



AWWA Free Water Audit Software: Worksheet

FWAS v6.1
American Water Works Association.
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Water Audit Report for: **Roosevelt Borough Water System**
 Audit Year: **2025** | **Jan 01 2025 - Dec 31 2025** | **Calendar**

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="4"/>	<input type="text" value="20.019"/>	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"/> n/a	<input type="text" value="0.000"/>	MG/Yr			
WE	Water Exported:	<input type="text" value="n"/> <input type="text" value="g"/> n/a	<input type="text" value="0.000"/>	MG/Yr			
WATER SUPPLIED:			20.019	MG/Yr			

VOSEA
WIEA
WEEA

AUTHORIZED CONSUMPTION							
BMAC	Billed Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="5"/>	<input type="text" value="14.396"/>	MG/Yr			
BUAC	Billed Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> n/a	<input type="text" value="0.000"/>	MG/Yr			
UMAC	Unbilled Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="4"/>	<input type="text" value="3.361"/>	MG/Yr			
UUAC	Unbilled Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="0.036"/>	MG/Yr			
AUTHORIZED CONSUMPTION:			17.793	MG/Yr			

Default option selected for Unbilled Unmetered, with automatic data grading of 3

choose entry option:

WATER LOSSES **2.226** MG/Yr

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="0.036"/>	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="0.000"/>	MG/Yr	<input type="text" value="percent"/>		<input type="text" value="under-registration"/>
UC	Unauthorized Consumption:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="0.036"/>	MG/Yr	<input type="text" value="0.25%"/> <input type="text" value="default"/>		
Default option selected for Unauthorized Consumption, with automatic data grading of 3							
Apparent Losses:			0.072	MG/Yr			

Real Losses **Real Losses:** 2.154 MG/Yr

WATER LOSSES: 2.226 MG/Yr

NON-REVENUE WATER **NON-REVENUE WATER:** 5.623 MG/Yr

SYSTEM DATA							
Lm	Length of mains:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="6"/>	<input type="text" value="4.8"/>	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="6"/>	<input type="text" value="305"/>		(active and inactive)		
	Service connection density:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="6"/>	<input type="text" value="64"/>	conn./mile main			
Lp	Are customer meters typically located at the curbstop/property line?	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="10"/>	<input type="text" value="Yes"/>				
Average length of customer service line has been set to zero and a data grading of 10 has been applied							
AOP	Average Operating Pressure:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="5"/>	<input type="text" value="45.0"/>	psi			

COST DATA							
CRUC	Customer Retail Unit Charge:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="9"/>	<input type="text" value="\$13.11"/>	\$/1000 gallons (US)	Total Annual Operating Cost		
VPC	Variable Production Cost:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="\$9,427.16"/>	\$/Million gallons	<input type="text" value="\$188,718"/>	\$/yr (optional input)	

Click here to calculate carbon emissions ---> [carbon](#)

WATER AUDIT DATA VALIDITY TIER:

*** The Water Audit Data Validity Score is in Tier II (26-50). 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: Billed Metered (BMAC)
- 3: Customer Metering Inaccuracies (CMI)

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 ^u :	<input type="text"/>	gal/conn/day
Unit Real Losses ^p :	<input type="text"/>	gal/mile/day

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