



3/29/2021

Newtown Artesian Water Company 2020 Water Audit

Attached with this letter is the completed 2020 water audit for Newtown Artesian Water Company, DRBC docket number D-1978-029 CP-4.

If any more information is needed or if there are any questions regarding this information please contact me.

Thank you,

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AWWA Free Water Audit Software: Worksheet

FWAS v6.0
American Water Works Association.
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Water Audit Report for: **Newtown Artesian Water Company**
Audit Year: **2020** Jan 01 2020 - Dec 31 2020 Calendar

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

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
WI
WE

Volume from Own Sources:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	282.023	MG/Yr	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="8"/>	0.09%	percent
Water Imported:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	443.133	MG/Yr	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="9"/>	0.50%	percent
Water Exported:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="n/a"/>	0.000	MG/Yr			

VOSEA
 WIEA
WEEA

WATER SUPPLIED: 727.129 MG/Yr

AUTHORIZED CONSUMPTION

BMAC
BUAC
UMAC
UUAC

Billed Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	710.385	MG/Yr			
Billed Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="n/a"/>	0.000	MG/Yr			
Unbilled Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="2"/>	3.640	MG/Yr			
Unbilled Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	1.776	MG/Yr			

choose entry option:

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

AUTHORIZED CONSUMPTION: 715.801 MG/Yr

WATER LOSSES

11.328 MG/Yr

Apparent Losses

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

choose entry option:

SDHE
CMI
UC

Systematic Data Handling Errors:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	1.776	MG/Yr	<input type="text" value="0.25%"/> <input type="text" value="default"/>
Customer Metering Inaccuracies:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="8"/>	3.588	MG/Yr	<input type="text" value="0.50%"/> <input type="text" value="percent"/>
Unauthorized Consumption:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	1.776	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: 7.140 MG/Yr

Real Losses

Real Losses: 4.188 MG/Yr

WATER LOSSES: 11.328 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 16.744 MG/Yr

SYSTEM DATA

Lm
Nc
Lp
AOP

Length of mains:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="8"/>	129.6	miles	(including fire hydrant lead lengths)
Number of service connections:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="10"/>	10,550		(active and inactive)
Service connection density:		81	conn./mile main	

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

Average length of (private) customer service line: 50.0 ft (average distance between property line and meter)

Average Operating Pressure: 71.0 psi

COST DATA

CRUC
VPC

Customer Retail Unit Charge:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="9"/>	\$6.90	\$/1000 gallons (US)	Total Annual Operating Cost
Variable Production Cost:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="8"/>	\$2,486.60	\$/Million gallons	

WATER AUDIT DATA VALIDITY TIER:

*** The Water Audit Data Validity Score is in Tier IV (71-90). 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: Water Imported (WI)
- 2: Billed Metered (BMAC)
- 3: Volume from Own Sources (VOS)

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 ¹ :	<input type="text"/>	gal/conn/day
Unit Real Losses ² :	<input type="text"/>	gal/mile/day

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