APPENDIX E

UWNY's AWWA Water Audit Reports to the PSC, 2012-2014

AWWA WLCC Free Water Audit S Copyright © 2009, American Water Works Ass			g Worksheet	Back to	o Instructions
Click to access definition Water Audit Report for: Reporting Year:	STATE OF THE PARTY	R NEW YORK 1/2012 - 12/2012			
Please enter data in the white cells below. Where available, metered values sho			≟ lable please estimate a va	alue. Indicate vour confidence i	n the accuracy of the
nput data by grading each component (1-10) using the drop-down list to the left	of the input cell. I-	lover the mouse over th		on of the grades	
ATER SUPPLIED	<<	Enter grading in	i column 'E'		
Volume from own sources: Master meter error adjustment (enter positive value):	7 9		Million gallons (U) under-registered	S)/yr (MG/Yr) MG/Yr	
Water imported:	n/a	0.000	MG/Yr	MO/11	
Water exported:	2 9				
WATER SUPPLIED:		10,307.323	MG/Yr		
THORIZED CONSUMPTION Billed metered:	9	8,192.276	MG/Yr	Click he	re: Z
Billed unmetered:	n/a	0.000	MG/Yr	buttons	
Unbilled metered:	? 9	29.555			lue:
Unbilled unmetered: Default obtion selected for Unbilled unmete		128.842		1.25%	
AUTHORIZED CONSUMPTION:		8,350.673			ons to select
ACTION III	<u> </u>	0/330.075	110/11	percentage of	of water supplied OR
AMER LOSSES (Walter Samplied Nichesterd Communities)	Г	1,956.650	MC (VI-	, , , , , , , , , , , , , , , , , , ,	value -
ATER LOSSES (Water Supplied - Authorized Consumption)		1,930.030	M6/11	Pont: Val	ue:
Unauthorized consumption:	2 8	497.000	MG/Yr		7.000
Unauthorized consumption volume entered is	greater tha	n the recommende	d default value		
Customer metering inaccuracies:	9	222.075		2.63% 💿 🔾	
Systematic data handling errors:	7 7	80.000	MG/Yr	1	hones this action to
Apparent Losses:		799.075			hoose this option to hter a percentage of
Apparent bosses.		739.073			billed metered onsumption. This is
eal Losses					IOT a default value
Real Losses = Water Losses - Apparent Losses:		1,157.575	MG/Yr		
WATER LOSSES:		1,956.650	MG/Yr		
N-REVENUE WATER					
NON-REVENUE WATER:	?	2,115.047	MG/Yr		
Total Water Loss + Unbilled Metered + Unbilled Unmetered					
Length of mains:	7	1,049.3	miles		
Number of active AND inactive service connections:	9	73,733	MILES		
Connection density:		70	conn./mile main	ipe length between curbsto	
Average length of customer service line:	7	75.0		ter or property boundary)	ip and customer
Average operating pressure:	9	107.0	psi		
OST DATA		*** *** ***			
Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses):	2 8	\$32,332,734 \$5.74	\$/Year \$/100 cubic feet	(ccf)	
Variable production cost (applied to Real Bosses):	9	\$362.00	\$/Million gallons		
RFORMANCE INDICATORS					
nancial Indicators Non-revenue water as percent by	(waluma of)	Water Puncticd.	20.	59	
Non-revenue water as percent by			20.		
		pparent Losses:	\$6,131,5		
	mnual cost	of Real Losses:	\$419,0	042	
perational Efficiency Indicators		anting		60 and tangers and	
Apparent Losses per s				.69 galions/connection/	
Real Losses per se				.01 gallons/connection/	αay
Real Losses pe	er length of	main per day*:	l l	N/A	
Real Losses per service connection	per day pe	r psi pressure:	0.	.40 gallons/connection/	day/psi
Unavoidable	Annual Real	Losses (UARL):	960.	.44 million gallons/yea	r
				-1	
Infrastructure Leakage Index		l Losses/UARL]:	1.	.21	
only the most applicable of these two indicators will be	calculated				
WATER AUDIT DATA VALIDITY SCORE:					
*** YOUR S	CORE IS	: 87 out of	100 ***		
				Water Audit Date 77-12	ditu Secre
A weighted scale for the components of consumption and	1 Maret 1022	is included in the	e calculation of the	e water Audit Data Vali	urcy acore
PRIORITY AREAS FOR ATTENTION:					
Based on the information provided, audit accuracy can	n be improve	d by addressing	the following com	ponents:	
1: Volume from own sources	n				-
2: Systematic data handling errors	For	more information, o	click here to see the G	rading Matrix worksheet	
3: Customer retail unit cost (applied to Apparent Losses)					

AWWA WLCC E	Free Water A	udit Softwan	Water Audit Report For:	Report Yr:	
			UNITED WATER NEW YORK	2012	
	Water Exported 41.542			Billed Water Exported	
			Billed Authorized Consumption	Billed Metered Consumption (inc. water exported) 8,192.276	Revenue Water
Own Sources (Adjusted for		Authorized Consumption	8,192.276	Billed Unmetered Consumption 0.000	8,192.276
known errors)		8,350.673	Unbilled Authorized Consumption	Unbilled Metered Consumption 29.555	Non-Revenue Wate (NRW)
10,348.865			158.397	Unbilled Unmetered Consumption 128.842	
	Water Supplied		Apparent Losses	Unauthorized Consumption 497.000	2,115.047
	10,307.323		799.075	Customer Matering Inaccuracies 222.075	
		Water Losses		Systematic Data Handling Errors 80.000	
Water Imported		1,956.650	Real Losses	Leakage on Transmission and/or Distribution Mains Not broken down	
0.000			1,157.575	Leakage and Overflows at Utility's Storage Tanks Not broken down	
				Leakage on Service Connections Not broken down	

AWWA WLCC Free Water Audit So				Back to Instructions
Click to access definition Water Audit Report for:	UNITED WATE	R NEW YORK		
Reporting Year: Please enter data in the white cells below. Where available, metered values sho		1/2013 - 12/2013 netered values are unava	ailable please estimate a value.	Indicate your confidence in the accuracy of
the input data by grading each component (1-10) using the drop-down list to the	left of the input of	cell. Hover the mouse or		
WATER SUPPLIED		Enter grading in		
Volume from own sources: Master meter error adjustment (enter positive value): Water imported: Water exported:	7 9 9 7 9 n/a 9		under-registered MG/Yr	r (MG/Yr) MG/Yr
Water exported: WATER SUPPLIED:		10,361.874	MG/Yr	
AUTHORIZED CONSUMPTION				Click here:
Billed metered: Billed unmetered: Unbilled metered: Unbilled unmetered:	9 n/a 9	The state of the s	MG/Yr E	for help using option buttons below Pont: Value: 1.25%
Default option selected for Unbilled unmete	red - a gran	ding of 5 is app	lied but not displaye	d 🛉
AUTHORIZED CONSUMPTION:	7	8,319.326	MG/Yr	i Use buttons to select percentage of water supplied OR value -
WATER LOSSES (Water Supplied - Authorized Consumption) Apparent Losses	Γ	2,042.548	MG/Yr	Pont: Value:
Unauthorized consumption:	greater than	412.885 n the recommende	MG/Yr ad default value	O ● 412.885
Customer metering inaccuracies: Systematic data handling errors:	9 7	221.210 191.675	MG/Yr MG/Yr	2.63% 0
Apparent Losses:	7	825.770		Choose this option to enter a percentage of billed metered
Real Losses = Water Losses - Apparent Losses:		1,216.778	MG/Yr	consumption. This is NOT a default value
Real Losses = water Losses - apparent Losses: WATER LOSSES:	Ïi	2,042.548		
NON-REVENUE WATER NON-REVENUE WATER:		2,237.788	Mr. Aye	
= Total Water Loss + Unbilled Metered + Unbilled Unmetered		2,231.100	MG/II	
SYSTEM DATA Length of mains:	7	1,050.5	miles	
Number of <u>active AND inactive</u> service connections: Connection density: <u>Average</u> length of customer service line:	9	74,576 71	conn./mile main ft (pipe le	ength between curbstop and customer r property boundary)
Average operating pressure:	? 9	103.3		I proporty source;
COST DATA				
Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses):	9 8 9		\$/Year \$/100 cubic feet (cct \$/Million gallons	f)
PERFORMANCE INDICATORS				
Financial Indicators Non-revenue water as percent by			21.6%	
	1 cost of Ap	erating system: pparent Losses: of Real Losses:	\$0	
Operational Efficiency Indicators			20.34	
Apparent Losses per s Real Losses per se				gallons/connection/day gallons/connection/day
		main per day*:	N/A	(313)(C)
Real Losses per service connection				gallons/connection/day/psi
7 Unavoidable	Annual Real	Losses (UARL):	935.62	million gallons/year
Infrastructure Leakage Index		l Losses/UARL]:	1.30	
* only the most applicable of these two indicators will be company and the com	alculated			
WATER AUDIT DATA VALIDITY SCORE:	CORE IS	: 87 out of	F 100 ***	
A weighted scale for the components of consumption and PRIORITY AREAS FOR ATTENTION:				er Audit Data Validity Score
Based on the information provided, audit accuracy can 1: Volume from own sources	be improved	d by addressing	the following compone	nts:
2: Systematic data handling errors 3: Customer retail unit cost (applied to Apparent Losses)	For	more information, c	lick here to see the Gradin	ng Matrix worksheet

AWWA WLCC H	Free Water A	udit Softwa	re: <u>Water Balance</u>	Water Audit Report For:	Report Yr:
	Copyright © 2009, American	n Water Works Association	n. All Rights Reserved. WAS v4.0	UNITED WATER NEW YORK	2013
	Water Exported 27.280			Billed Water Exported	
			Billed Authorized Consumption	Billed Metered Consumption (inc. water exported) 8,124.086	Revenue Water
Own Sources (Adjusted for		Authorized Consumption	8,124.086	Billed Unmetered Consumption 0.000	8,124.086
known errors)		8,319.326	Unbilled Authorized Consumption	Unbilled Metered Consumption 65.717	Non-Revenue Wate (NRW)
10,389.154			195.240	Unbilled Unmetered Consumption 129:523	
	Water Supplied		Apparent Losses	Unauthorized Consumption 412.885	2,237.788
	10,361.874	874	825.770	Customer Metering Inaccuracies 221.210	
		Water Losses		Systematic Data Handling Errors 191.675	
Water Imported		2,042.548	Real Losses	Leakage on Transmission and/or, Distribution Mains Not broken down	
0.000			1,216,778	Leakage and Overflows at Utility's Storage Tanks Not broken down	
				Leakage on Service Connections Not broken down	

AWWA WLCC Free Water Audit S Copyright © 2009, American Water Works Ass			g Worksheet	WAS v4.0	o Instructions
Click to access definition Water Audit Report for Reporting Year:		R NEW YORK 1/2014 - 12/2014			
Please enter data in the white cells below. Where available, metered values sho the input data by grading each component (1-10) using the drop-down list to the All volume	left of the input or	ell. Hover the mouse or		scription of the grades	e in the accuracy of
WATER SUPPLIED		Enter grading in			
Volume from own sources: Master meter error adjustment (enter positive value):	2 9 9	10,513.682	Million gallons (U under-registered	5)/yr (MG/Yr) MG/Yr	
Water imported: Water exported:	7 n/a 9		MG/Yr MG/Yr		
WATER SUPPLIED:		10,513.682			
AUTHORIZED CONSUMPTION				Click he	re: 1
Billed metered: Billed unmetered:	2 9 7 n/a	8,447.437	MG/Yr MG/Yr	for help buttons	using option below
Unbilled metered:	9	30.250	MG/Yr		Lue:
Unbilled unmetered: Default option selected for Unbilled unmete	red - a grac	131.421 Ung of 5 is app		1.25% ● O	
AUTHORIZED CONSUMPTION:		8,609.108		Use butt	ons to select of water supplied
					OR ralue —
WATER LOSSES (Water Supplied - Authorized Consumption)	L	1,904.574	MG/Yr		
Apparent Losses Unauthorized consumption:	2 8	373.821	MG/Yr	A Shanganada and Assessment Assessment Interpreted	lue: 3.821
Unauthorized consumption volume entered is	Action Street			Sea respicable	
Customer metering inaccuracies:	9 7	228.985	MG/Yr MG/Yr	2.63% 0 0	
Systematic data handling errors:		143.878	MG/II		hoose this option to
Apparent Losses:		746.684		-	nter a percentage of billed metered
eal Losses					onsumption. This is IOT a default value
Real Losses = Water Losses - Apparent Losses:		1,157.889	MG/Yr		
WATER LOSSES:		1,904.574	MG/Yr		
ON-REVENUE WATER NON-REVENUE WATER:		2,066.245	MG/Yr		
Total Water Loss + Unbilled Metered + Unbilled Unmetered					
YSTEM DATA		1 056 2			
Length of mains: Number of <u>active AND inactive</u> service connections:	7 9	1,056.3 74,973	miles		
Connection density: <u>Average</u> length of customer service line:	7	71	conn./mile main ft. (p.	ipe length between curbst	op and customer
			me	cer or property boundary)	
Average operating pressure:	9	103.3	ps1		
OST DATA					
Total annual cost of operating water system:	9	\$52,637,304	\$/Year		
Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses):	8 9		\$/100 cubic feet \$/Million gallons	(ccf)	
ERFORMANCE INDICATORS					
'inancial Indicators Non-revenue water as percent by	volume of W	Water Supplied:	19	.78	
Non-revenue water as percent by	cost of ope	rating system:	10 \$5,095,0		
		pparent Losses: of Real Losses:	\$498,4		
perational Efficiency Indicators					
Apparent Losses per s				.29 gallons/connection/	
Real Losses per se				31 gallons/connection/	day
		main per day*:		J/A	
Real Losses per service connection				.41 gallons/connection/	
Unavoidable	Annual Real	Losses (UARL):	816	.16 million gallons/yea	r
Infrastructure Leakage Index	(TLI) [Real	Losses/UARL]:	1	42	
only the most applicable of these two indicators will be o	calculated			25,4	
WATER AUDIT DATA VALIDITY SCORE:					
*** YOUR S	SCORE IS:	: 86 out of	100 ***		
A weighted scale for the components of consumption an	d water loss i	s included in the	calculation of the	Water Audit Data Vali	dity Score
PRIORITY AREAS FOR ATTENTION:					
Based on the information provided, audit accuracy car	be improved	l by addressing	the following com	ponents:	
1: Volume from own sources				and the second s	7
2: Systematic data handling errors	Fort	nore information, c	lick here to see the G	rading Matrix worksheet	
3: Customer retail unit cost (applied to Apparent Losses)					

AWWA WLCC H	Free Wate <u>r A</u>	udit Softwa	re: <u>Water Balance</u>	Water Audit Report For:	Report Yr:
	Copyright © 2009, America			UNITED WATER NEW YORK	2014
	Water Exported 0.000			Billed Water Exported	
			Billed Authorized Consumption	Billed Metered Consumption (inc. water exported) 8,447.437	Revenue Water
Own Sources (Adjusted for		Authorized Consumption	8,447.437	Billed Unmetered Consumption 0.000	8,447.437
Known errors)		8,609.108	Unbilled Authorized Consumption	Unbilled Metered Consumption 30.250	Non-Revenue Wate (NRW)
10,513.682			161.671	Unbilled Unmetered Consumption 231.421	
	Water Supplied		Apparent Losses	Unauthorized Consumption	2,066.245
	10,513.682	513.682	746.684	Customer Metering Inaccuracies 228.985	
		Water Losses		Systematic Data Handling Errors 143.878	
Water Imported		1,904.574	Real Losses	Leakage on Transmission and/or Distribution Mains Not broken down	
0.000			1;157.889	Leakage and Overflows at Utility's Storage Tanks Not broken down	
				Leakage on Service Connections Not broken down	

APPENDIX F

Revised UWNY Water Audit Reports for 2012-2014 Prepared By Task Force Consultant

AWW	Free Water Audit So Reporting Workshee		American Wa Countril Colu	VVAS VS 0 ter Works Associa 4. All Rights Rese
Click to access definition Water Audit Report for: REVISE Click to add a comment Reporting Year: 201	D UWNY REPORT-AWWA DE	a definició de la completa de la co	ED DATA	
Please enter data in the white cells below. Where available, metered values should be used; if n grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover	netered values are unavailable plea the mouse over the cell to obtain a	ase estimate a value. Indicate you a description of the grades	ur confidence in the accuracy of the input data b	у
All volumes to	be entered as: MILLION GAL	LONS (US) PER YEAR		und par volum
To select the correct data grading for each input, determing the state of the state	t grade and all grades below it.		Master Meter and Supply Error Adjustm	ents
WATER SUPPLIED		in column 'E' and 'J'		
Volume from own sources: Water imported:	8 10,348.865 18 182.500	MG/Yr Sill Sill Sill Sill Sill Sill Sill Sil	n/a (() ()	MG/Yr MG/Yr
PSC data Water imported: Water exported: Water exported:	and the second s	MG/Yr	n/a Enter negative % or value for under-reg	MG/Yr
WATER SUPPLIED:	10,457.796	MG/Yr	Enter positive % or value for over-regist	tration
AUTHORIZED CONSUMPTION			Click here:	
Billed metered:	8 8,141.947		for help using opti	on
PSC data Billed unmetered:	M	MG/Yr	buttons below	
PSC dufa Billed unmetered: Unbilled metered: Unbilled unmetered: Unbilled unmetered:		MG/Yr	Pont: Value: Value: 0 (2.670)	MONG
PP. 385 + 400 Unbilled unmetered:	2.670) MG/Yr	Use buttons to se	MG/Yr
AUTHORIZED CONSUMPTION:	8,188.559	MG/Yr	percentage of water s	
WATER LOSSES (Water Supplied - Authorized Consumption)	2,269.237	MG/Yr	Trade	
Apparent Losses			Pont: Value:	
Unauthorized consumption:	26.144	MG/Yr	0.25%	MG/Yr
Default option selected for unauthorized consumption	n - a grading of 5 is applied b	out not displayed		
Customer metering inaccuracies:	4 219.939	MG/Yr	2.63%	MG/Yr
Systematic data handling errors:		MG/Yr.	0.25%	MG/Yr
Default option selected for Systematic data handli	ng errors - a grading of 5 is a	applied but not displayed		
Apparent Losses:	266.439	MG/Yr		
Real Losses (Current Annual Real Losses or CARL)				
Real Losses = Water Losses - Apparent Losses:	2,002.798	MG/Yr		
WATER LOSSES:	2,269.237	MG/Yr		
NON DEVENUE WATER				
NON-REVENUE WATER NON-REVENUE WATER:	2,272.732	MGNr		
= Water Losses + Unbilled Metered + Unbilled Unmetered	2,212.702	a Michiti		
SYSTEM DATA				
Length of mains:	7 1,049.3	R miles		
Number of active AND inactive service connections:	9 73,733	AND ADMINISTRATION OF THE PROPERTY OF THE PROP		
Service connection density:	70	conn./mile main		
Are customer meters typically located at the curbstop or property line?	No.	(length of service in	e, beyond the property boundary,	
Average length of customer service line:	7 44.0	ft that is the responsib	uity of the utility)	
Average operating pressure:	5 107.0) psi		
COST DATA				
Total annual cost of operating water system:	3 \$28,759,617	7 \$/Year		
Customer retail unit cost (applied to Apparent Losses):	3 \$5.32	\$/100 cubic feet (ccf)		
Variable production cost (applied to Real Losses):	3 \$362.00) \$/Million gallons Use	e Customer Retail Unit Cost to value real losses	
WATER AUDIT DATA VALIDITY SCORE:				
*** YOU	R SCORE IS: 63 out of 100 ***			
A weighted scale for the components of consumption a			Validity Score	
PRIORITY AREAS FOR ATTENTION:				
	a componente:			
Based on the information provided, audit accuracy can be improved by addressing the following 1: Volume from own sources	g components.			
2: Total annual cost of operating water system				
3: Customer retail unit cost (applied to Apparent Losses)				

Water Audit Report for: REVISED UWNY REPORT-AWWA DEFAULTS, PSC & CORRECTED DATA Reporting Year: 2012 1/2012 - 12/2012 *** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 63 out of 100 *** System Attributes: 266,439 MG/Yr Apparent Losses: Real Losses: 2.002.798 MG/Yr Water Losses: 2,269.237 MG/Yr Unavoidable Annual Real Losses (UARL): 833.63 MG/Yr Annual cost of Apparent Losses: \$1,894,860 Annual cost of Real Losses: \$725,013 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption Performance Indicators: 21.7% Non-revenue water as percent by volume of Water Supplied: Non-revenue water as percent by cost of operating system: 9.1% Real Losses valued at Variable Production Cost Apparent Losses per service connection per day: 9.90 gallons/connection/day Real Losses per service connection per day: 74.42 gallons/connection/day Operational Efficiency: Real Losses per length of main per day*: N/A Real Losses per service connection per day per psi pressure: 0.70 gallons/connection/day/psi From Above, Real Losses = Current Annual Real Losses (CARL): 2,002.80 million gallons/year Infrastructure Leakage Index (ILI) [CARL/UARL]: 2.40 * This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline

		A	WWA Free W	ater Audit Software: Wate	Ame		
		٧	later Audit Report for:	REVISED UWNY REPORT-AWWA DEFA	JLTS, PSC & CORRECTED DATA		
			Reporting Year:	2012	1/2012 - 12/2012		
			Data Validity Score:	63			
		Water Exported 73.569			Billed Water Exported	Revenue Water 73.569	
				Billed Authorized Consumption	Billed Metered Consumption (water exported is removed)	Revenue Water	
Own Sources (Adjusted for known errors) 10,348.865 System Input			Authorized Consumption	8,185.064	8,141.947 Billed Unmetered Consumption 43.117	8,185.064	
			8,188.559 Vater Supplied 10,457.796 Water Losses	Unbilled Authorized Consumption	Unbilled Metered Consumption 0.825	Non-Revenue Water (NRW)	
				3.495	Unbilled Unmetered Consumption 2.670		
	10,531.365			Apparent Losses	Unauthorized Consumption 26.144	2,272,732	
		10,457.796		266.439	Customer Metering Inaccuracies 219.939		
Water Imported 182.500					Systematic Data Handling Errors 20,355		
	2,269.237		Real Losses	Leakage on Transmission and/or Distribution Mains Not broken down			
				2,002.798	Leakage and Overflows at Utility's Storage Tanks Not broken down		
					Leakage on Service Connections Not broken down		

	later Audit Software:		NAS v5 0
	ng Worksheet	American Water Copyright - 2014 A	
Water Addit Report to REVICED CHIEF IN	1/2013 - 12/2013	RRECTED BATA	
Please enter data in the white cells below. Where available, metered values should be used; if metered value grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse or All volumes to be entered	s are unavailable please estimate a value. In ver the cell to obtain a description of the grad as: MILLION GALLONS (US) PER YE	es de la companya de	
To select the correct data grading for each input, determine the higher	est grade where the		
utility meets or exceeds <u>all</u> criteria for that grade and WATER SUPPLIED <	all grades below it Enter grading in column 'E' and 'J'	Master Meter and Supply Error Adjustmen Pont: Value:	ts
Volume from own sources: 8	10,383.997 MG/Yr	n/a (O) ()	MG/Yr
PSC data PP, 305+ Water imported: 8 8 Water exported: 8 8	182.500 MG/Yr 70.866 MG/Yr	n/a (e) () Enter negative % or value for under-regist	MG/Yr MG/Yr
WATER SUPPLIED:	10,495.631 MG/Yr	Enter positive % or value for over-registrat	
AUTHORIZED CONSUMPTION		Click here:	
Billed metered: 8	8,068.390 MG/Yr	for help using option	
PSC data PP. 305+ Billed unmetered: 7 Unbilled metered: 9 9	129.600 MG/Yr 4.019 MG/Yr	buttons below Pont: Value:	
Unbilled unmetered: 7	5.968 MG/Yr	O ● 5.968	MG/Yr
AUTHORIZED CONSUMPTION:	8,207.977 MG/Yr	L Use buttons to select percentage of water sup OR value	
WATER LOSSES (Water Supplied - Authorized Consumption)	2,287.654 MG/Yr		
Apparent Losses Unauthorized consumption:	26.239 MG/Yr	Pcnt: Value: 0.25% O	MG/Yr
Default option selected for unauthorized consumption - a gradin		0.20% 0.0	
Customer metering inaccuracies: 4	218.039 MG/Yr	2.63% 🔘 🔾	MG/Yr
Systematic data handling errors:	20.171 MG/Yr	0.25% ()	MG/Yr
Default option selected for Systematic data handling errors - Apparent Losses:	a grading of 5 is applied but not disp 264.449 MG/Yr	layed	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses:	2,023.205 MG/Yr		
WATER LOSSES:	2,287.654 MG/Yr		
NON-REVENUE WATER			
NON-REVENUE WATER:	2,297.641 MG/Yr		
= Water Losses + Unbilled Metered + Unbilled Unmetered			_
SYSTEM DATA			
Length of mains: 7 7 9 Number of active AND inactive service connections: 9 9 Service connection density:	1,050.5 miles 74,576 71 conn./mile main		
Are customer meters typically located at the curbstop or property line?	No (length of a		
Average length of customer service line: 7	(lengar or a	ervice line, <u>beyond</u> the property boundary, esponsibility of the utility)	
Average operating pressure: 5	103.3 psi		
COST DATA			
Total annual cost of operating water system: 3	\$27,442,369 \$/Year		
Customer retail unit cost (applied to Apparent Losses): 3 Variable production cost (applied to Real Losses): 3	\$5.53 \$/100 cubic feet (or \$430.51 \$/Million gallons	Cf) Use Customer Retail Unit Cost to value real losses	
WATER AUDIT DATA VALIDITY SCORE:			
*** YOUR SCORE K	S: 64 out of 100 ***		
A weighted scale for the components of consumption and water loss	is included in the calculation of the Water A	udit Data Validity Score	
PRIORITY AREAS FOR ATTENTION:			
Based on the information provided, audit accuracy can be improved by addressing the following components			
1: Volume from own sources			
2: Total annual cost of operating water system			
3: Customer retail unit cost (applied to Apparent Losses)			

System Attributes and Performance Indicators	
CALCIDITION OF THE PROPERTY OF	Copyright © 2014, All Rights Reserved
Water Audit Report for: REVISED UWNY REPORT-AWWA DEFAULTS, PSC & CORRECTED DATA Reporting Year: 2013 1/2013 - 12/2013	
*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 64 out of 100 *** System Attributes:	
Apparent Losses: 264.449 MG/Yr	
+ Real Losses: 2,023.205 MG/Yr	
= Water Losses: 2,287.654 MG/Yr	
Unavoidable Annual Real Losses (UARL): 811.80 MG/Yr	
Annual cost of Apparent Losses: \$1,954,947	
Annual cost of Real Losses: \$871,010 Valued at Variable I Return to Reporting Workshe	
Performance Indicators:	
Non-revenue water as percent by volume of Water Supplied: 21.9%	
Non-revenue water as percent by cost of operating system: 10.3% Real Losses valued at V	ariable Production Cost
Apparent Losses per service connection per day: 9.72 gallons/connection/day	
Real Losses per service connection per day: 74.33 gallons/connection/day	
Operational Efficiency: Real Losses per length of main per day*: N/A	
Real Losses per service connection per day per psi pressure: 0.72 gallons/connection/day/p	si
From Above, Real Losses = Current Annual Real Losses (CARL): 2,023.21 million gallons/year	
Infrastructure Leakage Index (ILI) [CARL/UARL]: 2.49	
* This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline	

		Δ	WWA Free W	ater Audit Software: <u>Wate</u>	r Balance	VVAS V5 0 noin Water Works Association t © 2014, All Rights Reserve
		ν	Vater Audit Report for:	REVISED UWNY REPORT-AWWA DEFA		
			Reporting Year:		1/2013 - 12/2013	
			Data Validity Score:	64		
		Water Exported 70.866			Billed Water Exported	Revenue Water 70.866
				Billed Authorized Consumption	Billed Metered Consumption (water exported is removed)	Revenue Water
Own Sources Adjusted for known			Authorized Consumption	8,197.990	8,068.390 Billed Unmetered Consumption 129.600	8,197.990
errors)			8,207.977	Unbilled Authorized Consumption	Unbilled Metered Consumption 4.019	Non-Revenue Water (NRW)
10,383.997				9.987	Unbilled Unmetered Consumption 5.968	
	System Input 10,566,497	Water Supplied		Apparent Losses	Unauthorized Consumption 26.239	2,297.641
70,300.497	70,000.107	10,495.631		264.449	Customer Metering Inaccuracies 218,039	
			Water Losses		Systematic Data Handling Errors 20.171	
Water Imported			2,287.654	Real Losses	Leakage on Transmission and/or Distribution Mains Not broken down	
182.500				2,023.205	Leakage and Overflows at Utility's Storage Tanks	
				Not broken down Leakage on Service Connections Not broken down		

Cost to states definition Cost to state a context Cost to state a con	AWWA Free W	Vater Audit Software	a'			VVAS VS.O
Reporting Year. 2014 179914-120714 179914-						
ATER SUPPLIED To select the cornect state grading for each include to be determine the highest grade where the content state grading for each include. The profession where the cornect state grading for each include to the determine the highest grade where the clinical state of the state of	Trace Trade (topole 10). Individual of		, PSC & CORRECTED D	DATA		
All Inclinance to be entered as MILLON GALLONG (US) PER YEAR To select the connect state grading for some hour, determine in highestic grade where the utility medis or encoded all critices for that grade and all grades below it. ATER RUPPLIED COUNTY Volume from own sources with the provided provided below it. Values reported. I 16,513,662 MG/Y Water exported. I 16,513,663 MG/Y WG/Y WG				nfidence in the	accuracy of the input data by	
AUTHORIZED CONSUMPTION: AUTHORIZED CONSUMPTION: Billied methered: AUTHORIZED CONSUMPTION: Billied methered						
ATER SUPPLIED Volume from own sources: Velocity imported: Veloc						
Volume from own sourcess 8 10,515,862 Morr Water reported: 8 162,500 Morr Water supplied: 8 162,500 Morr Water supplied: 9 10,615,862 Morr Water supplied: 9 10,653,862 Morr Water suppli	[4][[[[]][[][[][[]][[][[]][[]][[][[][[]][[][[][[][[]][[][[][[]][[][[][[]][[]][[][[][[][[][[][[]][[][[][[][[][[][[][[][]					nts
WATER SUPPLIED: 10,811,981 MG/Y Enter egative % for value for under-registrations Enter positive % for value for under-registrations First positive % for value for under-registrations In 1917 MG/Y Unbilled unmetered. 1	Volume from own sources: 8					MG/Y
WATER SUPPLIED: 10,811,981 MG/Y Enter egative % for value for under-registrations Enter positive % for value for under-registrations First positive % for value for under-registrations In 1917 MG/Y Unbilled unmetered. 1	SC dlaga PP 395 + Water imported: 8 8				63 63	MG/YI
THORIZED CONSUMPTION Selected for selected			E	nter negative	% or value for under-regist	tration
Billed metered	WATER SUPPLIED:	10,611.981 MG/Yr	E	nter positive 9	% or value for over-registra	tion
Bild unmetered: 13175 MOYF 2.350 MOYF	UTHORIZED CONSUMPTION	8 453 843 MG/Vr				
AUTHORIZED CONSUMPTION: 8,599,753 MG/Yr Lish Nuthror to relect percentage of water supplied AUTHORIZED CONSUMPTION: 8,599,753 MG/Yr Pent: Value:	DCC De da PP. 305 + Billed unmetered: 1 7	131.275 MG/Yr			buttons below	
AUTHORIZED CONSUMPTION: 8,599,753 MG/Yr List Authorized Consumption 2,012,228 MG/Yr Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed Customer metering inaccuracies: 2,285,964 MG/Yr Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed Customer metering inaccuracies: 2,285,964 MG/Yr Default option selected for Systematic data handling errors: 3,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for Systematic data handling errors: 4,285,964 MG/Yr Default option selected for MG/Yr Default option selec	Unbilled metered: 9			Pont	Management of the Control of the Con	MG/YI
ACTER LOSSES (Water Supplied - Authorized Consumption) 2,012.228 MG/rr Value Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed Customer retenting inaccuracies; Systematic data handling errors: Systematic data handling errors: Default option selected for Systematic data handling errors: Apparent Losses: Total annual Real Losses - Apparent Losses: Total annual Cost of Operating water service connections: Service connection desiry: Are customer meters typically located at the customer service line: Are customer meters typically located at the customer service line: Total annual cost of operating water system: Average length of customer service line: Service connection desired: Total annual cost of operating water system: Average operating pressure: Service connection desired: Total annual cost of operating water system: Average operating pressure: Service connection desired: Total annual cost of operating water system: Average operating pressure: Service connection desired: Total annual cost of operating water system: Average operating pressure: Service connection desired: Total annual cost of operating water system: Service connection desired: Average operating pressure: Service connection desired: Average operating between desired desired of the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score Richard	Onbilled unmetered.	0.303 NG/11			↑ (a) 10.363	WG/TI
ATER LOSSES (Water Supplied - Authorized Consumption) 2,012,228 MG/Y Default option selected for unauthorized consumption: 2,530 MG/Y Default option selected for unauthorized consumption: 2,535 MG/Y Systematic data handling errors: 2,135 MG/Y Default option selected for Systematic data handling errors: 2,135 MG/Y Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 276,229 MG/Y Real Losses or CARL) Real Losses or CARL) Real Losses - Water Losses - Apparent Losses: 1,735,999 MG/Y Real Losses - Water Losses - Apparent Losses: 2,012,228 MG/Y Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 276,229 MG/Y Real Losses - Water Losses - Apparent Losses: 1,735,999 MG/Y Real Losses - Water Losses - Apparent Losses: 2,012,228 MG/Y Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 2,012,228 MG/Y Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 1,735,999 MG/Y Real Losses - Water Losses - Apparent Losses: 2,012,228 MG/Y Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed but not displayed Apparent Losses: 1,745,999 MG/Y Real Losses - Water Losses - Apparent Losses: 2,012,228 MG/Y Default option selected for Systematic Apparent Losses: 1,735,999 MG/Y Real Losses - Water Losses - Apparent Losses: 1,745,999 MG/Y Real Losses - Water Losses - Apparent Losses: 1,745,999 MG/Y Real Losses - Water Losses - Apparent Losses: 1,745,999 MG/Y Real Losses - Water Losses - Apparent Losses - Appar	AUTHORIZED CONSUMPTION:	8,599.753 MG/Yr			percentage of water su <u>OR</u>	
Unauthorized consumption: 28.530 MC/r Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed Customer metering inaccuracies: 4 228.564 Mc/r Systematic data handing errors: 121.35 Mc/r Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed Customer metering inaccuracies: 4 228.564 Mc/r Default option selected for systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 76.229 Mc/r Ball Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: 276.229 Mc/r WATER LOSSES: 2.012.228 Mc/r WATER LOSSES: 2.012.228 Mc/r WATER LOSSES: 2.012.228 Mc/r WATER LOSSES: 2.012.228 Mc/r Water Losses + Unbilled Metered + Unbilled Unmetered STEM DATA Length of mains: 7 1.056.3 miles Number of active AND inactive service connections: 8 74.973 conn.mile main Are customer meters typically located at the curbstop or property line? Average operating pressure: 8 10.33 psi DEST DATA Total annual cost of operating water system: 8 3 5.28.520.066 Street Customer retail unit cost (applied to Apparent Losses): 3 5.576 Street Customer retail unit cost (applied to Apparent Losses): 3 5.576 Street Customer retail unit cost (applied to Apparent Losses): 3 5.576 Street Customer retail unit cost (applied to Real Losses): 3 5.576 Street Customer retail unit cost (applied to Real Losses): 3 5.576 Street Customer retail unit cost (applied to Real Losses): 3 5.576 Street Customer retail unit cost (applied to Real Losses): 3 5.576 Street A weighted scale for the components of consumption and water loss is included in the calculation of the Weler Audit Data Validity Score RIGHTY AREAS FOR ATTENTION: A weighted scale for the components of consumption and water loss is included in the calculation of the Weler Audit Data Validity Score	WATER LOSSES (Water Supplied - Authorized Consumption)	2.012.228 MG/Yr			value	
Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed Customer metering inaccuracies: Systematic data handling errors: Default option selected for systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 276.229 MG/Yr Real Losses or CARLI Real Losses - Watter Losses - Apparent Losses: NON-REVENUE WATER Non-Revenue Water Cosses - Vibilited Metered + Unbilled Urmetered Service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive service connections of 1 1,056.3 males Number of active AND inactive s	Apparent Losses			Pont	▼ Value:	
Customer metering inaccuracies: 4 228,584 MG/Yr 2,135 MG/Yr Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 278,229 MG/Yr Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: 1,735,999 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 1,735,999 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 1,735,999 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 1,735,999 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 1,735,999 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 1,735,999 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 1,735,999 MG/Yr WATER LOSSES: 1,735,999 MG/Yr WATER LOSSES: 2,012,228 MG/Yr WATER LOSSES: 1,735,999 MG/Yr	Unauthorized consumption:	26.530 MG/Yr		0.25%	00	MG/Y
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Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed Apparent Losses: 276.229 MG/Yr Real Losses = Water Losses - Apparent Losses: 2,012.228 MG/Yr Real Losses = Water Losses - Apparent Losses: 2,012.228 MG/Yr WATER LOSSES: 2,012.228 MG/Yr Non-Revenue Water	Customer metering maccuracies.					MG/Y
Real Losses = Water Losses - Apparent Losses: 2,012.228 MG/Yr WATER LOSSES: 2,012.228 MG/Yr Pater Losses + Unbilled Metered + Unbilled Ummetered Water Losses + Unbilled Metered + Unbilled Ummetered Value Property Doundary, Tale of Property Doundary, Tale Proper			out not displayed			
Real Losses - Apparent Losses: 2,012.228 MG/Yr NN-REVENUE WATER NON-REVENUE WATER: 2,026.883 MG/Yr Abter Losses + Unbilled Metered + Unbilled Unmetered STEM DATA Length of mains: 2 7 1,056.3 miles 74,973 71 conn.mile main Are customer meters typically located at the curbstop or property line? Average length of customer service line: 2 7 444.0 ft that is the responsibility of the utility) Average operating pressure: 2 3 5 103.3 psl DST DATA Total annual cost of operating water system: 2 3 5.57.8 S/700 cubic feet (ccr) Variable production cost (applied to Real Lossee): 2 3 \$43.0.51 S/Million gallons Use Customer Retail Unit Cost to value real losses ATER AUDIT DATA VALIDITY SCORE: *** YOUR SCORE IS: 63 out of 100 *** A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score RIGHTY AREAS FOR ATTENTION: assed on the information provided, studil accuracy can be improved by addressing the following components: 1: Volume from own sources	Apparent Losses:	276.229 MG/Yr				
Real Losses - Apparent Losses: 2,012.228 MG/Yr NN-REVENUE WATER NON-REVENUE WATER: 2,026.883 MG/Yr Abter Losses + Unbilled Metered + Unbilled Unmetered STEM DATA Length of mains: 2 7 1,056.3 miles 74,973 71 conn.mile main Are customer meters typically located at the curbstop or property line? Average length of customer service line: 2 7 444.0 ft that is the responsibility of the utility) Average operating pressure: 2 3 5 103.3 psl DST DATA Total annual cost of operating water system: 2 3 5.57.8 S/700 cubic feet (ccr) Variable production cost (applied to Real Lossee): 2 3 \$43.0.51 S/Million gallons Use Customer Retail Unit Cost to value real losses ATER AUDIT DATA VALIDITY SCORE: *** YOUR SCORE IS: 63 out of 100 *** A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score RIGHTY AREAS FOR ATTENTION: assed on the information provided, studil accuracy can be improved by addressing the following components: 1: Volume from own sources						
NATER LOSSES: 2,012.228 MG/Yr Non-REVENUE WATER Non-REVENUE WATER: 2,026.863 MG/Yr Native Losses + Unbilled Metered + Unbilled Umetered STEM DATA Length of mains: 7 1,056.3 miles Number of active AND inactive service connections: 7 1,056.3 miles Service connection density: 7 1,056.3 miles Service connection density: 7 1,056.3 miles Are customer meters typically located at the curbstop or property line? Average length of customer service line: 7 44.0 the first interesponsibility of the utility) Average operating pressure: 7 1 1,056.3 miles Service connection density: 7 1,056.3 miles Service density: 7 1,0		1,735.999 MG/Yr				
NON-REVENUE WATER: 2,026.863 MG/Yr Netter Losses + Unbilled Metered + Unbilled Unmetered Length of mains: Service connections: Service connection density: Service connection density: Service connection density: To conn./mile main Are customer meters typically located at the curbstop or property line? Average length of customer service line: Total annual cost of operating water system: Total annual cost of operating wat	WATER LOSSES:	2,012.228 MG/Yr				
NON-REVENUE WATER: 2,026.863 MG/Yr Netter Losses + Unbilled Metered + Unbilled Unmetered Length of mains: Service connections: Service connection density: Service connection density: Service connection density: To conn./mile main Are customer meters typically located at the curbstop or property line? Average length of customer service line: Total annual cost of operating water system: Total annual cost of operating wat	ION-REVENUE WATER					
Number of active AND inactive service connections Service connections Service connection density: Total annual cost of operating water system: Total annual cost (applied to Apparent Losses): Total annual cost (applied to Real Losses): Total an		2,026.863 MG/Yr				
Length of mains: 7 1,066.3 miles Number of active AND inactive service connections: 9 74,973 Service connection density: 7 71 Are customer meters typically located at the curbstop or property line? Average length of customer service line: 7 7 4.40 t (length of service line, beyond the property boundary, that is the responsibility of the utility) Average operating pressure: 7 5 103.3 psi DST DATA Total annual cost of operating water system: 7 3 \$26,529,066 \$5.78 \$100 cubic feet (ccf) Variable production cost (applied to Apparent Losses): 7 3 \$5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 3 \$430.51 \$5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 3 \$430.51 \$5.78 \$100 cubic feet (ccf) Average operating water system: 7 3 \$430.51 \$5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 3 \$430.51 \$5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5.78 \$100 cubic feet (ccf) Variable production cost (applied to Real Losses): 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Water Losses + Unbilled Metered + Unbilled Unmetered					_
Number of active AND inactive service connections: Y 9 74,973 71 71 72 72 73 73 74 73 74 73 74 74		1 056 2 miles				
Are customer meters typically located at the curbstop or property line? Average length of customer service line: 7						
Average length of customer service line:	Service connection density:	71 conn./m	nile main			
Average operating pressure: 103.3 ps		TOTAL TOTAL CONTROL OF THE CONTROL O	(length of service line, be	yond the proper	rty boundary,	
Total annual cost of operating water system: Section	Average length of customer service line: 7	44.0) ft	that is the responsibility of	f the utility)		
Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): ***YOUR SCORE IS: 63 out of 100 *** A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score **RIORITY AREAS FOR ATTENTION: assed on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	Average operating pressure: 5	103.3 psi				
Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): ***YOUR SCORE IS: 63 out of 100 *** A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score **RIORITY AREAS FOR ATTENTION: assed on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	OST DATA					
Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): *** YOUR SCORE IS: 63 out of 100 *** A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score *** RIORITY AREAS FOR ATTENTION: assed on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources		\$26,529,066 \$/Year	William Control			
A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score RIORITY AREAS FOR ATTENTION: assed on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	Customer retail unit cost (applied to Apparent Losses):	\$5.78 \$/100 0				
A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score RIORITY AREAS FOR ATTENTION: assed on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	Variable production cost (applied to Real Losses):	\$430.51 \$/Million	n gallons Use Cush	omer Retail Unit C	Cost to value real losses	
A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score RIORITY AREAS FOR ATTENTION: assed on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	VATER AUDIT DATA VALIDITY SCORE:					
RIORITY AREAS FOR ATTENTION: ased on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	*** YOUR SCORE IS	S: 63 out of 100 ***				
ased on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	A weighted scale for the components of consumption and water loss	s is included in the calculation o	of the Water Audit Data Valid	ity Score		
ased on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources	PRIORITY AREAS FOR ATTENTION:					
1: Volume from own sources		s:				
2: Total annual cost of operating water system						
	2: Total annual cost of operating water system					
3: Customer retail unit cost (applied to Apparent Losses)	3: Customer retail unit cost (applied to Apparent Losses)					

* KWWA default applied.

	AWWA Free Water Audit Soft		
	System Attributes and Performance	e Indicators American Weter Works Association Copyright © 2014, All Rights Reserved	
	Water Audit Report for: REVISED UWNY REPORT-AWWA DEFA	AULTS, PSC & CORRECTED DATA	
	Reporting Year: 2014 1/2014 - 12/2014		
	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS:	63 out of 100 ***	
System Attributes:			
	Apparent Losses:	276.229 MG/Yr	
	+ Real Losses:	1,735.999 MG/Yr	
	= Water Losses:	2,012.228 MG/Yr	
	Unavoidable Annual Real Losses (UARL):	816.16 MG/Yr	
	Annual cost of Apparent Losses:	\$2,134,347	
	Annual cost of Real Losses:	\$747,365 Valued at Variable Production Cost	
		Return to Reporting Worksheet to change this assumption	
Performance Indicators:			
Financial:	Non-revenue water as percent by volume of Water Supplied:	19.1%	
	Non-revenue water as percent by cost of operating system:	10.9% Real Losses valued at Variable Production Cost	
Operational Efficiency:	Apparent Losses per service connection per day:	10.09 gallons/connection/day	
	Real Losses per service connection per day:	63.44 gallons/connection/day	
	Real Losses per length of main per day*:	N/A	
	Real Losses per service connection per day per psi pressure:	0.61 gallons/connection/day/psi	
	From Above, Real Losses = Current Annual Real Losses (CARL):	1,736.00 million gallons/year	
	Infrastructure Leakage Index (ILI) [CARL/UARL]:	2.13	
* This performance indicator applies for systems	with a low service connection density of less than 32 service connection	s/mile of pipeline	

		Water Audit Report for: REVISED UWNY REPORT-AWWA DEF			ULTS, PSC & CORRECTED DATA	
			Reporting Year:	2014	1/2014 - 12/2014	
			Data Validity Score:	63		
Own Sources (Adjusted for known errors) 10,513.682 System Input 10,696.182	Water Exported 84.201			Billed Water Exported	Revenue Water 84.201	
				Billed Authorized Consumption	Billed Metered Consumption (water exported is removed) 8,453.843	Revenue Water
			Authorized Consumption 8,599.753	8,585.118	Billed Unmetered Consumption	8,585.118
				Unbilled Authorized Consumption	Unbilled Metered Consumption 8.250	Non-Revenue Water (NRW)
			14.635	Unbilled Unmetered Consumption 6.385		
				Apparent Losses	Unauthorized Consumption 26.530	2,026,863
	10,611.981		276.229	Customer Metering Inaccuracies 228.564		
		Water Losses		Systematic Data Handling Errors 21.135		
Water Imported	ted	2,0	2,012.228	Real Losses	Leakage on Transmission and/or Distribution Mains Not broken down	
182.500			1,735.999	Leakage and Overflows at Utility's Storage Tanks Not broken down		
				Leakage on Service Connections Not broken down		