

AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.2

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Click to access definition

Water Audit Report for: Las Vegas Valley Water District

Reporting Year: 20121/2012 - 12/2012

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources: 712,522.600Million gallons (US)/yr (MG/Yr)

Master meter error adjustment (enter positive value): 100.000under-registeredMG/Yr

Water imported: 1092,563.000MG/Yr

Water exported: 7582.200MG/Yr

WATER SUPPLIED: 104,503.400MG/Yr

AUTHORIZED CONSUMPTION

Billed metered: 799,120.700MG/Yr

Billed unmetered: 100.000MG/Yr

Unbilled metered: 92.700MG/Yr

Unbilled unmetered: 97.800MG/Yr

AUTHORIZED CONSUMPTION: 99,131.200MG/Yr

Click here: ? for help using option buttons below

Pcnt: Value: 7.800

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption) 5,372.200MG/Yr

Apparent Losses

Unauthorized consumption: 261.259MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies: 71,324.000MG/Yr

Systematic data handling errors: 7100.000MG/Yr

Apparent Losses: 1,685.259

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 3,686.942MG/Yr

WATER LOSSES: 5,372.200MG/Yr

Pcnt: Value: 0.25%1,324.000

Choose this option to enter a percentage of billed metered consumption. This is NOT a default value

NON-REVENUE WATER

NON-REVENUE WATER: 5,382.700MG/Yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains: 104,515.0miles

Number of active AND inactive service connections: 10397,526

Connection density: 88conn./mile main

Average length of customer service line: 100.0ft (pipe length between curbstop and customer meter or property boundary)

Average operating pressure: 1070.0psi

COST DATA

Total annual cost of operating water system: 10\$253,809,000\$/Year

Customer retail unit cost (applied to Apparent Losses): 8\$3.77\$/1000 gallons (US)

Variable production cost (applied to Real Losses): 9\$899.19\$/Million gallons

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied: 5.2%

Non-revenue water as percent by cost of operating system: 3.8%

Annual cost of Apparent Losses: \$6,353,425

Annual cost of Real Losses: \$3,315,261

Operational Efficiency Indicators

Apparent Losses per service connection per day: 11.61gallons/connection/day

Real Losses per service connection per day*: 25.41gallons/connection/day

Real Losses per length of main per day*: N/A

Real Losses per service connection per day per psi pressure: 0.36gallons/connection/day/psi

? Unavoidable Annual Real Losses (UARL): 2,147.61million gallons/year

From Above, Real Losses = Current Annual Real Losses (CARL): 3,686.94million gallons/year

? Infrastructure Leakage Index (ILI) [CARL/UARL]: 1.72

* only the most applicable of these two indicators will be calculated

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 83 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources

2: Water exported

3: Billed metered

For more information, click here to see the Grading Matrix worksheet

AWWA Water Loss Control Committee

Reporting Worksheet

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AWWA WLCC Free Water Audit Software: <u>Water Balance</u>				Water Audit Report For:		Report Yr:			
Copyright © 2010, American Water Works Association. All Rights Reserved.				WAS v4.2		Las Vegas Valley Water District		2012	
Own Sources (Adjusted for known errors) 12,522.600	Water Exported 582.200		Billed Water Exported						
	Authorized Consumption 99,131.200	Billed Authorized Consumption 99,120.700	Billed Metered Consumption (inc. water exported) 99,120.700				Revenue Water		
			Billed Unmetered Consumption 0.000				99,120.700		
		Unbilled Authorized Consumption 10.500	Unbilled Metered Consumption 2.700				Non-Revenue Water (NRW) 5,382.700		
			Unbilled Unmetered Consumption 7.800						
	Water Supplied 104,503.400	Apparent Losses 1,685.259	Unauthorized Consumption 261.259						
			Customer Metering Inaccuracies 1,324.000						
			Systematic Data Handling Errors 100.000						
	Water Losses 5,372.200	Real Losses 3,686.942	Leakage on Transmission and/or Distribution Mains Not broken down						
			Leakage and Overflows at Utility's Storage Tanks Not broken down						
			Leakage on Service Connections Not broken down						
Water Imported 92,563.000									