ATTACHMENT A

Performance Indicators

Performance indicator	Split	Coverage	Performance Measure	Definition			
Baseline explanat	Baseline explanatory data						
Water customers	Domestic Non-domestic	Regional & Metropolitan	Context & normalising measure	 For performance reporting purposes, a water customer is a property which, at the end of the reporting period: is connected to the water business's water system; and receives a fixed and/or usage account. A tenanted property which is separately metered and in respect of which the tenant is liable for water usage counts as one water customer. The owner and the tenant are not separately counted as water customers. For performance reporting purposes a water customer does not include: a body corporate; or a property which is serviced but is not connected to the water business's water system. 			
Sewerage customers	Domestic Non-domestic	Regional & Metropolitan	Context & normalising measure	 For performance reporting purposes, a sewerage customer is: a water customer which is connected to the sewerage system (hence is separately billed for sewerage services (fixed and/or usage)); and any other property which, at the end of the reporting period, is connected to the sewerage system and is separately billed for sewerage services (fixed and/or usage). A sewerage customer who is also a trade waste customer counts as one sewerage customer. 			
Drainage Customers		Melbourne Water	Context & normalising measure	For performance reporting purposes, a drainage customer is a property which receives a drainage account at the end of the reporting period.			

Performance indicator	Split	Coverage	Performance Measure	Definition
Trade waste customers		Regional & Metropolitan	Context & normalising measure	A trade waste customer means a customer who has entered into a trade waste agreement with the licensee, or has received the business's consent to discharge trade waste to sewer.
Permanent population served		Regional & Metropolitan	Context & normalising measure	Total permanent population connected or able to be connected to the water business's system. Information should be derived from the most recently available census data and adjusted for growth.
Length of water main (km)		Melbourne Water Regional & Metropolitan	Context & normalising measure	 Includes all the water business's mains in operation at the end of the reporting period. Does not include property service pipes.
Length of sewerage main (km)		Melbourne Water Regional & Metropolitan	Context & normalising measure	 Includes all the water business's mains in operation at the end of the reporting period. Does not include house connection branches. Does not include mains carrying treated effluent.
Volume of water received (ML)		Melbourne Water Regional & Metropolitan	Context & normalising measure	 The volume of water received by the water business from its headworks (including its water treatment plants) and from any wholesaler of water. Volume of water delivered to retailers by Melbourne Water.
Metered volume of water delivered to customers (ML)	Domestic Non-domestic	Regional & Metropolitan	Context & normalising measure Average household consumption	The metered volume of water delivered to customers over the reporting period.
Volume of sewage delivered (ML)	Wholesaler Treatment plants	Melbourne Water Regional & Metropolitan	Context & normalising measure	The total volume of sewage (including trade waste) delivered by the water business to any wholesaler of sewage treatment services or to its own sewage treatment plants.

Performance indicator	Split	Coverage	Performance Measure	Definition
Water treatment plants	 Disinfection, unfiltered Further treatment Full treatment 	Melbourne Water Regional & Metropolitan	Context & normalising measure	 Disinfected, unfiltered: water treatment plant providing disinfection via chlorine or ozone. May also include other minor processes such as aeration, pH correction, fluoridation, or coagulation. Further treatment: The water treatment plant provides additional processes to serve a particular purpose. While not meeting the requirements of full treatment (defined below), it may address some of the elements of full treatment. Full treatment: The water treatment plant includes processes to remove colour/and or turbidity as well as providing filtration and disinfection. In addition, it may include processes for taste and/or odour reduction, softening, pH correction and target removal of elements and compound such as
Volume of sewage treated (ML)	 Primary treatment Secondary treatment Tertiary treatment 	Melbourne Water Regional & Metropolitan	Context & normalising measure	 iron, manganese, nitrates and pesticides. The volume of sewage treated at the water business's sewage treatment plants. primary treatment means the removal of settleable solids; secondary treatment means biological oxidation achieving typically 85%-90% reduction in biological oxygen demand (BOD); tertiary treatment means enhanced reduction of BOD and suspended solids from secondary treated sewage and significant nutrient reduction.
Sewage treatment plants	Primary treatmentSecondary treatmentTertiary treatment	Melbourne Water Regional & Metropolitan	Context & normalising measure	Number of sewage treatment plants in operation at the end of reporting period.

Performance indicator	Split	Coverage	Performance Measure	Definition
Water network r	eliability and e	fficiency		
Bursts and leaks	Priority 1Priority 2Priority 3	Regional & Metropolitan	Burst and leaks per 100km of water main	 An unplanned event in which water is lost which is attributable to failure of a pipe, hydrant, valve, fitting or joint material (being the mains and trunk infrastructure, excluding the mains to meter connections) regardless of cause. Priority 1 means a burst or leak which causes, or has the potential to cause, substantial damage or harm to customers, water quality, flow rate, property or the environment. Priority 2 means a burst or leak which causes, or has the potential to cause, minor damage or harm to customers, water quality, flow rate, property or the environment. Priority 3 means a burst or leak which is causing no discernible impacts on customers, property or the environment. A burst or leak may not necessarily result in loss of supply.
Total minutes to respond to bursts and leaks (Min)	 Priority 1 Priority 2 Priority 3	Regional & Metropolitan	Average minutes to respond	The duration between the times the water business is first notified or becomes aware of a burst or leak to the time at which the water business arrives at the site of the burst or leak.
Time taken to rectify bursts and leaks	 Priority 1 Priority 2 Priority 3	Regional & Metropolitan	Average hours taken to fully repair and rectify bursts and leaks	 The total job duration, including time from receiving first notification, responding to, and rectifying the fault to the required level of service. Follow-up rectification works, such as reinstatement of nature strips are not included.
Bursts and leaks fully rectified	 Priority 1 Priority 2 Priority 3	Regional & Metropolitan	Bursts and leaks fully repaired and rectified within 12 hrs, 24 hrs and 120 hrs	 Burst and leaks fully repaired and rectified within 12, 24 and 120hr. Includes time from receiving job, responding, and rectifying fault to the required level of service. Follow-up rectification works, such as reinstatement of nature strips are not included.

Performance indicator	Split	Coverage	Performance Measure	Definition
Water supply interruptions	Planned Unplanned	Regional & Metropolitan	Water supply interruptions per 100 customers or 100km of water main	 A water supply interruption is any event causing a total loss of water supply due to any cause. An unplanned interruption means an interruption which is caused by a fault in the water business's system. A planned interruption means an interruption of supply to a customer for which the water business has provided at least 2 business days advanced notification.
Water supply interruptions restored within 3, 5 & 12 hours	Planned Unplanned	Regional & Metropolitan	% of water supply interruptions restored within 3, 5 & 12 hrs	 Where the loss of water supply is due to the shutdown of a section of water main, the water supply interruption begins when the water supply is shut off and ends when the main is fully recharged. Otherwise, the water supply interruption begins when the water supply is lost and ends when it is fully restored.
Water supply customer-interruptions	Planned Unplanned	Regional & Metropolitan	Average customer interruption frequency	A water supply customer-interruption is a loss of water supply to an individual customer due to a water supply interruption. For example, a water supply interruption which causes loss of supply to 100 customers is 100 customer-interruptions.
Customer-minutes to restore water supply (Min)	Planned Unplanned	Regional & Metropolitan	Average duration of water supply interruptions Average customer minutes off supply	The total duration of all water supply customer-interruptions. For example, a water supply interruption which causes loss of supply to 100 customers and lasts for 150 minutes counts as 15,000 customer-minutes to restore water supply.
Customers receiving 1, 2, 3, 4, 5, & 6+ water supply interruptions in year	Unplanned Planned	Regional & Metropolitan	Number of customers receiving 1, 2, 3, 4,5, & 6+ interruptions in a year as % of customers	• The number of water customers experiencing more than 1, 2, 3, 4, 5, & 6+ interruptions in the 12 months ending on the final date of the annual reporting period.
Water Pressure (Bulk Supplier)		Melbourne Water	% compliance at wholesale/retail interface	Number of sites failing "criteria" (not meeting pressure requirement for more than 30 continuous mins) divided by the total number of measured pressure sites.
Non revenue water		Regional & Metropolitan	% unaccounted for water	Unaccounted water is the difference between the volume of bulk water supplied and the volume of water billed to the water businesses customers.

Performance indicator	Split	Coverage	Performance Measure	Definition
Leakage		Regional & Metropolitan Melbourne Water		 Current annual real losses divided by the unavoidable annual real losses. Indicator should be calculated in accordance with IWA methodology. For Melbourne Water the measure is calculated as the estimated manageable losses over average yearly consumption. Total estimated manageable losses from aqueducts, reservoirs, pipes and operations divided by average yearly water supplied to retail water companies. Estimates of losses do not include evaporation, seepage or environmental flows.
Sewerage networ	k reliability and	d efficiency		
Sewer blockages	Main House Connection Branch	Regional & Metropolitan*	Sewer blockages per 100 km of sewer main	 A confirmed partial or total blockage which causes an interruption to service and/or a spill. Includes all trunk and reticulation main blockages, but excludes blockages in the service connection or house connection branch and the property drain. *Metropolitan water businesses are to include an extra category of blockages on the HCB, where it is their responsibility to maintain the service.
Total minutes to respond to reported blockage/spill (Min)		Regional & Metropolitan	Average minutes to respond to a reported blockage / spill	Average number of minutes to attend and commence rectification of a reported blockage/spill measured from the time notification is made.
Total time taken to repair blockage/ spill (Hr)		Regional & Metropolitan	Average number of hours taken to repair a blockage/spill	Average number of hours taken to repair a blockage/spill measured from the time notification is made.
Customers receiving more than 1, 2, 3, & 4+sewer blockages in year		Regional & Metropolitan	Average number of customers receiving 1, 2, 3, & 4+ sewerage blockages in a year as a % of customers	• The number of sewerage customers experiencing more than 1,2,3 & 4+ sewerage blockages in the 12 months ending on the final date of the annual reporting period.

Performance indicator	Split	Coverage	Performance Measure	Definition
Sewer spills from reticulation and branch sewers	• Priority 1&2	 Regional & Metropolitan Melbourne Water 	Number of spills	 For the purpose of this indicator, a priority one or two sewer spill is a failure to contain sewage within the sewerage system, excluding: spills from emergency relief structures (a manhole is not an emergency relief structure); pump station spills; and spills due to house connection branch blockages. Priority I spill means, a spill that results in a public health concern; significant damage to property; a discharge to a sensitive receiving environment; a discharge from a sewer pipe that is 300mm diameter or greater; or the flow is >80l/min. Priority 2 spill means any minor failure to contain sewage within the sewerage system and any spill affecting several users which results in minor property damage or results in a surcharge outside a building which does not pose a health risk.
Sewer spills from reticulation and branch sewers fully contained within 5 hours	• Priority 1&2	Regional & Metropolitan	% of sewer spills contained within 5 hrs	 A sewer spill is to be regarded as: having taken place at the time the water business becomes aware of the spill; and being fully contained when there is no longer a discharge from the containment area. Containment means the sewage spill has ceased or has been alleviated by by-pass pumping/diversions, eductions or sand bagging.
Sewer spills to customer's properties		Regional & Metropolitan	Number of spills	 A sewer spill caused by a fault in the water business's system that discharges to a customer's property. Excludes sewer spills caused by faults in the service connection or house connection branch and the property drain.

Performance indicator	Split	Coverage	Performance Measure	Definition			
Customer respon	Customer responsiveness and service						
Call connect time to operator (Sec)	Account line Fault line	 Regional & Metropolitan Melbourne Water 	Average time taken for call to be connected to operator	 The average time taken for a caller to be connected to an operator should they elect to, or be required to do so. Average time spent in getting through to an operator on the account / fault line. Measured from time the call is answered by "auto attendant" (IVR) It does not include calls that are resolved by an automated system, or hang ups. Businesses with one contact point should report the figure against the account line 			
Calls connected to operator within 30 sec	Account line Fault line	Regional & Metropolitan Melbourne Water	% of calls connected to operator within 30 seconds	 The time in which a call connected to operator begins when the call is connected to the customer service operators' phone system. Calls to account / fault line answered within 30 seconds (beginning when the call is put through to customer service operator's phone system) It does not include calls that are resolved by an automated system, or hang ups. Businesses with one contact point should report the figure against the account line. 			
Water quality complaints	ColourTaste & odourBlue waterOther	Regional & Metropolitan	Complaints as % of customers	A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water business, its employees or contractors. Complaints from separate customers arising from the same cause count as separate complaints.			
Water supply reliability complaints		Regional & Metropolitan	Complaints as % of customers	 Includes all complaints concerning bursts, leaks, and service interruptions. When a customer reports a service interruption, this is not counted as a complaint unless the customer expresses dissatisfaction about the interruption. 			
Sewerage service quality & reliability complaints		Regional & Metropolitan	Complaints as % of customers	 Includes all complaints concerning sewer blockages and spills. Complaints about trade waste services are not included in this category. When a customer reports a blockage or spill, this is not counted as a complaint unless the customer expresses dissatisfaction about the interruption. 			

Performance indicator	Split	Coverage	Performance Measure	Definition
Affordability complaints Billing complaints		Regional & Metropolitan Regional & Metropolitan	Complaints as % of customers Complaint as % of customers	 Includes all complaints concerning: financial hardship, installment plans and capacity to pay, prices and tariffs. Includes all complaints concerning: account payment, financial loss or overcharging, billing errors.
Pressure complaints Sewage odours complaints		Regional & Metropolitan Regional & Metropolitan	Complaint as % of customers Complaint as % of customers	 Includes all complaints relating to pressure and/or flow rates. Includes all complaints concerning sewage odours emanating from the business's system.
Other complaints		Regional & Metropolitan	Complaints as % of customers	 Includes complaints of quality and timeliness of other services, e.g connections, account confidentiality, responding to correspondence, and staff behavior. Complaints about trade waste services are included in this category.
Property development agreements	 Prepared works Non-prepared works Prepared works turned around in 45 business days Non-prepared works turned around in 12 business days 	Regional & Metropolitan	% of prepared works turned around in 45 business days % non-prepared works agreements turned around in 12 business days	 Prepared works means an agreement between the water business and an owner for the provision of water and sewerage facilities to a proposed development requiring the construction by the water business of reticulation assets. Non-prepared works means an agreement between the water business and an owner for the provision of water and sewerage facilities to a proposed development not requiring the construction by the water business of reticulation assets. Counting the day application received as day zero. Counted from the day that applicant satisfies all their responsibilities for application.
Information statements turned around in 5 days		Regional & Metropolitan	% information statements applications turned around within 5 days	 Counting the day request received as day zero. Counted from the day that applicant satisfies all their responsibilities for statement.

Performance indicator	Split	Coverage	Performance Measure	Definition			
Affordability	Affordability						
Instalment plans	Domestic Non-domestic	Regional & Metropolitan	% of customers on instalment plans	 Total number of instalment plans entered into during the reporting period. An instalment plan is an alternative payment arrangement (confirmed in writing) between the customer and the water business in accordance with clause 5.4 of the Customer Code A verbal extension of the payment period does not constitute an instalment plan. 			
Restrictions applied for non-payment of bill	DomesticDomestic concessionNon-domestic	Regional & Metropolitan	% of customers restricted	The total number of restrictions applied for non-payment of water bills in the reporting period.			
Legal action for non-payment of bill	DomesticDomestic concessionNon-domestic	Regional & Metropolitan	% of customers subject to legal action	The number of customer accounts forwarded to a solicitor for legal action, subjecting the customers concerned to additional costs. Cases in which accounts are forwarded to a solicitor for legal action and the legal costs to the customer are subsequently waived should be included.			
Restriction duration (Days)	Domestic	Regional & Metropolitan	% of restrictions restored within 3 days % of restrictions still in	 Number of domestic restriction for non-payment that are removed within 3 days of the restriction being applied. Number of domestic restriction for non-payment that are still in place 14 days after the restriction being applied. 			
Debt levels for customer subject to restriction and legal action (\$)	Domestic	Regional & Metropolitan	Average debt levels for customer subject to restriction or legal action	 being applied. Domestic customer debt levels are to be measured at the time action is taking to recover the debt either by legal means or by the use of restriction. 			
Hardship grants		Regional & Metropolitan	Number of hardship grant applications per 1000 customers and number of hardship grants awarded per 1000 customers	 Number of hardship assistance grant applications made under the water business's hardship policy. Number of assistance grants awarded under the water business's hardship policy. 			

Performance indicator	Split	Coverage	Performance Measure	Definition
Water conservati	on, reuse, recyc	eling	'	
Effluent reuse (ML) - End use	Volume of effluent produced (excludes evaporation) Percentage recycled for urban and industrial uses Percentage recycled for agricultural uses Percentage recycled for beneficial allocations (i.e. environmental flows) Percentage recycled within process Volume discharged to the environment (i.e. ocean outfalls or inland water discharges)	Melbourne Water Regional & Metropolitan	% of effluent reused by category	Volume reused means volume of treated sewage effluent reused. Volume of treated effluent reused means reuse undertaken in accordance with EPA published guidelines or exempted from EPA licensing on the basis of being recognised as a legitimate reuse activity. The percentage of recycling is to be calculated as: **category recycling =

Performance indicator	Split	Coverage	Performance Measure	Definition
Effluent Reuse - Water Resource Management	Volume of effluent produced	Melbourne WaterRegional & Metropolitan	Volume of effluent produced.	Effluent can be treated sewage, treated trade waste and treated greywater. Note: Water authorities are accountable for recycling from treated sewage, but will need to develop methods for estimating reuse of treated trade waste and treated greywater.
	• Volume providing Potable Water Substitution	Melbourne WaterRegional & Metropolitan	Volume of effluent reused% of effluent reused by category	Effluent, treated "fit for purpose", used for non-drinking purposes that would have previously been supplied from the drinking water supply system (for example, garden use, toilet flushing, industrial process, open space watering)
	Volume providing Raw Water Substitution	Melbourne Water Regional & Metropolitan	Volume of effluent reused% of effluent reused by category	Effluent, treated "fit for purpose", used for purposes that would have previously been supplied with raw water (i.e. surface or groundwater resources) for non-drinking purposes. For example, agriculture, water released from treatment plant to waterway for downstream water supply purposes (provided environmental requirements are met)
	Volume providing Direct Environmental Flows	Melbourne Water Regional & Metropolitan	Volume of effluent reused of of effluent reused by category	Effluent, treated "fit for purpose", discharged to waterway for environmental purposes (criteria to be developed by EPA)
	Volume providing New Water	Melbourne Water Regional & Metropolitan	Volume of effluent reused of effluent reused by category	Effluent, treated "fit for purpose", used in development in areas previously not supplied with water. Note that existing on-site reuse, not substituting traditional sources, should be classified retrospectively as New Water.
Volume of sewage spilt from emergency relief structures (ERS) and pumping stations (ML)	BlockageHydraulicExtreme wet weatherSystem failure	Melbourne Water Regional & Metropolitan	Volume of sewage spilt as a % of the volume of sewage transported.	An estimation of spill volumes may be used where direct measurement of spill volume cannot be made.

¹

EPA Victoria: Guidelines for Environmental Management: Use of Reclaimed Water.

Performance indicator	Split	Coverage	Performance Measure	Definition
Sewage treatment standards		Melbourne Water Regional & Metropolitan	Number of analyses complying with licence agreements as % of samples	 Analyses performed means the total number of EPA license compliance analyses performed on the treated effluent for all treatment plants. Analyses complying means the number of analyses complying with EPA license limits for all treatment plants. Non-compliance means the water business has not met a quantitative standard prescribed by an EPA licence (or equivalent).
CO2 Equivalent Emissions (Tonne)	 Water treatment and supply; Sewerage treatment and management; Transport (i.e. vehicles); Other (i.e. office buildings) 	Melbourne Water Regional & Metropolitan	Net tonnes CO2 - equivalents	 Net tonnes of CO2 equivalent emissions for the whole business and their activities. Conversion factors to be based on those provided by the Australian Greenhouse Office (AGO) specific to the utility's location.
Trade waste volume received	Industrial Commercial	Melbourne Water Regional & Metropolitan		The aggregated volumes of trade waste received by the water business and reported separately as a percentage of treatment facility influent for customer categories of: • industrial; • commercial customers.
Trade wastes priority parameter	Industrial Commercial	Melbourne Water Regional & Metropolitan	% of influent volume	 The annual loads of priority parameters for individual sewage treatment plants are reported. Priority parameters relevant to individual facilities are agreed with EPA at the beginning of the reporting period. Priority parameters are established on a prioritised, case by case basis where: – the parameter poses a risk to STP compliance with EPA licence; – the parameter impacts on opportunities for water recycling or biosolids recycling; or – the parameter significantly exceeds domestic sewerage quality and has a potential environmental impact associated with discharge from the STP.

Performance indicator	Split	Coverage	Performance Measure	Definition
Drinking Water (Quality		'	
Standards for drinking water quality		Regional & Metropolitan	% of population receiving water meeting standards	• Population receiving drinking water that complies with the standard for [<i>E. coli</i> , turbidity, disinfection by-products], expressed as a proportion of population receiving drinking water from that supplier.
				Disinfection by-products means trihalomethanes, monochloroacetic acid, dichloroacetic acid and trichloroacetic acid
				Non-potable (regulated) supplies are excluded from calculations.
				• "Complies with the standard" means each water sampling locality whose annual compliance results comply with the standards for <i>E. coli</i> , turbidity and disinfection by-products then the zone is weighted for population.
		Regional & Metropolitan	% of population receiving water meeting standards % water samples meeting quality standards at wholesale / retail interface	• Population receiving drinking water that complies with the standard for [<i>E. coli</i> , turbidity, disinfection by-products], expressed as a proportion of population receiving drinking water from that supplier.
		Melbourne Water		Disinfection by-products means trihalomethanes, monochloroacetic acid, dichloroacetic acid and trichloroacetic acid
				Non-potable (regulated) supplies are excluded from calculations.
				• "Complies with the standard" means each water sampling locality whose annual compliance results comply with the standards for <i>E. coli</i> , turbidity and disinfection by-products then the zone is weighted for population.
				For Melbourne Water supplies to metropolitan businesses.
				 Water quality test meeting requirements at interface points for: E. coli Turbidity Aluminium Disinfection by-products.
				Disinfection by-products means trihalomethanes, monochloroacetic acid, dichloroacetic acid and trichloroacetic acid.

Performance indicator	Split	Coverage	Performance Measure	Definition		
Waterways and drainage						
Reduction in nitrogen loads (tonnes) to Port Phillip Bay		Melbourne Water	Reduction in nitrogen loads (tonnes) to Port Phillip Bay from water quality improvement infrastructure	Design nitrogen loads are established for each wetland based on the theoretical estimates of reduction that would be achieved through the use of best practice design.		
River health		Melbourne Water	% achievement of annual targets assigned to Melbourne Water from the Regional River Health Strategy	The percentage achievement of annual targets based for each category of the Regional River Health Strategy assigned to Melbourne.		
Development applications		Melbourne Water	% of drainage development applications processed within specified timeframes	The percentage of development applications turned around within the timeframes in Melbourne Water's Operating Charter for statutory referrals, non-works offers, works offers, third party works approvals, and flood levels.		