



## AWWA Free Water Audit Software: Worksheet

FWAS v6.0  
American Water Works Association  
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Water Audit Report for: **Roosevelt Borough Water System**  
 Audit Year: **2024** **Jan 01 2024 - Dec 31 2024** **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:

<b>WATER SUPPLIED</b>							
VOS	Volume from Own Sources:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="4"/>	<input type="text" value="24.278"/>	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="n/a"/>	MG/Yr			VOSEA
WE	Water Exported:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr			WIEA
			<input type="text" value="0.000"/>	MG/Yr			WEEA
<b>WATER SUPPLIED:</b>			<input type="text" value="24.278"/>	MG/Yr			

<b>AUTHORIZED CONSUMPTION</b>							
BMAC	Billed Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	<input type="text" value="15.689"/>	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="4"/>	<input type="text" value="4.779"/>	MG/Yr			
UUAC	Unbilled Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="0.039"/>	MG/Yr			
			<input type="text" value="0.039"/>	MG/Yr			
Default option selected for Unbilled Unmetered, with automatic data grading of 3							
<b>AUTHORIZED CONSUMPTION:</b>			<input type="text" value="20.507"/>	MG/Yr			

<b>WATER LOSSES</b>			<input type="text" value="3.770"/>	MG/Yr			
<b>Apparent Losses</b>							
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="0.039"/>	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="n/a"/>	MG/Yr			<input type="text" value="percent"/>
UC	Unauthorized Consumption:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="0.039"/>	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							
<b>Apparent Losses:</b>			<input type="text" value="0.078"/>	MG/Yr			

<b>Real Losses</b>							
<b>Real Losses:</b>			<input type="text" value="3.692"/>	MG/Yr			
<b>WATER LOSSES:</b>			<input type="text" value="3.770"/>	MG/Yr			

<b>NON-REVENUE WATER</b>			<input type="text" value="8.589"/>	MG/Yr			
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<b>SYSTEM DATA</b>							
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="304"/>		(active and inactive)		
	Service connection density:		<input type="text" value="63"/>	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"/>				
AOP	Average length of customer service line has been set to zero and a data grading of 10 has been applied						
	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			

<b>COST DATA</b>							
CRUC	Customer Retail Unit Charge:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="9"/>	<input type="text" value="\$14.89"/>	\$/1000 gallons (US)	<b>Total Annual Operating Cost</b>		
VPC	Variable Production Cost:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="\$9,624.24"/>	\$/Million gallons	<input type="text" value="\$233,654"/>	\$/yr (optional input)	

**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

<b>PRIORITY AREAS FOR ATTENTION TO IMPROVE DATA VALIDITY:</b>	<b>KEY PERFORMANCE INDICATOR TARGETS:</b>
Based on the information provided, audit reliability can be most improved by addressing the following components:	OPTIONAL: If targets exist for the operational performance indicators, they can be input below:
<b>1: Volume from Own Sources (VOS)</b>	Unit Total Losses: <input type="text" value=""/>
<b>2: Customer Metering Inaccuracies (CMI)</b>	Unit Apparent Losses: <input type="text" value=""/>
<b>3: Variable Production Cost (VPC)</b>	Unit Real Losses <sup>A</sup> : <input type="text" value=""/>
	Unit Real Losses <sup>B</sup> : <input type="text" value=""/>

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