



AWWA Free Water Audit Software: Worksheet

FWAS v6.0
American Water Works Association.
Copyright © 2020, All Rights Reserved.

Water Audit Report for: **Roosevelt Borough Water System**
 Audit Year: **2021** | **Jan 01 2021 - Dec 31 2021** | **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"/>	23.044	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			VOSEA
WE	Water Exported:	<input type="text" value="n"/> <input type="text" value="g"/> n/a	0.000	MG/Yr			WIEA WEEA
WATER SUPPLIED:			23.044	MG/Yr			

AUTHORIZED CONSUMPTION

BMAC	Billed Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="5"/>	14.588	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"/>	4.722	MG/Yr			
UUAC	Unbilled Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	0.036	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:			19.346	MG/Yr			

WATER LOSSES

Apparent Losses

Default option selected for Systematic Data Handling Errors, with automatic data grading of 3					choose entry option:		
SDHE	Systematic Data Handling Errors:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	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"/>	0.000	MG/Yr	<input type="text" value="percent"/>	under-registration	
UC	Unauthorized Consumption:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	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:			0.073	MG/Yr			

Real Losses

Real Losses: **3.625** MG/Yr
WATER LOSSES: **3.698** MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: **8.456** 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:		63	conn./mile main			
	Are customer meters typically located at the curbstop/property line?	<input type="text" value="Yes"/>					
Lp	Average length of customer service line has been set to zero and a data grading of 10 has been applied	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="10"/>					
AOP	Average Operating Pressure:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	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"/>	\$10.18	\$/1000 gallons (US)			
VPC	Variable Production Cost:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="1"/>	\$6,446.19	\$/Million gallons			
					Total Annual Operating Cost		
					<input type="text" value="\$148,545"/> \$/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: Billed Metered (BMAC)
- 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 ^A :	<input type="text"/>	gal/conn/day
Unit Real Losses ^B :	<input type="text"/>	gal/mile/day

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