

AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.2

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Water Audit Report for: Effingham County - SW
Reporting Year: 2013 / 1/2013 - 12/2013

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:	?	n/a	0.000	Million gallons (US)/yr (MG/Yr)
Master meter error adjustment (enter positive value):	?	8	0.000	under-registered MG/Yr
Water imported:	?	9	587.956	MG/Yr
Water exported:	?	9	15.137	MG/Yr
WATER SUPPLIED:			572.819	MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	?	7	363.101	MG/Yr
Billed unmetered:	?	n/a	0.000	MG/Yr
Unbilled metered:	?	7	189.512	MG/Yr
Unbilled unmetered:	?	6	0.100	MG/Yr
AUTHORIZED CONSUMPTION:			552.713	MG/Yr

Click here: [?](#)
for help using option buttons below

Pcnt: Value:

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption)

20.106 MG/Yr

Apparent Losses

Unauthorized consumption: [?](#) 1.432 MG/Yr

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

Customer metering inaccuracies:	?	7	3.678	MG/Yr
Systematic data handling errors:	?	6	0.100	MG/Yr

Apparent Losses: [?](#) 5.210

Pcnt: Value:

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

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: [?](#) 14.896 MG/Yr

WATER LOSSES: 20.106 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: [?](#) 209.718 MG/Yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	?	5	58.6	miles
Number of active AND inactive service connections:	?	7	2,050	
Connection density:			35	conn./mile main
Average length of customer service line:	?	10	0.0	ft (pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	?	3	45.0	psi

COST DATA

Total annual cost of operating water system:	?	5	\$1,283,995	\$/Year
Customer retail unit cost (applied to Apparent Losses):	?	8	\$1.55	\$/1000 gallons (US)
Variable production cost (applied to Real Losses):	?	10	\$1,222.56	\$/Million gallons

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	36.6%
Non-revenue water as percent by cost of operating system:	20.1%
Annual cost of Apparent Losses:	\$8,050
Annual cost of Real Losses:	\$18,211

Operational Efficiency Indicators

Apparent Losses per service connection per day:	6.96	gallons/connection/day
Real Losses per service connection per day*:	19.91	gallons/connection/day
Real Losses per length of main per day*:	N/A	
Real Losses per service connection per day per psi pressure:	0.44	gallons/connection/day/psi
? Unavoidable Annual Real Losses (UARL):	10.26	million gallons/year
From Above, Real Losses = Current Annual Real Losses (CARL):	14.90	million gallons/year
? Infrastructure Leakage Index (ILI) [CARL/UARL]:	1.45	

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

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 77 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: Total annual cost of operating water system
- 2: Billed metered
- 3: Water imported

[For more information, click here to see the Grading Matrix worksheet](#)

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				Effingham County - SW	2013
Own Sources (Adjusted for known errors) 0.000	Water Exported 15.137	Billed Water Exported			
	Authorized Consumption 552.713	Billed Authorized Consumption 363.101	Billed Metered Consumption (inc. water exported) 363.101	Revenue Water 363.101	
			Billed Unmetered Consumption 0.000		
	Water Supplied 572.819	Unbilled Authorized Consumption 189.612	Unbilled Metered Consumption 189.512	Non-Revenue Water (NRW) 209.718	
			Unbilled Unmetered Consumption 0.100		
			Unauthorized Consumption 1.432		
	Water Losses 20.106	Apparent Losses 5.210	Customer Metering Inaccuracies 3.678		
			Systematic Data Handling Errors 0.100		
			Leakage on Transmission and/or Distribution Mains Not broken down		
	Water Imported 587.956	Real Losses 14.896	Leakage and Overflows at Utility's Storage Tanks Not broken down		
Leakage on Service Connections Not broken down					