Definitions of Terms

OWN SOURCES: the volume of water input to a water distribution system from the water supplier's own sources

WATER IMPORTED OR EXPORTED: the volumes of bulk transfers across operational boundaries

SYSTEM INPUT: the volume input to that part of the water supply system to which the water balance calculation relates, allowing for known errors. Equal to OWN SOURCES + WATER IMPORTED +/- CORRECTION for production meter error

WATER SUPPLIED: SYSTEM INPUT minus WATER EXPORTED

AUTHORIZED CONSUMPTION: volume of metered and/or unmetered water taken by registered customers, the water supplier and others who are implicitly or explicitly authorized to do so by the water supplier, for residential, commercial and industrial purposes.

Note: Authorized consumption may include items such as fire fighting and training, flushing of mains and sewers, street cleaning, watering of municipal gardens, public fountains, frost protection, building water, etc. These may be billed or unbilled, metered or unmetered

WATER LOSSES: the difference between SYSTEM INPUT and AUTHORIZED CONSUMPTION. Water losses can be considered as a total volume for the whole system, or for partial systems such as raw water mains, transmission or distribution systems, or individual zones

APPARENT LOSSES: includes all types of inaccuracies associated with customer metering, systematic error or manipulation of consumption data in billing and accounting systems, plus unauthorized consumption (theft or illegal consumption).

REAL LOSSES: physical water losses from the pressurized system, up to the point of measurement of customer consumption. The annual volume lost through all types of leaks, breaks and overflows depends on frequencies, flow rates, and average duration of individual leaks, breaks and overflows

REVENUE WATER: those components of SYSTEM INPUT which are billed and produce revenue (also known as BILLED AUTHORIZED CONSUMPTION). Equal to BILLED WATER EXPORTED, BILLED METERED CONSUMPTION and BILLED UNMETERED CONSUMPTION

NON- REVENUE WATER: those components of SYSTEM INPUT which are not billed and do not produce revenue. Equal to UNBILLED AUTHORIZED CONSUMPTION, APPARENT LOSSES and REAL LOSSES

UNBILLED AUTHORIZED CONSUMPTION: those components of AUTHORIZED CONSUMPTION which are not billed and do not produce revenue. Equal to UNBILLED METERED CONSUMPTION and UNBILLED UNMETERED CONSUMPTION

				partment - Fiscal Year 2017		
				for the reporting year; and average million		
		Water Exported	Water Exported	Water Exported	Water Exported	Billed Water Exported
		547.5	547.5	547.5	547.5	547.5
		1.5	1.5	1.5	1.5	1.5
						Billed Metered Consumption
			Authorized	Billed Authorized Consumption	Revenue Water	47,412.7 129.9
		Water	Consumption	47,412.7 129.9	47,412.7 129.9	
		Supplied	48,862.0 133.9			Billed Unmetered Consumption 0.0 0.0
	System	80,747.6				Unbilled Metered Consumption
	Input	221.2		Unbilled Authorized Consumption		0.0
				1,449.3		Unbilled Unmetered Consumption
Own	81,295.1			4.0		1,449.3 4.0
Sources	222.7					Customer Metering Inaccuracies
				Apparent Losses	Non-revenue	2,038.1 5.6
79,963.6					Water	Unauthorized Consumption
219.1				6,304.1		2,736.0 7.5
			Water	17.3	33,334.9	Systematic Data Handling Error
			Losses		91.3	1,530.0 4.2
						Leakage on Mains
			31,885.6	Real Losses		11,476.9 31.4
			87.4	25,581.5		Leakage and Overflows at Storages
Correction	Water			70.1		0.0
	Imported					Leakage on Service Connections up
-1,331.5						the point of customer metering
-3.6	0					14,104.6 38.6

16

		Volumes ran		partment - Fiscal Year 2016 for the reporting year; and average million of	nallana nar day mardi	n italia
						Billed Water Exported
		Water Exported	Water Exported	Water Exported	Water Exported	·
		547.5	547.5	547.5	547.5	547.5
		1.5	1.5	1.5	1.5	1.5
			Acadha aite a d	Billed Authorized Consumption	Revenue Water	Billed Metered Consumption 47,986.4
		Water	Authorized Consumption	47,986.4 131.5	47,986.4 131.5	131.5
		Supplied	49,333.6 135.2			Billed Unmetered Consumption 0.0 0.0
	System Input	80,916.8 <i>221.7</i>		Unbilled Authorized Consumption		Unbilled Metered Consumption 0.0 0.0
				1,347.2		Unbilled Unmetered Consumption
Own	81,464.3			3.7		1,347.2 3.7
Sources	223.2					Customer Metering Inaccuracies
				Apparent Losses	Non-revenue	2,115.2 5.8
80,746.9					Water	Unauthorized Consumption
220.6				5,724.1		2,357.3 6.5
			Water	15.7	32,930.4	Systematic Data Handling Error
			Losses		90.2	1,251.7 3.4
			31,583.2	Real Losses		Leakage on Mains
			31, 3 63.2 86.5	25,859.1		10,902.8 29.9 Leakage and Overflows at Storages
Commontica	Water		80.3			
Correction	Water			70.8		0.0 0.0 Leakage on Service Connections up
-940.6	Imported					the point of customer metering
-2.6	0					14.956.3 <i>41.0</i>

				partment - Fiscal Year 2015		
				for the reporting year; and average million		
		Water Exported	Water Exported	Water Exported	Water Exported	Billed Water Exported
		949.0	949.0	949.0	949.0	949.0
		2.6	2.6	2.6	2.6	2.6
			Authorized	Billed Authorized Consumption	Revenue Water	Billed Metered Consumption 48,891.3 133.9
		Water	Consumption	48,891.3 133.9	48,891.3 133.9	
		Supplied	50,215.5 <i>137.6</i>			Billed Unmetered Consumption 0.0 0.0
	System Input	83,275.1 228.2		Unbilled Authorized Consumption		Unbilled Metered Consumption 0.0 0.0
				1,324.2		Unbilled Unmetered Consumption
Own	84,224.1			3.6		1,324.2 3.6
Sources	230.8					Customer Metering Inaccuracies
				Apparent Losses	Non-revenue	2,085.9 5.7
83,159.7					Water	Unauthorized Consumption
227.8				5,924.1		2,060.3 5.6
			Water	16.2	34,383.8	Systematic Data Handling Error
			Losses		94.2	1,777.8 4.9
				5		Leakage on Mains
			33,059.6	Real Losses		11,745.2 32.2
			90.6	27,135.5		Leakage and Overflows at Storages
Correction	Water			74.3		0.0 0.0
4.004.4	Imported					Leakage on Service Connections up
-1,064.4 <i>-2.</i> 9	0					the point of customer metering 15,390.3 42.2

16

International Water Association - American Water Works Association Standard Water Balance for the Philadelphia Water Department - Fiscal Year 2014

	Volumes reported in million gallons for the reporting year; and average million gallons per day, mgd in italic								
		Water Exported	Water Exported	Water Exported	Water Exported	Billed Water Exported			
		5,329.0	5,329.0	5,329.0	5,329.0	5,329.0			
		14.6	14.6	14.6	14.6	14.6			
		Water	Authorized Consumption	Billed Authorized Consumption 48,384.9 132.6	Revenue Water 48,384.9 132.6	Billed Metered Consumption 48,384.9 132.6			
		Supplied	49,724.4			Billed Unmetered Consumption			
	0		136.2			0.0 0.0			
	System Input	82,054.0 224.8		Unbilled Authorized Consumption 1,339.5		Unbilled Metered Consumption 0.0 Unbilled Unmetered Consumption			
Own	87,383.0			3.7		1.339.5 3.7			
Sources	239.4			3.7		Customer Metering Inaccuracies			
Jources	239.4			Apparent Losses	Non-revenue	1,453.6 4.0			
87,360.3				Apparent Losses	Water	Unauthorized Consumption			
239.3				6,994.4	774101	1,886.5 5.2			
200.0			Water	19.2	33,669.1	Systematic Data Handling Error			
			Losses		92.2	3,654.3 10.0			
						Leakage on Mains			
			32,329.6	Real Losses		11,529.9 31.6			
			88.6	25,335.2		Leakage and Overflows at Storages			
- Correction	Water			69.4		0.0			
-22.7	Imported					Leakage on Service Connections up to the point of customer metering			
-0.1	0					13,805.3 37.8			

16

International Water Association - American Water Works Association Standard Water Balance for the Philadelphia Water Department - Fiscal Year 2013

Volumes reported in million gallons for the reporting year; and average million gallons per day, mgd in italic								
		Water Exported	Water Exported	Water Exported	Water Exported	Billed Water Exported		
		5,219.5	5,219.5	5,219.5	5,219.5	5,219.5		
		14.3	14.3	14.3	14.3	14.3		
				онивника по на принава		Billed Metered Consumption		
				Billed Authorized Consumption	Revenue Water	50,279.4		
			Authorized			137.8		
		Water	Consumption	50,279.4 137.8	50,279.4 137.8			
		Supplied	52,238.5			Billed Unmetered Consumption		
	0	04 ==0 0	143.1			0.0 0.0		
	System	81,778.6 <i>224.1</i>		Habilla d Authoriza d Communities		Unbilled Metered Consumption		
	Input	224.1		Unbilled Authorized Consumption 1,959.0		0.0 0.0 Unbilled Unmetered Consumption		
0	00 000 4							
Own Sources	86,998.1			5.4		1,959.0 5.4		
Sources	238.4			A		Customer Metering Inaccuracies		
07.004.5				Apparent Losses	Non-revenue	1,490.2 4.1		
87,964.5 241.0				7,494.9	Water	Unauthorized Consumption		
241.0			Water		24 400 2	2,425.5 6.6		
			Losses	20.5	31,499.2 <i>86.3</i>	Systematic Data Handling Error 3,579,3 9.8		
					55.0	Leakage on Mains		
			29,540.1	Real Losses		10,143.0 27.8		
			80.9	22,045.2		Leakage and Overflows at Storages		
- Correction	Water			60.4		0.0 0.0		
	Imported					Leakage on Service Connections up to		
-966.4						the point of customer metering		
-2.6	0					11,902.3 32.6		