5.2	Asset lives to be applied	60
8	TD	DIMAI	'S PRICING DECISIONS FOR INDIVIDUAL SERVICES AND	
0				64
			O OUTCOMES	61 61
			w of pricing decisions decisions for Gosford Council	62
	0.2	8.2.1	Water charges	62
		8.2.2	Sewerage charges	63
		8.2.3	Stormwater charges	65
		8.2.4	Vacant land charges	66
		8.2.5	Trade waste charges	66
		8.2.6	Miscellaneous charges	67
	8.3		decisions for Wyong Council	67
		8.3.1	Water charges	67
		8.3.2	Sewerage charges	68
		8.3.3	Stormwater charges	69
		8.3.4	Vacant land charges	70
		8.3.5	Exempt properties	71
		8.3.6	Trade waste charges	71
		8.3.7	Effluent removal and chemical closet charges	72
	0.4	8.3.8	Miscellaneous charges	74
	8.4	8.4.1	ions for customers' bills Gosford Council	75 75
		8.4.2	Wyong Council	76
		8.4.3	Impacts on commercial and industrial customers	77
		8.4.4	Low income customers	77
	8.5		standards	78
			d water business and shareholder outcomes	79
	-	8.6.1	Impact on rates of return	79
		8.6.2	Overall financial strength as assessed by investment category ratings	80
		8.6.3	Appropriate payment of dividends	82
			mental outcomes	83
	8.8	Demand	management	84

GLOSSARY O	FTERMS	86
	MATTERS TO BE CONSIDERED BY THE TRIBUNAL UNDER OF THE IPART ACT	87
APPENDIX 2	OUTPUT MEASURES	89
APPENDIX 3	WACC	91
APPENDIX 4	LIST OF SUBMISSIONS	97
APPENDIX 5	PRESENTERS AT THE PUBLIC HEARING	98

1 INTRODUCTION

The Independent Pricing and Regulatory Tribunal of NSW (the Tribunal) is responsible for setting the maximum prices that can be charged for monopoly water, sewerage and drainage services by Gosford City Council (Gosford Council) and Wyong Shire Council (Wyong Council).

The current price determinations for these Councils expire on 30 June 2006. The Tribunal has therefore conducted a price review and made a draft determination on the maximum charges to apply from 1 July 2006. This draft report explains the Tribunal's draft decisions and sets out its draft determinations.

The Tribunal invites interested parties to comment on this draft report and determinations. Submissions are due by midday 28 April 2006. Following consideration of submissions, the Tribunal expects to issue final determinations in the second half of May 2006.

1.1 Overview of the determination

The prices determined by the Tribunal as part of this review continue the transition from pricing arrangements which reflected a relatively stable water supply environment to drought dominated conditions characterised by a water deficit. Addressing the water supply and demand imbalance, which will continue even after the drought is over, will have implications for water supply costs and consequently customers' bills.

1.1.1 Regulatory/legal basis for determination

The Tribunal's draft decisions have been made in accordance with the requirements set out in the *Independent Pricing and Regulatory Tribunal Act* 1992 (IPART Act), including the factors contained in Section 15 of the IPART Act (see Appendix 1). The Tribunal is satisfied that its draft determinations achieve a reasonable balance between the matters it is required to consider.

1.1.2 Drivers of pricing decisions

Most of the factors that led to the Tribunal increasing prices in the 2005 determinations¹ are still evident and have again shaped the Tribunal's draft decisions on price levels over the period to 30 June 2009.

The Tribunal's approach is to investigate the forecast levels of capital expenditure, operating expenditure and water consumption before determining prices for an agency. It then determines prices that it calculates will allow the agency to recover appropriate costs together with an appropriate return on the capital employed in its business.

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¹ IPART, Prices of Water Supply, Wastewater and Stormwater Services – Gosford City Council and Wyong Shire Council – 1 July 2005 to 30 June 2006.

The continuing drought has forced the Councils to invest in new infrastructure to secure the water supply to Central Coast residents. In addition, forecast increasing population growth is expected to place pressure on all services including stormwater works. Other capital investment is required to meet contemporary health and environmental standards.

Higher operating costs are the result of a number of contributing factors. The Councils have decided that they will now seek increased water supplies by augmenting the capacity to transfer water from the Hunter Water system and by increasing extraction from groundwater sources. Both these new options involve significant increases in operating costs from current levels. The Councils' previously preferred option of constructing a desalination plant has been deferred.

The Councils' current water demand forecasts now align closely with the forecasts made by the Tribunal's consultants McLennan Magasanik Associates (MMA) for the 2005 review. However, the forecasts are still much less than average historical levels and mean that, on average, prices will need to increase to cover the fixed costs associated with the provision of water services.

The Councils have historically earned higher returns on capital than in recent years. The Tribunal would like to see returns move to more economic levels. Recent changes to the *Local Government Act 1993* now permit the water businesses of local councils to pay dividends to their owner councils. The Tribunal's draft decisions on prices provides for a higher return on assets than that achieved in recent years. However, this still falls short of the level of economic return which properly reflects the cost of capital associated with providing water, sewerage and stormwater services. Fully economic returns may be achieved in subsequent determination periods.

Taken together, these factors mean that prices will need to increase over the price path if the Councils are to be able to undertake the extra works required to provide greater security in the provision of water, wastewater and stormwater services.

1.1.3 Pricing for 1 July 2006 to 30 June 2009

Gosford City Council

For the Gosford City Council's operating area the Tribunal has decided to:

- Set prices for the period from 1 July 2006 to 30 June 2009 to generate expected total revenue of \$164 million. This is the amount that the Tribunal has assessed as being required for Council to discharge its water, sewerage and stormwater responsibilities in an efficient manner over the period covered by the price path. This revenue will be sufficient to support a capital program of \$88.3 million. This program includes Council's share of \$86.8 million to help secure water supplies into the future, including joint water supply projects with Wyong Council to upgrade Mardi dam, augment the ability to transfer water from the adjacent Hunter Water supply system and to expand the use of ground water as a water source.
- Increase the price of water to better reflect costs. The cost of accessing additional water is much higher than costs incurred in the past. These increased costs will be reflected in the price of water to be paid by the residents of the Gosford local government area, with water usage charges increasing by 18 pert cent above inflation in each year of the price path. Water Service Charges will increase from \$80.82 in 2005/06 to \$83.24 in

- 2006/07 and by movements in the CPI thereafter. These price movements mean that water bills are expected to increase in real terms over the period to 30 June 2009.
- Take account of expectations that Council will spend of the order of \$37.8 million on sewerage services over the period covered by the price path. Increases in capital expenditures and operating costs will see the sewerage component of bills also increase. Sewerage service charges for residential properties will increase from \$363.99 in 2005/06 to \$374.91 in 2006/07, and by movements in the CPI thereafter.
- Introduce a new more cost reflective stormwater service charge. This charge will replace the existing drainage levy. A discrete charging arrangement for stormwater drainage services will improve transparency of the costs of these services in the future. The stormwater charge will be \$55.00 in 2006/07, increasing to about \$60 in 2008/09.

Wyong Shire Council

For the Wyong Shire Council's operating area the Tribunal has decided to:

- Set prices for the period from 1 July 2006 to 30 June 2009 to generate expected total revenue of \$140 million. This is the amount that the Tribunal has assessed as being required for Council to discharge its water and sewerage responsibilities in an efficient manner over the period covered by the price path. This revenue will be sufficient to support a capital program of \$94.5 million, inclusive of Council's share of joint water supply projects to be undertaken with Gosford Council. The Tribunal has made allowance in its draft findings for the Council to fund its stormwater services capital expenditure.
- Increase the price of water to better reflect costs. The cost of accessing additional water is much higher than costs incurred in the past. These increased costs have been reflected in the price of water to be paid by the residents of the Wyong local government area. Water usage prices are to increase by 17.5 per cent per year over the period to 30 June 2009 while water service charges will increase to \$94.56 in 2006/07 and by CPI thereafter. As a consequence, water bills are expected to increase in real terms over the period to 30 June 2009.
- Take account of expectations that Council will spend of the order of \$27 million on sewerage services over the period covered by the price path. Increases in capital expenditures and operating costs will see the sewerage component of bills also increase. Sewerage service charges for residential properties will increase from \$367.87 in 2005/06 to \$380.75 in 2006/07. They will increase further to about \$408 by 2008/09.

In making these decisions, the Tribunal had regard to the proposals and information submitted by the Councils, and independent analysis of these proposals by the consultants that it commissioned. It also considered the submissions made by other stakeholders (see Box 1.1 for more detail on the review process).

Box 1.1 Tribunal's approach to information collection and decision-making

The Tribunal's review included an extensive investigation and public consultation. As part of this review, the Tribunal:

- released an issues paper in August 2005
- invited Gosford and Wyong Councils to provide submissions detailing their pricing proposals, and
 required them to provide extensive financial and performance data on the future capital and
 operating expenditure they believe will be necessary to maintain their customer service levels and
 respond to regulatory and customer demands
- invited other interested parties to make submissions after reviewing the Councils' submissions, a total of 5 written responses were received
- engaged a consortium of Halcrow Pacific Ltd and McLennan Magasanik Associates Pty Ltd (Halcrow/MMA) to conduct a review of Gosford and Wyong Councils' capital expenditure, asset management and operating expenditure proposals across their water, wastewater and stormwater businesses
- engaged MMA to conduct a review of Gosford and Wyong Councils' consumption forecasts
- held a combined public hearing in Gosford on 10 February 2006 for Councils, and invited some of the parties who made written submissions to present their views at this hearing
- gave Gosford and Wyong Councils the opportunity to respond to the findings of Halcrow/MMA.

1.1.4 Implications for customers, the Councils and the environment

The Tribunal's draft pricing decisions explicitly take account of the impact on the Councils' customers, the Councils' water businesses (as operators and managers of the assets), the Councils (as owners) and the environment.

The Councils' customers face increases in their bills. Up until the 2005 determination the Tribunal had been able to limit price movements because of the efficiency improvements the Councils had been able to achieve. The current demand supply imbalance requires large increases in expenditure and prices must rise as a consequence. The key implications for the Councils' customers are:

- For all customers, usage charges will continue to make up a larger proportion of their bills in the 2006 determination period. This reinforces the water conservation signal to customers of the cost consequences of their current consumption by equating the usage price to the long run marginal cost of the next suite of augmentation options.
- For residential customers, the determination will increase a 180kL bill for Gosford customers by 9.5 per cent for 2006/07, 7.9 per cent for 2007/08 and 8.5 per cent for 2008/09 and for Wyong customers by 7.9 per cent for 2006/07, 8.4 per cent for 2007/08 and 9.0 per cent for 2008/09. Of these increases, 2.5 per cent per year results from the effect of inflation.
- For commercial and industrial customers, the determination will also increase their bills, particularly those of high water users. New trade waste charges will result in significant increases for some Wyong non-residential customers.

The Tribunal recognises that the increase in water and wastewater charges for the Councils, and stormwater charges for Gosford Council, will impact on cutomers' bills. However, the Tribunal believes that the increases are necessary if Central Coast residents are to continue to have access to acceptable water, wastewater and stormwater services.

The Councils' water businesses (as operators and managers of the assets) will be able to undertake the works necessary to continue to provide services that meet customer expectations and regulatory requirements and standards. The determined prices will allow the Councils to undertake essential works including the following:

- Construction of works to allow an increase in the transfer of bulk water from the Hunter Water Corporation to approximately 20ML/day.
- 'Fast track' projects to increase supply from groundwater sources.
- Undertake pre-construction works to be in a position to proceed with the construction of a desalination plant if the need arises.
- Construction of works to improve system security including augmentation of the Lower Wyong River Pumping System, construction of the Mardi High Lift Pump Station, augmentation of the Mooney Mooney Transfer System and raising of the Mardi Dam.
- Undertake a range of wastewater projects to ensure compliance with health and environmental standards.
- Undertake a range of stormwater projects necessary to reduce the pressure on existing systems and the impacts of population growth on the Central Coast.
- Fund works necessary to maintain existing and new infrastructure.

While recognising the need to carry out new works, the Tribunal is concerned about the Councils' ability to deliver the projects within the 2006 determination period, not least because the Councils have a history of not achieving their forecasts. To assist in measuring the Councils' performance over the 2006 determination period the Tribunal is in the process of developing a set of output measures to monitor progress against forecasts (see Appendix 2). The Tribunal intends working with the Councils to not only refine this current set of measures but to expand them so that the Tribunal can also better measure the benefits to customers from the increased expenditure and resultant increased prices.

The Councils (as owners) will receive an increasing but still less than fully economic return on their investment as a result of the determined prices. The prices set are expected to enable:

- Gosford Council to earn a real pre tax rate of return of between 2.7 per cent and 5.1 per cent over the determination period.
- Wyong Council to earn a real pre tax rate of return of between 3.9 per cent and 5.5 per cent over the determination period.

The Tribunal believes that the environment will particularly benefit from the increase in water usage prices by signalling to customers the real cost of water and, in concert with the current water restriction regime, encourage customers to be more careful in their use of water. In addition, the Councils are also subject to strict environmental guidelines regulated by various Government departments such as the Department of Environment and Conservation. The Councils take these various guidelines into account when developing their expenditure and pricing proposals for consideration by the Tribunal.

1.1.5 Length of determination period

The Tribunal has decided that the determination period will be three years, commencing 1 July 2006 and ending 30 June 2009.

This will align the Councils' determination period with the other three metropolitan water businesses regulated by the Tribunal; namely, Hunter Water Corporation, Sydney Catchment Authority and Sydney Water Corporation.

While there is still some uncertainty about the long term solutions to water supply, the Tribunal believes that the information available to it is sufficient to enable prices to be determined for the next three years.

1.1.6 Stormwater charges

Currently Gosford Council charges its water customers a stormwater drainage levy while Wyong Council recovers stormwater capital expenditure through its water and wastewater charges.

In the past the details of the allocation of stormwater costs between the Council's general funds and their in-house water businesses has been unclear. In the last two determinations the Tribunal requested that the Councils provide information that would allow it to determine stormwater charges in a transparent and cost-reflective manner.

The quality of the information provided by the Councils in their current pricing submissions is variable. However, by using information provided by its consultants, Halcrow/MMA, and further data provided by the Councils, the Tribunal believes it is now in a position to determine stormwater charges that meet its criteria of cost-reflectivity and transparency. However, the Tribunal has decided to defer the introduction of a stormwater charge for Wyong Council, at the request of Wyong Council, for administrative reasons. Gosford Council's stormwater charges determined by the Tribunal will replace the current stormwater levy.

1.1.7 Backlog sewerage

In the 2005 determination the Tribunal commented that on 14 March 2005 the then Minister for Energy and Utilities had requested that the Tribunal reopen the application of its 1997 Determination of Backlog Sewerage Services (Determination 4.2, 1997) in the Gosford local government area. The Tribunal has now concluded that review and released a new determination (Determination No.1, 2006). This determination can be viewed on the Tribunal's website.

Under this determination local residents of backlog sewerage areas are to pay a capital contribution of the first \$5,400 plus 67 per cent of any remaining costs. The balance of the cost is to be spread over the owners of sewered properties in the Gosford local government area. In addition, operating costs of backlog projects are to be met out of the sewerage service charges generally.

Council has informally advised the Tribunal that the portion of backlog sewerage costs relating to Mooney Mooney and Cheero Point to be paid by the community amounts to approximately \$1.20 per sewered property per year. The Tribunal has requested a formal

written submission from Council supporting the proposed charge so that it can consider the proposal prior to finalising the 2006 determination. The sewerage service charges set out in this report and the determination do not yet include this additional cost element.

1.2 The Tribunal's approach to determining prices

The maximum prices for the 2006 determination period have been set by:

- establishing the revenue required by each Council to efficiently provide water services for the determination period using the 'building block method'²
- setting maximum prices that take account of this revenue requirement, the demand for water services, the effect on customers, the longer term challenges facing Councils and the other matters the Tribunal must consider under Section 15 of the IPART Act.

An overview of this approach is shown in Figure 1.1.

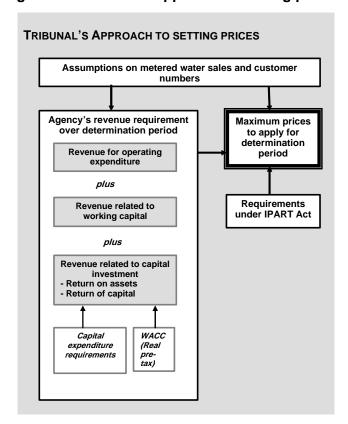


Figure 1.1 Tribunal's approach to setting prices

The building block methodology is the main method used by economic regulators in Australia and abroad for determining prices for monopoly services. The building block methodology was used at each of the previous metropolitan water reviews conducted by the Tribunal.

Under the building block approach the **revenue requirement** for a particular year in the price path can be expressed as:

Operating expenditure + return on working capital + depreciation + return on assets (rate of return x regulatory asset base)

The building block methodology is an important part of the Tribunal's considerations when determining prices for the regulated agencies. owever, it is not used in isolation from the exercise of the Tribunal's regulatory judgement, and may be modified to reflect the Tribunal's considerations of its section 15 obligations under the IPART Act including the social or environmental impacts of its pricing decisions.

1.3 Structure of this report

This report explains the Tribunal's draft determination in detail, including how and why it reached its draft decisions and what those decisions mean for the Councils, their customers and other stakeholders:

- Chapter 2 discusses the background and context for this price review, including an overview of each Council's business, their response to the drought, the Tribunal's draft finding on the length of the regulatory period and a comparison of the draft pricing outcomes to other water agencies
- Chapter 3 sets out a summary of the Councils' proposals including their capital and operating expenditure forecasts, consumption forecasts and the level of prices
- Chapter 4 sets out the Tribunal's assumptions on metered water sales that affect Councils' expenditure requirements and their ability to recover revenue
- Chapter 5 explains the Tribunal's assessment of the prudence of the Councils' past capital expenditure and the efficiency of their forecast capital expenditure, which is a key input into the decision on the revenue required for capital investment
- Chapter 6 explains the Tribunal's findings on the revenue required for operating expenditure.
- Chapter 7 describes the building block method the Tribunal used to calculate the Councils' notional revenue requirements, and provides an overview of its decisions on the notional revenue requirement for each agency. It also explains the Tribunal's findings on the revenue required for capital investment, including an increased but still less than economic return on assets, and a return of capital (depreciation)
- Chapter 8 sets out the Tribunal's draft decisions on prices for specific water services, and explains its draft decisions on changing the structure of water supply charges. It also analyses the impact of the draft pricing decisions for Councils, their customers, and the environment.

2 BACKGROUND AND CONTEXT FOR THIS REVIEW

This chapter provides the background and describes some of the issues that the Tribunal considered when it determined the charges for the 2006 determination period.

Section 2.1 provides a general description of the working and business environments of each Council. The Councils' response to the drought conditions is set out in section 2.2.

The Tribunal's draft finding on the length of the 2006 determination period is discussed in section 2.3.

The Tribunal must consider various matters under Section 15 of the IPART Act including the impacts of charges. In section 2.4 the new charges and resulting average customer bills are compared to those of other water agencies and the Tribunal has set out its analysis of the long run marginal cost.

2.1 Overview of each Council's business

Gosford Council provides water, wastewater and stormwater services to a permanent population of approximately 150,000 people. Its area of operations covers approximately 1,028 square kilometres of the Central Coast region of NSW. It provides some 65,000 properties with water services and 63,000 with sewerage services.

Wyong Council is responsible for one of the fastest growing municipalities in Australia covering approximately 827 square kilometres of operations. Its current population is around 140,000 and is expected to grow between 2.1 to 2.2 per cent per annum over the 2006 determination period. Wyong Council provides water supply services to around 59,000 properties and 57,000 properties are connected to its sewerage system.

The Councils share a joint water headworks supply managed by the Gosford and Wyong Councils' Water Authority with the major asset being the Mangrove Creek dam. However, each Council also maintains its own infrastructure to deliver water to customers, as well as systems for wastewater and stormwater disposal.

The Councils operate under the *Local Government Act* 1993, and are also statutory water supply authorities operating under Section 285 of the *Water Management Act* 2000. They are subject to the following key legislative instruments:

- The *Protection of the Environment Administration (POEA) Act 1991,* from which the powers of the Environment Protection Authority of NSW (EPA) are derived.
- The *Protection of the Environment Operations (POEO) Act 1997*, which further regulates Council's discharges.

Unlike the Sydney and Hunter Water Corporations, the Councils do not have an operating licence with the NSW Government that requires them to meet minimum system performance and customer service standards. Rather, they set these standards through an annual public management planning process.

The Tribunal does not conduct annual audits of compliance with these standards. However, the Councils are regulated through several other means. While the Tribunal regulates the maximum prices they can charge, the Department of Environment and Conservation and the Department of Natural Resources impose licences in relation to the abstraction of water from, and discharge of treated effluents to, the environment. Drinking water quality is regulated by the NSW Health Department within the context of the Australian Drinking Water Guidelines issued by the National Health and Medical Research Council (NHMRC).

2.2 Response to the drought

The drought has impacted the Councils' water supplies which have fallen from a high of 73 per cent of capacity in 1991 to their current level of around 20 per cent. The Councils are currently undertaking a range of drought management measures and preparing contingencies in the event the drought continues.

Rainfall in the Mangrove Dam catchment has been below average for 10 of the last 14 years. The catchment area is relatively small and does not recover from dry conditions with the speed of the Sydney Water and Hunter Water systems. Consequently, water restrictions were introduced in February 2002 and, even if the drought breaks, it is expected that restrictions will need to be in place for a number of years. Currently Level 2B restrictions are in place and have an overall targeted reduction in consumption of 20 per cent.

In February 2002 with water storages having fallen to 41 per cent, the Board of the Gosford and Wyong Councils Water Authority (Authority) considered it prudent to review the long term water strategy for the Central Coast. Other factors such as Water Management Plans to provide environmental flows had also emerged. Review of the long term water strategy involved the letting of a major consultancy to the Department of Commerce to review options to secure the water supply. The results of the consultancy are now on public exhibition and will form the basis of a long term strategy being developed for the Central Coast entitled WaterPlan 2050.

While WaterPlan 2050 is still evolving, some major short and medium term decisions have been taken. To increase water supplies in the short term emphasis is now on increasing water supplies from the Hunter Water system and from groundwater sources. Medium term works to help recover from the drought and increase water supply security include works on the Mardi and Mooney dams.

In addition to plans to increase supply the Councils are also focussing on measures to reduce water demands. Together with water restrictions, a range of contingency measures have been introduced including:

- community education initiatives to encourage water conservation
- programs encouraging the use of water efficient appliances
- water audits for major water consumers
- programs to encourage adoption of rainwater tanks
- improved system leakage reduction programs
- investigations into effluent re-use opportunities.

The completion of WaterPlan 2050 should clarify which projects are needed to ensure supply over the longer term. During the last determination period the Authority proposed desalination as a short term option. Circumstances have changed since then and this project has been classified as a State significant project regulated by the Department of Planning. The Authority will only be in a position to make a decision on the commencement of construction activities if the Department grants development approval. Any expenditure on desalination over the term of the determination period will be limited to some preconstruction works. This pre-construction work will enable a speedier path to completion of the plant if the need arises and if development approval is given.

2.3 Length of determination period

The Tribunal has decided that the determination period will be three years, commencing 1 July 2006 and ending 30 June 2009.

This will align the Councils' determination period with the other three metropolitan water businesses regulated by the Tribunal; namely, Hunter Water Corporation, Sydney Catchment Authority and Sydney Water Corporation.

In 2005, the Tribunal decided to set prices for Hunter Water Corporation, Sydney Catchment Authority and Sydney Water Corporation for four years beginning on 1 July 2005 and concluding on 30 June 2009. While the Tribunal wished to set prices for Gosford Council and Wyong Council for the same determination period, uncertainty about future expenditure needs led the Tribunal to determine charges for the Councils for only one year beginning on 1 July 2005 and concluding on 30 June 2006.

At the time of the 2005 determinations, the Councils were investigating strategies to manage a growing water supply/demand imbalance on the Central Coast but had not decided on their preferred options. The Councils advised the Tribunal that they expected to have completed a feasibility study of the available options for augmenting their water supply by September 2005. The Tribunal decided therefore that it would determine a one year price path from 1 July 2005 and subsequently a multi-year price path if more certain information later became available.

While there is still some uncertainty about the long term solutions to water supply, the Tribunal believes that the information available to it is sufficient to enable prices to be determined for the next three years.

2.4 Pricing and average bill comparisons

The Tribunal has based its decisions on maximum prices on the notional revenue requirement for each agency established using the building block method. However, these decisions drew on a range of analysis and investigations including an assessment of the current relative price levels of the NSW metropolitan water retailers and recent analysis of the long run marginal cost (LRMC) of water in the Central Coast. These matters are discussed below.

2.4.1 Comparison of prices for water and wastewater services

The prices currently charged for water and wastewater services by the four metropolitan water retailers vary. For example, a Sydney Water residential customer using 180kL of water per annum pays around \$40 more a year in total water and wastewater charges than a Gosford Council customer using the same amount of water (Table 2.1). Some of the price variations are due to differences in the costs associated with meeting regulatory standards, and differences in Government policy requirements.

Table 2.1 Residential water and wastewater charges and bills for a customer using 180kL water per annum in year ending 30 June 2006 (\$2005/06)

	Sydney Water	Hunter Water	Gosford Council	Wyong Council
Water usage price (per kL)	1.20	1.09	0.925	0.925
Water service charge (per annum)	76.73	30.14	80.82	92.25
Wastewater usage price (per kL)	0	0.43	0	0
Wastewater service charge (per annum)	369.43	260.06	363.99	367.87
Environmental Improvement	0	50.16	0	0
Total water and wastewater bill	651.69	495.82	611.31	626.62
Stormwater charge ³	31.02	43.35	42.00	0.00
Total estimated bill	681.22	538.39	653.31	626.62

Compared with the bills in other regions of Australia, current average NSW metropolitan water bills are neither particularly high nor low (Figure 2.1).

Sydney Water and Hunter Water charge for stormwater services to a limited number of customers. Therefore, their stormwater charge has been excluded for comparison purposes. Wyong Council has no stormwater charge.

\$800 \$700 \$600 \$500 \$300 \$200 \$100 Tara Valey Water Interbourse Sydne I Mader Corporation South Last Waler Methodine wase Coppositor Peater nyong shife council Linke Made Concluded CH West wate We portue ACTEMIACI Camberto SA Water Look label Gostod City Council Gold Coast Water Bietale Water

Figure 2.1 2004/05 National household water and wastewater bills (250kL/a)

Source: Based on published tariffs for year ending 30 June 2005.

2.4.2 Long Run Marginal Cost

Economic theory suggests that the usage component of water prices should be set at the LRMC of supply to achieve efficiency. The LRMC represents the incremental cost of measures needed to bring the demand and supply of water into balance.

Calculating the LRMC can be complex and uncertain. It involves estimating the costs and water savings associated with available demand management and supply augmentation options. The Councils have provided to the Tribunal information on the capital and operating costs of the various water supply augmentation schemes being implemented by them. Based on these cost estimates and estimated water yields the Tribunal has estimated the LRMC for the Councils.

The method used to estimate the LRMC was the Average Incremental Cost (AIC) method specified as follows:

AIC = Present value of least-cost suite of augmentation options

The incremental output stream resulting from the suite of augmentation options weighted to reflect the marginal time preference of consumption.

The Tribunal's LRMC estimates are set out in Table 2.2. The estimates have been made on the basis of real pre-tax rates of return ranging from 5.3 per cent (low) to 6.7 per cent (high).

Table 2.2 Long Run Marginal Cost Estimates (\$2005/06/kL)

	Low	High
Mardi Dam Works	\$2.65	\$3.11
Groundwater	\$1.73	\$1.88
Hunter Transfer	\$1.00	\$1.03
Combined	\$1.52	\$1.66

3 SUMMARY OF THE COUNCILS' PROPOSALS

This chapter provides a summary of the proposals by Gosford and Wyong Councils in their pricing submissions to the Tribunal for this review.

While the Tribunal recognises that the most pressing issue for the Central Coast is to secure the water supply, the Tribunal still must ensure that its determined prices are sufficient to support the projects deemed necessary at the lowest cost to consumers. Therefore, in making its draft decisions the Tribunal has analysed the overall needs of the Councils and examined expenditures at the project level.

Section 3.1 provides a summary of the major projects proposed by the Councils and details the capital expenditure forecasts that each Council believes are necessary to fund new works and replace existing, obsolete works so that community standards and regulatory targets are met. The Councils act together as members of the Gosford and Wyong Councils' Water Authority (Authority) to manage the supply of bulk water. Therefore, the first part of Section 3.1 deals with those large, joint water supply projects that are designed to provide solutions to the current low dam levels and the remaining parts of this section cover each Council's individual proposals for capital works over the determination period.

Section 3.2 deals with the Councils' operating expenditure proposals. While the Councils' infrastructure is relatively new and maintenance costs should be low, there are some major impacts resulting from their decisions to focus on groundwater and the enlarged connection to the Hunter Water system as the means for increasing the supply of water.

Section 3.3 looks at the prices for water, wastewater and stormwater services that the Councils have requested. The Councils have sought significant increases in charges to fund their increased expenditure proposals. There is an emphasis on increasing the level of water usage charges because the Councils believe that this has the advantage of sending out a strong water conservation message to customers.

Section 3.4 provides a summary of the updated water consumption forecasts calculated by the Councils. The forecasts are made with the expectation that the current water restriction regime will continue through the term of the price path.

3.1 Capital expenditure proposals

3.1.1 Joint water supply projects

The Authority is managing a number of major water projects (termed joint water supply (JWS) projects) with the costs shared between the Councils. The Board of the Authority is made up of representatives of both Councils and is governed by the Gosford and Wyong Councils' Water Authority Agreement 2000 which specifies that capital costs are generally to be shared equally between the Councils while operating costs are to be shared between them in the same proportion as water usage.

While final long-term strategies are still evolving, the Authority has detailed those works that it proposes to construct over the 2006 determination period. There have been some major revisions compared to the Councils' 2005 pricing submissions:

- **Desalination project**. Construction of a \$50 million desalination plant was the main emphasis of the 2005 pricing submissions. In the current submissions this option has been supplanted by projects seeking greater extraction of water from groundwater sources and involving an enlarged connection to the Hunter Water Corporation system. However, expenditure has been allocated for pre-construction works to enable work on a desalination plant to begin quickly if the need arises.
- **Hunter connection project.** At the time of the 2005 determinations the Hunter system was experiencing declining dam levels and desalination seemed a more reliable option to secure water supplies for the Central Coast. The situation has changed with the Hunter system replenished, and now increased supplies from the Hunter system have become a priority. Agreement between the Councils and the Hunter Water Corporation for the purchase of water has been reached, with works to enlarge the connection to be completed in late 2006/07.
- **Groundwater extraction project**. Water supply from groundwater sources is now also a major emphasis. This project has been 'fast-tracked' with the majority of the works scheduled for the early part of the 2006 determination period.

The Authority is also undertaking a series of medium term works to improve system security/performance and to speed recovery from the drought. A significant driver is the potential impact of Water Sharing Plans to allocate more water to protect the health of NSW rivers. This means, for example, that increases in pumping capacity are required to enable pumping from streams during high flow conditions. The main projects are:

- Lower Wyong River transfer system. This project involves the augmentation/ replacement of pumping infrastructure and associated works from the Wyong River near the lower Wyong weir.
- Mardi High Lift pumping station. This Pumping Station is to be constructed at Mardi Water Treatment Plant to allow water to be fed from Mardi into the Gosford system and to improve pressure in the Warnervale area.
- **Mooney Dam transfer system**. This project involves increasing the capacity of the existing pumping station at Mooney Dam.
- **Mardi Dam transfer system**. This project involves the construction of a new outlet tower, pipeline and pumping station to convey water to the Mardi Dam treatment Plant. An upgrade of the power supply to the Mardi area is also part of the project.
- **Mardi Dam rising.** The result of this planned work will see the Mardi Dam height raised by 2 metres.

The expenditure proposed for these projects makes up the majority of the Councils' forecast capital expenditures. However, while the forecast expenditure may be sufficient to secure the water supply in the short to medium term, there may be a need for further large scale projects in future price determinations to secure the water supply over the longer term. The Authority is using the results of a major consultancy, which reviewed options for securing supply, to form the basis of its long term water supply strategy 'WaterPlan 2050'.

Table 3.1 shows the Authority's forecast JWS project costs. The costs are the total forecast costs for each project over the 2006 determination period.

Table 3.1 Total cost of JWS projects over 2006 determination period (\$ million, 2005/06)

Project	Total cost
Desalination project	0.2
Hunter Water connection	7.7
Groundwater extraction project	10.7
Lower Wyong Transfer System Upgrade	5.5
Mooney Mooney Transfer System Upgrade	1.2
Mardi Dam raising	2.2
Mardi High Lift Pump Station	16.7
Mardi Dam Transfer System	15.0
Mardi to Mangrove Transfer System	0.6
Project Management for major projects	2.4
Total	62.2

3.1.2 Gosford Council projects

The majority of Gosford Council's forecast water capital expenditure is included in the Authority JWS projects. Forecast capital expenditure on other water projects is primarily for replacements with some expenditure for upgrading the asset management systems:

- Asset management systems. As part of the development of a Water Strategic Business
 Plan under the guidelines set by the Department of Energy and Sustainability (DEUS),
 Gosford Council intends upgrading its asset management systems. The upgraded
 systems will be integrated with the Council's other systems including the General
 Ledger and Council GIS systems.
- **GIS Backlog Data Capture**. Expenditure to upgrade the asset management system to allow the capture of previously held GIS data into the new asset management system.

Council has established a dedicated team to focus on asset management issues. Longer-term asset replacement for water and sewerage works is now focussed on asset consumption rates and asset performance and condition. Council's asset management systems form part of the development of a Water Strategic Business Plan under the guidelines set by DEUS.

Council's proposed capital expenditure on sewerage projects is similar to water capital expenditure with replacement expenditure and a planned upgrade of asset management and GIS systems. There is also some significant expenditure proposed for sewerage projects in the Gosford CBD and at North Avoca as follows:

- **Gosford CBD Sewer project**. The proposed upgrade of infrastructure in the Gosford CBD to service expected increasing population density.
- **North Avoca sewerage scheme**. The aggregation of a number of sewer projects totalling \$18 million.

Council's proposed capital expenditure on stormwater projects is a result of a significant problem with drainage infrastructure and nuisance flooding in the Gosford area. Some

systems in Gosford have a limited capacity, some urban areas have no drainage system and the rapid growth in urban development has put increased pressure on existing systems. Council's current estimate for drainage capital works required is \$171 million but because many catchments have yet to be studied the Council believes that the real cost is substantially more.

Table 3.2 summarises the Council's forecast costs for projects including the JWS projects.

Table 3.2 Gosford Council forecast capital expenditure (\$ million, 2005/06)

	Current⁴	2006 determination period			t
Financial year	2005/06	2006/07	2007/08	2008/09	Total
Water	19.5	30.2	9.1	4.6	44.0
Wastewater	7.8	10.4	15.3	16.3	42.0
Stormwater	3.3	3.6	3.4	3.4	10.3
Total	30.6	44.2	27.8	24.3	96.3

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

3.1.3 Wyong Council projects

The Wyong Shire is experiencing strong population growth and much of the capital expenditure for Wyong Council relates to providing services for new development areas. There is also water related expenditure for refurbishments and for meeting regulatory standards including:

- Development areas:
 - The Mardi/Warnervale trunk main
 - The Gorokan to Norah Head trunk main
 - The Warnervale to Bushells Ridge trunk main
 - Over \$3.0 million for general works
- Refurbishment:
 - Repainting and reproofing reservoirs
 - Rehabilitating mains
- Standards:
 - Fishways and flowmeters.

Similarly, the proposed expenditure for sewerage projects is generally for replacement (\$3.5 million), for growth and pumping stations (\$4.4 million). Expenditure is expected for:

- Development areas:
 - Treatment infrastructure generally
 - Expenditure on pumping stations
- Refurbishment

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Note that the current determination period does not end until 30 June 2006, therefore the expenditure referred to as current in this report includes actual and some forecast expenditure.

- Treatment in flow meters, general mechanical replacements, civil refurbishment
- Mains
- General items such as telemetry and the 2-way radio system

Standards

- Treatment works in WAS pits and aerators at Wyong South
- Expenditure on mains and pumping stations.

Wyong Council's proposed stormwater capital expenditure results from a backlog of works similar to that of Gosford Council. There are significant local flooding problems in older parts of the Shire with the program to refurbish set to continue for another twenty years. This is in addition to works required to service new developments. Expenditure is therefore generally categorised as either for growth or for refurbishment and for meeting standards. Since making its submission, Council has advised the Tribunal of administrative difficulties associated with introducing separate stormwater charges (refer sections 3.3.2 and 8.3.3).

Table 3.3 summarises the Council's forecast estimates for projects including the JWS projects.

Table 3.3 Wyong Council forecast capital expenditure (\$ million, 2005/06)

	Current	2006 determination period			d
Financial year	2005/06	2006/07	2007/08	2008/09	Total
Water	22.8	40.3	11.5	7.4	59.2
Wastewater	7.3	11.8	10.5	9.6	31.9
Stormwater	9.1	8.1	8.0	8.0	24.1
Total	39.3	60.2	30.0	25.0	115.2

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

3.2 Operating expenditure proposals

Gosford and Wyong Councils have similar operating environments and many issues affecting the level of operating expenditure are common to both. While increases in costs for items such as wages and materials are expected, the decision to choose groundwater extraction and a larger connection to the Hunter Water system as short term solutions to the water supply problem has an additional impact on the proposed operating expenditure levels for the 2006 determination.

3.2.1 Gosford Council proposed operating expenditure

The Councils are placing an increased emphasis on long term planning given the drought and aging systems. The Councils are developing a Strategic Master Plan together to provide a road map for a sustainable water supply for the Central Coast through to the year 2050. The cost to Council of developing the plan is estimated at \$400,000 per year. To provide a high level strategy for its own water business operations, Gosford Council is also developing a Water and Sewerage Strategic Business Plan at an annual cost of \$110,000. These costs overlay the more obvious costs related to the day-to-day operations of Gosford Council's water, wastewater and stormwater systems.

The most significant increases in operating costs for Gosford Council flow from managing the water assets. New estimates for the cost of groundwater now stand at about \$1.3 million per annum while there are associated increases in energy costs due to an increased need for pumping as the ground water project becomes operational. The decision to enlarge the connection to Hunter Water will see annual purchases of bulk water from this source increase to around \$1.5 million in 2008/09. Demand management costs are also expected to rise with initiatives such as programs for retrofitting water efficient appliances and programs for rainwater tank rebates being promoted over the 2006 determination period.

The Council expects increased sewerage operating expenditure over the 2006 determination period to address increased odour and septicity control measures and biosolids reuse demand. Odours around sewerage treatment plants are covered by environmental compliance requirements and these have obliged Gosford Council to commission a septicity control system to reduce odours with a set-up cost of \$550,000 and annual costs of \$720,000. Biosolid disposal is also a potential problem because the current arrangements of reuse through rehabilitation of mine sites in the Hunter Valley is set to conclude in May 2007. Future costs will depend on the demand for biosolids and the relevant environmental laws placed on the reuse of biosolids.

Gosford Council has transferred responsibility for drainage assets to the water business of Council and asked for the costs for the provision of drainage asset management, construction and maintenance to be funded through a separate drainage charge. Forecast stormwater operating expenditure is expected to increase due to repairs and maintenance and the Trial GIS Lagoons project and the Kahibah project.

Table 3.4 summarises the Council's forecast operating expenditure.

Table 3.4 Gosford Council forecast operating expenditure (\$ million, 2005/06)

	Current	2006 determination period			
Financial year	2005/06	2006/07	2007/08	2008/09	Total
Corporate	13.2	9.9	9.8	9.5	29.2
Water	11.9	13.2	13.7	13.7	40.7
Wastewater ⁵	14.9	14.9	14.9	14.9	44.6
Stormwater	3.9	3.9	3.8	3.9	11.6
Total	44.0	41.9	42.2	42.0	126.1

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

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Includes dividends and tax payments equivalents of approximately \$1.9 million per annum. The Tribunal provides for a return on investment and considers dividends through its financial analysis.

3.2.2 Wyong Council proposed operating expenditure

In its pricing submission, Council advises that there are a number of factors driving operating costs generally:

- Council has spent \$590,000 on long term planning to date with a further \$150,000 required to finalise WaterPlan 2050. Council is also developing its own Water Strategic Business Plan following the Best Practice Management Guidelines published by the DEUS at a cost to date of \$180,000.
- Predicted population growth rates of between 2.1 per cent to 2.2 per cent over the 2006 determination period for the Wyong Shire will directly impact operating expenditure levels.
- Wages and salaries are forecast to increase at rates between 3.4 per cent and 4.0 per cent but they are aligned with a Workplace Reform and Continuous Improvement policy designed to provide a 1.5 per cent improvement in labour productivity over the medium term.
- Corporate support costs are set to grow at 0.5 per cent (real) per year.
- While Council's assets overall are relatively new, some classes of assets will need refurbishment in the near future.

Council advises that the most significant increases in operating expenditures will be in water operations due to cost increases resulting from strategies implemented to address the supply/demand imbalance. The most important are purchases of water from Hunter Water, greater emphasis on groundwater as a major source, and pre-construction work for a desalination plant. The comparable marginal costs for these options are all higher than the marginal cost of supply from current systems. Council is also expanding its demand management initiatives through community education, refits of water efficient appliances, system leakage reduction programs and effluent reuse systems.

Increases in expenditure are expected in the wastewater systems because of increasing chemical and energy costs, increasing costs associated with Occupational Health and Safety standards and increasing costs of stricter environmental standards. For example, the Department of Environment and Conservation Odour Management Draft Policy will require Council to increase expenditure on odour reduction systems.

Council initially proposed that stormwater operating costs be recovered from water customers. Since making its submission Council has advised that certain administration issues have arisen in being able to implement separate charges. Further, it has advised that the issues cannot be resolved before 1 July 2006. Therefore, Council has requested deferral of its proposed separate stormwater charges (see section 8.3.3).

Table 3.5 summarises the Council's current estimates for operating expenditure.

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	Current	2006 determination period			
Financial year	2005/06	2006/07	2007/08	2008/09	Total
Corporate	16.3	16.4	16.5	16.5	49.5
Water	9.1	10.4	11.5	11.4	33.3
Wastewater	9.8	10.1	10.3	10.5	30.8
Stormwater	1.3	1.3	1.3	1.4	4.0
Total	36.6	38.2	39.6	39.8	117.6

Where appropriate, Council forecasts have been converted to 2005/06\$.

Entries may not add to totals due to rounding.

Council has since withdrawn its stormwater operating expenditure.

3.3 Pricing proposals

Both Councils advise that they are faced with increasing costs arising from a number of factors including the water demand/supply balance, addressing the implications of water sharing plans, providing resources to meet regulatory reporting requirements and implementing programs focusing on asset management.

The Councils propose that their existing water and wastewater pricing structures remain in place for the 2006 determination period because the current one year determination has not allowed them time to examine alternative structures such as the inclining block model in place for Sydney Water.

The main focus of the Councils is to increase the proportion of revenue collected through the water usage component of charges.

3.3.1 Gosford Council's pricing proposals

Gosford Council has proposed that average price rises be mainly reflected in increases in the water usage charge. It has proposed that all other water and wastewater charges remain the same in real terms.

The Tribunal held the stormwater levy constant in nominal terms in the 2005 determination. This was less than Council had sought and reflected the Tribunal's concerns regarding the lack of clarity of the relationship between stormwater revenue and stormwater expenditure. At that time, revenue from the stormwater levy was collected by the Council's water/wastewater business but the stormwater assets were held by the general Council.

In its submission to this review, Council stated that it has begun to transfer stormwater assets to the Water and Sewer Directorate in order to address the Tribunal's concerns. It is now seeking considerable price increases to fund a large stormwater capital program. It has proposed two pricing options:

- to fully fund projected stormwater drainage operating and capital expenditure through a Stormwater Service Charge
- to fully fund stormwater operating expenditure through a Stormwater Service Charge and to fund capital expenditures through loans.

Under the first option, Gosford advises that the following charges would need to be determined to fully fund stormwater operations:

Table 3.6 Gosford Council Option 1 proposed levy (\$2006/07)

	Current	2006 determination period		
Financial year	2005/06	2006/07 2007/08 200		2008/09
Levy/property	42.00	110.00	117.07	123.74

Where appropriate, Council forecasts have been converted to 2005/06\$.

Under the second option a regulatory asset base (RAB) would be established and charges determined using the building block approach. Council proposes that the RAB be set at the written down replacement cost of the assets (\$121m) with appropriate returns on and of assets determined. Council believes that the level of the current levy (\$42 per annum) would fund stormwater operating expenditure but capital expenditure would need to be funded by new loans. Council proposes that the following charges be determined which phase in appropriate increases to the levy to reach a point where sufficient funds are available to cover expenses and provide a return on investment.

Table 3.7 Gosford Council Option 2 proposed levy (\$2006/07)

	Current	2006 determination period		
Financial year	2005/06	2006/07	2007/08	2008/09
Levy/property	42.00	70.00	78.05	85.66

Where appropriate, Council forecasts have been converted to 2005/06\$.

Gosford Council prefers Option 2.

Gosford Council has proposed that miscellaneous charges be increased to achieve full cost recovery from 2006/07. This results in significant increases in a number of charges.

Council has proposed annual CPI increases to all Trade Waste charges except for the Liquid Trade Waste Re-inspection Fee. Council is proposing to set this fee to recover costs.

Table 3.8 summarises the Council's proposed key price increases.

Table 3.8 Gosford Council's current charges and proposed increases

	Current	2006 d	2006 determination period		
	Charges	Pro	Proposed increases		
Financial year	2005/06	2006/07	2007/08	2008/09	
Water Service Charge (\$)	80.82	1+∆CPI ₀ *	1+∆CPI₁	$1+\Delta CPI_2$	
Water Usage Charge (\$/kL)	0.925	18% x(1+∆CPI₀)	18% x(1+∆CPI₁)	18% x(1+∆CPI₂)	
Wastewater Service Charge (\$)	363.99	1+∆CPI ₀	1+∆CPI₁	$1+\Delta CPI_2$	
Non-Residential Wastewater usage charge (\$/kL) to be multiplied by discharge factor	0.78	1+∆CPI ₀	1+∆CPI ₁	1+∆CPI ₂	
Stormwater Charge (\$)	42.00	64% x(1+∆CPI₀)	12% x(1+ΔCPI₁)	10% x(1+∆CPI ₂)	
Miscellaneous charges	Various	Full cost recovery	Full cost recovery	Full cost recovery	
Trade waste charges**	Various	1+∆CPI₀	1+∆CPI₁	1+∆CPI₂	

*Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and

the four quarters ending 31 March 2005.

 ΔCPI_1 Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters

ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

**Except for the Liquid Trade Waste Re-inspection Fee.

3.3.2 Wyong Council's pricing proposals

Wyong Council has proposed that average price rises be mainly reflected in increases in the water usage charge. It has proposed that water service charges remain the same in real terms and both fixed and variable waste water charges increase by CPI + 1%.

The Wyong Council's submission includes a methodology for determining stormwater charges and proposes a new charging regime for trade waste charges based on DEUS Trade Waste Model and Best Practice Pricing guidelines.

Council currently does not levy a separate stormwater charge but recovers stormwater capital expenditure (but not stormwater operating expenditure) through water and wastewater charges. Council initially proposed an interim stormwater charge for the 2006 determination period with a more extensive investigation to be completed at the next review. Since making its submission Council has advised that certain administration issues have arisen in being able to implement separate charges. Further, it has advised that the issues cannot be resolved before 1 July 2006. Therefore, Council has requested deferral of its proposed separate stormwater charges (see section 8.3.3).

The proposed Trade Waste regime is based on the same guidelines as those adopted by Gosford Council for the 2005 determination. Council states that the new regime will see some customers facing significant increases in charges but that Council will phase in the Trade Waste Usage Fee over three years as recommended by the DEUS Guidelines.

Table 3.9 summarises the Council's proposed key price increases.

Table 3.9 Wyong Council's current charges and proposed increases

	Current	2006 determination period			
	Charges	Proposed increases			
Financial year	2005/06	2006/07	2007/08	2008/09	
Water Service Charges (access – \$) Water Usage Charge (\$/kL)	92.25 0.925	1+∆CPI₀ 17.5% x(1+∆CPI₀)	1+∆CPI₁ 17.5% x(1+∆CPI₁)	1+ΔCPI ₂ 17.5% x(1+ΔCPI ₂)	
Sewerage Service Charges (access - \$)	367.87	1% x(1+∆CPI₀)	` 1% x(1+ΔCPI₁)	` 1% x(1+ΔCPl₂)	
Sewerage Usage Charge (\$/kL) to be multiplied by discharge factor	0.66	1% x(1+∆CPI₀)	1% x(1+∆CPI₁)	1% x(1+∆CPI ₂)	
Stormwater Service Charge	na	na	na	na	
Miscellaneous Charges	Various	1+∆CPI ₀	1+∆CPI₁	1+∆CPI ₂	
Trade Waste Charges	Various	New charges	1% x(1+∆CPI₁)	1% x(1+∆CPl₂)	

CPI being the movement in CPI between four quarters.

The Trade Waste Usage fee increases from \$0.10/kL (without pre-treatment) in 2006/07 to \$0.30/kL x $(1+\Delta CPI2)$ (without pre-treatment) in 2008/09 to reflect the phase-in requirement of DEUS's Best Practice Management Guidelines.

Wyong Council states that its pricing proposals are designed to phase in charges over three years and avoid excessive annual increases.

3.4 Water consumption forecasts

Since the 2005 determination both Councils have increased the level of water restrictions to Level 2B and they have formulated their water consumption forecasts on the assumption that water restrictions will continue throughout the 2006 determination period. The Councils believe that this is a valid assumption as the joint bulk water supply system does not respond rapidly to rainfall events and it would take several years of average or above average rainfall before restrictions could be removed.

3.4.1 Gosford Council water consumption forecasts

Table 3.10 shows Gosford Council's forecasts water consumption for the 2006 determination period.

Table 3.10 Gosford Council forecast water consumption (ML/year)

	Current	2006 determination period		
Financial year	2005/06	2006/07	2007/08	2008/09
Gosford Council 2005 submission	13,220	13,200	13,345	13,492

3.4.2 Wyong Council forecast water consumption

Table 3.11 shows Wyong Council's forecasts water consumption for the 2006 determination period.

Table 3.11 Wyong Council consumption forecast (ML/year)

	Current	2006 determination period		
Financial year	2005/06	2006/07	2007/08	2008/09
Wyong Council 2005 submission	13,308	13,594	13,879	14,164

4 THE TRIBUNAL'S ASSUMPTIONS ON METERED WATER SALES

The Tribunal needs to consider the Councils' forecast metered water sales for the 2006 determination period because they have a direct influence on the revenue received by Councils. Specifically, revenue from water sales is a product of usage charges and metered water sales. If the consumption forecasts are not reasonable, there is a risk that the prices that the Tribunal determines will result in each Council significantly over or under recovering its required revenue. As well, the demand for water and wastewater services affect the Councils' capital and operating costs.

The Tribunal is concerned that forecasts that unduly understate demand will result in customers paying prices that exceed efficient levels. It is also concerned that unduly high forecasts may result in Councils not earning a sustainable revenue stream over the determination period. Therefore, it has sought to ensure that the forecasts on which the pricing determinations are based have been subject to objective review. For the 2005 determination, the Tribunal engaged McLennan Magasanik Associates (MMA) to independently review the Councils' forecasts for the period 2004/05 to 2009/10, and to provide alternative forecasts where necessary. MMA finalised its report and recommendations in December 2004. The Tribunal has re-examined those recommendations for this review and has examined the Councils' updated forecasts.

This chapter explains the Tribunal's draft findings on the metered water sales forecasts used to set prices for each Council for 2006/07 to 2008/09. Section 4.1 provides a summary of its findings on forecast metered water sales. Section 4.2 discusses the key factors that influence metered sales. Section 4.3 explains the Tribunal's considerations in making its draft findings on each Council's forecasts for metered sales.

4.1 Summary of Tribunal's draft findings on metered water sales

The Tribunal's draft finding is to adopt the metered water sales forecasts shown in Table 4.1 when setting prices for 2006/07 to 2008/09 period.

Table 4.1 Metered water sales forecasts adopted in the draft determination (ML/year)

Financial year	2006/07	2007/08	2008/09
Gosford Council	13,637	13,782	13,847
Wyong Council	12,939	13,128	13,245

4.2 Key factors influencing water consumption

As part of its review for the 2005 determination, MMA noted a range of factors that will have an important influence on the demand for water, wastewater and stormwater drainage services over the determination period. The MMA report made the following comments about some of those factors:

- **Population growth**, which is a key driver of growth in residential water demand. Gosford Council has forecast population growth of 1.1 per cent over the period 2006/07 to 2008/09, Wyong Council has forecast population growth of 2.0 per cent to 2.1 per cent for that period.
- Economic growth rates, which affect water usage in several ways. High economic growth will accelerate other trends such as the purchase of more efficient appliances. Economic growth and increases in process and plant efficiency are significant factors in determining the future trends of non-residential water consumption. Conversely, experience shows that higher real incomes brought about by favourable economic conditions result in increased water use.
- **Pricing structure and level.** The price structures and levels that the Tribunal determines will have some effect on water consumption.
- Trends in appliance purchases and usage, which affect residential water consumption. There has been a move towards the installation of larger appliances in residences, such as spa baths, which can increase water usage. The installation of automatic sprinkler systems is also likely to increase water usage. Countering this has been the trend towards more water efficient appliances, such as dual-flush toilets and low-flow showerheads and, more recently, front-loading washing machines.
- **Demand management programs.** There have been increased efforts by the Councils to undertake community education, promote the installation of water efficient devices and develop other programs that will reduce demand.
- Weather and the impact of current and proposed water restrictions. External water
 usage is strongly influenced by weather and water restrictions, while internal water
 usage is affected to a lesser degree. Water restriction policies affect consumption while
 the restrictions are in place and have a residual effect for a period after the restrictions
 are lifted.

4.3 Tribunal's considerations on metered sales forecasts

In making its draft decisions on the metered water sales forecast for each Council, the Tribunal took into account the submissions it received from the Councils and other stakeholders, MMA's findings and recommendations, and its own analysis.

28

⁶ WA Water Corporation, Domestic Water use Study in Perth, Western Australia 1998-2001, Perth, March 2003.

4.3.1 Council forecasts, MMA findings and Tribunal's draft findings on metered water sales forecasts

Table 4.2 sets out the metered water sales forecasts submitted by the Councils for this review and the review in 2005, those recommended by MMA, and the Tribunal's draft findings on the metered water sales to be used to set prices for 2006/07 to 2008/09.

Table 4.2 Comparison of Gosford Council's, MMA's and Tribunal's forecasts (ML/year)

Financial year		2006/07	2007/08	2008/09
Gosford Council				
	Gosford Council submission 2005	11,955	12,722	13,506
	Gosford Council submission 2006	13,200	13,345	13,492
	MMA forecast with Level 2 restrictions	13,637	13,782	13,847
	Tribunal draft finding	13,637	13,782	13,847
Wyong Council				
	Wyong Council submission 2005	11,664	12,536	13,434
	Wyong Council submission 2006	13,594	13,879	14,164
	MMA forecast with Level 2 restrictions	12,939	13,128	13,245
	Tribunal draft finding	12,939	13,128	13,245

For the 2005 determination, MMA developed a range of forecasts based on different assumptions about the level of water restrictions that could apply to the Councils' customers. The Councils' forecasts for the 2005 review were based on the assumption that Level 3 water restrictions would be in place until 2008/09. Because only Level 2 restrictions were in place at the time of the 2005 review, the Tribunal decided to adopt MMA's recommendations based on Level 2 restrictions.

The Tribunal has previously taken the position that consumers should not face increased prices because of temporary restrictions. It reaffirms its position that temporary restrictions should not be factored into forecasts to be used for price setting. However, in the case of Gosford and Wyong Councils, it notes that the Councils now believe that level 2 restrictions will remain in place until at least 2008/09. Therefore, for the purposes of this determination, these restrictions should be considered a fixed feature.

The Tribunal notes that Gosford Council's forecast consumptions now more closely align with MMA's recommended level 2 consumption forecasts whereas Wyong Council's consumption forecasts are higher.

The Tribunal has formed the view that the MMA's recommendations on the forecast consumptions based on the level 2 restrictions should be adopted.

5 CAPITAL EXPENDITURE PROPOSALS AND DECISIONS

The Tribunal considered each Council's capital expenditure as an input to its draft finding on the revenue required by the Councils for capital investment. Capital expenditure (actual and forecast) for the current determination period that the Tribunal deems to be prudent and forecast capital expenditure for the 2006 determination period that it considers to be efficient are incorporated into the RAB when rolling it forward to establish its value at the start of each year in the determination period.⁷ The RAB provides the basis for calculating both the allowances for a return of capital and a return on capital.

This chapter explains the Tribunal's findings on the prudent past and efficient forecast capital expenditure. Section 5.1 summarizes the Tribunal's findings for each Council. Section 5.2 outlines the approach it used to assess past and forecast capital expenditure. Sections 5.3 and 5.4 discuss its draft findings on prudent past capital expenditure and efficient forecast capital expenditure in detail, including the key issues the Tribunal considered in making these decisions. Section 5.5 discusses a range of other issues the Tribunal considered in relation to the Councils' capital programs.

5.1 Summary of Tribunal's draft finding

The Tribunal's draft finding is that the following capital expenditure for Gosford Council and Wyong Council for the period 2005/06 is prudent (see Table 5.1), and that the forecast capital expenditure for the 2006 determination period for each Council shown in Table 5.2 is efficient.

Table 5.1 Prudent past capital expenditure (\$ million, 2005/06)

Financial year	2005/06
Gosford Council	30.5
Wyong Council	33.4

Table 5.2 Forecast capital expenditure (\$ million, 2005/06)

Financial year	2006/07	2007/08	2008/09	Total
Gosford Council	43.2	24.3	20.7	88.3
Wyong Council	55.0	22.4	17.0	94.5

Where appropriate, Council forecasts have been converted to 2005/06\$.

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⁷ Capital expenditure included in the RAB is net of growth capital expenditure funded by developer charges.

5.2 Tribunal's approach to assessing capital expenditure

The Tribunal's approach to assessing capital expenditure for the purpose of rolling forward the RAB includes a backward-looking test to determine the prudent amount of capital expenditure of an agency in the current determination period, and an assessment of the efficiency of their forecast capital expenditure for the coming determination period.

For the 2005 determination the Tribunal commissioned a consultant, Atkins/Cardno, to undertake an independent review of the Councils' actual and proposed capital expenditure for the period from 2002/03 to 2009/10. The results of the consultancy were published in the Tribunal's 2005 determination although the Tribunal only considered prices for 2005/06.

As part of this determination, the Tribunal commissioned Halcrow/MMA to undertake an independent review of the Councils' proposed forecast capital expenditure for the 2006 determination period. Specifically, it asked Halcrow/MMA to assess:

- the prudent capital expenditure for the 2005/06 financial year
- the efficiency of any changes from the last review of the Councils' estimates of capital expenditure for the period from 1 July 2006 to 30 June 2009, and
- the asset management systems for each Council and proposed expenditure on further development of the asset management systems.

The Tribunal required Halcrow/MMA to only review those projects with significant changes between the Councils' current submissions and their previous submissions to the 2005 determination. The Tribunal advised Halcrow/MMA to apply a \$40,000 materiality threshold to determine if a project should be reviewed in detail. If the change was less than \$40,000 then Halcrow/MMA adopted the Councils' forecasts.

It should also be noted that in undertaking their review, Halcrow/MMA took into account Atkins/Cardno's recommendations in the 2005 review, regardless of materiality, and made adjustments to the Councils' forecasts accordingly.

In making its own findings on the amount of past capital expenditure that was prudent and the amount of forecast capital expenditure that is efficient, the Tribunal considered Halcrow/MMA's findings. It also considered:

- the Councils' submissions on their capital expenditure during the 2005 and 2006 determination periods
- other stakeholders' submissions that commented on these expenditures
- its own analysis of issues related to capital expenditure
- important contextual factors, particularly the short and long term balance between demand and supply
- the range of factors set out in Section 15 of the IPART Act.

5.3 Prudence of past capital investment

The Tribunal's draft finding is to adopt Halcrow/MMA's recommendation on the prudence of past capital expenditure.

To decide what portion of each Council's capital expenditure in the 2005 determination period was prudent, the Tribunal considered the Council's proposals for the 2006 determination period, and Halcrow/MMA's advice on whether that expenditure was prudent.

Table 5.3 sets out each of these expenditures and the Tribunal's draft finding on the amount of actual expenditure that was prudent.

Table 5.3 Capital expenditure over the 2005 determination period (\$ million, 2005/06)

Financial year	2005/06
Gosford Council	
Council actual/projected expenditure	30.6
Halcrow/MMA recommended expenditure	30.5
Tribunal's draft finding on prudent expenditure	
Wyong Council	
Council actual/projected expenditure	39.3
Halcrow/MMA recommended expenditure	33.4
Tribunal's draft finding on prudent expenditure	33.4

Where appropriate, Council forecasts have been converted to 2005/06\$.

Halcrow/MMA's decision on whether the proposed capital expenditure is considered prudent or efficient necessarily requires:

- consideration of whether the expenditure is required to maintain the quality, quantity and reliability of the water, wastewater and drainage services provided by the Councils
- that the expenditure is a cost effective method of achieving these goals.

Halcrow/MMA concluded that for both Councils some of the proposed capital expenditure for 2005/06 is not prudent or efficient. In particular, Halcrow/MMA concluded that:

- for Gosford Council, minor adjustments were needed to the actual 2005/06 capital costs for the JWS Mardi Dam Transfer, JWS project management and other water projects
- for Wyong Council, minor adjustments were required across projects, with a reduction to sewer projects ('treatment other') of \$600,000 to reflect Halcrow/MMA's assessment of the appropriate level of ongoing expenditure and \$4 million for stormwater projects such that the total spend more closely reflects the historical trend. The Tribunal notes that Halcrow/MMA were concerned at the step increase (some

\$4.5 million) in 2005/06 stormwater capital expenditure. Halcrow/MMA commented that they "cannot support Council's major increase in stormwater expenditure as we still do not see any firm justification for the increase8".

The Tribunal has considered the Councils' proposals and the recommendations of Halcrow/MMA for 2005/06. The Tribunal has decided to adopt the Halcrow/MMA recommendations on the level of prudent capital expenditure.

5.4 Other factors

The Tribunal also considered several other factors in relation to Councils' forecast capital programs. These included project delivery, asset management and output measures.

5.4.1 Project delivery

The Tribunal has accepted Halcrow/MMA's recommendations that there be no adjustment for historical performance of the Councils.

One of the key issues the Tribunal considered was whether the Councils have the resources and capability to deliver the projects in a timely fashion. In previous reviews, the Tribunal's consultant Atkins/Cardno raised concerns about the ability of Councils' to deliver on proposed projects within the determination period. Halcrow/MMA have the same concerns for the 2006 determination period.

Based on past performance, Halcrow/MMA were concerned about Councils' ability to achieve their forecast capital expenditure programs in the time frame of the 2006 determination. Halcrow/MMA devised a methodology based on a band of +/- 20% as a target for the difference in past actual versus forecast capital expenditure. The methodology was not applied to the joint water supply projects because the Councils have employed external consultants to project manage them. Therefore, only each Council's unique capital expenditure works projects were scrutinised.

Based on its review, Halcrow/MMA believe that Gosford Council should be able to achieve its forecast capital expenditure targets and that no adjustment was required. For Wyong Council, despite concerns that Halcrow/MMA have with Council achieving its forecasts, they also recommend that no adjustment be made to the forecasts.

The Tribunal has some misgivings about the Wyong Council's capital expenditure profile and the ability for the Council to deliver the quantum of works scheduled for 2006/07. Despite these concerns the Tribunal has been persuaded that the total amount of capital expenditure approved for the 2006 determination period is warranted.

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See section 3.7.3 of Halcrow/MMA report, *Review of Capital Expenditure, Asset Management and Operating Expenditure for Gosford City Council and Wyong Shire Council, Final Review Report – Wyong, 27 February 2006* p 26.

5.4.2 Asset management

The Tribunal considers that sound asset management practices are critical to meeting system performance standards in the most efficient manner. For this reason, it continues to take a close interest in the practices and performance of regulated businesses in this area.

The Tribunal asked Halcrow/MMA, as part of its review, to consider and comment on the Councils' asset management practices. In relation to Gosford Council, Halcrow/MMA noted that the Council is currently in the process of implementing a complete upgrade of systems with a projected cost of between \$800,000 and \$1,000,000. The system will be integrated with an updated GIS and a specific team has been set up to undertake the project.

In relation to Wyong Council, Halcrow/MMA noted that Council was also upgrading their system. The focus will be on putting in place a condition-based asset management system which will be integrated with the GIS and the General Ledger.

As part of its next review in 2009, the Tribunal will consider Gosford and Wyong Councils' progress and commitment to asset management. It will take care to ensure that prices for Councils take account of efficient asset management practices.

5.4.3 Output measures

In the last determination the Tribunal stated its belief that output measures should be developed and implemented as part of the 2006 determination, and further refined as part of the expected 2009 determination.

The Tribunal considered that output measures will help ensure that capital expenditure is more accountable. Where the outputs are achieved under budget, the savings made could be considered efficiency gains. Failure to achieve specified outputs would need to be justified on the basis that other outputs were of a higher priority.

The Tribunal realises that the current environment of severe drought will see large increases in the expenditure levels of the Councils and has adjusted prices accordingly. The Tribunal is still concerned about the Councils' ability to deliver the proposed but significantly larger range of projects within the price path when there is a history of actual capital expenditure falling short of forecasts. To assist in measuring the Councils' achievements over the coming determination period the Tribunal is in the process of developing a set of output measures to monitor progress against forecasts (see Appendix 2). The Tribunal intends working with the Councils to not only refine this current set but also to expand them so that the Tribunal can better measure the benefit to customers from the increased expenditure and resultant increased prices.

5.5 Efficient forecast capital expenditure for the 2006 determination period

The Tribunal considered the Councils forecast capital expenditure programs to determine how much of the forecast expenditure for the 2006 determination period is efficient. Both Gosford and Wyong Councils have proposed to make significant investments in demand management and supply augmentation projects over the next three years in response to the current water shortage and increasing population in the Central Coast region. However,

they also proposed increased forecast capital expenditure in the wastewater and stormwater areas of their water businesses.

The Tribunal's draft findings in relation to the Councils' joint proposed projects, and to their individual forecast capital expenditures are summarised below.

5.5.1 Joint water supply forecast capital expenditure

The Tribunal's draft finding is to accept Halcrow/MMA's recommendations on the forecast capital expenditure for the joint water supply projects.

As mentioned in section 3.1.1, generally speaking the Councils equally share the costs of the joint works.

The operating environment of the Councils has not changed since the 2005 determination. However, while the ongoing drought is still the main driver of increasing costs, the proposed solution has changed from desalination to expansion of the Hunter Water connection and greater expenditure on groundwater sources. The Councils, who manage the projects jointly as the Authority, are also proposing significant capital expenditure increases in some medium term projects such as work on the Mardi Dam.

Table 5.4 shows the proposed capital expenditure for joint works over the 2006 determination period for each Council compared to Halcrow/MMA's recommendations and the Tribunal's draft finding.

Table 5.4 Forecast capital expenditure for JWS projects compared with Tribunal's draft finding on efficient capital expenditure (\$ million, 2005/06)

Financial year		2006/07	2007/08	2008/09	Total
	Councils' forecast	52.0	8.6	1.6	62.2
	Halcrow/MMA recommendation	50.0	4.1	1.4	55.5
	Tribunal draft finding	50.0	4.1	1.4	55.5

Where appropriate, Council forecasts have been converted to 2005/06\$.

Table 5.5 shows those projects where there has been a material change in the Councils' forecast capital expenditure to this review compared to their forecasts for the 2005 determination, and that have been examined in detail by Halcrow/MMA. The figures in Table 5.5 represent the total expenditure for each project for the period from 1 July 2005 to 30 June 2009.

Table 5.5 Forecast capital expenditure for JWS projects (total for 2005/06 to 2008/09) (\$ million, 2005/06)

Items	2005 submission	2006 submission	Difference	Halcrow finding
Desalination project	49.8	0.7	-49.1	0.7
Hunter Water Connection	-	18.0	18.0	18.0
Groundwater Extraction project	3.1	23.7	20.6	23.7
Lower Wyong Transfer System Upgrade	5.4	5.8	0.4	5.8
Mooney Mooney Transfer System Upgrade	4.0	1.3	-2.7	1.3
Mardi Dam raising	3.7	3.2	-0.4	3.2
Mardi High Lift Pump Station	7.9	17.7	9.8	12.4
Mardi Dam Transfer System	8.4	19.0	10.6	17.4
Mardi to Mangrove Transfer System	3.1	1.0	-2.1	1.0
Project Management for major projects	-	3.3	3.3	3.3
Total	85.3	93.6	8.3	86.8

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

Halcrow/MMA's reasons for their recommendation are as follows:

- **Desalination project** even though the desalination project has been replaced by the Hunter Water connection and groundwater extraction projects, the Councils have asked for \$700,000 for desalination pre-construction works so that the project can move ahead quickly if approval is given by the Department of Planning and if the decision to proceed is taken. Halcrow/MMA believe that the expenditure should be allowed.
- **Hunter Water connection project** Halcrow/MMA believe that the proposed expenditure is necessary and appropriate in light of the change in project preference, but would have preferred more justification for the proposed levels of expenditure.
- Groundwater extraction project the increased forecasts are a result of the greater emphasis on groundwater supply and additional requirements placed on the project by the Department of Natural Resources. Halcrow/MMA accept that the increases are a result of the different emphasis and of the major impact of the additional work required by the Department of Natural Resources relating to environmental impact assessment and monitoring and groundwater yield studies.
- **Mooney Mooney Transfer System** the decrease is the result of the use of existing infrastructure and revised estimates.
- Mardi High Lift Pump Station Wyong Council has advised that the increase in costs is due to additional works added to the project. Halcrow/MMA have expressed serious concerns with Wyong Council's planning process. They are not satisfied that the additional costs have been justified and have recommended that the cost of the pump station be allowed but not the costs of the additional works. Halcrow/MMA do not accept that the additional works are required at this stage and have recommended a \$5.3 million reduction in total forecast spend over the 2006 determination period.

- Mardi Dam Transfer System the Councils advised that the increase was due to a combination of additional works being included in the project and to significantly higher tender prices. Halcrow/MMA believe that detailed estimates should be within 15 per cent of the actual contract costs with a premium of 15-20 per cent to account for increased construction activity. They are concerned about evidence of slippage in the project and recommend that the allowable capital expenditure should be within 30 per cent of the original detailed estimate. Consequently, Halcrow/MMA recommend a \$1.1 million reduction in total spend over the 2006 determination period.
- **Mardi to Mangrove Transfer System** the reduction in expenditure is a result of the majority of the expenditure slipping out of the 2006 determination period.
- **Project Management for Major Works Projects** this new expenditure is in response to concerns in the 2005 review about the ability of Councils to deliver projects in a timely fashion. Halcrow/MMA believe this is a positive response to those concerns. However, they have revised the timing of the expenditure to reflect the timing of the proposed expenditure on major works.

5.5.2 Gosford Council's forecast capital expenditure

Halcrow/MMA examined all capital projects where there had been a material change in Gosford Council's 2005 submission forecasts compared to its 2006 submission forecasts and have made recommendations for the level of expenditure for each project that they believe is efficient.

The next sections discuss the Tribunal's considerations and draft findings in relation to major capital expenditure items within Council's forecast capital expenditure program and the potential for additional efficiency gains within this program, as well as the overall effect of the Tribunal's findings on the program.

Tribunal draft findings

In making their recommendation on Gosford Council's forecast capital expenditure (excluding the JWS projects dealt with in section 5.4.1), Halcrow/MMA concluded the following:

North Avoca Sewerage Scheme

The Tribunal's draft finding is to accept Halcrow/MMA's recommendations on Gosford Council's proposed \$18 million capital expenditure on the North Avoca Sewerage Scheme.

Council has proposed capital expenditure of \$18 million associated with projects in the North Avoca region based on estimates developed by an external consultant in a strategic options report. The estimate includes a contingency allowance of approximately 15 per cent. The consultant stated that the estimates should not be used for budgeting purposes and more detailed estimates should be developed from a functional design.

Halcrow/MMA have not specifically reviewed the estimates and state that they do not necessarily have the information to do so. They note the uncertainty in the cost estimates and that there may be opportunities to gain capital efficiencies to reduce overall expenditure. Having said that, Halcrow/MMA accept Gosford Council's estimates.

Stormwater capital expenditure

The Tribunal's draft finding is to accept Halcrow/MMA's recommendations on Gosford Council's stormwater capital expenditure forecasts.

In its 2005 determination the Tribunal requested that Gosford Council improve the transparency of the stormwater drainage charging arrangements from 1 July 2006.

Halcrow/MMA believe that Gosford Council has now taken the necessary steps to make stormwater funding transparent, i.e. stormwater assets have been transferred to the water business, transfers between funds have ceased and a regulatory asset base has been estimated. Further, they believe that Council has a well established process for identifying and costing stormwater works. Halcrow/MMA recommended that the Council's proposed capital expenditure is both necessary and appropriate and therefore should be allowed by the Tribunal. Table 5.6 shows recommended stormwater capital expenditure.

Table 5.6 Gosford Council forecast Stormwater capital expenditure compared with Halcrow/MMA's recommended capital expenditure (\$ million, 2005/06)

	Current	Determination period			
Financial year	2005/06	2006/07	2007/08	2008/09	Total
Gosford Council forecast	3.3	3.6	3.4	3.4	10.4
Halcrow/MMA recommendation	3.3	3.6	3.3	3.2	10.1

Where appropriate, Council forecasts have been converted to 2005/06\$.

Potential for efficiency gains

The Tribunal has accepted Halcrow/MMA's recommendations on the potential efficiency gains.

Halcrow/MMA have not specifically investigated new efficiency targets but have reviewed the targets set by Atkins/Cardno for the 2005 determination. Given the drought and that some projects have already commenced, Halcrow/MMA have set targets for efficiency but delayed them to take effect towards the end of the price path (Table 5.7).

Table 5.7 Halcrow/MMA recommended efficiency targets (per cent)

		Current	Determination period			
Financial year		2005/06	2006/07	2007/08	2008/09	
	Efficiency target	-	-	2.5%	5%	

The Halcrow/MMA recommendation on capital efficiency targets reduces Council's total capital expenditure by \$1.7 million over the 2006 determination period.

Overall effect of Tribunal's draft findings on level of efficient capital expenditure

Table 5.8 shows a comparison of the annual capital expenditures proposed by Gosford Council for the 2005/06 year and for the period of this review compared to the amounts recommended by Halcrow/MMA and the Tribunal's draft finding. The amounts in Table 5.8 include Gosford Council's share of the JWS projects.

Table 5.8 Forecast capital expenditure for Gosford Council compared with Tribunal's finding on efficient capital expenditure (\$ million, 2005/06)

	Current	Determination period			
Financial year	2005/06	2006/07	2007/08	2008/09	Total
Gosford Council forecast					
Water service	19.5	30.2	9.1	4.6	44.0
Wastewater service	7.8	10.4	15.3	16.3	42.0
Stormwater service	3.3	3.6	3.4	3.4	10.3
Total	30.6	44.2	27.8	24.3	96.3
Halcrow/MMA recommendation					
Water service	19.4	29.2	6.7	4.3	40.3
Wastewater service	7.8	10.4	14.3	13.2	37.9
Stormwater service	3.3	3.6	3.3	3.2	10.1
Total	30.5	43.2	24.3	20.7	88.3
Tribunal's draft finding					
Water service	19.4	29.2	6.7	4.3	40.3
Wastewater service	7.8	10.4	14.3	13.2	37.9
Stormwater service	3.3	3.6	3.3	3.2	10.1
Total	30.5	43.2	24.3	20.7	88.3

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

5.5.3 Wyong Council's forecast capital expenditure

As for Gosford Council, Halcrow/MMA examined all capital projects where there had been a material change in Wyong Council's forecasts to the 2005 determination compared to its 2006 submission forecasts and have made recommendations for the level of expenditure for each project that they believe is efficient. There has been a material change in over fifty projects. Only the significant changes are discussed below (details of all recommended Halcrow/MMA adjustments are contained within their report for Wyong Council⁹).

The next sections discuss the Tribunal's considerations and draft findings in relation to major capital expenditure items within Council's forecast capital expenditure program and the potential for additional efficiency gains within this program, as well as the overall effect of the Tribunal's findings on the program.]

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⁹ Halcrow/MMA, Review of Capital Expenditure, Asset Management and Operating Expenditure for Gosford City Council and Wyong Shire Council, Final Review Report – Wyong, 27 February 2006.

Tribunal draft findings

In making their recommendation on Wyong Council's forecast capital expenditure (excluding the JWS projects dealt with in section 5.4.1), Halcrow/MMA concluded that the adjustments were required to Council's forecasts for the following projects:

Water Projects

Halcrow/MMA accepted Wyong Council's updated forecasts for capital expenditure for most water projects. However Halcrow/MMA recommended a reduction of \$6.2 million from *Unidentified Works*. Council proposed a contingency amount of \$8.6 million over the 2006 determination period for unidentified water works and while Halcrow/MMA accept that some level of contingency is prudent they believe the amount should represent no more than 4.4 per cent of total proposed expenditure. They have recommended a contingency at this level.

Sewer Projects

As for water projects, Halcrow/MMA have accepted Wyong Council's forecasts for most sewerage projects. They recommended a reduction of \$289,000 in expenditure on pumping stations . The major reduction recommended by Halcrow/MMA is \$4.8 million in other sewerage related expenditures. Council proposed a contingency amount of \$7.7 million over the 2006 determination period for unidentified sewer works. While Halcrow/MMA accept that some level of contingency is prudent they believe the amount should represent no more than 4.5 per cent of total proposed expenditure and have recommended a contingency at this level.

Stormwater capital expenditure

The Tribunal's draft finding is to accept Halcrow/MMA's recommendations on Wyong Council's stormwater capital expenditure forecasts but to allow Council to continue to recover these costs through water and sewerage services.

In their pricing submission, Wyong Council asked the Tribunal to consider stormwater operating and capital expenditure for the purpose of setting a stand alone stormwater charge. As discussed in section 3.3.2, Council has revised its submission and asked the Tribunal to continue the current practice of recovering stormwater capital expenditures through water and wastewater charges.

Halcrow/MMA advise that the level of expenditure proposed by Wyong Council is inconsistent with historical levels and there is insufficient justification for significant increases. Council has proposed an increase of 185 per cent in expenditure compared with historical levels. Halcrow/MMA recommend that the capital expenditure amount proposed by Wyong Council for the 2006 determination period of \$24.1 million be reduced to \$18.4 million.

Potential for efficiency gains

The Tribunal has accepted Halcrow/MMA's recommendations on the potential efficiency gains.

Halcrow/MMA have not specifically investigated new efficiency targets but have reviewed the targets set by Atkins/Cardno for the 2005 determination. Given the drought and that some projects have already commenced, Halcrow/MMA have set targets for efficiency but delayed them to take effect towards the end of the price path (Table 5.9).

Table 5.9 Halcrow/MMA recommended efficiency targets (per cent)

	Current	Determination period			
Financial year	2005/06	2006/07	2007/08	2008/09	
Efficiency target	-	-	2.5%	5%	

The Halcrow/MMA recommendation on capital efficiency targets reduces Council's total capital expenditure by \$1.5 million over the 2006 determination period.

Overall effect of Tribunal's draft findings on level of efficient capital expenditure

Table 5.10 shows a comparison of the annual capital expenditures proposed by Wyong Council for the 2005/06 year and for the 2006 determination period compared to the amounts recommended by Halcrow/MMA and the Tribunal's draft finding. The amounts in Table 5.10 include Wyong Council's share of the JWS projects.

Table 5.10 Forecast capital expenditure for Wyong Council compared with Tribunal's finding on efficient capital expenditure (\$ million, 2005/06)

	Current		Determinat	ion period	
Financial year	2005/06	2006/07	2007/08	2008/09	Total
Wyong Council forecast					
Water service	22.8	40.3	11.5	7.4	59.2
Wastewater service	7.3	11.8	10.5	9.6	31.9
Stormwater service	9.1	8.1	8.0	8.0	24.1
Total	39.3	60.2	30.0	25.0	115.2
Halcrow/MMA recommendation					
Water service	22.2	38.4	7.6	3.3	49.4
Wastewater service	6.1	11.0	8.8	7.3	27.1
Stormwater service	5.1	5.6	6.0	6.4	18.0
Total	33.4	55.0	22.4	17.0	94.5
Tribunal's draft finding					
Water service	22.2	38.4	7.6	3.3	49.4
Wastewater service	6.1	11.0	8.8	7.3	27.1
Stormwater service	5.1	5.6	6.0	6.4	18.0
Total	33.4	55.0	22.4	17.0	94.5

Where appropriate, Council forecasts have been converted to 2005/06\$.

Entries may not add to totals due to rounding.

6 OPERATING EXPENDITURE PROPOSALS AND FINDINGS

This chapter explains the Tribunal's draft findings on the Councils' required operating expenditure. Sections 6.1 and 6.2 summarise its findings for each Council, and the approach it used to assess the Councils' efficient operating costs. Section 6.3 sets out the forecast operating expenditure proposed by each Council, the level of efficient operating costs recommended by the Tribunal's consultant, and the Tribunal's findings on the level of efficient operating costs. Sections 6.4 and 6.5 explain the Tribunal's considerations in making its findings for each Council.

6.1 Summary of Tribunal's draft finding on operating expenditure

The Tribunal's draft finding is that the following forecast operating expenditure for Gosford City Council and Wyong Shire Council for the 2006 determination period shown in Table 6.1 is efficient.

Financial year	2006/07	2007/08	2008/09	Total
Gosford Council	38.7	37.8	36.2	112.8
Wyong Council	28.8	30.0	30.1	89.0

Table 6.1 Forecast operating expenditure (\$ million, 2005/06)

6.2 Tribunal's approach to assessing efficient operating costs

The Tribunal's approach to assessing each Council's level of efficient operating costs involved:

- obtaining proposals from the Councils on their forecast operating expenditure for the 2006 determination period and their potential to make future efficiency gains
- engaging a consultant to independently review these proposals
- considering the Councils' proposals, the consultant's advice and other stakeholder submissions in relation to operating expenditure
- analysing other information, including the Councils' past operating expenditure.

The Tribunal engaged Halcrow/MMA to review the Councils' proposals and assess the efficiency of any changes made by the Councils since the 2005 determination for the estimates of operating expenditure for the 2006 determination period. The Tribunal required Halcrow/MMA to only review those projects with significant changes between the Councils' current submissions and their previous submissions to the 2005 determination.

The Tribunal advised Halcrow/MMA to apply a \$40,000 materiality threshold to determine if a project should be reviewed in detail. If the change was less than \$40,000 then Halcrow/MMA adopted the Councils' forecasts.

Halcrow/MMA assessed the Councils' forecast operating expenditure by service area, and considered the processes they used to manage operating costs, specific issues affecting their operating costs and each Council's potential for additional operating efficiency gains. Full

details of Halcrow/MMA's approach and analysis can be found in its final report, which is available on the IPART website¹⁰.

6.3 Overview of Councils' forecasts, expert findings and Tribunal's draft findings on operating expenditure

Table 6.2 sets out the forecast operating expenditure proposed by Gosford and Wyong Councils, efficient operating costs recommended by Halcrow/MMA (incorporating potential efficiencies), and the Tribunal's draft findings on the operating expenditure to be used in calculating each Council's revenue requirement and setting prices for the 2006 determination period.

Table 6.2 Councils' forecast compared with Tribunal's draft finding on operating expenditure (\$ million, 2005/06)

Financial year	2006/07	2007/08	2008/09	Total
Gosford Council				
Atkins/Cardno 2005 recommendation	30.3	30.0	29.6	89.9
Gosford Council forecast ¹¹	41.9	42.2	42.0	126.1
Halcrow/MMA recommendation	38.7	37.8	36.2	112.8
Tribunal draft finding	38.7	37.8	36.2	112.8
Wyong Council				
Atkins/Cardno 2005 recommendation	28.0	28.7	30.0	86.7
Wyong Council forecast	38.2	39.6	39.8	117.6
Halcrow/MMA recommendation	30.3	31.6	31.8	93.7
Tribunal draft finding	28.8	30.0	30.1	89.0

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

6.4 Tribunal's considerations in relation to Gosford Council's forecast operating expenditure

Gosford Council has forecast a significant increase in operating expenditure over the 2006 determination period including:

- The cost of groundwater abstraction and storage by \$1.25 million in 2006/07.
- Purchases of bulk water from Hunter Water increasing by \$1.5 million in 2007/08 as a result of continuing drought in the region.
- Energy costs arising from increases in pumping requirements for groundwater.

Halcrow/MMA, Review of Capital Expenditure, Asset Management and Operating Expenditure for Gosford City Council and Wyong Shire Council, Final Review Report – Wyong, Gosford, 27 February 2006.

Includes dividends and tax payments equivalents of approximately \$1.9 million per annum. The Tribunal provides for a return on investment and considers dividends through its financial analysis.

- The inclusion of stormwater operations in the Council's water business has resulted in the addition of over \$4.5 million in stormwater costs although this has been offset, in part, by the removal of \$3 million previously provided for by a corporate allocation.
- Water customer support services have increased more than 70 per cent over the 2006 determination period to reflect increased communications with customers during the drought and as the Council seeks to encourage customers to conserve water usage.
- Wastewater collection/transportation projections have increased by 20 per cent due to a projected increase in maintenance for sewer mains, tunnels and pumping stations and an increase in the labour oncost allocation.
- The provision for a \$1.8 million dividend from wastewater customer support services has resulted in a 125 per cent increase in cost over the 2006 determination period. The previous submission did not include any provision for dividend payments.

Halcrow/MMA examined all operating expenditure forecasts where there had been a material change in Gosford Council's 2006 submission forecasts compared to its 2005 forecasts and have made recommendations about the level of expenditure for each project that they believe is efficient.

The next sections discuss the Tribunal's considerations and draft findings in relation to major operating expenditure items within Council's forecast operating expenditure program and the potential for additional efficiency gains within this program, as well as the overall effect of the Tribunal's findings on the program.

6.4.1 Tribunal draft findings

The Tribunal's draft finding is to apply Halcrow/MMA's recommendation on Gosford Council's forecast operating costs over the 2006 determination period.

Halcrow/MMA recommended the following adjustments to Gosford Council's forecast operating expenditure as adopted by Atkins/Cardno at the 2005 determination:

- \$300,000 increase in water costs and \$900,000 in wastewater costs to cover increased on-cost rates. The on-cost rates have been increased on the advice of Council's auditors to reflect increased costs for workers compensation, training and leave entitlements.
- Increases in bulk water purchases from Hunter Water by \$1.5 million in 2007/08. This coincides with the construction of the Hunter Water connection resulting in increased bulk water purchases.
- Additional costs of extracting, monitoring and treating groundwater of \$1.25 million in 2006/07 and \$1 million thereafter.
- Reduced reticulation costs for some drought contingency works previously provided for which have been revised or are no longer required.
- Increased maintenance on sewerage treatment plants of about \$1.3 million per annum.
- Increased costs under a new contract for the removal of biosolids from Council's sewerage treatment plants of about \$700,000 more per annum than the previous contract.

- Increased stormwater costs because the Trial GIS Lagoons stormwater project is continuing for another year while the Kahibah Creek project continues for the remainder of the regulatory period.
- Reduced corporate costs of \$200,000 per annum.
- The inclusion of stormwater costs of \$3 million per annum.
- Inclusion of a 1.2 per cent efficiency target.

Corporate allocations

The Tribunal's draft finding is to apply Halcrow/MMA's recommendation on Gosford Council's corporate cost allocation over the 2006 determination period.

As part of their review of the proposed operating expenditure of Gosford Council, Halcrow/MMA examined Council's method of allocating shared costs between the General Council and its water business. Halcrow/MMA are concerned about Council's practice of allocating corporate overheads to the water business at an arbitrary 50 per cent flat rate. The resulting corporate costs account for about 24 per cent of total water business operating expenditure. In comparison, under the Tribunal's 2005 determination corporate costs for Sydney Water and Hunter Water amount to 18.6 per cent and 23.5 per cent of operating expenditure respectively. In January 2005, Victoria's Essential Services Commission (ESC) published studies conducted by PB Associates on Victoria's metropolitan water businesses which recommended average corporate cost allocations of around 13 per cent of total operating expenses for the three metropolitan businesses.

Council advised Halcrow/MMA that it intends implementing a new allocation approach from 2006/07 based on a system of cost drivers for each service area. Halcrow/MMA support this new cost allocation approach but have recommended that the Tribunal reduce the current corporate cost allocation by \$200,000 until the new process is implemented. This is a smaller reduction than that recommended by Atkins/Cardno in 2005 (\$500,000) to reflect moves by Gosford to amend the allocation approach and should be removed once a satisfactory allocation method is implemented.

Halcrow/MMA recommendation results in Gosford Council's corporate costs reducing to \$9.96 million or 22.8 per cent of operating expenditure.

The Tribunal has accepted Halcrow/MMA's recommendation on the level of the reduction in corporate costs but has decided to apply the reduction over the whole determination period. It will reassess the level of corporate costs at the next review.

Stormwater operating expenditure

The Tribunal's draft finding is to accept Halcrow/MMA's recommendation on Gosford Council's stormwater operating expenditure forecasts.

As set out in section 5.4.2, this is the first determination where the Tribunal will be setting an explicit stormwater charge. In previous submissions Council included some stormwater operating costs as a corporate allocation. For this determination Council has removed them from corporate costs and submitted separate stormwater operating expenditure.

Halcrow/MMA have reviewed Council's forecast and recommended a level of operating expenditure of about \$3 million per year over the 2006 determination period.

Efficiency targets

The Tribunal's draft finding is to accept Halcrow/MMA's recommendation on Gosford Council's potential operating expenditure efficiency targets.

Gosford Council has not explicitly provided for any productivity improvements in their operating expenditure forecasts.

For the 2005 determination, the Tribunal's consultants Atkins/Cardno suggested an annual 1.3 per cent efficiency target. Halcrow/MMA noted that the ESC recently considered advice from its consultant that a target productivity improvement of 0.5 per cent per annum for most of the larger regional urban water businesses was reasonable. Information from the Australian Bureau of Statistics and the Productivity Commission suggest that productivity for Australian companies is increasing on average at about 1 per cent per annum.

Halcrow/MMA believe that there is clearly an opportunity for the Council to modestly restrain operating expenditure while increasing its maintenance levels by increasing productivity. As a result, they recommend that an efficiency adjustment be made of 1 per cent with an additional 0.2 per cent additional productivity gain to improve the organisation's competitiveness relative to the average Australian company.

Table 6.3 shows Halcrow/MMA's recommendations for the reductions in forecast operating costs over the 2006 determination period by pursuing greater efficiency in operations.

Table 6.3 Halcrow/MMA's recommended operating efficiencies for Gosford Council (% per annum cumulative)

Financial year	2006/07	2007/08	2008/09
Water	1.2%	1.2%	1.2%
Wastewater	1.2%	1.2%	1.2%
Stormwater	1.2%	1.2%	1.2%

The Halcrow/MMA recommendation on operating efficiency targets reduces Council's total operating expenditure by \$2.6 million over the 2006 determination period.

6.4.2 Overall effect of Tribunal's draft findings on forecast operating expenditure

Table 6.4 shows a comparison of the annual operating expenditures proposed by Gosford Council for the 2006 determination period compared to the amounts recommended by Halcrow/MMA and the Tribunal's draft finding.

Table 6.4 Forecast operating expenditure for Gosford Council compared with Tribunal's draft finding on efficient operating expenditure (\$ million, 2005/06)

Financial year		2006/07	2007/08	2008/09	Total
Atkins/Cardno 2005 recom	mendation				
	Corporate	9.1	8.7	8.4	26.2
	Water service	10.3	10.4	10.6	31.4
	Wastewater service	10.9	10.8	10.6	32.3
	Stormwater service	0.0	0.0	0.0	0.0
	Total	30.3	30.0	29.6	89.9
Gosford Council forecast					
	Corporate	9.9	9.8	9.5	29.2
	Water service	13.2	13.7	13.7	40.7
	Wastewater service	14.9	14.9	14.9	44.6
	Stormwater service	3.9	3.8	3.9	11.6
	Total	41.9	42.2	42.0	126.1
Halcrow/MMA recommend	ation				
	Corporate	8.9	8.6	8.3	25.8
	Water service	12.9	12.5	11.4	36.9
	Wastewater service	13.6	13.4	13.3	40.3
	Stormwater service	3.3	3.3	3.2	9.8
	Total	38.7	37.8	36.2	112.8
Tribunal's draft finding					
	Corporate	8.9	8.6	8.3	25.8
	Water service	12.9	12.5	11.4	36.9
	Wastewater service	13.6	13.4	13.3	40.3
	Stormwater service	3.3	3.3	3.2	9.8
	Total	38.7	37.8	36.2	112.8

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

6.5 Tribunal's considerations in relation to Wyong Council's forecast operating expenditure

Wyong Council has forecast a significant increase in operating expenditure over the 2006 determination period due to:

- Increased bulk water costs to approximately \$2 million in 2006/07 representing an increase of approximately \$1 million above the 2005 determination forecasts. From 2007/08 onwards, the additional capacity of the Hunter Water connection is expected to be fully available with the cost of bulk water purchases increasing to approximately \$3 million per annum, or a \$2 million per annum increase above previous estimates.
- Forecast expenditures for water and wastewater have been based on an annual increase from the base year that allows for increasing:

- wage costs
- chemical and electricity costs
- demand associated with growth
- Occupational Health and Safety
- environmental standards.
- Correction of errors in the 2005 submission in wastewater operating expenditure including an increase in wastewater sludge/effluent disposal due to an allocation error in the 2005 submission. Other errors were also identified in stormwater operating expenditure. However, since these were identified Council has requested deferral of a separate stormwater charge. Therefore, stormwater operating expenditures will continue to be met from the Council's General Funds.
- Increased cost of extracting, monitoring and treating groundwater not previously expected of about \$600,000 in 2005/06 and \$1.2 million per annum thereafter.

Halcrow/MMA examined all operating expenditure forecasts where there had been a material change in Wyong Council's 2006 submission forecasts compared to its 2005 submission forecasts and have made recommendations for the level of expenditure for each project that they believe is efficient.

The next sections discuss the Tribunal's considerations and draft findings in relation to Council's major operating expenditure items and the potential for additional efficiency gains, as well as the overall effect of the Tribunal's findings on Council's program.

6.5.1 Tribunal draft findings

The Tribunal's draft finding is to apply Halcrow/MMA's recommendation on Wyong Council's forecast operating costs over the 2006 determination period adjusted for stormwater operating costs and efficiency gains in labour productivity.

Halcrow/MMA recommended the following adjustments to Wyong Council's forecast operating expenditure:

- an allowance for cost increases at half the rate of growth estimated by Council of 1.9 per cent per annum over the next six years
- inclusion of a 1 per cent efficiency target.

Rate of growth

The Tribunal's draft finding is to accept Halcrow/MMA's recommendation on Wyong Council's rate of growth.

Wyong Council is one of the fastest growing areas in New South Wales. The Council estimates that average growth in the number of properties in the area will increase by 1.9 per cent per annum over the next six years. Council expects its cost to increase accordingly.

Halcrow/MMA believe that this growth is too high and likely to overstate costs. Consequently they have adjusted costs to reflect half the rate of growth.

Corporate allocations

The Tribunal's draft finding is to accept Halcrow/MMA's recommendation on Wyong Council's corporate allocation costs.

Halcrow/MMA's review of Wyong Council's corporate cost allocation methodology highlighted that shared corporate costs are allocated to administration areas (IT, finance, staff services, strategic planning, executive services & governance, legal etc) and non-administration related areas of Council (for example roads, open space, buildings as well as water and wastewater). Cost drivers are assigned to activities in each of these areas.

Halcrow/MMA have concerns about the cost allocation methodology used because of the reliance on the apportionment of a number of shared costs. They also have concerns with the quantum allocated to the water business. In 2006/07, the corporate allocation is projected to amount to 43 per cent of total operating expenses which is significantly higher than corporate cost allocations for other water agencies. Under the Tribunal's 2005 determination corporate costs for Sydney Water and Hunter Water amount to 18.6 per cent and 23.5 per cent of operating expenditure respectively. In January 2005, ESC published studies conducted by PB Associates on Victoria's metropolitan water businesses which recommended average corporate cost allocations of around 13 per cent of total operating expenses for the three metropolitan businesses. In November 2004, Barwon Water provided data in its Water Plan to the ESC that indicates that its corporate costs amount to approximately 20 per cent of its operating expenses. These figures suggest that Wyong Council's allocation of corporate costs is significantly higher than comparable water businesses.

Halcrow/MMA noted in its February 2005 report to the Tribunal that Atkins/Cardno reached similar conclusions and it proposed a nominal operating expenditure decrease of \$500,000 per annum.

During Halcrow/MMA's review, Wyong Council advised that:

- \$6.7 million of stormwater expenditure had been double counted, having been included in the corporate allocation and in the stormwater capital and operating expenditure
- \$3 million of salary costs should be directly allocated to water services (\$1.4 million) and wastewater services (\$1.6 million).

Halcrow/MMA agreed that the above two matters are not part of corporate cost allocations. Adjusting the corporate cost allocations for them results in corporate costs being 22.1 per cent of total forecast operating expenditure. Halcrow/MMA noted that this will bring corporate allocations broadly in line with other water agencies and therefore recommended the adjustments. The Tribunal has subsequently adjusted operating costs to reflect that there will be no separate stormwater charge.

Stormwater operating expenditure

The Tribunal's draft finding is not to accept Halcrow/MMA's recommendation on Wyong Council's stormwater operating expenditure forecasts.

As set out in sections 3.3.2 and 8.3.3, this was to be the first determination where the Tribunal was to consider stormwater costs as part of an explicit stormwater charge. In previous submissions Council included some stormwater operating costs as a corporate allocation.

For this determination Council initially removed them from corporate costs and submitted separate stormwater operating expenditure.

Halcrow/MMA reviewed Council's forecast and recommended a level of operating expenditure of about \$1.4 million per year over the 2006 determination period.

Since the Council's submission and Halcrow/MMA's review, Council has submitted that there is doubt over its ability to levy a stormwater charge (see section 8.3.3). Given the uncertainty of the Council's ability to levy the charge, the Tribunal has decided not to include a separate stormwater charge. As a result, existing arrangements under which Council recovers stormwater capital costs through its water and sewerage charges will continue.

Efficiency targets

The Tribunal's draft finding is to accept Halcrow/MMA's recommendation on the potential operating expenditure efficiency targets adjusted for the Council's labour productivity gains.

Wyong Council has a "Workplace Reform and Continuous Improvement" policy with the aim of achieving a 1.5 per cent per annum improvement in labour productivity over the medium term. The proposed productivity improvement is factored into their forecasts for operating expenses.

Atkins/Cardno, recommended a 1.3 per cent per annum target for the 2005 determination period. As detailed in Section 6.4.1, the ESC has considered a 0.5 per cent per annum target for some of their regulated water agencies and the Australian Bureau of Statistics and the Productivity Commission suggest that productivity in Australia is increasing on average at about 1 per cent per annum.

Halcrow/MMA have recommended that a 1 per cent per annum efficiency target for Wyong Council be applied over the 2006 determination period to total operating expenses.

Table 6.5 shows Halcrow/MMA's recommendations for the reductions in forecast operating costs they believe Council can achieve over the 2006 determination period by pursuing greater efficiency in operations.

Table 6.5 Halcrow/MMA's recommended operating efficiencies for Wyong Council (% per annum cumulative)

Financial year	2006/07	2007/08	2008/09
Water	1.0%	1.0%	1.0%
Wastewater	1.0%	1.0%	1.0%

The Halcrow/MMA recommendation on operating efficiency targets reduces Council's total operating expenditure by \$1.8 million over the 2006 determination period.

The Tribunal has decided to adopt Halcrow/MMA's recommended efficiency target but to reverse Council's 1.5 per cent per annum improvement in labour productivity. While the Tribunal has accepted Halcrow/MMA's recommendation for a 1 per cent efficiency

improvement, it does not want "double counting" to occur with the Council having two efficiency adjustments imposed.

6.5.2 Overall effect of Tribunal's findings on forecast operating expenditure

Table 6.6 shows a comparison of the annual operating expenditures proposed by Wyong Council for the 2006 determination period compared to the amounts recommended by Halcrow/MMA and the Tribunal's draft decision.

Table 6.6 Forecast operating expenditure for Wyong Council compared with Tribunal's draft finding on efficient operating expenditure (\$ million, 2005/06)

_	•	• •	•	•	•
Financial year		2006/07	2007/08	2008/09	Total
Atkins/Cardno 2005 recommendation	1				
C	orporate	9.3	9.4	9.4	28.1
Wate	r service	8.2	8.6	9.7	26.5
Wastewate	r service	9.7	9.8	10.0	29.5
Stormwate	r service	8.0	0.8	0.9	2.5
	Total	28.0	28.7	30.0	86.7
Wyong Council forecast					
C	orporate	16.4	16.5	16.5	49.5
Wate	r service	10.4	11.5	11.4	33.3
Wastewate	r service	10.1	10.3	10.5	30.8
Stormwate	r service	1.3	1.3	1.4	4.0
	Total	38.2	39.6	39.8	117.6
Halcrow/MMA recommendation					
C	orporate	6.1	6.2	6.4	18.7
Wate	r service	11.8	12.9	12.9	37.5
Wastewate	r service	11.1	11.1	11.1	33.4
Stormwate	r service	1.3	1.4	1.4	4.1
	Total	30.3	31.6	31.8	93.7
Tribunal's draft finding					
C	orporate	5.8	5.9	6.1	17.8
Wate	r service	11.8	12.9	12.9	37.6
Wastewate	r service	11.2	11.2	11.2	33.5
Stormwate	r service	-	-	-	-
	Total	28.8	30.0	30.1	89.0

Where appropriate, Council forecasts have been converted to 2005/06\$.

Entries may not add to totals due to rounding.

7 REVENUE REQUIRED BY EACH COUNCIL

One of the key inputs to the Tribunal's decisions on maximum prices is its calculation of the amount of revenue required by each Council to efficiently provide its water, wastewater and stormwater services during the determination period. The Tribunal then determines prices for each service that take account of this revenue requirement, assumptions about metered water sales, and the factors listed in section 15 of the IPART Act.

Section 7.1 below provides a summary of the Tribunal's findings on the overall revenue which the Tribunal has assessed as being adequate for this determination, and which the Tribunal expects the Councils to recover from the prices it has set. Section 7.2 explains the notional revenue requirements of each agency as calculated by the Tribunal. Sections 7.3 to 7.5 explain the key inputs to those findings, including the Tribunal's draft findings on the methodology used in rolling forward the RAB, and on rate of return, depreciation method and asset lives applied in determining the allowances for a return on assets and depreciation.

7.1 Summary of Tribunal's assessment of revenue requirements

The Tribunal has assessed that the notional revenue requirements to be taken into account in setting prices for each Council for the 2006 determination period will be those shown in Table 7.1.

Table 7.1 Tribunal's assessment of notional revenue requirements for Gosford and Wyong Councils (\$million, 2005/06)

Financial year	2006/07	2007/08	2008/09	Total
Gosford Council	61.8	63.2	62.7	187.7
Wyong Council	49.4	52.5	52.9	154.7

The Tribunal considers that these revenue projections will enable each Council to recover the efficient costs of providing services while maintaining appropriate standards of quality, reliability and safety and to progress towards achieving an economic return on the capital employed.

7.2 Summary of Tribunal's draft findings on notional revenue requirements

Before the Tribunal decides on the prices that an agency can levy, it looks at the notional revenue requirement of the agency. The 'notional' revenue requirement is an input to the price setting process whereas the 'target' revenue is an output of the price setting process. The Tribunal uses the notional revenue requirement in conjunction with assumptions about each agency's metered sales in setting prices. It also considers the factors listed in Section 15 of the IPART Act. The target revenue is the actual revenue that the Tribunal expects the agency to recover based on the prices it has set.

The Tribunal used the building block method to calculate each agency's notional revenue requirement for the new determination period. This method entails estimating the amount of revenue the agency needs to cover its 'cost blocks', then adding these amounts together. The cost blocks include:

- Operating and maintenance expenditure. This cost block represents the Tribunal's assessment of the agency's efficient level of operating and maintenance costs associated with providing regulated water services to the required standards.
- **Capital investment**. This is based on two cost blocks:
 - An allowance for a return on assets. This cost block represents the Tribunal's assessment of the opportunity cost of capital invested in the agency by its owner. It is derived by multiplying the value of the agency's regulatory asset base (RAB) by an appropriate rate of return. The value of the RAB is established by 'rolling forward' the RAB used in making the 2005 determination, to incorporate the agency's past capital expenditure that the Tribunal deems was prudent and its forecast capital expenditure that the Tribunal considers to be efficient (net of asset disposals and regulatory depreciation). The rate of return is established by assessing a range for each Council's Weighted Average Cost of Capital, then making a judgement about what rate within the range is most appropriate, having regard to the matters in Section 15 of the IPART Act.
 - **A return of capital (depreciation).** This cost block represents the Tribunal's assessment of the agency's efficient level of costs in maintaining its capital asset base. It is calculated using straight-line depreciation on the RAB.
- An allowance for the costs associated with working capital. This cost block represents the Tribunal's assessment of the agency's costs of maintaining an investment in working capital. It is derived by calculating the agency's working capital, then multiplying it by the rate of return used for calculating the allowance for a return on assets.

The Tribunal's draft findings on Councils' notional revenue requirements to be taken into account in setting prices for the determination period are set out in Table 7.2.

The Tribunal considers that these notional revenue requirements would enable each agency to recover the efficient costs of providing the services on a sustainable basis while maintaining appropriate standards of quality, reliability and safety, and to earn an appropriate rate of return.

Table 7.2 Tribunal's finding on notional revenue requirements for Gosford and Wyong Councils (\$ million, 2005/06)

Financial Year	2006/07	2007/08	2008/09	Total
Gosford Council				
Agency forecast				
Operating expenditure	39.6	39.7	39.4	118.7
Return of capital (depreciation)	4.1	4.4	4.5	13.0
Allowance for return on assets	7.9	11.1	15.6	34.7
Allowance for costs associated with working capital	0.0	0.1	0.2	0.2
Notional revenue requirement	51.6	55.4	59.6	166.6
Tribunal's draft finding				
Operating expenditure	38.7	37.8	36.2	112.8
Return of capital (depreciation)	4.0	4.3	4.5	12.9
Allowance for return on assets	19.1	20.8	21.7	61.6
Allowance for costs associated with working capital	(0.1)	0.2	0.3	0.4
Notional revenue requirement	61.8	63.2	62.7	187.7
Difference between Tribunal's draft finding and Council forecast	10.2	7.8	3.1	21.1
Wyong Council				
Agency forecast				
Operating expenditure	38.2	39.6	39.8	117.6
Return of capital (depreciation)	3.8	4.1	4.2	12.1
Allowance for return on assets	1.8	3.6	7.6	12.9
Allowance for costs associated with working capital	(0.1)	0.0	0.1	0.1
Notional revenue requirement	43.7	47.4	51.7	142.7
Tribunal's draft finding				
Operating expenditure	28.8	30.0	30.1	89.0
Return of capital (depreciation)	3.6	3.8	3.9	11.3
Allowance for return on assets	17.1	18.4	18.5	53.9
Allowance for costs associated with working capital	(0.1)	0.2	0.3	0.5
Notional revenue requirement	49.4	52.5	52.9	154.7
Difference between Tribunal's draft finding and Council forecast	5.7	5.1	1.2	12.0

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

The Tribunal notes that these findings specifically recognise the significant adjustments to prices that will be required in the longer term, to reflect fundamental changes in expenditure requirements and consumption. However, the Tribunal must also recognise the need for transitional arrangements to balance and manage the impact of these adjustments on customers and other stakeholders (see Chapter 8 for price setting).

7.3 Rolling forward the RAB

The Tribunal determined the value of each Council's RAB by rolling forward the opening value of its RAB at the 2005 determination, to reflect its draft findings on prudent actual capital over the 2005 determination (net of customer contributions), and efficient forecast capital expenditure for 2006/07 to 2008/09 (less actual disposals for 2005/06 and forecast disposals for each year of the 2006 determination period, and less regulatory depreciation).

The next sections outline the Tribunal's findings on:

- the methodology used in rolling forward the RAB
- the initial RAB value for Gosford Council's stormwater assets
- the resulting values for each agency's RAB over the determination period.

7.3.1 Tribunal's draft findings on methodology used in rolling forward the RAB

The Tribunal's draft finding is that it will determine the value of each Council's opening regulatory asset base at 1 July 2006 by:

- rolling forward the 1 July 2004 RAB to 30 June 2005 on the basis of actual prudent capital expenditure over this period (net of capital contributions)
- rolling forward the 30 June 2005 RAB to 30 June 2006 on the basis of the estimated efficient capital expenditure for this period (as discussed in Chapter 5) (net of capital contributions)¹²
- deducting regulatory depreciation as allowed for in the 2005 determination
- deducting actual/forecast disposals
- indexing the annual closing regulatory asset base for actual / forecast inflation.

The Tribunal's finding is that it will roll forward each Council's RAB for each year from 1 July 2006 to 30 June 2009 by:

• adding the forecast efficient capital expenditure (as discussed in Chapter 5) for that year (net of capital contributions) to the opening RAB. Half the capital expenditure is assumed to occur at the start of the year and is indexed by the movement in the CPI, the remaining half is assumed to occur at the end of the year and is not indexed

Given that the actual expenditure for this year is not fully known at the time of the determination, the Tribunal has used the estimated expenditure for this year. This estimate has been assessed by the Tribunal as part of the review and adjusted where appropriate (see Chapter 5). At the next review, the RAB will be adjusted to reflect the difference between this estimate and actual expenditure for 2005/06.

- deducting the regulatory depreciation for that year allowed by the Tribunal in this determination
- deducting forecast disposals for that year
- indexing the annual closing RAB for forecast inflation.

This approach is consistent with other decisions made by the Tribunal in the gas, electricity and water industries.

7.3.2 Initial RAB value for Gosford Council stormwater assets

The Tribunal has attributed a zero RAB value for Gosford Council's stormwater assets.

Gosford Council has a stormwater levy determined by the Tribunal but there is no direct relationship between the income generated by the levy and the costs incurred by Council. Gosford Council's stormwater assets are owned by the General Council and not the water business.

Council has submitted two options for charging for stormwater services in its pricing submission to the Tribunal. Council's preferred option is to set charges based on the building block methodology and has provided a RAB valuation to the Tribunal of \$121 million.

The Tribunal notes that Council's drainage works to date have been funded by either grants, Council's General Fund or by the current drainage levy. Therefore, the Tribunal believes that the initial RAB should be set with a zero value.

7.3.3 Resulting values for each Council's RAB

The Tribunal has applied the methodology set out in section 7.3.1 using the capital expenditure set out in Chapter 5. The resulting closing RAB value for each Council over the 2006 determination period is shown in Table 7.3.

Table 7.3 Closing RAB value for 2006 determination period (\$million, 2005/06)

Financial Year	2006/07	2007/08	2008/09
Gosford Council	333.1	350.8	364.6
Wyong Council	299.6	304.5	304.9

Where appropriate, Council forecasts have been converted to 2005/06\$. Entries may not add to totals due to rounding.

7.4 Tribunal's draft finding on rate of return

There are several approaches for calculating the appropriate rate of return on the RAB. The Tribunal's preferred approach is to use the Weighted Average Cost of Capital (WACC) to determine an appropriate rate of return range. As with other determinations made by the Tribunal, the Tribunal has used a real pre-tax WACC. The WACC is a weighted average of the cost of debt and equity. The Tribunal has used the Capital Asset Pricing Model to derive the cost of equity, and calculated the cost of debt as a margin over the risk free rate.

In making its finding on the rate of return, the Tribunal has exercised its judgement, taking into consideration the requirements of the IPART Act – particularly Sections 15(1)(b) dealing with the protection of consumers from abuses of monopoly power; 15(1)(c) dealing with an appropriate rate of return including payment of dividends; and 15(1)(k) dealing with the social impact of its determinations and recommendations. It investigated the implications of its chosen rate of return on the average bills paid by customers with differing characteristics, and on the financial viability of the businesses estimated by changes in key financial ratios.

The following sections outline the Tribunal's draft finding on the rate of return for each Council and their proposals on the rate of return. The Tribunal's considerations on each of the parameters used to calculate the WACC range are set out in Appendix 3.

7.4.1 Summary of the submissions made on the rate of return

In its 2005 determination, the Tribunal did not make a decision on WACC parameters but rather commented that its decisions on prices would provide for very modest returns on capital. The Councils did not propose a target rate of return in their submissions, but rather determined prices based on their capital and operating expenditure forecasts and dividend requirements.

The majority of the parameters required for determining a rate of return for the Councils are not specific to the water industry. As such, there are regulatory precedents for estimating the majority of the parameters, including the Tribunal's 2005 decision on prices for the metropolitan water businesses. The equity beta and the debt margin are the only parameters that are specific to the Councils. The equity beta is the most controversial of the parameters.

7.4.2 Summary of the Tribunal's draft findings on the rate of return

The Tribunal's draft finding is that for the purposes of calculating the allowance for a return on assets, a real pre-tax rate of return of 6.3 per cent will be targeted. This finding reflects the Tribunal's view that the industry weighted average cost of capital is in the range of 5.3 to 6.7 per cent.

The parameters it used to calculate this WACC range are shown in Table 7.5.

Table 7.5 WACC Parameters

Parameter	Draft finding
Nominal risk free rate	5.3%
Real risk free rate	2.3%
Inflation	2.9%
Market risk premium	5.5-6.5%
Debt margin and allowance for debt raising costs	1.1-1.2%
Debt to total assets	60%
Dividend imputation factor, or gamma	0.5-0.3
Tax rate	30%
Asset beta	0
Debt beta	0
Equity beta	0.8-1.0
Cost of equity (nominal post-tax)	9.7-11.8%
Cost of debt (nominal pre-tax)	6.4-6.5%
WACC (real pre-tax)	5.3-6.7%

^{*} Market parameters are calculated to 3 March 2006.

In making its decision on the final rate of return to apply, the Tribunal took into consideration the requirements of the IPART Act - particularly Sections 15(1)(b), 15(1)(c) and 15(1)(k). The Tribunal's draft finding on the target level of WACC to be achieved over the 2006 determination period is consistent with its final finding made in the 2005 water determinations.

7.5 Tribunal's draft findings on depreciation method and asset lives

The allowance for a return of capital, or depreciation, represents the revenue each agency requires to maintain the value of its assets. Depreciation represents around 5 to 10 per cent of each agency's total notional revenue requirement.

To determine this allowance, the Tribunal has made draft findings on the depreciation method and the asset lives to be applied. The following sections discuss each of these draft findings.

7.5.1 Depreciation method

The Tribunal's draft decision is that it will use the straight-line depreciation method to calculate the return of capital (depreciation) allowance for each water agency.

The Tribunal believes that this approach is superior to alternatives in terms of simplicity, consistency and transparency. This approach is consistent with decisions made by the Tribunal in other industries and its 2005 determination.

7.5.2 Asset lives to be applied

For this determination, the Tribunal has decided to calculate depreciation using the asset lives shown in Table 7.6. These asset lives are consistent with the Tribunal's 2005 determination.

Table 7.6 Asset lives used in calculating depreciation allowance

Existing assets	New Assets
75 years	100 years

8 TRIBUNAL'S PRICING DECISIONS FOR INDIVIDUAL SERVICES AND EXPECTED OUTCOMES

This chapter explains the Tribunal's decisions on the maximum prices to be charged by Gosford Council and Wyong Council for water, sewerage and stormwater drainage services for the determination period and the expected outcomes of those pricing decisions. Section 8.1 provides an overview of the Tribunal's pricing decisions for each Council, including the average change compared to current prices. Sections 8.2 and 8.3 set out the Tribunal's decisions for Gosford Council and Wyong Council respectively. Sections 8.4 to 8.7 explain the implications of the determined prices on customers, on standards, on the water businesses, on their Councils as owners and on the environment. The demand management programs being investigated by the Councils are discussed in section 8.8.

8.1 Overview of pricing decisions

The Tribunal has decided to increase average prices for Gosford Council and Wyong Council as set out in Table 8.1.

Table 8.1 Tribunal's draft decision on increase in average prices for Gosford Council and Wyong Council (% per annum)

Financia	Financial year 2006/07			2008/09
Gosford Council average prices		6.8+(1+∆CPI ₀)	5.4+(1+∆CPI₁)	5.9+(1+∆CPI ₂)
Wyong Council average prices $5.7+(1+\Delta CPI_0)$ $6.2+(1+\Delta CPI_0)$		$6.2+(1+\Delta CPI_1)$	6.7+(1+ Δ CPI ₂)	
Where:				
Δ CPI ₀ Is the assumed movement in the CPI of 2.5% between the four quarters the four quarters ending 31 March 2005.				ing 31 March 2006 and
ΔCPI_1	ΔCPI_1 Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.			
ΔCPI_2	8			

In making its pricing decisions for Gosford Council the Tribunal has:

- increased the water usage charge by CPI+18%
- increased the fixed water charge by CPI
- increased the sewerage fixed charge by CPI
- increased the sewerage non-residential variable charge by CPI
- introduced a new stormwater charge to replace the existing levy and increased this by CPI+2%
- increased the sewerage portion of vacant land charges by CPI
- increased the trade waste charges by CPI
- accepted (with some minor adjustments) Gosford Council's list of proposed miscellaneous charges.

In making its pricing decision for Wyong Council the Tribunal has:

increased the water usage charge by CPI+17.5%

- increased the fixed water charge by CPI
- increased the sewerage fixed charge by CPI+1%
- increased the sewerage non-residential variable charge by CPI+1%
- increased the sewerage portion of vacant land charges by CPI+1%
- increased the trade waste charges by CPI
- increased the effluent and sludge charges by CPI+1%
- generally accepted Wyong Council's list of proposed miscellaneous charges.

8.2 Pricing decisions for Gosford Council

8.2.1 Water charges

The Tribunal has decided to set the maximum water charges for the 2006 determination period shown in Table 8.2.

Table 8.2 Gosford Council's current and Tribunal's determined water charges (\$ of the day)

	Current \$	Determination period \$		
Financial year	2005/06	2006/07	2007/08	2008/09
Usage charge (\$/kL)	0.925	1.124 ¹³	1.327 x (1+ΔCPI ₁)	1.565 x (1+ΔCPI ₂)
Service charge (\$ per annum)*	80.82	83.24	83.24 x (1+ΔCPI ₁)	83.24 x (1+ΔCPI ₂)

Note 1: The water service charge is based on the size of the meter connection to the property. The charge shown is for a 20mm connection.

Note 2: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 ΔCPI_1 Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

These charges reflect the Tribunal's decision to accept Council's proposal to increase water usage charges by movements in CPI+18% and to increase water fixed charges by movements in CPI. By increasing the water usage charge from \$0.925/kL to \$1.565/kL by 2008/09, the Tribunal has attempted to move the variable charge to within the range of the Tribunal's estimated long run marginal cost range of \$1.52 to \$1.66/kl. Its decision will increase the proportion of Gosford Council's total revenue that it derives from water usage charges.

These charges reflect the Tribunal's decision to accept Council's proposal to increase water usage charges by 18 per cent above the movements in inflation in each year of the price path

8.2.2 Sewerage charges

The Tribunal has decided to set the maximum sewerage charges for the determination period shown in Table 8.3.

Table 8.3 Gosford Council's current and Tribunal's determined sewerage charges (\$ of the day)

	Current \$	Determination period \$			
Financial year	2005/06	2006/07	2007/08	2008/09	
Residential sewerage service charge (\$ per annum)	363.99	374.91	374.91 x (1+ΔCPI ₁)	374.91 x (1+ΔCPI ₂)	
Non-residential sewerage service charge (\$ per annum)	363.99	374.91	374.91 x (1+ΔCPI ₁)	374.91 x (1+ΔCPI ₂)	
Non-residential sewerage usage charge (\$ per kL)	0.78	0.803	0.803 x (1+ΔCPI ₁)	0.803 x (1+ΔCPI ₂)	

^{*}Note 1: The above charges are based on 20mm sewerage service connection. The non-residential sewerage service varies with meter size but the Tribunal has decided to continue to allow Council to levy non-residential customers the maximum of the residential sewerage service charge and the sum of the meter based non-residential service charge and the non-residential sewerage usage charge.

Note 2: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

These charges reflect the Tribunal's decision to increase the residential and non-residential sewerage service charge and the non-residential sewerage usage charge by movements in the CPI. This is the same increase that Gosford Council proposed (movements in CPI for all sewerage charges).

In the 2005 determination the Tribunal commented that on 14 March 2005 the then Minister for Energy and Utilities had requested that the Tribunal reopen the application of its 1997 Determination of Backlog Sewerage Services (Determination 4.2, 1997) in the Gosford local government area. The Tribunal has now concluded that review and released a new determination (Determination No.1, 2006). This determination can be viewed on the Tribunal's website.

This determination provides for local residents of backlog sewerage areas to pay a capital contribution of the first \$5,400 plus 67 per cent of any remaining capital costs. The balance is to be spread over sewered properties in the Gosford local government area. In addition, operating costs of backlog projects are to be met out of the sewerage service charges generally.

Council has informally advised the Tribunal that the portion of backlog sewerage to be paid by the community amounts to approximately \$1.20 per property per annum. The Tribunal has requested a formal written submission from Council supporting the proposed charge so that it can consider the proposal prior to finalising the 2006 determination.

The sewerage charges shown above do not include allowance for backlog sewerage projects.

8.2.3 Stormwater charges

The Tribunal has decided to set the maximum stormwater charges for the 2006 determination period shown in Table 8.4.

Table 8.4 Gosford Council's current and Tribunal's determined stormwater charges (\$ of the day)

	Current \$	Determination period \$			
Financial year	2005/06	2006/07	2007/08	2008/09	
Stormwater service charge (\$ per annum)	42.00	55.00	56.10 x (1+ΔCPI ₁)	57.22 x (1+ΔCPI ₂)	

Note 1: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

Gosford Council has a stormwater levy in place but there is no direct relationship between the income generated by the levy and the costs incurred by Council. The stormwater assets of Gosford Council are owned by the General Council and not the water business.

Council has submitted two options for charging for stormwater services in its pricing submission to the Tribunal. Council's preferred option is to set charges based on the building block methodology and has provided a RAB valuation to the Tribunal of \$121 million (see section 7.3.2). Council's proposed charges attempt to minimise customer impact and will not fully recover costs until the end of the determination period (see Table 8.5).

Table 8.5 Gosford Council's proposal for stormwater service pricing (\$ of the day)

	Current \$	Determination period \$		
Financial year	2005/06	2006/07	2007/08	2008/09
Drainage levy/property	\$42.00	\$70.00	\$80.00 x (1+ΔCPI ₁)	\$90.00 x (1+ΔCPI ₂)

Note 1: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

The Tribunal's draft decision on Council's stormwater charges reflects its draft finding that the opening RAB value be set at zero, and its assessment as to the appropriate level of capital and operating costs and property numbers.

8.2.4 Vacant land charges

The Tribunal has decided to set the maximum vacant land charges for the determination period shown in Table 8.6.

Table 8.6 Gosford Council's current and Tribunal's determined vacant land charges (\$ of the day)

	Current \$	Determination period \$		
Financial year	2005/06	2006/07	2007/08	2008/09
Water – per annum	80.82	83.24	83.24 x (1+ΔCPI ₁)	83.24 x (1+ΔCPI ₂)
Wastewater – per annum	272.99	281.18	281.18 x (1+ΔCPI ₁)	281.18 x (1+ΔCPI ₂)

Note 1: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 Δ CPI₂ Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

The Tribunal has endorsed its decision in the 2005 determination and Council's proposal to charge vacant land owners a residential wastewater service charge at 75 per cent of the full residential wastewater charge. It has also decided to set the residential water charge for vacant land so it is equal to the residential water service charge, in line with Council's proposal.

8.2.5 Trade waste charges

The Tribunal has decided to set the maximum trade waste charges for the determination period shown in Schedule 4 of the determination.

Council has proposed increases to all Trade Waste charges by the annual movements in CPI except for the Liquid Trade Waste Re-inspection Fee, which it is proposing to set to recover costs.

For charging purposes, trade waste dischargers are categorised according to the nature of the wastes they discharge, as follows:

- Category 1 (requiring nil or minimal pre-treatment). Dischargers conducting an activity deemed by Council as requiring nil or minimal pre-treatment equipment and whose effluent is well defined and/or of a relatively benign nature (eg, Hairdresser, food preparation or service business not generating oily/greasy waste, retail pet shop, florist).
- Category 2 (requiring prescribed pre-treatment). Dischargers conducting an activity deemed by Council as requiring a prescribed type of liquid trade waste pre-treatment equipment (eg, Grease arrestor, oil/water separator,) and whose effluent is well characterised (vehicle washing, mechanical repairs, food preparation or service generating oily/greasy waste etc).

• Category 3 (large or industrial waste dischargers). Dischargers conducting an activity which is of an industrial nature and/or which results in large volumes of liquid trade waste being discharged to the sewerage system (eg, abattoir, landfill, winery, etc).

The Tribunal has accepted Gosford Council's proposal.

8.2.6 Miscellaneous charges

The Tribunal has decided to set the maximum miscellaneous charges for the determination period shown in Table 12 of the determination.

The Tribunal sets miscellaneous charges for a range of ancillary services that Gosford Council provides, including special meter readings, statements of available pressure and flows, and an application for water service connection. Although these charges do not account for a large proportion of the total revenue earned by the Council, they can be significant for those customers who are required to pay them. The Tribunal has previously asked the Councils to adopt the following formula to calculate the level of charges:

Miscellaneous charge = base cost + direct material cost

For this determination Gosford Council has asked for increases in its miscellaneous charges so that they achieve full cost recovery.

For the 2005 determination, the Tribunal hired a consultant (RSM Bird Cameron) to review the reasonableness of each Council's miscellaneous charging proposals for the period commencing 1 July 2005. RSM Bird Cameron concluded that both Councils had applied a methodology that is supportable but is conservative in its application. It noted that in most cases charges were likely to be below cost for the 2005 determination period.

With this in mind, the Tribunal has considered Council's proposed miscellaneous charges and compared them with other water agencies' charges and likely impacts on customers. It has decided to make minor changes to the level of the Council's proposed charges for miscellaneous services. While the Tribunal aims to set charges to recover costs, it also has to take into account the potential impact on customers and has amended Council's proposals accordingly.

8.3 Pricing decisions for Wyong Council

8.3.1 Water charges

The Tribunal has decided to set the maximum water charges for the 2006 determination period shown in Table 8.7.

Table 8.7 Wyong Council's current and Tribunal's determined water charges (\$ of the day)

	Current \$	Determination period \$			
Financial year	2005/06	2006/07	2007/08	2008/09	
Usage charge (\$/kL)	0.925	1.115 ¹⁴	1.310 x (1+ΔCPI ₁)	1.540 x (1+ΔCPI ₂)	
Service charge	92.25	94.56	94.56 x (1+ΔCPI ₁)	94.56 x (1+ΔCPI ₂)	
(\$ per annum)*					

Note 1: The water service charge is based on the size of the meter connection to the property. This charge is calculated for a 20mm connection.

Note 2: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

These charges reflect the Tribunal's decision to increase water usage charges by movements in CPI+17.5% and to increase water fixed charges by movements in CPI. By increasing the water usage charge from \$0.925/kL to \$1.54/kL by 2008/09, the Tribunal has attempted to move the variable charge closer to the Tribunal's estimated long run marginal cost range of \$1.52 to \$1.66/kl. Its decision will increase the proportion of Wyong Council's total revenue that it derives from water usage charges. This is the same increase that Wyong Council proposed for the usage charge (movements in CPI+17.5%) and the same increase that Wyong Council proposed for the service charge (movements in CPI).

8.3.2 Sewerage charges

The Tribunal has decided to set the maximum sewerage charges for the 2006 determination period shown in Table 8.8.

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These charges reflect the Tribunal's decision to accept Council's proposal to increase water usage charges by 17.5 per cent above the movements in inflation in each year of the price path.

Table 8.8 Wyong Council's current and Tribunal's determined sewerage charges (\$ of the day)

	Current \$	Determination period \$			
Financial year	2005/06	2006/07	2007/08	2008/09	
Residential sewerage service charge (\$ per annum)	367.87	380.75	384.46 x (1+ΔCPI ₁)	388.22 x (1+ΔCPI ₂)	
Non-residential sewerage service charge (\$ per annum)	367.87	380.75	384.46 x (1+ΔCPI ₁)	388.22 x (1+ΔCPI ₂)	
Non-residential sewerage usage charge (\$ per kL)	0.66	0.683	0.690 x (1+ΔCPI ₁)	0.700 x (1+ΔCPI ₂)	

Note 1: The above charges are based on 20mm wastewater service connection. The non-residential sewerage service varies with meter size but the Tribunal has decided to continue to allow Council to levy non-residential customers the gretaer of the residential sewerage service charge and the sum of the meter based non-residential service charge and the non-residential sewerage usage charge.

Note 2: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

These charges reflect the Tribunal's decision to increase the residential and non-residential sewerage service charge and the non-residential sewerage usage charge by movements in CPI+1%. This is the same increase that Wyong Council proposed.

8.3.3 Stormwater charges

The Tribunal has decided not to set a stormwater service charge but to allow Council to continue to recover capital costs through water and sewerage charges.

Wyong Council does not have a stormwater levy but recovers stormwater capital expenditure through its water and sewerage charges. The water business of Council owns the stormwater assets.

Wyong Council initially proposed a stormwater service charge based on the size of the water meter fitted to a property. They believe that there is a reasonable relationship between meter size and use of stormwater services because large water users are typically industrial or commercial customers with large roof areas and impervious outdoor areas which generate proportionally high run-offs into the drainage system. For 2006/07, Council proposed a flat charge of \$63.30 be added to the water service charge of properties with a 20mm water meter with a similar amount added to the sewerage charge. This would generate sufficient revenue to match the proposed drainage expenditure of \$7.2 million in 2006/07. Council proposed that the charges be increased by CPI+1% per year over the next two years of the 2006 determination period. In addition, Council proposed that the water component and sewerage component of bills each be reduced by \$63.30 to maintain revenue neutrality. Table 8.9 shows Wyong Council's proposal for drainage charges.

Table 8.9 Wyong Council proposal for drainage pricing for 2006/07 and increases for 2007/08 and 2008/09 (\$ of the day)

	Current \$	Determination period \$			
Financial year	2005/06	2006/07	2007/08	2008/09	
Drainage levy/property*	na	\$126.60	CPI+1%	CPI+1%	

Note 1: For properties with a 20mm meter and with both water and sewerage services

Since Wyong Council made its submission, it has received advice in relation to its powers to levy a drainage charge under the Water Management Act (WMA). The advice states that Council may only levy a drainage charge on an area that is designated as a 'drainage area'. An area only becomes a drainage area when the Minister makes an order to that effect and subsequently publishes the order in the Government Gazette.

Wyong Council has advised the Tribunal that it does not have such an order and will not be able to obtain an order by 1 July 2006.

In view of the administrative difficulties associated with the imposition of a stormwater charge, the Tribunal has decided not to set a stormwater service charge and to allow Council to continue to recover capital costs through water and wastewater charges. The Tribunal expects a separate stormwater service charge to be set at the next determination. However, the Tribunal encourages the Council to seek approval from it to set a separate stormwater service charge during the 2006 determination. The Tribunal's staff will work with Council to progress this matter.

8.3.4 Vacant land charges

The Tribunal has decided to set the maximum vacant land charges for the 2006 determination period shown in Table 8.10.

Table 8.10 Wyong Council's current and Tribunal's determined vacant land charges (\$ of the day)

	Current \$	Determination period \$			
Financial year	2005/06	2006/07	2007/08	2008/09	
Water – fixed	92.25	94.56	94.56 x (1+ΔCPI ₁)	94.56 x (1+ΔCPI ₂)	
Wastewater - fixed	275.90	285.56	288.35 x (1+ΔCPI ₁)	291.17 x (1+ΔCPI ₂)	

Note 1: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

The Tribunal has endorsed its decision in the 2005 determination and Council's proposal to charge vacant land owners a residential wastewater service charge at 75 per cent of the full residential wastewater charge. It has also decided to set the residential water charge for vacant land so it is equal to the residential water service charge, in line with Council's proposal.

8.3.5 Exempt properties

The Tribunal decided to set the maximum exempt property charges for the 2006 determination period shown in Table 8.11.

Table 8.11 Tribunal's determined charges for exempt properties (\$ of the day)

	Current \$	Determination period \$		
Financial year	2005/06	2006/07	2007/08	2008/09
Per water closet	51.90	53.73	54.27 x (1+ΔCPI ₁)	54.81 x (1+ΔCPI ₂)
Per cistern servicing a urinal	18.38	19.03	19.22 x (1+ΔCPI ₁)	19.41 x (1+ΔCPI ₂)

Note 1: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

Wyong Council has requested an increase in charges for exempt properties of movements in CPI+1% for each year of the 2006 determination period. The Tribunal decided to increase charges in line with Council's proposals. The per-water-closet charge is applicable to all properties classified as exempt under the Water Management Act.

8.3.6 Trade waste charges

The Tribunal has decided to set the maximum trade waste charges for the 2006 determination period shown in Schedule 3 of the determination.

Council has reviewed its trade waste policy and procedures to comply with "Best Practice Management Guidelines" as developed by DEUS and detailed in the following documents:

- Liquid Trade Waste Management Guidelines (DEUS March 2005)
- Water Supply, Sewerage and Trade Waste Pricing Guidelines (DEUS December 2002).

For charging purposes, trade waste dischargers are categorized according to the nature of the wastes they discharge, as follows:

Category 1 Liquid Trade Waste Dischargers are those conducting an activity deemed by Council as requiring nil or minimal pre-treatment equipment and whose effluent is well defined and or relatively low risk to the sewerage system. Also included are activities with prescribed pre-treatment but low impact on the sewerage system.

Category 2 Liquid Trade Waste Dischargers are those conducting an activity deemed by Council as requiring a prescribed type of liquid trade waste pre-treatment equipment and whose effluent is well characterized.

Category 3 Liquid Trade Waste Dischargers are those conducting an activity which is of an industrial nature and/or which results in the discharge of large volumes (over 20kL/day) of liquid trade waste to the sewerage system. Any Category 1 or 2 discharger whose volume exceeds 20 kL/day becomes a Category 3 discharger.

DEUS Guidelines have recommended phasing in new Trade Waste fees and charges over a period of up to three years.

Council has reviewed the recommendation and proposes that:

- The following Fees/Charges be introduced without phase-in:
 - Application Fee
 - Annual Trade Waste Fee
 - Re-inspection Fee
 - Excess Mass Charge
 - Non-compliance Excess Mass Charge
- The Trade Waste Usage Fee be phased in over three years (2006/07, 2007/08 and 2008/09).

As a result of implementing the DEUS Charging Methodology Wyong Council expects that some customers may face significant increases in Trade Waste fees and charges. Council has proposed that the revised fees be increased by CPI+1% in 2007/08 and by CPI+1% in 2008/09.

The Tribunal has investigated Council's proposals and has accepted the revised charges for the first year of the price path. However, the Tribunal is concerned about the potential impact on customers of the higher charges and has decided to limit the increase in 2007/08 and 2008/09 to the change in CPI.

8.3.7 Effluent removal and chemical closet charges

The Tribunal has decided to set the maximum effluent removal charges shown in Table 8.12 and Table 8.13 for the 2006 determination period.

Table 8.12 Tribunal's determined effluent and sludge removal charges for residential properties (\$ of the day)

	Current \$	Determination period \$		riod \$
Financial year	2005/06	2006/07	2007/08	2008/09
Fortnightly effluent removal and disposal service (\$ per year)	846.85	876.70	885.47 x (1+∆CPI₁)	894.32 x (1+∆CPl ₂)
Additional effluent removal and disposal service (\$ per visit)	32.77	33.93	34.26 x (1+∆CPI₁)	34.61 x (1+∆CPl ₂)
Sludge removal and disposal services:				
 Septic tanks with a capacity up to 2750 litres (\$ per service) 	237.57	245.94	248.40 x (1+∆CPI₁)	250.89 x (1+ΔCPl ₂)
 Septic tanks exceeding 2750 litres or AWTS with one tank (\$ per service) 	308.22	319.08	322.28 x (1+∆CPI₁)	325.50 x (1+ΔCPl ₂)
 AWTS with more than one tank (\$ per system) 	459.78	475.99	480.75 x (1+∆CPI₁)	485.55 x (1+ΔCPl ₂)
Chemical closet services:				
- Fortnightly service (\$ per year)	1,220.55	1,263.57	1,276.21 x (1+∆CPI₁)	1,288.97 x (1+∆CPl ₂)
- Each requested weekly special service (\$ per service)	23.78	24.62	24.86 x (1+∆CPI₁)	25.11 x (1+∆CPl₂)

Note 1: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 ΔCPI_1 Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 ΔCPI_2 Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

Table 8.13 Tribunal's determined effluent and sludge removal charges for non-residential properties (\$ of the day)

	Current \$	Determination period \$		riod \$
Financial year	2005/06	2006/07	2007/08	2008/09
Commercial effluent removal and disposal service (\$/kL)	10.86	11.24	11.36 x (1+∆CPI₁)	11.47 x (1+∆CPl₂)
Sludge removal and disposal services:				
 Septic tanks with a capacity up to 2750 litres (\$ per service) 	237.57	245.94	248.40 x (1+∆CPI₁)	250.89 x (1+∆CPI ₂)
 Septic tanks exceeding 2750 litres or AWTS with one tank (\$ per service) 	308.22	319.08	322.28 x (1+∆CPI₁)	325.50 x (1+∆CPl ₂)
 AWTS with more than one tank (\$ per system) 	459.78	475.99	480.75 x (1+ΔCPI₁)	485.55 x (1+ΔCPI₂)
 Sludge disposal only (collection organized by customer) 	-	26.50	26.77 x (1+∆CPI₁)	27.04 x (1+∆CPI ₂)
Chemical closet services:				
- Fortnightly service (\$ per year)	1,220.55	1,263.57	1,276.21 x (1+∆CPI₁)	1,288.97 x (1+∆CPl₂)
- Each requested weekly special service (\$ per service)	23.78	24.62	24.86 x (1+∆CPI₁)	25.11 x (1+ΔCPI ₂)

Note 1: Where:

 ΔCPI_0 Is the assumed movement in the CPI of 2.5% between the four quarters ending 31 March 2006 and the four quarters ending 31 March 2005.

 Δ CPI₁ Is the movement in the CPI between the four quarters ending 31 March 2007 and the four quarters ending 31 March 2006.

 Δ CPI₂ Is the movement in the CPI between the four quarters ending 31 March 2008 and the four quarters ending 31 March 2007.

Wyong Council proposed that effluent and sludge removal charges and chemical closet charges increase by CPI+1%. In relation to effluent and sludge removal, the Tribunal decided to increase the charges by CPI+1%. It also decided to increase chemical closet charges by CPI+1%.

8.3.8 Miscellaneous charges

The Tribunal has decided to set the maximum miscellaneous charges for the 2006 determination period shown in Table 14 of the determination.

In setting these charges, the Tribunal used the approach described in section 8.2.6 above.

Wyong Council has asked that it increase its miscellaneous charges by movements in the CPI in each year of the price path. For the 2005 determination, the Tribunal hired a consultant (RSM Bird Cameron) to review the reasonableness of each Council's miscellaneous charges price proposal for the period commencing 1 July 2005. RSM Bird Cameron concluded that both Councils had applied a methodology that is supportable but is conservative in its application. It noted that in most cases charges were likely to be below cost for the 2005 determination period.

With this in mind, the Tribunal has considered Council's proposed miscellaneous charges and compared them with other water agencies' charges and likely impacts on customers. It has decided to accept Wyong Council's proposed increases for miscellaneous services.

8.4 Implications for customers' bills

In reaching its pricing decisions, the Tribunal explicitly considered the likely impact on Gosford and Wyong Councils' residential, commercial, and industrial customers. The Tribunal recognizes that its decisions mean that most customers will face increases in the cost of water, wastewater and, for Gosford Council, stormwater drainage services. In the case of high water use customers, the increase in water usage bills could be significant if they do nothing to reduce their usage. However, it believes these increases are warranted to ensure customers have access to a sustainable water supply of appropriate quality and service.

Some key implications for customers are as follows:

- For all customers, usage charges will make up a larger proportion of their bills than in
 previous years. These charges are intended to signal to customers the cost
 consequences of their current consumption by equating the usage price to the LRMC of
 the next suite of augmentation options.
- For residential customers, the determination will increase a 180kL bill for Gosford customers by 9.5 per cent for 2006/07, 7.9 per cent for 2007/08 and 8.5 per cent for 2008/09, including the effect of inflation. For Wyong customers bills will increase by 7.9 per cent for 2006/07, 8.4 per cent for 2007/08 and 9.0 per cent for 2008/09, including the effect of inflation.
- The introduction of more cost reflective stormwater charges for Gosford Council will increase the annual charge from \$42 to \$55 in 2006/07.
- For commercial and industrial customers, the determination will also increase their bills, particularly those of high water users. Trade waste charges will remain steady for Gosford non-residential customers.

While the price increases above will result in increased bills, particularly for large water users, many customers have the ability to mitigate this increase by reducing their water consumption.

8.4.1 Gosford Council

The Tribunal's analysis of the impacts has concentrated on the overall effect on customers' total bills. It has looked at how the increased bills compare with the past costs of these services. It has also looked at how the size of a bill varies with water usage, and what changes to behaviour are required to mitigate the increase.

The Tribunal's analysis shows that the impact of this determination on annual residential bills for Gosford Council customers will vary according to the customer's total water usage. Bill increases will range from approximately \$36 per year (for customers who use less than 100kL per year) to more than \$325 (for those who use 1,500kL or more per year). For approximately 96 per cent of customers, the total increase in their annual water bill for 2006/07 will be under \$100, or less than \$2 per week (Table 8.14). Customers consuming

180 kL per year (which is approximately the current average consumption) will see a rise of \$62 in their bill for 2006/07.

Table 8.14 Impact of prices on annual residential water, wastewater and stormwater bills by water usage level - Gosford Council (Dollars of the day)

Financial year	2005/06	2006/07	Increase	2007/08	Increase	2008/09	Increase
<100	533.1	569.4	36.3	595.1	25.7	623.7	28.6
100-150	602.4	653.7	51.2	697.1	43.4	747.0	50.0
150-200	648.7	709.9	61.2	765.1	55.2	829.3	64.2
200-250	694.9	766.1	71.2	833.1	67.0	911.5	78.5
250-300	741.2	822.3	81.1	901.0	78.7	993.7	92.7
300-400	810.6	906.6	96.1	1,003.0	96.4	1,117.1	114.1
400-500	903.1	1,019.1	116.0	1,139.0	119.9	1,281.6	142.5
500-1000	1,180.6	1,356.3	175.8	1,546.9	190.6	1,775.0	228.0
>1000	1,874.3	2,199.5	325.2	2,566.8	367.3	3,008.4	441.7

Note:

Figures under increase represent absolute increases or decreases relative to the previous year.

Actual bill is calculated to include water, wastewater and drainage charges.

The impact was calculated using the mid-point of water usage, 1500kL was used for >1000kL and 50kL was used for <100kL.

8.4.2 Wyong Council

The Tribunal's analysis shows that the impact of the determination on annual residential bills for Wyong Council customers will vary according to the customer's total water usage. Bills increases will range from approximately \$25 per year (for customers who use less than 100kL per year) to more than \$300 (for those who use 1,500kL or more per year). For approximately 99 per cent of customers, the total increase in their annual water bill for 2006/07 will be under \$100, or less than \$2 per week (Table 8.15). Customers consuming 180kL per year (which is approximately the current average consumption) will see a rise of \$49 in their bill for 2006/07.

Table 8.15 Impact of prices on annual residential water, wastewater and stormwater bills by water usage level - Wyong Council (Dollars of the day)

Financial	2005/06	2006/07		2007/08		2008/09	
year			Increase		Increase		Increase
<100	506.4	531.1	24.7	558.1	27.1	588.1	30.0
100-150	575.7	614.7	38.9	658.9	44.2	709.5	50.6
150-200	622.0	670.4	48.4	726.0	55.6	790.4	64.3
200-250	668.2	726.2	57.9	793.2	67.0	871.3	78.1
250-300	714.5	781.9	67.4	860.3	78.4	952.2	91.8
300-400	783.9	865.6	81.7	961.0	95.5	1,073.5	112.5
400-500	876.4	977.1	100.7	1,095.3	118.3	1,235.3	140.0
500-1000	1,153.9	1,311.6	157.7	1,498.2	186.7	1,720.7	222.5
>1000	1,847.6	2,147.8	300.2	2,505.5	357.7	2,934.2	428.7

Note: Figures under increase represent absolute increases or decreases relative to the previous year. Actual bill is calculated to include water and wastewater charges.

8.4.3 Impacts on commercial and industrial customers

The impact of the Tribunal's decisions on commercial and industrial customers will vary depending on their level of water usage. Higher water users are likely to experience larger increases in their annual water bills than lower water users. Because commercial and industrial customers are much more diverse in terms of their water usage patterns than residential customers, it is difficult to draw general conclusions about the impact of this decision on these customers.

As for residential customers, the Tribunal believes that increasing water prices will encourage commercial and industrial water customers to review consumption and to encourage efficient water use in this sector.

8.4.4 Low income customers

The Tribunal requests that the Councils more fully articulate the measures they have in place and propose to assist customers facing financial hardship.

The Tribunal recognizes that its pricing decisions mean that most customers will face increases in the cost of water and wastewater services, and for Gosford Council customers in the stormwater services. However, it believes these increases are necessary to balance the long-term interests of customers and ensure they continue to have access to a sustainable water supply of appropriate quality and service.

It is important that the potential to mitigate the impact of the increases is fully understood. The Tribunal believes customer-impact mitigation is primarily the responsibility of the State Government and the Councils, as part of their broader social policies. However, the Tribunal is concerned to ensure that the Councils' have appropriate measures in place to assist financially disadvantaged customers who may have difficulty in paying their bills. Such

The impact was calculated using the mid-point of water usage, 1500kL was used for >1000kL and 50kL was used for <100kL.

measures may include special payment arrangements and financial assistance for the purchase and installation of water saving devices.

In the last determination the Tribunal asked the Councils, as part of their pricing submissions for this determination, to articulate their policies on:

- debt and disconnection (including restricting water supply to households)
- special payment arrangements for customers having difficulty paying their bills
- financial assistance for the purchase and installation of water saving devices.

The Councils' response to this request is less than the Tribunal would have liked. Several submissions to the determination pointed to the lack of information in the Councils' submissions and that the customer impact was likely to be greater in the Central Coast given the higher than average proportion of low income families in the area.

The Tribunal appreciates that there is a need to invest in the water businesses of the Central Coast to ensure the provision of adequate services into the future. However, it is also concerned to ensure that provision is made to assist people who might have difficulties paying larger bills.

As part of the consultation on the draft determination and report, the Tribunal requests the Councils to more fully articulate the measures they have in place and propose to assist customers facing financial hardship.

8.5 Service standards

When considering the impact of its pricing decisions on service quality, the Tribunal seeks to ensure that these decisions do not adversely affect the standards of service the Councils deliver to their customers. It sets prices in the expectation that service levels will be maintained and that cost reductions and efficiency savings will not be obtained at the expense of service standards. This is particularly important for Gosford and Wyong Councils because, unlike other agencies regulated by the Tribunal, the Councils do not have operating licences that require them to meet minimum service standards. The Councils are required to meet some externally set mandatory standards, but they also establish other standards themselves. For this determination, the Tribunal must therefore rely on the Councils' own monitoring of their respective customer service performance.

The Councils' current level of externally set service standards, as detailed in the Councils' Management Plans, are based on the following:

- Compliance with guidelines and standards regulated by the National Health and Medical Research Council (NHMRC), the NSW Health Department, and the Department of Environment and Conservation.
- The DEUS Best-Practice Guidelines for Water Businesses.

The Councils also obtain community feedback through customer surveys, precinct committees and community liaison groups. Wyong Council reports that it plans to establish a customer service agreement that will outline the key levels of service that customers can expect to receive.

The Tribunal has initiated a process to improve the quality and breadth of information on service quality available to it by developing a series of performance indicators. Performance Indicator Returns have been developed for the Councils to complete on an annual basis. The Tribunal recognizes that the Councils will require some time to establish systems to capture the necessary information in a consistent manner but believes that, once in place, the resulting data will better inform it on the quality of services provided to customers and the performance of the Councils' assets. Additionally, the new Performance Indicator Return information will assist the Tribunal in fulfilling its obligations under section 15(1b) of the IPART Act relating to the protection of consumers from abuses of monopoly power.

8.6 Expected water business and shareholder outcomes

Overall, the Tribunal believes that its pricing decisions will not adversely affect the ability of Gosford Council and Wyong Council to operate, maintain, renew and develop the assets required to deliver regulated services. In addition, the Tribunal believes that the Councils' financial positions will remain sufficiently strong for them to meet relevant borrowing, capital and dividend requirements. Impact of notional revenue versus target revenue

Table 8.16 shows the comparison of the notional revenue, as set out in chapter 7 of this report, with the 'target' revenue likely to be generated by the agency's prices.

Financial year	2006/07	2007/08	2008/09	Total
Gosford Council				
Notional revenue requirement	61.8	63.2	62.7	187.7
Target revenue	51.2	54.6	58.5	164.3
NPV of costs not likely to be recovered				(21.1)
Wyong Council				
Notional revenue requirement	49.4	52.5	52.9	154.7
Target revenue	43.1	46.5	50.4	140.1
NPV of costs not likely to be recovered				(13.2)

Table 8.16 NPV of costs not recovered by the Councils (\$million, 2005/06)

As stated in Chapter 7 of this report, the Tribunal's draft decisions on prices have taken account of the interests of Councils, customers and stakeholders. In doing so, the balancing of these different interests for the Councils mean that the likely target revenue derived from prices is less than the Tribunal's determined notional revenue requirement.

8.6.1 Impact on rates of return

The rate of return on Gosford Council's regulatory asset base (RAB) is expected to be around 2.7 per cent, 3.7 per cent and 5.1 per cent for 2006/07, 2007/08 and 2008/09 respectively, provided the assumptions used in the Tribunal's modelling of the financial impacts of its pricing decisions are correct and the Council achieves the efficiency targets the Tribunal has set.

The rate of return on Wyong Council's RAB is expected to be around 3.9 per cent, 4.3 per cent and 5.5 per cent for 2006/07, 2007/08 and 2008/09 respectively, provided the assumptions used in the Tribunal's modelling of the financial impacts of its pricing decisions are correct and the Council achieves the efficiency targets the Tribunal has set.

These rates of return outcomes are low compared with similar businesses (whether publicly or privately owned) elsewhere in Australia. However, the returns are higher than those targeted by the Tribunal in the 2005 determination and the Tribunal considers that, on balance, the expected rate of return outcomes are reasonable for this determination. The Tribunal's analysis shows that Gosford Council is expected to earn a real pre tax return of between 2.7 per cent and 5.1 per cent over the 2006 determination period. Likewise for Wyong Council, the revenue recovered through prices is expected to earn a real pre tax return of between 3.9 per cent and 5.5 per cent over the 2006 determination period. These returns are also above the returns implied by the Councils' pricing proposals of 2.6 per cent, 3.3 per cent and 4.5 per cent for 2006/07, 2007/08 and 2008/09 respectively for Gosford and 0.6 per cent, 1.2 per cent and 2.3 per cent for 2006/07, 2007/08 and 2008/09 respectively for Wyong.

However, the Tribunal considers that the longer term sustainability of these services requires prices which better reflect underlying costs and that some improvement in future rates of return is warranted. The Tribunal is also mindful that the rate of return likely to be achieved by the Councils over the 2006 determination period is less than the Tribunals target rate of 6.3 per cent. The Tribunal expects that it will take more than a single determination to achieve the target return.

8.6.2 Overall financial strength as assessed by investment category ratings

The Tribunal analysed a range of financial indicators that are commonly used by credit rating agencies to assess an entity's financial capacity and ability to service and repay debt. This analysis (see Tables 8.16 and 8.17) shows that the Councils should be able to maintain a sound financial position during the price path. In completing its analysis, the Tribunal has assumed the payment of dividends based on a payout rate of 50 per cent of profits before tax. The analysis also indicates that the prices determined will enable the Councils to attain a minimum investment grade rating of BBB+ overall.

Section 16 of the IPART Act requires the Tribunal to report on the likely impact to the Consolidated Fund if prices are not increased to the maximum permitted. As Gosford Council and Wyong Council do not contribute to Consolidated Revenue there will be no impact.

Further, the Councils' extremely low levels of debt suggest that they are well positioned to maintain their strong financial positions into the future.

Table 8.16 Financial indicators and credit ratings for Gosford Council

	2006/07	2007/08	2008/09
Ability to service debt			
1. EBITDA interest cover	100.8	15.0	10.3
NSW Treasury ratings (2002)	AAA	AAA	AAA
2. Funds from operations interest coverage	118.4	12.9	9.1
Standard and Poors US ratings (1995)	AA	AA	AA
3. Pre-tax interest coverage -	0.48	1.56	2.42
Standard and Poors US ratings (1995)	<bb< td=""><td>BBB</td><td>Α</td></bb<>	BBB	Α
Ability to repay debt			
4. Funds flow net debt payback	1.70	2.04	1.89
NSW Treasury ratings (2002)	AA+	AA+	AA+
5. Funds from operations/total debt (%)	27%	19%	24%
Standard and Poors US ratings (1995)	AA	AA	AA
6. Debt gearing (regulatory value)	7%	10%	10%
NSW Treasury ratings (2002)	AA+	AA+	AA+
Standard and Poors US ratings (1995)	AA	AA	AA
Ability to finance investment from internal sources			
7. Internal financing ratio	29%	60%	80%
NSW Treasury ratings (2002)	В	BBB+	A+
8. Net cash flow/capital expenditure (%)	36%	55%	78%
Standard and Poors US ratings (1995)	BBB	BBB	AA
NSW Treasury overall score and rating			
NSW Treasury total score (0 -10)	7.00	8.25	8.75
Overall rating	A+	AA	AA
9. Net debt (\$m of the day)	25.5	36.1	40.5

Table 8.17 Financial indicators and credit ratings for Wyong Council

	2006/07	2007/08	2008/09	
Ability to service debt				
1. EBITDA interest cover	22.4	5.9	6.3	
NSW Treasury ratings (2002)	AAA	AAA	AAA	
2. Funds from operations interest coverage	17.0	3.4	4.4	
Standard and Poors US ratings (1995)	AA	AA	AA	
3. Pre-tax interest coverage -	0.5	0.5	1.5	
Standard and Poors US ratings (1995)	<bb< td=""><td><bb< td=""><td>BBB</td></bb<></td></bb<>	<bb< td=""><td>BBB</td></bb<>	BBB	
Ability to repay debt				
4. Funds flow net debt payback	1.7	1.9	1.7	
NSW Treasury ratings (2002)	AA+	AA+	AA+	
5. Funds from operations/total debt (%)	24%	13%	22%	
Standard and Poors US ratings (1995)	AA	BBB	AA	
6. Debt gearing (regulatory value)	16%	18%	17%0.2	
NSW Treasury ratings (2002)	AA+	AA+	AA+	
Standard and Poors US ratings (1995)	AA	AA	AA	
Ability to finance investment from internal sources				
7. Internal financing ratio	8%	39%	122%	
NSW Treasury ratings (2002)	В	В	AAA	
8. Net cash flow/capital expenditure (%)	12%	11%	110%	
Standard and Poors US ratings (1995)	<bb< td=""><td><bb< td=""><td>AA</td></bb<></td></bb<>	<bb< td=""><td>AA</td></bb<>	AA	
NSW Treasury overall score and rating				
NSW Treasury total score (0 -10)	7.0	7.0	9.5	
Overall rating	A+	A+	AA+	
9. Net debt (\$m of the day)	48.8	57.0	56.5	

8.6.3 Appropriate payment of dividends

Based on the financial indicators and credit ratings shown above, the Tribunal estimates that the water businesses of Gosford and Wyong Councils' will have funds available to pay a dividend to their respective Councils during the price path. Alternatively, these monies could be retained in the business and used to help fund the major new investments foreshadowed for the upcoming years.

However, it should be noted that the ability to pay a dividend would also depend on the water businesses achieving the operating and capital expenditure efficiencies set by the Tribunal.

The Tribunal notes that Gosford Council's water business stated in its submission that it wanted to pay a dividend and tax equivalents of approximately \$1.9 million per year. Wyong Council's water business provided \$170,000 for tax equivalents per annum but made no provision for dividend payments because of the continuing level of uncertainty in forecast operating and capital expenditures and projected financial results.

8.7 Environmental outcomes

The key environmental issue facing the Central Coast is the pressure on its water supplies due to population growth, and the current drought. There is a need to continue to implement demand management initiatives, and to seek a solution to the current demand/supply imbalance. Large infrastructure solutions being considered by Gosford and Wyong Councils to address the demand/supply imbalance have the potential to have significant impacts on the environment. There is also a need to continually improve methods of effluent disposal and reuse, and to implement measures to prevent polluted water runoff into rivers and beaches.

The Tribunal believes its pricing decisions will contribute to the resolution of these issues.

Their key implications for the environment are as follows:

- The Tribunal has placed a heavy emphasis on increasing the usage price of water to send a better signal to water users regarding the cost of water.
- The Tribunal believes that its determined prices will enable both Councils to fund their demand management initiatives. These include:
 - increasing community education
 - initiatives for the fitting of rain water tanks and water efficient devices
 - more expenditure on effluent re-use systems
 - undertaking more comprehensive system leakage reduction programs
 - investigations into possible dual water systems for new release areas.
- The Councils aim to continue to fund works that achieve compliance with standards for wastewater disposal, particularly those conditions imposed by the DEC. This expenditure not only relates to maintenance and renewals of existing wastewater assets but also to expenditure on new development areas on the Central Coast.
- Expenditure will also be directed to better stormwater outcomes. In particular, there will be initiatives in relation to some areas on the central coast subject to flooding and expenditure directed at environmental wetlands improvement.

8.8 Demand management

The Tribunal has supported the efforts of the Councils to ensure customers are aware of the scarcity of water. While the Tribunal recognizes that the current water restrictions will have a more significant effect on demand, it believes that an increased water usage charge will signal to customers the real cost of water and the necessity to conserve this resource.

The prices determined by the Tribunal will also support the Councils' efforts in their demand management programs which include:

- expanded community communication / education
- programs to refit residential homes with water efficient devices
- amendments to operational procedures to reduce water losses during mains and reservoir cleaning
- system leakage reduction programs
- development of effluent re-use systems
- substitution of potable water with bore water for watering parks and ovals
- retrofit of rainwater tanks to existing residential properties
- industrial water use audits
- introduction of water management plans for industry.

The Tribunal believes that these efforts and its draft decisions on increasing prices will encourage customers to reduce their water consumption.

GLOSSARY OF TERMS

Term	Meaning/Definition	
2005 determination period	The regulatory period from 1 July 2005 to 30 June 2006	
2005 review	The Tribunal's review for the 2005 determination period	
2006 determination period	The regulatory period from 1 July 2006 to 30 June 2009	
Atkins/Cardno	Consultancy firms WS Atkins International Ltd and Cardno	
	MBK	
Authority	Gosford and Wyong Councils' Water Authority	
Council	When we refer to Wyong Shire Council (Gosford City Council), or the Council, we mean the water, sewerage and stormwater sections of these councils, the regulated business.	
CPI	Consumer Price Index	
Determination	The price limits set by the Tribunal	
DEUS	Department of Energy and Sustainability	
EPA	The Environment Protection Authority of NSW	
Financial year	The financial year commencing on 1 July and ending 30 June	
Gosford Council	Gosford City Council	
Halcrow	Halcrow Management Sciences Limited	
Hunter Water	Hunter Water Corporation	
IPART Act	Independent Pricing and Regulatory Tribunal Act 1992	
JWS	Joint water supply projects undertaken by the Gosford and Wyong Councils' Water Authority Agreement 2000	
LGA	Local Government Amendment (Stormwater) Act	
LRMC	Long run marginal cost	
MMA	McLennan Magasanik Associates	
NHMRC	National Health and Medical Research Council	
POEA	Protection of the Environment Administration (POEA) Act 1991	
POEO	The Protection of the Environment Operations	
RAB	Regulatory Asset Base	
Regulatory period	The period over which price limits are determined	
Sydney Water	Sydney Water Corporation	
Tribunal	Independent Pricing and Regulatory Tribunal of NSW	
WACC	Weighted Average Cost of Capital	
WMA	Water Management Act	
Wyong Council	Wyong Shire Council	

APPENDIX 1 MATTERS TO BE CONSIDERED BY THE TRIBUNAL UNDER SECTION 15 OF THE IPART ACT

The Tribunal's decisions have been made in accordance with the requirements set out in the IPART Act, including the factors contained in Section 15 of the Act. This section, which is reproduced in full in Box A1, specifies the matters the Tribunal must consider when making a determination. The Tribunal is satisfied that its determination achieves a reasonable balance between these matters.

Box A1 Matters to be considered by the Tribunal under Section 15 of the IPART Act

- (1) In making determinations and recommendations under this Act, the Tribunal is to have regard to the following matters (in addition to any other matters the Tribunal considers relevant):
 - (a) the cost of providing the services concerned,
 - (b) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services,
 - (c) the appropriate rate of return on public sector assets, including appropriate payment of dividends to the Government for the benefit of the people of New South Wales,
 - (d) the effect on general price inflation over the medium term,
 - (e) the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers,
 - (f) the need to maintain ecologically sustainable development (within the meaning of section 6 of the <u>Protection of the Environment Administration Act 1991</u>) by appropriate pricing policies that take account of all the feasible options available to protect the environment,
 - (g) the impact on pricing policies of borrowing, capital and dividend requirements of the government Council concerned and, in particular, the impact of any need to renew or increase relevant assets,
 - (h) the impact on pricing policies of any arrangements that the government agency concerned has entered into for the exercise of its functions by some other person or body,
 - (i) the need to promote competition in the supply of the services concerned,
 - (j) considerations of demand management (including levels of demand) and least cost planning,
 - (k) the social impact of the determinations and recommendations,
 - (l) standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise).
- (2) In any report of a determination or recommendation made by the Tribunal under this Act, the Tribunal must indicate what regard it has had to the matters set out in subsection (1) in reaching that determination or recommendation.

Table A1.1 indicates where the matters have been considered throughout the report by the Tribunal in making its draft determination.

Table A1.1 Consideration of section 15 matters by Tribunal for Gosford Council and Wyong Council determination

Section 15(1)	Report reference
(a) cost of providing the service	Sections 5.4, 6.4 and 6.5
(b) protection of consumers from abuse of monopoly power	Sections 8.4 and 8.5
(c) appropriate rate of return and dividends	Sections 7.4 and 8.6
(d) affect on general price inflation	Section 8.4
(e) improved efficiency in supply of services	Chapters 5 and 6 generally
(f) ecologically sustainable development	Section 8.7
(g) impact on borrowing, capital and dividend requirements	Section 8.6
(h) additional pricing policies	Not applicable
(i) need to promote competition	Chapter 7 generally
(j) considerations of demand management	Section 8.8
(k) the social impact on customers	Sections 8.4
(I) standards of quality, reliability and safety of the services	Section 8.5

APPENDIX 2 OUTPUT MEASURES

The output measures recommended by the Tribunal which the Councils are to report against during the 2006 determination period are set out below. These will be further developed in consultation with the Councils.

A2.1 Output measures for the Joint Water Supply Authority

- 1. Completion of the lower Wyong Transfer System Upgrade
- 2. Completion of the Mooney Mooney Transfer System Upgrade
- 3. Completion of the Mardi Dam Raising
- 4. Completion of the Mardi High Lift Pumping Station and Associated Works.
- 5. Completion of the Mardi Dam Transfer System
- 6. Substantial progress on the Mardi to Mangrove Transfer System
- 7. Completion of the Groundwater Contingency Scheme
- 8. Completion of the Hunter Transfer Contingency Scheme

A2.2 Output measures for Gosford Council

Output Measures for Water Services

Output (or Activity) Measure - Water		Draft Report Value
Renewal of water mains		Kms.
New Mains laid by council		Kms
Average leakage for	2006/07	ML/d
	2007/08	ML/d
	2008/09	ML/d
Pumping Stations Ren	newed	No
Service Reservoirs	Built	No
	Refurbished	No

Output Measures for Sewerage Services

Output (or Activity) Measure - Water	Draft Report Value
Repair of sewers	Kms
Renewal of sewers	Kms
Comply with DEC effluents standards	All STPs
KSTP- Renew Belt Press Facility	
Make substantial progress on Gosford CBD Upgrade	
Complete Gosford CBD Sewer DSP works	
Complete North Avoca Sewerage Scheme	
Pumping Stations Renewed.	No

A2.3 Output measures for the Wyong Council

Output Measures for Water Services

Output (or Activity) Measure - Water		Draft Report Value
Renewal of water mains		Kms
New Mains laid by council		Kms
Average leakage for	2006/07	ML/d
	2007/08	ML/d
	2008/09	ML/d
Pumping Stations Renewed		No
Service Reservoirs	Built	No
	Refurbished	No

Output Measures for Sewerage Services

Output (or Activity) Measure - Water	Draft Report Value
Repair of sewers	Kms
Renewal of sewers	Kms
Comply with DEC effluents standards	All STPs
Complete B3/B4 Pumping Stations and Rising Mains	
Complete B11/B13 Pumping Stations	
Complete WS9 Pumping Station and Rising Main	
Complete replacement of aerators and roadworks at Wyong South STW	
Pumping Stations Renewed.	No

APPENDIX 3 WACC

A3.1 Calculating the WACC

The Tribunal has calculated the Weighted Average Cost of Capital (WACC) as a pre-tax real WACC. The methodology was to first calculate the Cost of Equity using the Capital Asset Pricing Model CAPM:

$$R_e = Rf + \beta e \times (Rm - Rf)$$

where:

Rf = the *nominal* risk free rate

Rm = the *nominal* weighted expected return of the whole market. This leads to

the calculation of the market risk premium over the risk-free rate as Rm - Rf

Beta (β e) = a measure of the risk of the asset relative to the market index

The cost of equity is then feed into the pre-tax real WACC formula thus

$$WACCpretax \quad real = \frac{\left(1 + \left\{\frac{R_e}{\left[1 - t \times (1 - \gamma)\right]} \times \left(\frac{E}{D + E}\right) + R_d \times \frac{D}{D + E}\right\}\right)}{(1 + i)} - 1$$

where:

Re = the nominal cost of equity

Rd = the nominal cost of debt

t = the statutory tax rate

Gamma (γ) = the value attributed to imputation tax credits

E = the amount of equity in the capital structure

D = the amount of debt in the capital structure E/(D + E) is the proportion of

equity funding D/(E + D) is the proportion of debt funding

i = inflation rate

The individual parameters used in the calculation of the WACC are set out below.

A3.2 The Tribunal's considerations in relation to nominal and real risk free rates and inflation

The Tribunal's draft finding is to base the WACC calculation on a nominal risk free rate of 5.3 per cent and a real risk free rate of 2.3 per cent. The implied inflation is 2.9 per cent.

The Tribunal has used the nominal and real risk free rates (calculated as the 20-day averages of the ten-year Commonwealth Government Bonds and Treasury indexed bonds with similar maturity) to derive inflation for the WACC calculation (using the Fisher equation¹⁵). The 20-day averages for the nominal and real risk free rate and implied inflation at 3 March 2006 are shown in Table A3.1 below.

Table A3.1 Interest rates and implied inflation calculated at 3 March 2006

	Value (%)*	
Nominal risk free rate	5.3%	
Real risk free rate	2.3%	
Implied inflation	2.9%	

^{*} Calculated as the 20-day average of the ten year Commonwealth Government Bond indicator rate as prepared by Lewis Securities Ltd and published daily in the Australian Financial Review and the 20-day average of yields of the 2016 Treasury indexed bond, 3 March 2006.

A3.3 The Tribunal's considerations in relation to market risk premium

The Tribunal's draft finding is to calculate WACC using a market risk premium in the range of 5.5 to 6.5 per cent.

The market risk premium (MRP) represents the additional return over the risk free rate of return that an investor requires for the risk of investing in a diversified equity portfolio.

The Tribunal's draft finding is to adopt the range of the MRP to 5.5 to 6.5 per cent. It has maintained the use of a range for the MRP due to the large variability in observed MRP, for example, as estimated by the Centre for Research in Finance at the Australian Graduate School of Management (AGSM).¹⁶ This range is similar to the range adopted by the Tribunal in its recent regulatory decisions.

In arriving at its finding, the Tribunal had regard to the values of MRP adopted by other Australian regulators and to previous regulatory decisions made by the Tribunal. Importantly, it also considered evidence from long-term historical MRP studies. Table A3.2 provides a summary of the MRP studies it considered. The MRP estimates in this table depend considerably on the underlying methodology used and the time periods chosen for study. Of these studies, the lowest estimate is 5.8 per cent and the highest is 7.9 per cent, resulting in a mid-point of 6.9 per cent. However, the most recent study conducted by the

The Fisher equation is $(1 + r_{nominal}) = (1 + r_{real}) \times (1 + i)$

Centre for Research in Finance, AGSM, (2004), *Risk Premium Estimates for Investors in Fully Paid Australian Listed Equity – January 1974 to December 2003*, Report prepared for IPART.

AGSM indicates that the Australian market risk premium as measured by an arithmetic average including October 1987 is 5.8 per cent.

Source Methodology Period **MRP AGSM** Arithmetic average, incl. Oct 1987 1974-2003 5.8% Arithmetic average, excl. Oct 1987 1974-2003 7.1% Arithmetic mean¹⁷ Officer 1882-1987 7.9% Arithmetic mean¹⁸ 1882-2001 7.2% Arithmetic mean¹⁹ 1946-1991 6.0-6.5% Hathaway²⁰ 7.7% Arithmetic mean 1882-1991 Arithmetic mean 1947-1991 6.6% Dimson, Marsh & Staunton²¹ Arithmetic mean 1900-2000 7.6% Grav²² Arithmetic mean 1883-2000 7.3%

Table A3.2 Market Risk Premium Studies

A3.4 The Tribunal's considerations in relation to debt margin (including debt raising costs)

The Tribunal's draft finding is that the appropriate level of debt margin is in the range of 1.1 to 1.2 per cent, including an allowance of 0.125 per cent for debt raising costs.

The debt margin represents the cost of debt a company has to pay above the nominal risk free rate. The debt margin is related to current market interest rates on corporate bonds, the maturity of debt, the assumed capital structure and the credit rating. The Tribunal has determined the debt margin by:

- Assuming BBB+ to BBB rated corporate debt with a 10-year maturity (to best reflect the expected life over which these assets are expected to generate cash flows).
- Using a 20-day average of yields obtained from CBASpectrum²³.

Officer, R. "Rates of return to shares, bond yields and inflation rates: An historical perspective", in *Share Markets and Portfolio Theory; Readings and Australian Evidence*, 2ed, University of Queensland Press, 1992.

Provided by Professor Officer to the Essential Services Commission (Review of Gas Access Arrangements, Final Decision, October 2001). Original information published in Officer, R. "Rates of return to shares, bond yields and inflation rates: An historical perspective", in *Share Markets and Portfolio Theory; Readings and Australian Evidence*, 2ed, University of Queensland Press, 1992.

Officer, R. "Rates of return to shares, bond yields and inflation rates: An historical perspective", in *Share Markets and Portfolio Theory; Readings and Australian Evidence*, 2ed, University of Queensland Press, 1992.

Hathaway, N. *unpublished manuscript*. "Australian Equity Risk Premium" in *Valuation and the Cost of Capital Under an Imputation Tax System*, Cost of Capital Seminar, Melbourne Business School, University of Melbourne, August 1996.

²¹ Cited in: E. Dimson, P. Marsh and M. Staunton, *Triumph of the Optimist: 101 years of Global Investment Returns*, Princeton University Press, 2002.

Gray, S. "Issues in Cost of Capital Estimation", UQ Business Schools, University of Queensland, 19 October 2001.

²³ CBASpectrum is a database service from the Commonwealth Bank of Australia. The database estimates fair yield curves for Australian corporate debt.

The 20-day average for BBB+ to BBB rated debt as at 3 March 2006 was 100.7 to 109.6 basis points.

Allowances for debt raising costs suggested in previous consultancy reports by ABNAmro and Westpac ranged from 12.5 to 25 basis points.

The resulting overall debt margin for the final decision is 1.1 to 1.2 basis points.

A3.5 The Tribunal's considerations in relation to gearing level

The Tribunal's draft finding is that the appropriate level of gearing is 60 per cent.

When determining the level of gearing used to calculate WACC, the Tribunal adopts a benchmark capital structure, rather than the actual financing structure, to ensure that customers will not bear the cost associated with an inefficient financing structure.

Given the limited available public information on Australian public water businesses, the Tribunal reviewed the gearing ratios of UK water businesses (see Table A3.3).

Table A3.3 UK water businesses – gearing (book value of equity)

Business ²⁴	Gearing (per cent)	
	1990/91	February 2005
Anglican Water Group	13.5	80
Bristol Water	57.5	59
Northumbrian Water	12.9	69
Kelda Group	2.4	52
Severn Trent	0	53

Source: London Stock Exchange. Gearing numbers for 1990/91 from Annual Reports. Gearing numbers for February 2005 from London Stock Exchange.

UK water authorities were privatised in November 1989 and Table A3.3 presents a snapshot of the change in gearing ratios for the largest UK businesses providing water service only since privatisation. In September 2004, the gearing ratios ranged from 52 to 80 per cent with an average of 62 per cent.

The Tribunal believes that a benchmark gearing level of 60 per cent is appropriate for the Councils, which is consistent with its 2005 determination on the retail water agencies.

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The Tribunal has limited its analysis to companies that mainly are water businesses and have a market capitalisation in excess of 100 million British pounds. The Tribunal has ignored diversified water businesses, as these would not give correct guidance on the appropriate gearing level for a "pure" water business.

A3.6 The Tribunal's considerations in relation to dividend imputation factor (gamma)

The Tribunal's draft finding is to use a gamma range of 0.3 to 0.5.

Under the Australian dividend imputation system, investors receive a tax credit (franking credit) for the company tax they have paid. This ensures the investor is not taxed twice on their investment returns (ie, once at the company level and once on the personal tax level).

The value of imputation tax credits is represented in the Capital Asset Pricing Model (CAPM) by 'gamma'. The rationale behind this, including the value of gamma in the CAPM, is that if investors are receiving a tax credit from their investment, they would accept an investment with a lower return than if there were no tax credits attached to this investment. The gamma is an important input in the CAPM, as a high value (for example one) would reduce the cost of capital considerably.

The Tribunal's draft finding is to continue using a gamma range of 0.3 to 0.5 as in previous water price determinations. The debate in Australia about what value to assign to gamma has centred on the assumptions that capital markets are either fully globally integrated or fully segregated within local markets. The use of a domestic CAPM, with a domestic MRP and betas, should imply that capital markets are fully segregated and that the marginal investor is domestic.

In arriving at its draft finding, the Tribunal had regard to a number of studies where gamma has been estimated.²⁵ These studies indicate that the gamma value is anywhere between zero and one. The Tribunal's view is that assuming the marginal investor in Australian equities is domestic, under the *New Business Tax System (Miscellaneous) Act (No. 1) 2000* imputation tax credits should have a value greater than zero. The Tribunal has decided to maintain its previous approach of assigning some value to gamma by using a range of 0.3 to 0.5. It believes that this range reflects both the uncertainty surrounding the value investors attach to imputation tax credits, as well as the different franking credit distribution rates of companies.

A3.7 The Tribunal's considerations in relation to tax rate

The Tribunal's draft finding is to use the statutory tax rate of 30 per cent.

This draft finding is consistent with the findings made by the Tribunal in other industries, and in particular its 2005 determination on the retail water agencies.

A3.8 The Tribunal's considerations in relation to equity beta

The Tribunal's draft finding is that for the purpose of determining a real pre-tax rate of return an appropriate equity beta is in the range of 0.8 to 1.0.

See for example, Cannavan, Finn & Gray, 2004, *The value of dividend imputation tax credits in Australia,* Journal of Financial Economics 73,1, pp 167-197; Bellamy, D and S. Gray, 2004. *Using Stock Price Changes to Estimate the Value of Dividend Franking Credits*. Working Paper University of Queensland, Business School; Chu, H., Partington G. *The market value of dividends: evidence from a new method*, working paper, UTS, 2001.

The equity beta is a measure of the extent to which the return of a security varies in line with the return of the market. The equity beta represents the systematic or market-wide risk of a security. It does not take into account business specific or unsystematic risks.

A business with an equity beta greater than the market average of one would be expected to have a higher rate of return compared with the market average, as it represents a higher level of systemic risk than the market average. Equally, a business with an equity beta of less than one would be expected to have a lower rate of return than the market, as it represents a lower level of systemic risk.

Estimating betas empirically requires information on the economic returns to a particular entity. This information is available only for entities that are listed on the stock exchange. In the absence of such information, the Tribunal has to exercise its discretion. It does so by considering other information available at the time of the decision, such as relative risk analysis with comparable traded companies, relative risk analysis with other regulated industries and overseas evidence.

The Tribunal notes that in its 2005 determination for the regulated retail water agencies, it considered whether the water businesses face more or less systematic risk than the Australian gas and electricity network. The Tribunal concluded that there is no evidence to suggest that the water agencies face more or less systematic risk than the Australian gas and electricity network businesses. Therefore, the Tribunal set an equity beta in a range of 0.8 to 1.0. The Tribunal believes that this equity beta range of 0.8 to 1.0 is appropriate value for the Council's water businesses.

APPENDIX 4 LIST OF SUBMISSIONS

Submissions in relation to the Issues paper of August 2005:

Gosford City Council

Wyong Shire Council

Community Environment Network

Department of Environment and Conservation

Public Interest Advocacy Centre

NSW Council of Social Services

BR and JW Jessop

APPENDIX 5 PRESENTERS AT THE PUBLIC HEARING

The list of presenters at the public hearing on 10 February 2006 were:

David Cathers, Wyong Shire Council Ken Grantham, Wyong Shire Council Ian Johnson, Wyong Shire Council

Rod Williams, Gosford City Council

Steve Diffey, Gosford City Council

Byron Oloughlin, Gosford City Council

Dev Mukherjee, NSW Council of Social Services

Leigh Martin, Total Environment Centre

Elissa Freeman, Public Interest Advocacy Centre