

APPENDIX C: OVERVIEW OF SERVICE QUALITY AND PERFORMANCE - NPR INDICATORS AND OTHER JURISDICTIONS

Appendix C lists all NPR indicators and identifies indicators that are used by other regulators in State-based performance reporting.

<i>NPR Indicators</i>	<i>NPR Reference</i>	<i>IPART</i>	<i>ESC</i>	<i>ERA</i>	<i>ICRC</i>	<i>OTTER (Tas)</i>	<i>DEWS (SAMPs)</i>
WATER RESOURCES							
Sources of water							
Volume of water sourced from surface water (ML)	W1	YES	YES	YES	YES	-	-
Volume of water sourced from groundwater (ML)	W2	YES	YES	YES	-	-	-
Volume of water sourced from desalination (ML)	W3	YES	YES	YES	-	-	-
Volume of water sourced from desalination of marine water (ML)	W3.1	-	-	-	-	-	-
Volume of water sourced from desalination of groundwater (ML)	W3.2	-	-	-	-	-	-
Volume of water sourced from desalination of surface water such as dams, rivers or irrigation channels (ML)	W3.3	-	-	-	-	-	-
Volume of water sourced from recycling (ML)	W4	YES	YES	-	YES	-	-
Volume of water received from bulk supplier (ML)	W5	YES	YES	-	-	-	-
Volume of potable water received from bulk supplier (ML)	W5.1	-	-	-	-	-	-
Volume of non-potable water received from bulk supplier (ML)	W5.2	-	-	-	-	-	-
Volume of bulk recycled water purchased (ML)	W6	-	YES	-	-	-	-
Total sourced water (ML)	W7	YES	YES	-	-	-	-
Use of water supplied							
Volume of water supplied – Residential (ML)	W8	YES	YES	-	-	-	-
Volume of potable water supplied – Residential (ML)	W8.1	-	-	-	-	-	-
Volume of non-potable water supplied – Residential (ML)	W8.2	-	-	-	-	-	-
Volume of water supplied – Commercial, municipal and industrial	W9	YES	YES	-	-	-	-

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(ML)							
Volume of potable water supplied – Commercial, municipal and industrial (ML)	W9.1	-	-	-	-	-	-
Volume of non-potable water supplied – Commercial, municipal and industrial (ML)	W9.2	-	-	-	-	-	-
Volume of water supplied – Other (ML)	W10	YES	-	-	-	-	-
Volume of non-revenue water (ML)	W10.1	-	-	-	-	-	-
Volume of non-potable water supplied – Other (ML)	W10.2	-	-	-	-	-	-
Volume of water supplied – Managed aquifer recharge (ML)	W10.3	-	-	-	-	-	-
Volume of water supplied – Agricultural irrigation (ML)	W10.4	-	-	-	-	-	-
Total urban water supplied (ML)	W11	-	-	YES	-	-	-
Total urban potable water supplied (ML)	W11.1	-	-	-	-	-	-
Total urban non-potable water supplied (ML)	W11.2	-	-	-	-	-	-
Total volume of potable water produced (ML)	W11.3	-	-	-	-	-	-
Average annual residential water supplied (kL/property)	W12	YES	YES	YES	-	-	-
Volume of water supplied – Environmental flows (ML)	W13	-	-	-	YES (GL, %)	-	-
Volume of bulk water exports (ML)	W14	-	YES	-	-	-	-
Volume of potable bulk water exports (ML)	W14.1	-	YES	-	-	-	-
Volume of non-potable bulk water exports (ML)	W14.2	-	YES	-	-	-	-
Volume of bulk recycled water exports (ML)	W15	-	YES	-	-	-	-
Sewage collected							
Volume of sewage collected – Residential sewage, non-residential sewage and non-trade waste (ML)	W16	-	-	-	-	-	-
Volume of sewage collected –Trade waste (ML)	W17	-	-	-	-	-	-
Total sewage collected (ML)	W18	YES	YES	-	YES	-	-
Volume of sewage supplied to other infrastructure operators (ML)	W18.1	-	-	-	-	-	-

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Volume of sewage received from other infrastructure operators (ML)	W18.2	-	-	-	-	-	-
Volume of sewage taken from sewer mining (ML)	W18.3	-	-	-	-	-	-
Volume of sewage measured at inlet to treatment works (ML)	W18.4	-	-	-	-	-	-
Volume of treated sewage effluent (ML)	W18.5	-	-	-	-	-	-
Sewage collected per property (kL/property)	W19	YES	-	YES	YES	-	-
Uses of recycled water and stormwater							
Volume of recycled water supplied – Residential (ML)	W20	YES	-	-	-	-	-
Volume of recycled water supplied – Commercial, municipal and industrial (ML)	W21	YES	-	YES	-	-	-
Volume of recycled water supplied – Agricultural (ML)	W22	YES	-	YES	-	-	-
Volume of recycled water supplied – Environmental (ML)	W23	YES	-	YES	-	-	-
Volume of recycled water supplied – On-site (ML)	W24	YES	-	YES	-	-	-
Volume of recycled water supplied – Other (ML)	W25	-	-	YES	-	-	-
Volume of recycled water supplied – Managed aquifer recharge (ML)	W25.1	-	-	-	-	-	-
Total recycled water supplied (ML)	W26	-	YES	YES	-	-	-
Recycled water (per cent of effluent recycled) (%)	W27	-	YES	YES	-	-	-
Total volume of urban stormwater discharges from a stormwater discharge point (ML)	W28	-	-	-	-	-	-
Volume of urban stormwater supplied to other infrastructure operators (ML)	W28.1	-	-	-	-	-	-
Volume of urban stormwater received from other infrastructure operators (ML)	W28.2	-	-	-	-	-	-
Volume of urban stormwater supplied for managed aquifer recharge (ML)	W28.3	-	-	-	-	-	-
Volume of urban stormwater used (ML)	W28.4	-	-	-	-	-	-
Total volume of treated and untreated sewage discharges from a sewage discharge point (ML)	W29	-	-	-	-	-	-

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ASSET DATA							
Number of water treatment plants providing full treatment (No.)	A1	-	YES	-	-	-	-
Length of water mains (km)	A2	-	-	YES	YES	-	-
Properties served per km of water main (No./km)	A3	-	-	YES	-	-	-
Number of sewage treatment plants (No.)	A4	-	YES	-	-	-	-
Length of sewerage mains and channels (km)	A5	-	-	YES	-	-	-
Properties served per km of sewer main (No./km)	A6	-	-	YES	-	-	-
Number of recycled water treatment plants (No.)	A7	-	-	-	-	-	-
Water main breaks (No. per 100 km of water main)	A8	YES	YES	YES	YES	-	YES
WATER LOSS							
Infrastructure leakage index (ILI)	A9	-	YES	-	-	-	-
Real losses (L/service connection/day)	A10	YES	YES	-	-	-	YES
Real losses (kL/km water main/day)	A11	-	YES	-	-	-	-
Sewerage mains breaks and chokes (No. per 100 km of sewer main)	A14	YES	YES	YES	YES (number)	YES	YES
Property connection sewer breaks and chokes (No. per 1000 properties)	A15	-	-	-	YES (number)	YES	-
CUSTOMERS							
Population receiving water supply services (000s)	C1	-	-	-	-	-	-
Connected Residential properties – Water supply (000s)	C2	-	-	YES	YES	-	-
Connected Non-residential properties – Water supply (000s)	C3	-	-	-	YES	-	-
Total connected properties – Water supply (000s)	C4	-	-	-	-	-	-
Population receiving sewage services (000s)	C5	-	-	-	-	-	-
Connected Residential properties – Sewerage (000s)	C6	-	-	-	-	-	-
Connected Non-residential properties – Sewerage (000s)	C7	-	-	-	-	-	-
Total connected properties – Sewerage (000s)	C8	-	-	YES	-	-	-

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Water quality complaints (No. per 1000 properties)	C9	YES	YES	YES	YES (number)	-	YES
Water service complaints (No. per 1000 properties)	C10	-	YES /100 customers	YES	YES (number)	-	-
Sewerage service complaints (No. per 1000 properties)	C11	-	YES /100 customers	YES	YES (number)	-	-
Billing and account complaints – water and sewerage (No. Per 1000 properties)	C12	-	YES /100 customers	YES	YES (number)	-	-
Total water and sewerage complaints (No. per 1000 properties)	C13	YES	YES	YES	-	-	-
Percentage of calls answered by an operator within 30 seconds (%)	C14	YES	YES	YES	-	-	-
Average duration of an unplanned interruption – Water (minutes)	C15	YES	YES	YES	YES	YES	YES
Average sewerage interruption (minutes)	C16	YES	-	-	YES	-	-
Incidence of unplanned interruptions – Water (No. per 1000 properties)	C17	YES	YES	YES	YES	-	YES
Number of restrictions applied for non-payment of water bill (No. per 1000 properties)	C18	YES	YES	-	-	YES	-
Number of legal actions applied for non-payment of water bill (No. per 1000 properties)	C19	-	YES	-	-	-	-
ENVIRONMENT							
Per cent of sewage treated to a primary level (%)	E1	YES	YES	YES	-	-	-
Per cent of sewage treated to a secondary level (%)	E2	YES	YES	YES	-	-	-
Per cent of sewage treated to a tertiary or advanced level (%)	E3	YES	YES	YES	-	-	-
Per cent of sewage volume treated that was compliant (%)	E4	YES	YES	YES	-	-	-
Number of sewage treatment plants compliant at all times (e.g. 5 of 6)	E5	-	YES	YES	-	-	-
Public disclosure of your sewage treatment plant's performance (yes/no)	E6	-	-	-	-	-	-
Compliance with environmental regulator – Sewerage (yes/no)	E7	-	-	-	-	-	-
Per cent of biosolids reused (%)	E8	YES	YES	-	-	-	-
Greenhouse gas emissions – Water (tonnes CO ₂ -equivalents per 1000	E9	-	YES	-	-	-	-

NPR Indicators	NPR Reference	IPART	ESC	ERA	ICRC	OTTER (Tas)	DEWS (SAMPs)
connected water properties)							
Greenhouse gas emissions – Bulk utility water (tonnes CO ₂ -equivalents per ML)	E9.1	-	YES	-	-	-	-
Greenhouse gas emissions – Sewerage (tonnes CO ₂ -equivalents per 1000 connected sewerage properties)	E10	-	YES	-	-	-	-
Greenhouse gas emissions – Bulk utility sewerage (tonnes CO ₂ -equivalents per ML)	E10.1	-	YES	-	-	-	-
Net Greenhouse gas emissions – Other (net tonnes CO ₂ -equivalents per 1000 connected water properties)	E11	-	YES	-	-	-	-
Net greenhouse gas emissions – Bulk utility other (net tonnes CO ₂ -equivalents per ML)	E11.1	-	YES	-	-	-	-
Total net greenhouse gas emissions (net tonnes CO ₂ -equivalents per 1000 connected water properties)	E12	YES	YES	-	-	-	-
Total net greenhouse gas emissions – Bulk utility (net tonnes CO ₂ -equivalents per ML)	E12.1	-	YES	-	-	-	-
Sewer overflows reported to environmental regulator (No. per 100 km of sewer main)	E13	-	-	YES	-	-	-
PRICING AND FINANCE							
Water							
Tariff structure (text) (Description)	P1	-	-	-	-	-	-
Free water allowance (kL/property)	P1.1	-	-	-	-	-	-
Fixed charge (\$/property) (Basis for charge)	P1.2	-	-	-	YES	-	-
Usage charge 1st step (\$/kL) Up to kL	P1.3	-	-	-	YES	-	-
Usage charge 2nd step (\$/kL) From kL to kL	P1.4	-	-	-	YES	-	-
Usage charge 3rd step (\$/kL) From kL to kL	P1.5	-	-	-	-	-	-
Usage charge 4th step (\$/kL) From kL to kL	P1.6	-	-	-	-	-	-
Usage charge 5th step (\$/kL) From kL to kL	P1.7	-	-	-	-	-	-
Usage charge 6th step (\$/kL) From kL to kL	P1.8	-	-	-	-	-	-
Usage charge 7th step (\$/kL) From kL to kL	P1.9	-	-	-	-	-	-

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Usage charge 8th step (\$/kl) From kL to kL	P1.10	-	-	-	-	-	-
Usage charge 9th step (\$/kl) From kL to kL	P1.11	-	-	-	-	-	-
Special levies (\$/property) (Description)	P1.12	-	-	-	-	-	-
Income from special levies retained by utility? (yes/no)	P1.13	-	-	-	-	-	-
Annual bill based on 200 kL/a (\$)	P2	-	-	-	-	-	-
Average annual residential water supplied (kL)	P2.1	-	-	-	-	-	-
Typical residential bill (\$)	P3	-	-	-	-	-	-
Number of meter readings per annum (No.)	P3.1	-	-	-	-	-	-
Number of bills per annum (No.)	P3.2	-	-	-	-	-	-
Sewerage							
Tariff structure	P4	-	-	-	-	-	-
Fixed charge (\$/property)	P4.1	-	-	-	YES	-	-
Usage charge (\$/kl)	P4.2	-	-	-	-	-	-
Special levies (\$/property)	P4.3	-	-	-	-	-	-
Income from special levies retained by utility? (yes/no)	P4.4	-	-	-	-	-	-
Annual bill based on 200kL/a (\$)	P5	-	-	-	-	-	-
Typical residential bill (\$)	P6	-	-	-	-	-	-
Number of bills per annum (No.)	P6.1	-	-	-	-	-	-
Water supply and sewerage							
Annual bill based on 200kL/a (\$)	P7	-	-	-	-	-	-
Typical residential bill (\$)	P8	-	-	-	YES	-	-
Revenue							
Total Revenue – Water (\$000)	F1	-	-	-	YES	-	-
Total Revenue – Sewerage (\$000)	F2	-	-	-	YES	-	-
Total Income for utility (\$000)	F3	-	-	-	-	-	-
Residential revenue from usage charges – Water (%)	F4	-	-	-	-	-	-
Revenue per property for water supply services (\$/property)	F5	-	-	-	-	-	-
Revenue for water supply services (\$/ML) – Bulk utility	F5.1	-	-	-	-	-	-

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Revenue per property for sewerage services (\$/property)	F6	-	-	-	YES	-	-
Revenue for sewerage services – Bulk utility (\$/ML)	F6.1	-	-	-	-	-	-
Income per property for utility (\$/property)	F7	-	-	-	-	-	-
Income for whole of utility – Bulk utility (\$/ML)	F7.1	-	-	-	-	-	-
Revenue from community service obligations (\$)	F8	-	-	-	-	-	-
Written-down value of fixed water supply assets (\$000s)	F9	-	-	-	-	-	-
Written-down value of fixed sewerage assets (\$000s)	F10	-	-	-	-	-	-
Costs							
Operating cost – Water (\$/property)	F11	-	-	-	-	-	-
Operating cost – Bulk utility water (\$/ML)	F11.1	-	-	-	-	-	-
Operating cost – Sewerage (\$/property)	F12	-	-	-	-	-	-
Operating cost – Bulk utility sewerage (\$/ML)	F12.1	-	-	-	-	-	-
Combined operating cost water and sewerage (\$/property)	F13	YES	-	-	-	-	-
Combined operating cost – Bulk utility water and sewerage (\$/ML)	F13.1	-	-	-	-	-	-
Capex							
Total water supply capital expenditure (\$000s)	F14	-	-	-	YES	-	-
Total sewerage capital expenditure (\$000s)	F15	-	-	-	YES	-	-
Total capital expenditure for water and sewerage (\$000s)	F16	-	-	-	-	-	-
Water supply capital expenditure (\$/property)	F28	-	-	-	-	-	-
Water supply capital expenditure – Bulk utility (\$/ML)	F28.1	-	-	-	-	-	-
Sewerage capital expenditure (\$/property)	F29	-	-	-	-	-	-
Sewerage capital expenditure – Bulk utility (\$/ML)	F29.1	-	-	-	-	-	-
Financial data							

NPR Indicators	NPR Reference	IPART	ESC	ERA	ICRC	OTTER (Tas)	DEWS (SAMPs)
Economic real rate of return – Water (ratio)	F17	-	-	-	-	-	-
Economic real rate of return – Sewerage (ratio)	F18	-	-	-	-	-	-
Economic real rate of return – Water and sewerage (ratio)	F19	-	-	-	-	-	-
Dividend (\$000s)	F20	-	-	-	-	-	-
Dividend payout ratio (%)	F21	-	-	-	-	-	-
Net debt to equity %	F22	-	-	-	-	-	-
Interest cover (ratio)	F23	-	-	-	-	-	-
Net profit after tax (NPAT) (\$000s)	F24	-	-	-	-	-	-
NPAT Ratio (%)	F30	-	-	-	-	-	-
Community service obligations (\$000s)	F25	-	-	-	-	-	-
Capital works grants – Water (\$000s)	F26	-	-	-	-	-	-
Capital works grants – Sewerage (\$000s)	F27	-	-	-	-	-	-
PUBLIC HEALTH							
Water quality guidelines (text)	H1	-	-	-	-	-	-
Number of zones where microbiological compliance was achieved	H2	-	-	YES	-	-	-
% of population where microbiological compliance was achieved (%)	H3	YES	-	YES	-	-	-
Number of zones where chemical compliance was achieved	H4	YES	-	-	-	-	-
Risk-based drinking water management plan externally assessed? (yes/no)	H5	-	-	-	-	-	-
Risk-based drinking water management plan (Please specify plan in place e.g. ISO9001, HACCP, ADWG A quality assessment)	H6	-	-	-	-	-	-
Public disclosure of drinking water quality performance (yes/no)	H7	-	-	-	-	-	-

Source: NWC (2013)