# **ENCLOSURE**

# Annual Water Supply and Sewerage Performance Reporting

TBL Water Supply Performance
TBL Sewerage performance

**Ordinary Meeting of Council** 

*12 DECEMBER 2007* 

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WATER SUPPLY SYSTEM - Wyong Shire Council serves a population of 142,000 (62,300 assessments). Supply is provided by the Gosford-Wyong Joint Water Supply. Water is drawn from Wyong River, Ourimbah Creek, Mooney Mooney Creek and Mangrove Creek. Mangrove Creek Dam (190,000 ML) is the key storage followed by Mardi Dam (7,400ML) and Mooney Mooney Dam (4,600 ML). The Wyong Shire Council system comprises 1 direct filtration water treatment works (160 Megalitres per day), 22 service reservoirs (186 ML) 19 pumping stations, 160 ML/d delivery capacity into the distribution system, 173 km of trunk mains and 909 km of reticulation. The water supply is fully treated.

PERFORMANCE - Wyong Shire Council complied with all of the 6 Best Practice Criteria. The typical residential bill was \$290 which was less than the statewide median (Indicator 13 The economic real rate of return was 1.4% which was greater than the statewide median (Indicator 41). The operating cost per property was less than the statewide median (Indicator 44). Water quality complaints were above the statewide median (Indicator 23). Compliance with microbiological water quality was 100% with 1 of 1 zones compliant (Indicator 13), physical compliance was 100% (Indicator 16) and chemical compliance was 100% with 1 of 1 zones compliant (Indicator 17). Current replacement cost of system assets was \$499M (\$8,000 per assessment), cash and investments were \$34.5M, debt was \$47.3M and revenue was \$28.7M (excluding capital works grants).

#### COMPLIANCE WITH BEST- PRACTICE MANAGEMENT GUIDELINES CRITERIA

(1) Cor (2)	(1) Complete Current Strategic Business Plan & Financial Plan (2) (2a) Pricing (full cost-recovery, without significant cross subsidies) (2a) Complying Residential Charges (2c) Complying non-Residential Charges (2d) DSP with Commercial Developer Charges (2d) DSP with Commercial Developer Charges (2d) Residential Charges (2d) DSP with Commercial Developer Charges (2d) Residential Charges (2d) Residential Charges (2e) Compliance With ALL Required Compensation (a) Integrated water cycle management strategy commenced COMPLIANCE WITH ALL REQUIRED CRITERIA					YES YES YES YES YES
	E BOTT	OM LINE (TBL) PERFORMANCE INDICATORS  1 Population served: 142000 Number of connected properties: 60130 2 Number of assessments: 62300 0.97 connected properties per assessment	LWU Result	>10,000 properties Note 1	All LWUs Note 2	Statewide Median Note 3
UTILITY CHARACTERISTICS		3 Residential assessments (% of total) 4 New residences connected to water supply (%) 5 Properties served per kilometre of main 6 Rainfall (% of average annual rainfall) 7 Total water supplied at master meters (ML) 8 Peak week to average consumption (%) 9 Renewals expenditure (% of current replacement cost of system assets) 10 Employees per 1000 properties	93 0.9 56 60 14,100 126	4 1 5 1 2	3 1 5 1 1	92 1.0 33 86 7,400 155 0.0
	2006/07 CHARGES & BILLS	Residential tariff structure: two part; independent of land value  11 Residential water usage charge (c / kL) (Note 5)  12 Residential access charge / assessment(\$)  13 Typical residential bill / assessment (\$)  14 Typical developer charge / equivalent tenement (\$)	112 108 290 2,500	3 3 1 5	2 2 1 2	105 110 345 4,100
SOCIAL	НЕАLТН	15 Urban population without reticulated water supply (%) 16 Physical water quality compliance (%) 17 Chemical water quality compliance (%) 18 Microbiological (E. coli) water quality compliance (%) 19 Category 1 (minor) public health incidents per 1000 properties 20 Category 2 (limited effects) public health incidents per 1000 properties 21 Category 3 (major) public health incidents per 1000 properties 22 Capital investment on improving public health performance per property (\$)	0.1 100 100 100 0.0 0.0 0.00 6	2 1 1 1 1	1 1 1 1 1 1 1 3	0.9 100 100 100 0.0 0.0 0.0 6
	SERVICE LEVELS	Water quality complaints per 1000 properties  Water service complaints per 1000 properties  Customer interruption frequency per 1000 properties  Average duration of interruption (h)  Number of main breaks per 100 km  Drought water restrictions (% of time)  Total days lost (%)	9 2 31 3 5 5 100	4 2 5 3 2 4	5 1 3 4 3 1 4	6 6 38 3 6 10 3 3.2
ENVIRONMENTAL	MANAGEMENT	Average annual residential consumption per property (kL)  Water losses (including leakage) (%)  Benergy consumption per Megalitre (kiloWatt hours)  Renewable energy consumption per property (kiloWattt hours)	163 8 0	1	1 1	190 10 660 216
ENVIROR	PERFORMANCE	Category 1 (minor) environmental incidents per 1000 properties Category 2 (limited effects) environmental incidents per 1000 properties (Category 3 (major) environmental incidents per 1000 properties Capital investment on improving environmental performance per property (\$)	0.0 0.0 0.00 30.8		1 1 1 1	0.0 0.0 0.00 0.9
оміс	FINANCE	39 Residential revenue from usage charges (% of residential bills) 40 Non-residential revenue from usage charges (% of non-residential bills) 41 Economic real rate of return (%) 42 Return on assets (%) 43 Net Debt to equity (%) 44 Interest cover 45 Loan payment per property (\$)	1.4 1.1 4 >100 84	2 3 4 1 1	2 3 4 1 1 2	67 71 1.4 1.6 -11 >100 23
ECONOMIC	EFFICIENCY	46 Operating cost (OMA) per 100km of main (\$'000) 47 Operating cost (OMA) per property (\$ ) (Note 6) 48 Operating cost (OMA) per kilolitre (cents) 49 Management cost per property (\$ ) 50 Treatment cost per property (\$ ) 51 Pumping cost per property (\$ ) 52 Energy cost per property (\$ ) 53 Water main cost per property (\$ )	1,310 236 101 116 17 22 9 74	4 2 3 4 1 3 3 4	5 1 4 4 1 2 1 4	1040 280 86 110 27 24 17 49

#### NOTES:

- NOTES:

  1. Ranking for LWUs with >10,000) connected properties is based on dividing the results for LWUs in this group into 5 equal divisions of 20%:
  ie. a ranking of 1 indicates the LWU is in the top 20% of LWUs; a ranking of 5 indicates the LWU is in the bottom 20% of LWUs. (Relevant for comparison with LWUs of similar size).

  2. Ranking (1 to 5) for all LWUs is on a percentage of LWUs basis. (Relevant for comparing performance with all other LWUs).

  3. The Statewide Median is on a percentage of connected properties basis (Table 1 of Monitoring Report) as this is the most appropriate for statewide comparisons.

  4. Annual review of key projections and actions in LWU's SBP are required, together with annual updating of LWU's financial plan. The SBP should be updated after 3 years.

  5. Non-residential Tariff: Access Charge based on Service Connection Size (eg. 40mm: %381.94), Two Part Tariff; All usage 112 c/kL.

  Water consumption by non-residential customers was 30% of potable water consumption excluding non-revenue water.

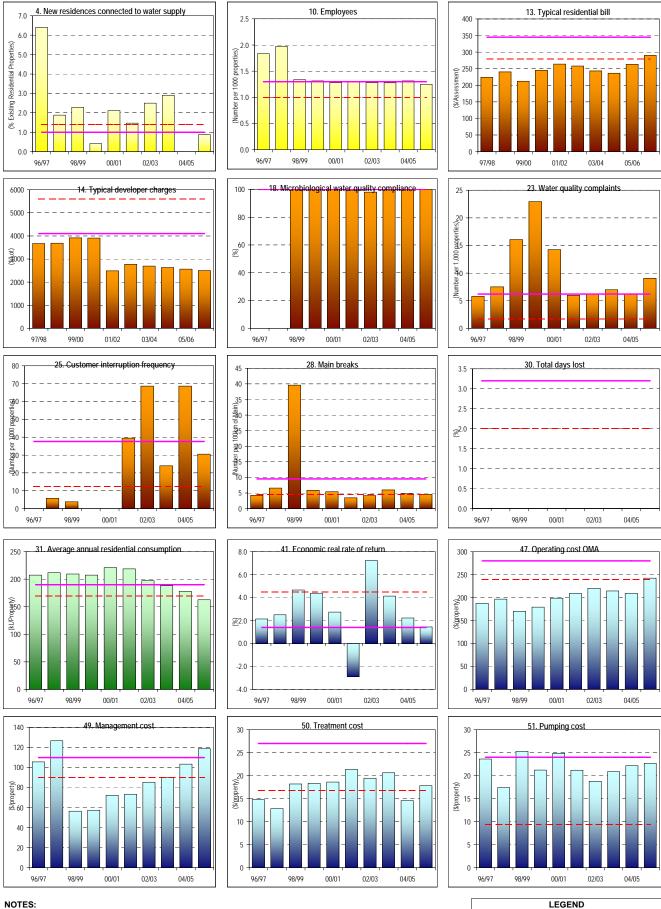
  2005/06 revenue from non-residential customers was 22% of annual rates and charges.

  6. The operating cost (OMA)/property was \$236. The components of operating cost were: management (\$116), operation (\$54), maintenance (\$57), energy (\$9) and chemical (\$0).

2005/06 State Median

2005/06 Top 20%

(Results shown for 10 years together with 2005/06 Statewide Median and Top 20%)



### NOTES:

- Costs are in Jan 2006\$.
- Microbiological water quality compliance 1998/99 to 2003/04 was on the basis of 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines for E. coli; from 2004/05 compliance was on the basis of the  $2004\ NHMRC/NRMMC\ Australian\ Drinking\ Water\ Guidelines.$

SEWERAGE SYSTEM - Wyong Council has 6 sewage treatment works providing secondary, advanced secondary and tertiary treatment. The system comprises 219,000 EP treatment capacity (Intermittent Extended Aeration/Activated Sludge and Trickling Filter), 142 pumping stations (525 ML/d), 193 km of rising mains and 1022 km of gravity trunk mains and reticulation. Treated effluent is discharged to ocean or distributed as tertiary treated effluent for various non-potable purposes.

PERFORMANCE - Wyong Shire Council complied with all 4 out of 4 Best Practice Criteria. The typical residential bill was \$381 which was close to the statewide median (Indicator 11). The economic real rate of return was 0.3% which was less than the statewide median (Indicator 41). The operating cost per property was less than the statewide median (Indicator 47). Sewage odour complaints were above the statewide median (Indicator 18). 100% of treated effluent complied with DEC licence limits and 6 of 6 sewage treatment works were compliant at all times (Indicators 29 to 31). The current replacement cost of system assets was \$380M (\$6,500 per assessment), cash and investments were \$15.6M, debt was \$15.9M and revenue was \$23.4M (excluding capital works grants).

# COMPLIANCE WITH BEST-PRACTICE MANAGEMENT GUIDELINES CRITERIA

(1) Complete current strategic business plan & financial plan		YES	(2e) DSP with commercial developer charges	Yes			
(2)	(2a) Full cost recovery (without significant cross-subsidies)	Yes	(2f) Liquid trade waste approvals & policy	Yes			
	(2b) Complying residential charges	Yes	(3) Complete performance reporting form (by 15 September)	YES			
	(2c) Complying non-residential charges	Yes	(4) Integrated water cycle management strategy commenced	YES			
	(2d) Complying trade waste fees and charges	Yes	COMPLIANCE WITH ALL REQUIRED CRITERIA	YES			
	Ranking						

				Ranl		
TRIPLE	E BOTT	OM LINE (TBL) PERFORMANCE INDICATORS	LWU	>10,000	All	Statewide
S		1 Population served: 140000 Number of connected properties: 57160	Result	properties	LWUs	Median
UTILITY CHARACTERISTICS		2 Number of assessments: 58500 0.98 connected properties per assessment		Note 1	Note 2	Note 3
8		3 Residential Assessments (% of total)	94			90
Ę		4 New residences connected to sewerage (%)	1.6	2	2	1.3
\R A		5 Properties served per kilometre of main	47	1	1	41
충		6 Volume of sewage collected (ML)	11,830	1	1	5,100
Ě		7 % Renewals expenditure of current replacement cost of system assets	0.0	3	2	0.2
5		8 Employees per 1000 properties	1.6	4	3	1.5
5		9 Employees undergoing 2 or more days of training (% of total)	100		1	8
	S	Description of residential tariff structure: access charge per property; independent of land value	(Note 5	)		
	2006/07 CHARGES & BILLS	10 Residential access charge / assessment (\$)	381	2	3	385
	용글	11 Typical residential bill / assessment (\$)	381	2	3	400
	8, E	12 Typical developer charge / equivalent tenement (\$)	2,000	5	3	3,500
	200	12a Non-residential sewer usage charge (c/kL)	68	4	5	80
		13 Urban properties without reticulated sewerage service (%)	0.1	1	1	3.7
	I	14 Category 1 (minor) public health incidents per 1000 properties	0.0	•	1	0.4
ΙĘ	НЕАСТН	15 Category 2 (limited effects) public health incidents per 1000 properties	0.0		1	0.0
SOCIAL	빞	16 Category 3 (major) public health incidents per 1000 properties	0.00		1	0.00
0)		17 Capital expenditure on improving public health performance per property (\$)	2		2	68
	"	18 Odour complaints per 1000 properties	1.0	5	3	0.8
	SERVICE LEVELS	19 Service complaints per 1000 properties	10	3	3	14
	鱼	20 Customer interruption frequency per 1000 properties	0		1	15
	빙	21 Average duration of interruption (hours)	2	2	2	2
	E	22 Average customer outage time (minutes)				1.5
	8	23 Total days lost (%)	0.0	1	1	3.3
	-	24 Volume of sewage treated per property (kL)	207	4	2	200
	NATURAL RESOURCE MANAGEMENT	25 Percentage effluent reclaimed for recycling	8	4	4	9
	F 9 9	26 Biosolids reuse (%)	100	1	1	100
	RES A	27 Energy consumption per Megalitre (kiloWatt hours)				540
_	2	28 Renewable energy consumption per property (kiloWatt hours)				148
ENVIRONMENTAL	GE	29 90 Percentile licence limits for effluent discharge:				
É	ENVIRONMENTAL PERFORMANCE	SS 50 mg/l; Total P 0 mg/l				
Z Z	OR.	30 Compliance with BOD in licence (%)	100	1	1	100
ĕ	E.	31 Compliance with SS in licence (%)	100	1	1	98
Ź	<u> </u>	32 Sewer main chokes and collapses per 100 km of main	49	5	3	49
	₹	33 Sewer overflows to the environment per 100 km of main	0	1	1	8
	Ξ	34 Category 1 (minor) environmental incidents per 1000 properties	0.0		1	5
	ő	35 Category 2 (limited effects) environmental incidents per 1000 properties	0.1		4	0.1
	Ž	36 Category 3 (major) environmental incidents per 1000 properties	0.00		1	0.00
	Ш	37 Capital investment on improving environmental performance per property (\$)	14		2	35
		38 Revenue from non-residential plus trade waste charges (% of total revenue)	15	3	3	15
	O	39 Revenue from trade waste charges (% of total revenue)	1.5	2	2	1.5
	<u> </u>	41 Economic real rate of return (%)	0.3	5	4	2.4
	FINANCING	42 Return on assets (%)	0.3	5	4	2.3
	፱	43a Net Debt to equity (%) 44 Interest cover	0 >100	2	1	-7 >100
2€		45 Loan payment per property (\$)	>100 66	2	2	>100 45
ECONOMI						
Ö		46 Operating cost (OMA) per 100 km of main (\$'000) 47 Operating cost (OMA) per property (\$)	1190 251	3	4 2	1200 290
ш	<b>&gt;</b>	47 Operating cost (OMA) per property (\$) 48 Operating cost (OMA) per kilolitre (cents)	122	3	3	122
	EFFICIENCY	49 Management cost per property (\$)	76	1	3	100
	길	50 Treatment cost per property (\$)	80	2	2	85
	#	51 Pumping cost per property (\$)	64	4	4	48
		52 Energy cost per property (\$)	19	2	3	20
		53 Sewer main cost per property (\$)	28	1	2	31

## NOTES:

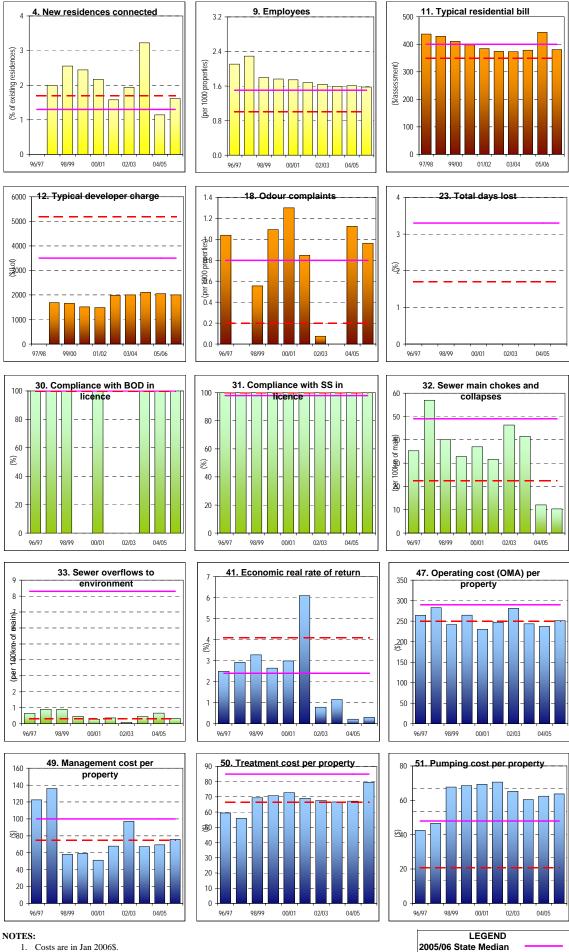
- Ranking for LWUs with >10,000) connected properties is based on dividing the results for LWUs in this group into 5 equal divisions of 20%:

- ie. a ranking of 1 indicates the LWU is in the top 20% of LWUs; a ranking of 5 indicates the LWU is in the bottom 20% of LWUs; a ranking of 5 indicates the LWU. So in the bottom 20% of LWUs. (Relevant for comparison with LWUs of a similar size).

  Ranking (1 to 5) for all LWUs is on a percentage of LWUs basis. (Relevant for comparing performance with all other LWUs).

  The Statewide Median is on a percentage of connected properties basis (Table 2 of 2005/06 NSW Performance Benchmarking Report) as this is the most appropriate for statewide comparisor
- Annual review of the key projections and actions in LWU's Business Plan are required, together with annual updating of LWU's Financial Plan. The business plan should be updated after 3 year Non-residential: Access Charge based on meter size, sewer usage charge 68c/kL.
- Trade waste & non-residential rates & charges provided 15% of the annual rates & charges revenue, including usage. Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
- The operating cost (OMA)/property was \$251. The components of operating cost/property were: management (\$76), operation (\$71), maintenance (\$86) and energy (\$19).

(Results shown for 10 years together with 2005/06 Statewide Median and Top 20%)



2005/06 Top 20%

1. Costs are in Jan 2006\$.