

[?](#) Click to access definition

Water Audit Report for: **Lake Arrowhead CSD**

Reporting Year: **2011** 7/2010 - 6/2011

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: ACRE-FEET PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	<input type="text" value="7"/>	<input type="text" value="1,733.800"/>	acre-ft/yr
Master meter error adjustment (enter positive value):	<input type="text" value="n/a"/>	<input type="text" value="under-registered"/>	acre-ft/yr
Water imported:	<input type="text" value="8"/>	<input type="text" value="3.870"/>	acre-ft/yr
Water exported:	<input type="text" value="n/a"/>	<input type="text" value=""/>	acre-ft/yr
WATER SUPPLIED:		1,737.670	acre-ft/yr

AUTHORIZED CONSUMPTION

Billed metered:	<input type="text" value="9"/>	<input type="text" value=""/>	acre-ft/yr
Billed unmetered:	<input type="text" value="n/a"/>	<input type="text" value=""/>	acre-ft/yr
Unbilled metered:	<input type="text" value="10"/>	<input type="text" value="4.310"/>	acre-ft/yr
Unbilled unmetered:	<input type="text" value="5"/>	<input type="text" value="21.721"/>	acre-ft/yr
Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed			
AUTHORIZED CONSUMPTION:		26.031	acre-ft/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)

1,711.639 acre-ft/yr

Apparent Losses

Unauthorized consumption:	<input type="text" value="5"/>	<input type="text" value="4.344"/>	acre-ft/yr
Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed			
Customer metering inaccuracies:	<input type="text" value="7"/>	<input type="text" value="0.000"/>	acre-ft/yr
Systematic data handling errors:	<input type="text" value="5"/>	<input type="text" value="2.000"/>	acre-ft/yr
Apparent Losses:		6.344	

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:	<input type="text" value=""/>	1,705.295	acre-ft/yr
WATER LOSSES:		1,711.639	acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: **1,737.670** acre-ft/yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	<input type="text" value="10"/>	<input type="text" value="125.0"/>	miles
Number of active AND inactive service connections:	<input type="text" value="9"/>	<input type="text" value="8,314"/>	
Connection density:		<input type="text" value="67"/>	conn./mile main
Average length of customer service line:	<input type="text" value="10"/>	<input type="text" value=""/>	ft (pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	<input type="text" value="8"/>	<input type="text" value="89.5"/>	psi

COST DATA

Total annual cost of operating water system:	<input type="text" value="10"/>	<input type="text" value="\$5,853,414"/>	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<input type="text" value="7"/>	<input type="text" value="\$/100 cubic feet (ccf)"/>	
Variable production cost (applied to Real Losses):	<input type="text" value="10"/>	<input type="text" value="\$/acre-ft/yr"/>	

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	<input type="text" value="100.0%"/>
Non-revenue water as percent by cost of operating system:	<input type="text" value="0.0%"/>
Annual cost of Apparent Losses:	<input type="text" value="\$0"/>
Annual cost of Real Losses:	<input type="text" value=""/>

Operational Efficiency Indicators

Apparent Losses per service connection per day:	<input type="text" value="0.68"/>	gallons/connection/day
Real Losses per service connection per day*:	<input type="text" value="183.11"/>	gallons/connection/day
Real Losses per length of main per day*:	<input type="text" value="N/A"/>	
Real Losses per service connection per day per psi pressure:	<input type="text" value="2.05"/>	gallons/connection/day/psi
<input type="text" value="5"/> Unavoidable Annual Real Losses (UARL):	<input type="text" value="62.83"/>	million gallons/year
From Above, Real Losses = Current Annual Real Losses (CARL):	<input type="text" value="1,705.29"/>	million gallons/year
<input type="text" value="5"/> Infrastructure Leakage Index (ILI) [CARL/UARL]:	<input type="text" value="8.84"/>	

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

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 79 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: Unauthorized consumption**
- 3: Systematic data handling errors**

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