D

Appendix D: AWWA Water Audits

A	WWA Free	e Water Audit So	oftware:	WAS v5.0			
		orting Workshee					
Click to access definition **Click to add a comment* Click to add a comment* Click to add a comment* Reporting Year:		icipal Water District (7/2015 - 6/2016	3310009 SRO)				
Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades							
	All volumes to be entered as: ACRE-FEET PER YEAR						
To select the correct data grading for each input, del	`	•	in antoneo (El and I II	Master Meter and Supply Error Adjustments			
WATER SUPPLIED Volume from own sources:	+ ? 5	39,038.703	in column 'E' and 'J'	> Pcnt: Value: 5			
Water imported: Water exported:	+ ? 5	47,433.023 12,382.642	acre-ft/yr + ?	2			
WATER SUPPLIED:		74,089.084	acre-ft/yr	Enter negative % or value for under-registration Enter positive % or value for over-registration			
AUTHORIZED CONSUMPTION	 -			Click here:			
Billed metered:	+ ? 8	65,197.120		for help using option			
Billed unmetered: Unbilled metered:	+ ? n/a + ? n/a		acre-ft/yr acre-ft/yr	buttons below Pcnt: Value:			
Unbilled unmetered:	+ ? 6		acre-ft/yr	○ ② 27.360 acre-ft/yr			
AUTHORIZED CONSUMPTION:	?	65,224.480	acre-ft/yr	Use buttons to select percentage of water supplied OR value			
WATER LOSSES (Water Supplied - Authorized Consumption)		8,864.604	acre-ft/yr	Pcnt: Value:			
Apparent Losses Unauthorized consumption:	+ ?	185.223	acre-ft/yr	0.25%			
Default option selected for unauthorized cons	sumption - a g	grading of 5 is applied	but not displayed				
Customer metering inaccuracies: Systematic data handling errors:			acre-ft/yr acre-ft/yr	1.00% ● ○ acre-ft/yr 0.25% ● ○ acre-ft/yr			
Default option selected for Systematic data							
Apparent Losses:	?	1,006.772	acre-ft/yr				
Real Losses (Current Annual Real Losses or CARL)							
Real Losses = Water Losses - Apparent Losses:	?	7,857.832	•				
Real Losses = Water Losses - Apparent Losses: WATER LOSSES:	?	7,857.832 8,864.604	•				
WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER:	?	-	acre-ft/yr				
WATER LOSSES: NON-REVENUE WATER	=	8,864.604	acre-ft/yr				
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains:	? 9	8,891.964 8,891.964	acre-ft/yr				
WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER: = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA	? 9	8,891.964 8,891.964 2,576.0 154,989	acre-ft/yr				
WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER: = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line?	? 9 + ? 8	8,891.964 8,891.964 2,576.0 154,989	acre-ft/yr acre-ft/yr miles conn./mile main (length of service lin	ie, <u>beyond</u> the property boundary,			
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line:	? + ? 9 + ? 8	8,891.964 2,576.0 154,989 60 Yes	acre-ft/yr miles conn./mile main (length of service lin that is the responsite				
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WATER LOSSES: NON-REVENUE WATER SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line: Average length of customer service line has been s Average operating pressure: COST DATA	? 9 + ? 8 + ? set to zero an: + ? 5	8,864.604 8,891.964 2,576.0 154,989 60 Yes d a data grading score 74.0 \$111,535,107 \$3.75	acre-ft/yr miles conn./mile main (length of service lir that is the responsible of 10 has been applied psi \$/Year \$/100 cubic feet (ccf)				
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WATER LOSSES: NON-REVENUE WATER - Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been s Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): WATER AUDIT DATA VALIDITY SCORE:	? 9 + ? 9 + ? 8 - 2 et to zero an + ? 5	8,864.604 8,891.964 2,576.0 154,989 60 Yes d a data grading score 74.0 \$111,535,107 \$3.75	acre-ft/yr miles conn./mile main (length of service linthat is the responsite of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft Use Co	vility of the utility)			
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WATER LOSSES: NON-REVENUE WATER - Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains:	? + ? 9 + ? 8	8,864.604 8,891.964 2,576.0 154,989 60 Yes d a data grading score 74.0 \$111,535,107 \$3.75 \$872.75	acre-ft/yr miles conn./mile main (length of service lir that is the responsite of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	istomer Retail Unit Cost to value real losses			
NON-REVENUE WATER - Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line: Average length of customer service line has been s Average length of customer service line has been s Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): WATER AUDIT DATA VALIDITY SCORE: * A weighted scale for the components of consumpriority AREAS FOR ATTENTION: Based on the information provided, audit accuracy can be improved by addressing	? + ? 9 + ? 8	8,864.604 8,891.964 2,576.0 154,989 60 Yes d a data grading score 74.0 \$111,535,107 \$3.75 \$872.75	acre-ft/yr miles conn./mile main (length of service lir that is the responsite of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	istomer Retail Unit Cost to value real losses			
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Ш	Repo	orting Workshee	<u>t</u>	American Water Works Associatio		
Click to access definition Water Audit Report for: Reporting Year:	stern Muni 2017	icipal Water District (3 7/2016 - 6/2017	3310009 SRO)			
Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades All volumes to be entered as: ACRE-FEET PER YEAR						
To select the correct data grading for each input, determ			EEI FER TEAR			
WATER SUPPLIED	_		in column 'E' and 'J'	Master Meter and Supply Error Adjustments -> Pcnt: Value:		
Volume from own sources:	? 6	36,847.860		3 acre-ft/yr		
Water imported: • Water exported: •	? 6	54,030.710 14,032.420		2 acre-ft/yr 3 acre-ft/yr Enter negative % or value for under-registration		
WATER SUPPLIED:		76,846.150	acre-ft/yr	Enter negative % or value for over-registration		
AUTHORIZED CONSUMPTION				Click here:		
Billed metered: Billed unmetered: **The company of the company	? 7 ? n/a	70,593.100	acre-ft/yr acre-ft/yr	for help using option buttons below		
Unbilled metered:	? n/a		acre-ft/yr	Pcnt: Value:		
Unbilled unmetered: +	? 5	32.040	acre-ft/yr	○ 32.040 acre-ft/yr		
AUTHORIZED CONSUMPTION:	?	70,625.140	acre-ft/yr	Use buttons to select percentage of water supplied OR value		
WATER LOSSES (Water Supplied - Authorized Consumption) Apparent Losses		6,221.010	acre-ft/yr	Pcnt: Value:		
Unauthorized consumption:	?	192.115	acre-ft/yr	0.25%		
Default option selected for unauthorized consum	nption - a g	grading of 5 is applied	but not displayed			
Customer metering inaccuracies: * Systematic data handling errors: +			acre-ft/yr acre-ft/yr	0.50%		
Default option selected for Systematic data ha			•			
Apparent Losses:	?	723.337	acre-ft/yr			
Real Losses (Current Annual Real Losses or CARL)						
Real Losses = Water Losses - Apparent Losses:	?	5,497.673	•			
WATER LOSSES:		6,221.010	acre-ft/yr			
NON-REVENUE WATER NON-REVENUE WATER:	?	6,253.050	acre-ft/yr			
= Water League Lipbilled Metered Lipbilled Lipmetered						
= Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA						
SYSTEM DATA Length of mains:	? 9	2,576.0	miles			
SYSTEM DATA	? 9 ? 8	157,519	miles			
SYSTEM DATA Length of mains: Number of <u>active AND inactive</u> service connections: Service connection density: Are customer meters typically located at the curbstop or property line?	? 8	157,519	conn./mile main	e. beyond the property boundary.		
SYSTEM DATA Length of mains: Number of <u>active AND inactive</u> service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line:	? 8	157,519 61 Yes	conn./mile main (length of service lir that is the responsit	e, <u>beyond</u> the property boundary, ility of the utility)		
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SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line: Average length of customer service line has been set to Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): WATER AUDIT DATA VALIDITY SCORE:	? 8 ? do zero and ? 4	157,519 61 Yes d a data grading score 74.0 \$121,089,214 \$3.71 \$885.55	conn./mile main (length of service lir that is the responsit of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft Use Co	stomer Retail Unit Cost to value real losses		
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Click to access definition Click to add a comment	Water Audit Report for: Reporting Year:	Eastern Mur 2018	nicipal Water District (i	3310009 SRO)		
Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the						
input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades All volumes to be entered as: ACRE-FEET PER YEAR						
To selec	t the correct data grading for each input,	determine th	e highest grade where		Master Meter and Supply Error Adjustments	
WATER SUPPLIED			< Enter grading	in column 'E' and 'J'		
	Volume from own sources:		34,988.040			cre-ft/yr
	Water imported: Water exported:		65,369.400 17,592.890			cre-ft/yr cre-ft/yr
	WATER SUPPLIED:		82,811.984		Enter negative % or value for under-registration Enter positive % or value for over-registration	
AUTHORIZED CONSUMPTION			. ,			
AUTHORIZED CONSUMPTION	Billed metered:	+ ? 7	78,470.600	acre-ft/yr	Click here: ? for help using option	
	Billed unmetered:	+ ? n/a		acre-ft/yr	buttons below	
	Unbilled metered: Unbilled unmetered:	+ ? n/a + ? 4		acre-ft/yr acre-ft/yr	Pcnt: Value:	cre-ft/yr
	Official diffretered.		20.030	acie-ityi	<u> </u>	CIG-II/yI
	AUTHORIZED CONSUMPTION:	?	78,490.650	acre-ft/yr	Use buttons to select percentage of water supplied OR value	
WATER LOSSES (Water Supp	lied - Authorized Consumption)		4,321.334	acre-ft/vr		
Apparent Losses	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		3,02,100,1		Pcnt: ▼ Value:	
	Unauthorized consumption:	+ ?	207.030	acre-ft/yr		cre-ft/yr
Default	option selected for unauthorized cons	sumption - a	grading of 5 is applied	but not displayed		
	Customer metering inaccuracies:			acre-ft/yr		cre-ft/yr
Defa	Systematic data handling errors: ult option selected for Systematic data			acre-ft/yr		cre-ft/yr
5014	Apparent Losses:	?	876.872		,,,,	
Real Losses (Current Annual		_	2 444 400			
	s = Water Losses - Apparent Losses:	?	3,444.462	•		
	WATER LOSSES:					
			4,321.334	acre-ft/yr		
NON-REVENUE WATER	NON-REVENUE WATER:	?	4,341.384	<u> </u>		
= Water Losses + Unbilled Metered		?		<u> </u>		
	+ Unbilled Unmetered	?	4,341.384	acre-ft/yr		
= Water Losses + Unbilled Metered SYSTEM DATA		? + ? 9 + ? 8		acre-ft/yr		
= Water Losses + Unbilled Metered SYSTEM DATA	+ Unbilled Unmetered Length of mains:		4,341.384 2,281.1 160,017	acre-ft/yr		
= Water Losses + Unbilled Metered SYSTEM DATA Number of a	+ Unbilled Unmetered Length of mains: ctive AND inactive service connections: Service connection density:		4,341.384 2,281.1 160,017 70	acre-ft/yr miles conn./mile main		
= Water Losses + Unbilled Metered SYSTEM DATA Number of a	+ Unbilled Unmetered Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line:	+ ? 8	2,281.1 160,017 70	acre-ft/yr miles conn./mile main (length of service boundary, that is	line, <u>beyond</u> the property the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a	+ Unbilled Unmetered Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s	+ ? 8 + ? et to zero an	4,341.384 2,281.1 160,017 70 Yes and a data grading score	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applier	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a	+ Unbilled Unmetered Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line:	+ ? 8 + ? et to zero an	4,341.384 2,281.1 160,017 70 Yes and a data grading score	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applier	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a	+ Unbilled Unmetered Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s	+ ? 8 + ? et to zero an	4,341.384 2,281.1 160,017 70 Yes and a data grading score	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applier	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA	+ Unbilled Unmetered Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure:	+ ? 8	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses):	+ ? 8	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$//Year \$//100 cubic feet (ccf)	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai	+ Unbilled Unmetered Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure:	+ ? 8	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$//Year \$//100 cubic feet (ccf)	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE:	+ ? 8	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73 \$886.17	acre-ft/yr miles conn./mile main (length of service boundary, that is to f 10 has been applied psi \$//ear \$//occupic feet (ccf) \$/acre-ft Use	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai Variable p	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE:	+ ? 8	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73	acre-ft/yr miles conn./mile main (length of service boundary, that is to f 10 has been applied psi \$//ear \$//occupic feet (ccf) \$/acre-ft Use	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai Variable p WATER AUDIT DATA VALIDITY	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE:	+ ? 8 ? et to zero an + ? 4 + ? 5 + ? 6	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73 \$886.17	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai Variable p WATER AUDIT DATA VALIDITY	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE:	+ ? 8 ? et to zero an + ? 4 + ? 5 + ? 6	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73 \$886.17	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai Variable p WATER AUDIT DATA VALIDITY A V PRIORITY AREAS FOR ATTENT	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE:	+ ? set to zero an + ? 4 + ? 5 6 + ? 6	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73 \$886.17 ORE IS: 68 out of 100 *** er loss is included in the cal	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai Variable p WATER AUDIT DATA VALIDITY A V PRIORITY AREAS FOR ATTENT	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE: Veighted scale for the components of consurtion:	+ ? set to zero an + ? 4 + ? 5 6 + ? 6	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73 \$886.17 ORE IS: 68 out of 100 *** er loss is included in the cal	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai Variable p WATER AUDIT DATA VALIDITY Av PRIORITY AREAS FOR ATTENT Based on the information provided	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE: *** reighted scale for the components of consum ION: audit accuracy can be improved by address	+ ? set to zero an + ? 4 + ? 5 6 + ? 6	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73 \$886.17 ORE IS: 68 out of 100 *** er loss is included in the cal	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	the responsibility of the utility)	
= Water Losses + Unbilled Metered SYSTEM DATA Number of a Are customer meters typically Average leng COST DATA Tota Customer retai Variable p WATER AUDIT DATA VALIDITY A v PRIORITY AREAS FOR ATTENT Based on the information provided 1: Water imported	Length of mains: ctive AND inactive service connections: Service connection density: located at the curbstop or property line? Average length of customer service line: th of customer service line has been s Average operating pressure: I annual cost of operating water system: I unit cost (applied to Apparent Losses): roduction cost (applied to Real Losses): SCORE: *** reighted scale for the components of consum ION: audit accuracy can be improved by address	+ ? set to zero an + ? 4 + ? 5 6 + ? 6	4,341.384 2,281.1 160,017 70 Yes ad a data grading score 74.0 \$129,977,810 \$3.73 \$886.17 ORE IS: 68 out of 100 *** er loss is included in the cal	acre-ft/yr miles conn./mile main (length of service boundary, that is of 10 has been applied psi \$/Year \$/100 cubic feet (ccf) \$/acre-ft	the responsibility of the utility)	

<u></u>	AWWA I	Free	e Water Audit So	oftware:		WAS v5.0
ш	<u>R</u>	epc	orting Workshee	<u>et</u>		American Water Works Association.
Click to access Water Audit Report fo Reporting Yea			icipal Water District (3310009 SRO)		
Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the						
All volumes to be entered as: ACRE-FEET PER YEAR						
To select the correct data grading for each input, of						
the utility meets or exceeds <u>all</u> criteria for WATER SUPPLIED	hat grade a		all grades below it. < Enter grading	in column 'E' an		Master Meter and Supply Error Adjustments Pont: Value:
Volume from own source:	3: + ?	7	40,545.710		+ ?	5
Water importer Water exporter		7	53,578.970 18,362.290		+ ?	4 -0.18%
vvalei exportei	1. + ?		10,302.290	acre-n/yr		3 -1.20% O acre-ft/yr Enter negative % or value for under-registration
WATER SUPPLIED):		75,659.982	acre-ft/yr		Enter positive % or value for over-registration
AUTHORIZED CONSUMPTION						Click here:
Billed metered Billed unmetered		9 n/a	68,282.700 0.000	acre-ft/yr acre-ft/yr		for help using option
Unbilled metered	d: + ?	n/a	0.000	acre-ft/yr		Pcnt: Value:
Unbilled unmetered	1: + ?	4	17.740	acre-ft/yr		17.740 acre-ft/yr
AUTHORIZED CONSUMPTION	l: ?	-	68,300.440	acre-ft/yr		Use buttons to select percentage of water supplied OR
WATER LOSSES (Water Supplied - Authorized Consumption)			7,359.542	acre-ft/vr		value :
Apparent Losses			7,000.042	acro-reyr		Pcnt: ▼ Value:
Unauthorized consumption	1: + ?		189.150	acre-ft/yr		0.25% ● ○ acre-ft/yr
Default option selected for unauthorized co		$\overline{}$			yed	
Customer metering inaccuracie: Systematic data handling error:		7 5		acre-ft/yr acre-ft/yr		1.20%
Default option selected for Systematic de					ot displayed	C.20% C C
Apparent Losses	s: ?		1,189.201	acre-ft/yr		
Real Losses (Current Annual Real Losses or CARL)						
Real Losses = Water Losses - Apparent Losses	3: ?	_	6,170.341	acre-ft/yr		
WATER LOSSES	i:		7,359.542	acre-ft/yr		
NON-REVENUE WATER NON-REVENUE WATER	R: ?		7,377.282	acre-ft/yr		
= Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA						
Length of main:	S: + ?	9	2,314.0	miles		
Number of active AND inactive service connections	S: + ?	8	162,904			
Service connection density	y: ?		70	conn./mile main		
Are customer meters typically located at the curbstop or property line Average length of customer service line	?		Yes	(length o	f service line, b	eyond the property boundary,
Average length of customer service line has beer		o and	d a data grading score	that is the of 10 has been	e responsibility n applied	of the utility)
Average operating pressure		4				
COST DATA			\$400 405 000			
Total annual cost of operating water systen Customer retail unit cost (applied to Apparent Losses		7	\$129,435,936 \$4,21	\$/Year \$/100 cubic fee	et (ccf)	
Variable production cost (applied to Real Losses		7				r Retail Unit Cost to value real losses
WATER AUDIT DATA VALIDITY SCORE:						
WATER AUDIT DATA VALIDITY SCORE:	*** YOUR	SCO	RE IS: 73 out of 100 **	*		
WATER AUDIT DATA VALIDITY SCORE: A weighted scale for the components of const					/ater Audit Data	ı Validity Score
					/ater Audit Data	a Validity Score
A weighted scale for the components of const PRIORITY AREAS FOR ATTENTION: Based on the information provided, audit accuracy can be improved by addressed.	umption and	l wate	er loss is included in the ca		/ater Audit Data	a Validity Score
A weighted scale for the components of const PRIORITY AREAS FOR ATTENTION: Based on the information provided, audit accuracy can be improved by addre 1: Water imported	umption and	l wate	er loss is included in the ca		/ater Audit Data	ı Validity Score
A weighted scale for the components of const PRIORITY AREAS FOR ATTENTION: Based on the information provided, audit accuracy can be improved by addressed.	umption and	l wate	er loss is included in the ca		/ater Audit Date	a Validity Score

A	VWA Free Water Audit Software:	WAS v5.0 American Water Works Association.				
<u></u>	Reporting Worksheet	American Water Works Association.				
Click to access definition Water Audit Report for: Click to add a comment Reporting Year:	Eastern Municipal Water District (3310009 SRO) 2020 7/2019 - 6/2020					
Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input						
All volumes to be entered as: ACRE-FEET PER YEAR						
To select the correct data grading for each input, determ						
utility meets or exceeds <u>all</u> criteria for the	_ , , , , , , , , , , , , , , , , , , ,	Supply Error Adjustments				
WATER SUPPLIED Volume from own sources:		Value: S.130 acre-ft/yr				
Water imported:	+ 2 7 58,985.230 acre-ft/yr + ? 4 -0.22%	O acre-ft/yr				
Water exported:		or value for under-registration				
WATER SUPPLIED:		r value for over-registration				
AUTHORIZED CONSUMPTION		Click here:				
Billed metered:		for help using option				
Billed unmetered: Unbilled metered:		Value:				
Unbilled unmetered:		 24.050 acre-ft/yr 				
		Use buttons to select				
AUTHORIZED CONSUMPTION:	74,323.550 acre-ft/yr	percentage of water supplied OR				
		value				
WATER LOSSES (Water Supplied - Authorized Consumption)	5,095.502 acre-ft/yr					
Apparent Losses	Pont:	▼ Value:				
Unauthorized consumption:	198.548 acre-ft/yr 0.25% ● umption - a grading of 5 is applied but not displayed	O acre-ft/yr				
Customer metering inaccuracies:		acre-ft/yr				
Systematic data handling errors:						
	handling errors - a grading of 5 is applied but not displayed					
Apparent Losses:	2,682.219 acre-ft/yr					
Real Losses (Current Annual Real Losses or CARL)						
Real Losses = Water Losses - Apparent Losses:	2,413.283 acre-ft/yr					
WATER LOSSES:	5,095.502 acre-ft/yr					
NON-REVENUE WATER	7 5 119 552 acre-ft/vr					
NON-REVENUE WATER: = Water Losses + Unbilled Metered + Unbilled Unmetered	5,119.552 acre-ft/yr					
SYSTEM DATA						
Length of mains:						
Number of <u>active AND inactive</u> service connections: Service connection density:	+ 7 8 165,627 71 conn./mile main					
· ·						
Are customer meters typically located at the curbstop or property line? <u>Average</u> length of customer service line:	Yes (length of service line, <u>beyond</u> the property b	oundary,				
	that is the responsibility of the utility)					
Average operating pressure:						
COST DATA						
Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses):						
Variable production cost (applied to Real Losses):		ue real losses				
-						
WATER AUDIT DATA VALIDITY SCORE:						
	* YOUR SCORE IS: 73 out of 100 ***					
A weighted scale for the components of consu	ption and water loss is included in the calculation of the Water Audit Data Validity Score					
PRIORITY AREAS FOR ATTENTION:						
Based on the information provided, audit accuracy can be improved by addressing	the following components:					
1: Water imported						
2: Volume from own sources						
3: Unauthorized consumption						