



## AWWA Free Water Audit Software: Worksheet

FWAS v6.0

American Water Works Association.

Water Audit Report for: **VEOLIA - Dallas**  
 Audit Year: **2023** | **Jan 01 2023 - Dec 31 2023** | **2023**

Click 'n' to add notes | Click 'g' to determine data validity grade | To edit water system info: [go to start page](#)

To access definitions, click the [input name](#)

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

Water Supplied Error Adjustments

choose entry option:

### WATER SUPPLIED

VOS	Volume from Own Sources:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="7"/>	<input type="text" value="172.447"/>	MG/Yr	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="4"/>	<input type="text" value="percent"/>	
WI	Water Imported:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="7"/>	<input type="text" value="4.995"/>	MG/Yr	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="4"/>	<input type="text" value="percent"/>	VOSEA
WE	Water Exported:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="n/a"/>		MG/Yr					WIEA
											WEEA

**WATER SUPPLIED: 177.442 MG/Yr**

### AUTHORIZED CONSUMPTION

BMAC	Billed Metered:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="8"/>	<input type="text" value="119.714"/>	MG/Yr				
BUAC	Billed Unmetered:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="n/a"/>		MG/Yr				
UMAC	Unbilled Metered:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="n/a"/>		MG/Yr				
UUAC	Unbilled Unmetered:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="4"/>	<input type="text" value="0.723"/>	MG/Yr				

choose entry option:   MG/Yr

**AUTHORIZED CONSUMPTION: 120.437 MG/Yr**

### WATER LOSSES

#### Apparent Losses

Default option selected for Systematic Data Handling Errors, with automatic data grading of 3

SDHE	Systematic Data Handling Errors:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="3"/>	<input type="text" value="0.299"/>	MG/Yr	<input type="text" value="0.25%"/>	<input type="text" value="default"/>		
CMI	Customer Metering Inaccuracies:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="3"/>	<input type="text" value="1.196"/>	MG/Yr		<input type="text" value="volume"/>	<input type="text" value="1.196"/>	MG/Yr
UC	Unauthorized Consumption:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="1"/>	<input type="text" value="0.444"/>	MG/Yr		<input type="text" value="custom"/>	<input type="text" value="0.444"/>	MG/Yr

**Apparent Losses: 1.939 MG/Yr**

under-registration

#### Real Losses

**Real Losses: 55.066 MG/Yr**

**WATER LOSSES: 57.005 MG/Yr**

### NON-REVENUE WATER

**NON-REVENUE WATER: 57.728 MG/Yr**

### SYSTEM DATA

Lm	Length of mains:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="8"/>	<input type="text" value="37.4"/>	miles				(including fire hydrant lead lengths)
Nc	Number of service connections:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="8"/>	<input type="text" value="2,282"/>					(active and inactive)
	Service connection density:				<input type="text" value="61"/>	conn./mile main				

Are customer meters typically located at the curbstop/property line?

Lp	Average length of (private) customer service line:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="7"/>	<input type="text" value="75.0"/>	ft				(average distance between property line and meter)
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AOP Average Operating Pressure:     psi

### COST DATA

CRUC	Customer Retail Unit Charge:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="5"/>	<input type="text" value="\$8.24"/>	\$/1000 gallons (US)				
VPC	Variable Production Cost:	<input type="text" value="n"/>	<input type="text" value="g"/>	<input type="text" value="3"/>	<input type="text" value="\$588.30"/>	\$/Million gallons				<b>Total Annual Operating Cost</b>
										<input type="text" value="\$21,312,543"/> \$/yr (optional input)

### WATER AUDIT DATA VALIDITY TIER:

**\*\*\* The Water Audit Data Validity Score is in Tier III (51-70). See Dashboard tab for additional outputs. \*\*\***

[go to dashboard](#)

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

#### PRIORITY AREAS FOR ATTENTION TO IMPROVE DATA VALIDITY:

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

- 1: Volume from Own Sources (VOS)
- 2: Customer Metering Inaccuracies (CMI)
- 3: Variable Production Cost (VPC)

#### KEY PERFORMANCE INDICATOR TARGETS:

OPTIONAL: If targets exist for the operational performance indicators, they can be input below:

Unit Total Losses:	<input type="text"/>	gal/conn/day
Unit Apparent Losses:	<input type="text"/>	gal/conn/day
Unit Real Losses <sup>A</sup> :	<input type="text"/>	gal/conn/day
Unit Real Losses <sup>B</sup> :	<input type="text"/>	gal/mile/day

If entered above by user, targets will display on KPI gauges (see Dashboard)