



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: **2022** | **Jan 01 2022 - Dec 31 2022** | **Calendar**

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

Click 'n' to add notes
 Click 'g' to determine data validity grade
 All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To edit water system info: [go to start page](#)

Water Supplied Error Adjustments

choose entry option:

VOS	Volume from Own Sources:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="4"/>	24.214	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	0.000	MG/Yr			
WE	Water Exported:	<input type="text" value="n"/> <input type="text" value="g"/> n/a	0.000	MG/Yr			
WATER SUPPLIED:			24.214	MG/Yr			

VOSEA
WIEA
WEEA

AUTHORIZED CONSUMPTION

BMAC	Billed Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	15.944	MG/Yr			
BUAC	Billed Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> n/a	0.000	MG/Yr			
UMAC	Unbilled Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="4"/>	3.914	MG/Yr			
UUAC	Unbilled Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	0.040	MG/Yr			
					choose entry option:		
					<input type="text" value="0.25%"/> <input type="text" value="default"/>		
				Default option selected for Unbilled Unmetered, with automatic data grading of 3			
AUTHORIZED CONSUMPTION:			19.898	MG/Yr			

WATER LOSSES

4.316 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"/>	0.040	MG/Yr			
CMI	Customer Metering Inaccuracies:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	0.000	MG/Yr			
UC	Unauthorized Consumption:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	0.040	MG/Yr			
				Default option selected for Unauthorized Consumption, with automatic data grading of 3			
Apparent Losses:			0.080	MG/Yr			

choose entry option:

under-registration

Real Losses

Real Losses: **4.237** MG/Yr

WATER LOSSES: **4.316** MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: **8.270** MG/Yr

SYSTEM DATA

Lm	Length of mains:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="6"/>	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"/>	303		(active and inactive)		
	Service connection density:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="6"/>	63	conn./mile main			
Lp	Are customer meters typically located at the curbside/property line?	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="10"/>	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"/>	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"/>	\$12.64	\$/1000 gallons (US)		
VPC	Variable Production Cost:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	\$8,322.05	\$/Million gallons	Total Annual Operating Cost	
					\$201,509	\$/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

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: gal/conn/day
 Unit Apparent Losses: gal/conn/day
 Unit Real Losses^A: gal/conn/day
 Unit Real Losses^B: gal/mile/day

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