

APPENDIX D. AWWA WATER LOSS AUDIT

WAS v5.0
 American Water Works Association
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AWWA Free Water Audit Software: Reporting Worksheet

Water Audit Report for: **City of Grover Beach (CA4010004)**
 Reporting Year: **2015** 1/2015 - 12/2015

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 (n/a or 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: ACRE-FEET PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED		Enter grading in column 'E' and 'J'		Master Meter and Supply Error Adjustments	
Volume from own sources:	+ ? 8	474.810	acre-ft/yr	Pcnt:	2 -0.40%
Water imported:	+ ? 7	777.250	acre-ft/yr	Value:	7 -0.40%
Water exported:	+ ? n/a	0.000	acre-ft/yr		
WATER SUPPLIED:		1,257.088	acre-ft/yr	Enter negative % or value for under-registration Enter positive % or value for over-registration	

AUTHORIZED CONSUMPTION				Click here: ? for help using option buttons below	
Billed metered:	+ ? 8	1,125.110	acre-ft/yr	Pcnt:	1.25%
Billed unmetered:	+ ? 8	0.000	acre-ft/yr	Value:	
Unbilled metered:	+ ? 8	0.150	acre-ft/yr		
Unbilled unmetered:	+ ? 6	15.714	acre-ft/yr		
Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed					
AUTHORIZED CONSUMPTION:		1,140.974	acre-ft/yr	Use buttons to select percentage of water supplied OR value	

WATER LOSSES (Water Supplied - Authorized Consumption)				Click here: ? for help using option buttons below	
Apparent Losses					
Unauthorized consumption:	+ ?	3.143	acre-ft/yr	Pcnt:	0.25%
Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed					
Customer metering inaccuracies:	+ ? 6	2.820	acre-ft/yr	Value:	
Systematic data handling errors:	+ ? 5	2.813	acre-ft/yr		
Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed					
Apparent Losses:		8.776	acre-ft/yr	Use buttons to select percentage of water supplied OR value	
Real Losses (Current Annual Real Losses or CARRL)					
Real Losses = Water Losses - Apparent Losses:	?	107.339	acre-ft/yr		
WATER LOSSES:		116.115	acre-ft/yr		

NON-REVENUE WATER			
NON-REVENUE WATER:		131.978	acre-ft/yr
= Water Losses + Unbilled Metered + Unbilled Unmetered			

SYSTEM DATA			
Length of mains:	+ ? 6	63.0	miles
Number of active AND inactive service connections:	+ ? 8	5,295	
Service connection density:	?	84	conn./mile main
Are customer meters typically located at the curbside or property line? <input type="checkbox"/> Yes (length of service line, beyond the property boundary, that is the responsibility of the utility)			
Average length of customer service line has been set to zero and a data grading score of 10 has been applied			
Average operating pressure:	+ ? 5	60.0	psi

COST DATA			
Total annual cost of operating water system:	+ ? 8	\$4,234,794	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+ ? 8	\$4.65	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	+ ? 8	\$3.35	\$/acre-ft
Use Customer Retail Unit Cost to value real			

WATER AUDIT DATA VALIDITY SCORE:
***** YOUR SCORE IS: 66 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: Water imported
- 2: Volume from own sources
- 3: Billed metered