

VILLAGE OF FARMINGDALE

ANALYSIS OF RATES AND REVENUE PROPOSALS

BY

SUFFOLK COUNTY WATER AUTHORITY
AND
BETHPAGE WATER DISTRICT

MARCH 2012

UTILITY MANAGEMENT • VALUATION • RATE CONSULTANTS

6 BEACON STREET. SUITE 200 BOSTON, MA 02108 TEL: (617) 423-3030 FAX: (617) 423-2929

March 12, 2012

Honorable Mayor George Starkie Village of Farmingdale 361 Main Street Farmingdale, NY 11735

Dear Mayor Starkie:

We have completed our analysis of the operating proposals by the Suffolk County Water Authority ("SCWA") and the Bethpage Water District ("BWD") as to the provisions regarding the rates and charges.

This report summarizes the results of our analysis, and contains a summary of our major findings at the outset of this narrative. It also contains a description of our calculations, along with supporting schedules. Our conclusion is that the proposal by SCWA, if implemented, would be in the best interests of the Village of Farmingdale ("Village") and its water customers.

We trust that this report will assist the Village in this matter, and we are available to answer any questions you may have regarding as to its content.

Respectfully submitted, GUASTELLA ASSOCIATES, LLC

D. Huwelle

John F. Guastella

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GENERAL

By letter dated January 27, 2012 this firm entered into an agreement with the Village of Farmingdale ("Village") to undertake an analysis of proposals by the Suffolk County Water Authority ("SCWA") and the Bethpage Water District ("BWD") to operate the Village's water system. The purpose of our analysis is to determine which rate proposal has the better impact on the Village and its water customers.

SUMMARY OF FINDINGS

On the basis of our analysis, the following is an outline of major findings as to the water rate impact on the Village's customers. Because BWC's proposal requires the Village to establish a tax charge to cover capital improvements and SCWA's proposal does not, comparisons of the two proposals must include the relative impact at current as well as potential future capital improvement amounts. Also, because the Village provides water to both residential and commercial customer classes, a thorough analysis must include comparisons for residential and commercial customers, as well as a combined or total impact. Yet another factor to recognize is that there would be different impacts on customers whose water consumption is less than average.

1. A comparison of the average annual water bill (water use of 140,000 gallons) of a *residential* customer under proposals by SCWA and BWD, is shown in the table below. Under BWD's proposal, with capital expenditures of \$4.0 million, the average annual residential bill would be lower than under SCWA's proposal. Once capital expenditures reach \$6.24 million, the average annual residential would be about the same. After capital expenditures exceed \$6.24 million, the SCWA proposal would produce average annual residential bills that are increasingly less in amount than BWD's proposal.

Average Annual Residential Bill with Capital Expenditures (\$ millions)

	<u>\$4.0</u>	<u>\$6.24</u>	<u>\$8.0</u>
SCWA	\$288.52	\$288.52	\$288.52
BWD	\$239.13	\$288.53	\$327.35

2. A comparison of the annual bill of a *commercial* customer, also using 140,000 gallons, under the proposals by SCWA and BWD is shown in the table below. Because the BWD proposal requires a tax charge, a charge that would be higher for commercial customers, the SCWA proposal would produce commercial bills that are considerably less in amount than BWD's.

Average Annual Residential Bill with Capital Expenditures (\$ millions)

	<u>\$4.0</u>	<u>\$6.24</u>	<u>\$8.0</u>
SCWA	\$288.52	\$288.52	\$288.52
BWD	\$465.92	\$622.91	\$746.26

- 3. The SCWA proposal would produce lower bills than the BWD proposal for all customers whose annual water consumption levels are relatively low, up to about 38,000 gallons; the higher the capital expenditures, the greater the difference.
- 4. In terms of overall annual billings (total revenues) a comparison of the two proposals is shown in the table below. The overall impact is that the total charges for all customers would be less under the BWD proposal until the capital expenditures reach about \$5.17 million, after which the SCWA proposal produces lower overall annual billings.

Average Annual Residential Bill with Capital Expenditures (\$ millions)

	<u>\$4.0</u>	<u>\$6.24</u>	\$8.0
SCWA	\$688,131	\$688,131	\$688,131
BWD	\$612,107	\$688,133	\$872,313

- 5. Both of the SCWA and BWD proposals would produce lower billings for all customers than under the Village's rates.
- If the SCWA proposal cannot be accomplished with respect to the inclusion of current and future capital expenditures. The BWD proposal would produce lower billings for all customers.
- 7. Because the SCWA proposal would produce significantly better results for all customers once capital expenditures reach \$5.17 million, it is recommended that the Village accept the SCWA proposal.

SCOPE OF WORK

In performing our analysis, we examined the proposals by SCWA and BWD, particularly the provisions related to rates and charges. We obtained billing data from the Village in order to more accurately determine the impact on both residential and commercial customers. We also obtained other correspondence and information. In addition to information provided by the Village, Michael J. Boufis, Superintendent of Bethpage Water District, sent us an unsolicited letter dated February 24, 2012 in order to bring to our attention certain legal issues, and attached a memorandum dated February 24, 2012 (apparently misdated) to the Board of Commissioners, Bethpage Water District from Cullen & Danowski Carman, Callahan & Ingham, LLP, essentially an analysis of legal issues. We also received a copy of a SCWA interoffice memorandum dated March 6, 2012 to Jeffrey Szabo, Chief Executive Officer from

Timothy J. Hopkins, General Counsel, clearly as a response to the BWD's letter and attached memorandum.

ANALYSIS

Schedule 1, attached, is a calculation of the average revenues under the existing water rates of the Village and those proposed by the SCWA and BWD. The water rate structure of each is shown at the top of the schedule. The average annual water consumption of 140,000 gallons is used for the calculations. The annual revenues under the SCWA and BWD proposals are based on annualized quarterly billings, assuming an average of 35,000 per quarter. This analysis favors BWD because the actual quarterly water consumption will fluctuate, so that under BWD's inclining rate structure higher quarterly bills would be generated for quarters when water consumption exceeds 35,000 gallons. The use of quarterly billings under the proposed SCWA rate structure would not produce higher individual quarterly bills than if billed annually because SCWA proposed a constant rate of \$1.52 for all water consumption.

The next calculations in this schedule take into account the revenue impact of the tax charge that would be required under the BWD proposal. The calculation of the tax amounts are shown on Schedule 2, attached. Schedule 2 shows, and uses, BWD's estimates of property values that would be subject to taxes and the debt service that the taxes would have to cover, assuming increasing amounts of capital expenditures. BWD's tax calculation is shown on this schedule for residential and commercial customers for capital expenditures of \$4.0 million, as well as our calculations for \$4.0, \$6.0 and \$8.0 million. There is an insignificant difference between BWD's and our calculation with respect to the \$4.0 million in capital expenditures, because BWD uses slightly more than \$4.0 million (\$4.035). On the basis of information from the Village, we also assume different terms for the financing of the first \$1.5 million, but again the difference is not significant to this analysis. The average water tax per unit for residential and commercial customers is reflected on Schedule 1.

Referring back to Schedule 1, the total annual revenue for the average annual consumption for residential and commercial customers is calculated by adding the water consumption charges and the tax

charges under BWD's proposal. There is, of course, no tax charge under SCWA's proposal. This schedule also shows "savings" that would result by comparing SCWA's and BWD's proposal with the annual charges under the Village's rate structure. These savings would only be realized if the Village enters into an agreement with either SCWA or BWD, without which the Village would have to increase the charges to its customers in order to make capital improvements, absent consideration of other cost increases. As shown on this schedule, for the average residential customer, BWD's proposal produces lower bills and more savings than the SCWA proposal, if capital expenditures do not exceed about \$6.24 million. For the average commercial customer, the SCWA proposal produces lower bills and more savings than the BWD proposal, under all levels of capital expenditures -- with BWD's proposal producing rate increases for the commercial customers.

Schedule 3, attached, contains calculations of the total average (140,000 gallons) annual revenues at different levels of capital expenditures, and the resultant savings comparing the Village's existing rates and those proposed by the SCWA and BWD. In terms of total revenues, the "breakeven" point, when the revenues under the SCWA and BWD proposals are the same, is when capital expenditures are at about \$5.17 million.

We have added a column to this schedule to show what the impact would be if a tax charge for a \$4.0 million financing would have to be imposed and SCWA's proposed rates were used. The result shows a significantly higher impact. Accordingly, the provision in the SCWA proposal in which SCWA would be responsible for capital expenditures is a critical factor. On the other hand, it is a proposal that certainly shifts a decision in favor of SCWA.

BILL COMPARISONS

Schedule 4 is a bill comparison of annual <u>residential</u> charges at varying water consumption levels and at \$4.0, \$6.0 and \$8.0 million of capital expenditures, using the Village's existing rates and the

¹

¹ It is noted that in addition to its rate proposal, SCWA would charge for hydrants and unbilled locations, for a combined total of \$36,364. It is uncertain as to how these charges would be applied, but if added to each annual bill they would equate to \$17 each -- not significant enough to change the conclusions in this analysis.

SCWA and BWD proposals. In addition, to annual revenues, there are columns in bold type that reflect the savings (positive amounts) or excess (negative amounts) in relation to the Village's existing rates. At the \$4.0 million of capital expenditures, residential rates are lower under the BWD proposal with the exception of customers using the lower level of water consumption -- but the differences at those levels of consumption are not significant. At the higher levels of capital expenditures, the SCWA proposal is better at all levels of water consumption.

We have not prepared a similar bill comparison for commercial customers because SCWA's proposal produces significantly lower annual charges at all levels.

LEGAL CONSIDERATIONS

The February 24, 2012 letter from the BWD sent to this firm along with its attached legal memorandum provides an extensive legal analysis in order to bring to our attention "what are apparent fatal flaws in the SCWA proposal." This correspondence opines that the SCWA proposal requires legislative action to enlarge SCWA's powers to enter into the Construction Operation and Maintenance agreement and to extend its jurisdiction to undertake such construction agreements, across county lines into Nassau County that according to BWD would be confronted by an insurmountable statutory barrier. BWD further states that even if the SCWA could meet that high hurdle the capital cost avoidance stratagem by SCWA meets the same fatal statuary barrier – because enabling legislation for all the other County Water Authorities mandates that the local government fully reimburse the County Authority for all costs of any capital construction performed in the Village.

In response to BWD's communication to me, an interoffice memorandum from SCWA's General Counsel and its Chief Executive Officer dated March 6, 2012 essentially challenges BWD's position. It states that SCWA can successfully take action to obtain required legislative approvals, and finance capital improvements with the related costs recovered through its rates and charges. In addition, the SCWA opines that a water district such as the BWD cannot operate, manage and finance improvements for the public water supply system of the Village or sell water to it because there is no statutory authority in the

Town laws for such action outside the water district's boundaries. Both the BWD and SCWA correspondence cite extensive statutory support for their respective positions.

Our assignment and consulting services agreement with the Village is to evaluate each of the SCWA and BWD proposals in order to determine which has the most beneficial rate and revenue impact on the Village and is in the best interests of its customers. Both of the proposals would produce lower rates than if the Village were to continue on its own. Our assignment did not include a determination as to whether SCWA or BWD could better undertake the physical operation of the Village's water system, or a determination as to whether one or the other of the proposals was legally or legislatively feasible.

It is our opinion, however, that if the Village is to act in the best interests of its customers, it should proceed with the better of the rate proposals – assuming both SCWA and BWD are capable of physically operating the Village's water system in order to provide the customers with safe and adequate water service. It should also then cooperate with the successful bidder to accomplish whatever legal hurdles are necessary to accomplish the goal of charging the lowest available water rates to the benefit of its customers.

CONCLUSION

On the basis of our analysis, and for the reasons previously outlined, we find that, in anticipation of capital requirements, the SCWA proposal would produce lower rates and charges than the BWD proposal. We, therefore, recommend that on the basis of our analysis of rates and charges, the SCWA proposal be accepted, subject to any other factors the Village may consider.

> Respectfully submitted, GUASTELLA ASSOCIATES, LLC

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John F. Guastella

President

						Average	Annuai Kev	enu	e Compani	SOII								
Residential Rev Analysis	_		/illage .nnual			SCWA Qtrly			BWD Qtrly									
	0-20 kg 20-45 kg 45-75 kg 75-100 kg >100 kg	\$ \$ \$ \$	50.00 2.50 2.55 2.85 3.40	Base Chg All kg		18.93 1.52	0-10 kg 10-35 kg 35-60 kg 60-100 kg >100 kg	\$ \$ \$ \$	0.75 1.05 1.35 1.65 2.10		(Co	orrected) BWD		BWD		BWD	Ві	reakeven BWD
Avg Annual Usage Avg Qtrly Usage			kg 140			kg 140 35			kg 140 35	Cap Costs	\$ 4		\$ (5,000,000	\$ 8	3,000,000	\$	6,240,000
Base Chg Usage Chg	20	\$	50.00	35	\$	18.93 53.20	10	\$	- 7.50		\$	7.50	\$	7.50	\$	7.50	\$	7.50
		\$ \$ \$ \$	62.50 76.50 71.25 136.00	33	, 	33.20		\$	26.25		\$	26.25	\$	26.25	\$	26.25	\$	26.25
Qtrly Rev Annual Rev Property Tax Adds		\$ \$	396.25 -		\$ \$ \$	72.13 288.52 -		\$ \$ \$	33.75 135.00 105.23		\$ \$ \$	33.75 135.00 104.13	\$ \$ \$	33.75 135.00 148.24	\$ \$ \$	33.75 135.00 192.35	\$ \$ \$	33.75 135.00 153.53
Total Annual Rev		\$	396.25		\$	288.52		\$	240.23		\$	239.13	\$	283.24	\$	327.35	\$	288.53
Annual Savings without H	lydrant Chg				\$	107.73		\$	156.02		\$	157.12	\$	113.01	\$	68.90	\$	107.72
Additional Rev for Hydran Total Annual Rev	t				\$ \$	17.00 305.52												
Annual Savings Including	Hydrant Chg				\$	90.73												
Residential Revenue 1905 Customers	Billing Tax		754,856 - 754,856			549,631 - 549,631						257,175 189,998 447,173		257,175 270,480 527,655		257,175 350,961 608,136		257,175 280,137 537,312
	Avg Bill Saving	\$	396.25		\$ \$	288.52 107.73					\$ \$	234.74 161.51	\$ \$	276.98 119.27	\$ \$	319.23 77.02	\$ \$	282.05 114.20
Commercial Revenue 354 Customers	Billing Tax		140,273 - 140,273			102,136 - 102,136						47,790 117,144 164,934		47,790 166,765 214,555		47,790 216,386 264,176		47,790 172,720 220,510
	Avg Bill Saving	\$	396.25		\$ \$	288.52 107.73					\$ \$	465.92 (69.67)	\$ \$	606.09 (209.84)	\$ \$	746.26 (350.01)	\$ \$	622.91 (226.66)
Subtotal Additional Hydrant	T I .		005.400			651,767 36,364						542.407		742.240		072.040		757 000
	Total Rev. \$/Avg Unit Saving		895,129 396.25		\$ \$	688,131 304.62 91.63					\$ \$	612,107 270.96 125.29	\$ \$	742,210 328.56 67.69	\$ \$	872,313 386.15 10.10	\$ \$	757,822 335.47 60.78

VILLAGE OF FARMINGDALE Tax Charge Calculation SCHEDULE 2

	Capital Costs Term	:	4,000,000	1,500,000 15	2,500,000	4,000,000	1,500,000 15	4,500,000	6,000,000	1,500,000 15	6,500,000	8,000,000
	Interest Rate		5.0%	5.0%	5.0%		5.0%	5.0%		5.0%	5.0%	
	Annual Debt Service	2	\$260,206	\$144,513	\$162,629	\$307,142	\$144,513	\$292,731	\$437,245	\$144,513	\$422,834	\$567,348
	BW	/A Calculation			GA Calculation			GA Calculation			GA Calculation	
	res	comm	total	res	comm	total	res	comm	total	res	comm	total
Property Value	698,754,104	237,373,552	936,127,656	698,754,104	237,373,552	936,127,656	698,754,104	237,373,552	936,127,656	698,754,104	237,373,552	936,127,656
Tax Rate Per \$1000	3.129137	5.679203		3.129137	5.679203		3.129137	5.679203		3.129137	5.679203	
Taxes	2,186,497	1,348,093	3,534,590	2,186,497	1,348,093	3,534,590	2,186,497	1,348,093	3,534,590	2,186,497	1,348,093	3,534,590
	0.60			0.62	0.38		0.62	0.38		0.62	0.38	
Debt Service	\$192,000.00	\$128,000.00	320,000	\$189,998.05	\$117,143.97	307,142	\$270,479.69	\$166,765.20	437,245	\$350,961.32	\$216,386.44	567,348
Water Tax Rate Per \$1000	0.274774773	0.539234464		0.271909749	0.493500497		0.387088516	0.702543308		0.502267282	0.911586119	
	192,000.00	128,000.00	320,000.00	189,998.05	117,143.97	307,142.02	270,479.69	166,765.20	437,244.89	350,961.32	216,386.44	567,347.76
Tax Increase	8.78%	9.49%		8.69%	8.69%		12.37%	12.37%		16.05%	16.05%	
Median Unit Value	382,966	752,576		382,966	752,576		382,966	752,576		382,966	752,576	
No. of Units	1,824.59	315.41		1,824.59	315.41		1,824.59	315.41		1,824.59	315.41	
Avg Water Tax Per Unit	105.23	405.81		104.13	371.40		148.24	528.72		192.35	686.04	

VILLAGE OF FARMINGDALE Total Average Annual Revenue Comparison SCHEDULE 3

Hydrant Chgs Unbilled Locations				SCWA 35,564.40 800.00 36,364.40	BWD 0		Residential Commercial Fire	Customers 1,905 354 28	
Amt per Customer				\$17.00				2,287	
No. of Metered Customers		Village 2,259	No FWD Fund SCWA 2,259	At \$4.0M SCWA 2,259	At \$4.0M BWD 2,259	Breakeven \$5,168,700 BWD 2,259	At \$6.0M BWD 2,259	At \$6.5M BWD 2,259	At \$8.0M BWD 2,259
Avg Annual Rev/Customer Annual Revenue Additional Rev Rqd	at 140 kg	396.25 \$895,129	288.52 \$651,767 36,364	288.52 \$651,767 36,364	135.00 \$304,965	135.00 \$304,965 -	135.00 \$304,965	135.00 \$304,965	135.00 \$304,965 -
Operating Revenues		\$895,129	\$688,131	\$688,131	\$304,965	\$304,965	\$304,965	\$304,965	\$304,965
\$	\$1,500,000 5.0% 15			\$144,513	\$144,513	\$144,513	\$144,513	\$144,513	\$144,513
\$	\$2,500,000 5.0% 30			\$162,629	\$162,629				
B.E.	3,668,700 5.0% 30					\$238,654			
	4,500,000 5.0% 30						\$292,731		
\$	\$5,000,000 5.0% 30							\$325,257	
Ş	\$6,500,000 5.0% 30								\$422,834
Tax Revenues	_	\$0	\$0	\$307,142	\$307,142	\$383,168	\$437,245	\$469,771	\$567,348
Total Annual Rev Rqd Annual Savings		\$895,129	\$688,131 \$206,998	\$995,273 (\$100,144)	\$612,107 \$283,022	\$688,133 \$206,996	\$742,210 \$152,919	\$774,736 \$120,393	\$872,313 \$22,816

Bill Comparisons

				PROJECTED CAPITAL EXPE	NDITURES	
			\$4,000,000	\$6,000,000	\$8,000,000	
	Village	SCWA	BWD	BWD	BWD	
At 20 kg annually	4=	4.00.0	4	*** **	4	
Annual Rev Property Tax Adds	\$50.00	\$106.12	\$15.00 \$104.13	\$15.00	\$15.00 \$192.35	
Total Annual Rev	\$0.00 \$50.00	\$0.00 \$106.12 (\$	56.12) \$119.13	\$148.24 (\$69.13) \$163.24	(\$113.24) \$207.35	(\$157.35)
Total Allitual Nev	\$30.00	\$100.12 (\$	30.12) 3119.13	(303.13) 3103.24	(\$113.24) \$207.33	(\$157.55)
At 30 kg annually	Ć75 00	¢424.22	ć22.50	¢22.50	¢22.50	
Annual Rev	\$75.00	\$121.32	\$22.50	\$22.50	\$22.50	
Property Tax Adds Total Annual Rev	\$0.00 \$75.00	\$0.00 \$121.32 (\$	\$104.13 46.32) \$126.63	\$148.24 (\$51.63) \$170.74	\$192.35 (\$95.74) \$214.85	(\$139.85)
Total Allitual Nev	\$75.00	3121.52 (3	40.32) \$120.03	(331.03) 3170.74	(333.74) 3214.03	(\$155.05)
At 40 kg annually						
Annual Rev	\$100.00	\$136.52	\$30.00	\$30.00	\$30.00	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	(6422.25)
Total Annual Rev	\$100.00	\$136.52 (\$	36.52) \$134.13	(\$34.13) \$178.24	(\$78.24) \$222.35	(\$122.35)
At 50 kg annually						
Annual Rev	\$125.25	\$151.72	\$40.50	\$40.50	\$40.50	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	(6407.60)
Total Annual Rev	\$125.25	\$151.72 (\$	26.47) \$144.63	(\$19.38) \$188.74	(\$63.49) \$232.85	(\$107.60)
At 60 kg annually						
Annual Rev	\$150.75	\$166.92	\$51.00	\$51.00	\$51.00	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$150.75	\$166.92 (\$	16.17) \$155.13	(\$4.38) \$199.24	(\$48.49) \$243.35	(\$92.60)
At 62.9 kg annually						
Annual Rev	\$158.15	\$171.33	\$54.05	\$54.05	\$54.05	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$158.15		13.18) \$158.18	(\$0.03) \$202.29	(\$44.14) \$246.40	(\$88.25)
At 70 kg annually						
Annual Rev	\$176.25	\$182.12	\$61.50	\$61.50	\$61.50	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$176.25		\$5.87) \$165.63	\$10.62 \$209.74	(\$33.49) \$253.85	(\$77.60)
At 75.5 kg annually	ć 100.42	ć 100.40	ć 67.20	ćc7.20	¢67.20	
Annual Rev	\$ 190.43	\$ 190.48	\$ 67.28	\$67.28	\$67.28	
Property Tax Adds Total Annual Rev	\$0.00 \$190.43	\$0.00 \$190.48	\$104.13 \$0.06) \$171.41	\$148.24 \$19.02 \$215.52	\$192.35 (\$25.09) \$259.63	(\$69.20)
	7277.0	,	, , , , , , , , , , , , , , , , , , ,	7	(+=====	(+
At 80 kg annually						
Annual Rev	\$ 203.25	\$ 197.32	\$ 72.00	\$72.00	\$72.00	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$203.25	\$197.32	\$5.93 \$176.13	\$27.12 \$220.24	(\$16.99) \$264.35	(\$61.10)
At 90 kg annually						
Annual Rev	\$ 231.75	\$ 212.52	\$ 82.50	\$82.50	\$82.50	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$231.75	\$212.52 \$	19.23 \$186.63	\$45.12 \$230.74	\$1.01 \$274.85	(\$43.10)
At 100 kg annually						
Annual Rev	\$ 260.25	\$ 227.72	\$ 93.00	\$93.00	\$93.00	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$260.25	\$227.72 \$	32.53 \$197.13	\$63.12 \$241.24	\$19.01 \$285.35	(\$25.10)
At 120 kg annually						
Annual Rev	\$ 328.25	\$ 258.12	\$ 114.00	\$114.00	\$114.00	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$328.25	\$258.12	70.13 \$218.13	\$110.12 \$262.24	\$66.01 \$306.35	\$21.90
At 140 kg annually						
Annual Rev	\$ 396.25	\$ 288.52	\$ 135.00	\$135.00	\$135.00	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$396.25		07.73 \$239.13	\$157.12 \$283.24	\$113.01 \$327.35	\$68.90
At 150 kg angually						
At 150 kg annually Annual Rev	\$ 430.25	\$ 303.72	\$ 148.50	\$148.50	\$148.50	
Property Tax Adds	\$0.00	\$0.00	\$104.13	\$148.24	\$192.35	
Total Annual Rev	\$430.25		26.53 \$252.63	\$177.62 \$296.74	\$133.51 \$340.85	\$89.40
A. 200 l						
At 200 kg annually Annual Rev	\$ 600.25	\$ 379.72	\$ 216.00	\$216.00	\$216.00	
Property Tax Adds	\$ 000.25	\$0.00	\$ 210.00	\$148.24	\$192.35	
Total Annual Rev	\$600.25		20.53 \$320.13	\$280.12 \$364.24	\$236.01 \$408.35	\$191.90
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Appendix A

PROFESSIONAL QUALIFICATIONS AND EXPERIENCE of JOHN F. GUASTELLA

B.S., Mechanical Engineering, Stevens Institute of Technology, 1962, Licensed Professional Engineer.

Member:

American Water Works Association, Lifetime Member National Association of Water Companies New England Water Works Association, Lifetime Member

Committees:

AWWA, Water Rates Committee (Manual M-1, 1983 Edition)

National Association of Regulatory Utility Commissioners (NARUC) and NAWC, Joint-

Committee on Rate Design

NAWC, Rates and Revenues Committee

NAWC, Small Water Company Committee

Mr. Guastella is President of Guastella Associates, LLC ("formerly John F. Guastella Associates, Inc.") which provides management, valuation and rate consulting services for municipal and investor-owned utilities, as well as regulatory agencies. His clients include utilities in the states of Alaska, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Maine, Maryland, Massachusetts, Missouri, Michigan, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Pennsylvania, South Carolina, Texas, Rhode Island and Virginia. He has provided consulting services that include all aspects of utility regulation and rate setting, encompassing revenue requirements, revenues, operation and maintenance expenses, depreciation, taxes, return on investment, cost allocation and rate design. He has performed depreciation studies for the establishment of average service lives of utility property. He has performed appraisals of utility companies for management purposes and in connection with condemnation proceedings. He has also negotiated the sale of utility companies.

Mr. Guastella served for more than four years as President of Country Knolls Water Works, Inc., a water utility that served some 5,500 customers in Saratoga County, New York. He also served as a member of the Board of Directors of the National Association of Water Companies.

Mr. Guastella has qualified and testified as an expert witness before regulatory agencies and municipal jurisdictions in the states of Alaska, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Maryland, Massachusetts, Missouri, Montana, Nevada, New Hampshire, New Mexico, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas and Virginia.

Prior to establishing his own firm, Mr. Guastella was employed by the New York State Public Service Commission for sixteen years. For two years he was involved in the regulation of electric and gas utilities, with the remaining years devoted to the regulation of water utilities. In 1970, he was promoted to Chief of Rates and Finance in the Commission's Water Division. In 1972, he was made Assistant Director of the Water Division. In 1974, he was appointed by Alfred E. Kahn, then Chairman of the Commission, to be Director of the Water Division, a position he held until he resigned from the Commission in August 1978.

At the Commission, his duties included the performance and supervision of engineering and economic studies concerning rates and service of many public utilities. As Director of the Water Division, he was responsible for the regulation of more than 450 water companies in New York State and headed a professional staff of 32 engineers and three technicians. A primary duty was to attend Commission sessions and advise the Commission during its decision making process. In the course of that process, an average of about fifty applications per year would be reviewed and analyzed. The applications included testimony, exhibits and briefs involving all aspects of

utility valuation and rate setting. He also made legislative proposals and participated in drafting Bills that were enacted into law: one expanded the N.Y. Public Service Commission's jurisdiction over small water companies and another dealt specifically with rate regulation and financing of developer-related water systems.

In addition to his employment and client experience, Mr. Guastella served as Vice-Chairman of the Staff-Committee on Water of the National Association of Regulatory Utility Commissioners (NARUC). This activity included the preparation of the "Model Record-Keeping Manual for Small Water Companies," which was published by the NARUC. This manual provides detailed instruction on the kinds of operation and accounting records that should be kept by small water utilities, and on how to use those records.

Each year since 1974 he has prepared study material, assisted in program coordination and served as an instructor at the Eastern Annual Seminar on Water Rate Regulation sponsored over the years by the NARUC in conjunction with the University of South Florida, Florida Atlantic University, the University of Utah, Florida State University, the University of Florida and currently Michigan State University. In 1980 he was instrumental in the establishment of the Western NARUC Rate Seminar and has annually served as an instructor since that time. This course is recognized as one of the best available for teaching rate-setting principles and methodology. More than 5,000 students have attended this course, including regulatory staff, utility personnel and members of accounting, engineering, legal and consulting firms throughout the country.

Mr. Guastella served as an instructor and panelist in a seminar on water and wastewater regulation conducted by the Independent Water and Sewer Companies of Texas. In 1998, he prepared and conducted a seminar on basic rate regulation on behalf of the New England Chapter of the National Association of Water Companies. In 2000 and 2001, Mr. Guastella developed and conducted a special seminar for developer related water and wastewater utilities in conjunction with Florida State University, and again in 2003 in conjunction with the University of Florida. It provided essential training for the financial structuring of small water and wastewater utilities, rate setting, financing and the establishment of their market value in the event of a negotiated sale or condemnation. In 2004, he prepared and conducted a special workshop seminar on behalf of the Office of Regulatory Staff of South Carolina, covering rate setting, valuation and general regulation of water and wastewater utilities. In 2006, he participated in an expert workshop on full cost pricing conducted by the U. S. Environmental Protection Agency in coordination with the Institute of Public Utilities, Michigan State University. In 2006, he prepared and conducted a special seminar on rate setting and valuation on behalf of the New York Chapter of the NAWC. In 2007, he prepared and conducted a special seminar on rate setting and valuation on behalf of the New England Chapter of NAWC.

Mr. Guastella has made presentations on a wide variety of rate, valuation and regulatory issues at meetings of the National Association of Regulatory Utility Commissioners, the American Water Works Association, the New England Water Works Association, the National Association of Water Companies, the New England Conference of Public Utilities Commissioners, the Florida, New England, New Jersey and New York Chapters of NAWC, the Mid-America Regulatory Conference, the Southeastern Association of Regulatory Utility Commissioners, the Pennsylvania Environmental Conference, the Public Utility Law Section of the New Jersey Bar Association, and the NAWC Water Utility Executive Council.

John F. Guastella List of Proceedings in which Expert Testimony was Presented

***	CIV.	G	D 1.46 N 1
Year 1966	Client Sunhill Water Corporation	State New York	Regulatory Docket/Case Number 23968
1967	Amagansett Water Company	New York	24210
1967	Worley Homes, Inc.	New York	24466
1968	Amagansett Water Company	New York	24718
1968	Amagansett Water Company	New York	24883
1968	Sunhill Water Corporation	New York	23968
1968	Worley Homes, Inc.	New York	Supreme Court
1969 1969	Amagansett Water Supply Citizens Water Supply Co.	New York New York	24883 25049
1969	Worley Homes, Inc.	New York	24466/24992
1970	Brooklyn Union Gas Company	New York	25448
1970	Consolidated Edison of New York	New York	25185
1971	Hudson Valley Water Companies	New York	26093
1971	Jamaica Water Supply Company	New York	26094
1971 1971	Port Chester Water Works, Inc. U & I Corp Merrick District	New York New York	25797 26143
1971	Wanakah Water Company	New York	25873
1972	Spring Valley Water Company	New York	26226
1972	U & I Corp Woodhaven District	New York	26232
1973	Citizens Water Supply Company	New York	26366
1978	Rhode Island DPU&C (Bristol County)	Rhode Island	1367A
1979 1979	Candlewick Lake Utilities Co. Candlewick Lake Utilities Co.	Illinois Illinois	76-0218 76-0347
1979	Candlewick Lake Utilities Co.	Illinois	78-0151
1979	Jacksonville Suburban Utilities	Florida	770316-WS
1979	New York Water Service Corporation	New York	27594
1979	Salem Hills Sewerage Disposal Corp. v. V. of Vorheesville	New York	Supreme Court
1979	Seabrook Water Corporation	New Jersey	7910-846
1979	Southern Utilities Corporation	Florida	770317-WS
1979 1979	Township of South Brunswick Westchester Joint Water Works	New Jersey New York	Municipal Municipal
1979	Woodhaven Utilities Corporation	Illinois	77-0109
1980	Crestwood Village Sewer Company	New Jersey	BPU 802-78
1980	Crestwood Village Water Company	New Jersey	BPU 802-77
1980	Gateway Water Supply Corporation	Texas	Municipal
1980	GWW-Central Florida District	Florida	800004-WS
1980 1980	Jamaica Water Supply Company Phodo Jelond DPU & C. (Newport Water)	New York Rhode Island	27587 1480
1981	Rhode Island DPU&C (Newport Water) Briarcliff Utilities, Inc.	Texas	3620
1981	Candlewick Lake Utilities Co.	Illinois	81-0011
1981	Caroline Water Company, Inc.	Virginia	810065
1981	GDU, Inc Northport	Florida	Municipal
1981	GDU, Inc Port Charlotte	Florida	Municipal
1981	GDU, Inc Port Malabar	Florida	80-2192
1981 1981	Hobe Sound Water Company Lake Buckhorn Utilities, Inc.	Florida Ohio	8000776 80-999
1981	Lake Kiowa Utilities, Inc.	Texas	3621
1981	Lakengren Utilities, Inc.	Ohio	80-1001
1981	Lorelei Utilities, Inc.	Ohio	80-1000
1981	New York Water Service Corporation	New York	28042
1981	Rhode Island DPU&C (Newport Water)	Rhode Island	1581
1981 1981	Shawnee Hills Utility Company Smithville Water Company, Inc.	Ohio New Jersey	80-1002 808-541
1981	Spring Valley Water Company, Inc.	New York	27936
1981	Spring Valley Water Company, Inc.	New York	27936
1981	Sunhill Water Corporation	New York	27903
1981	Swan Lake Water Corporation	New York	27904
1982	Chesterfield Commons Sewer Company	New Jersey	822-84
1982 1982	Chesterfield Commons Water Company Crescent Waste Treatment Corp.	New Jersey New York	822-83 Municipal
1982	Crestwood Village Sewer Company	New Jork New Jersey	821-33
1982	Crestwood Village Water Company	New Jersey	821-38
1982	Salem Hills Sewerage Disposal Corp.	New York	Municipal
1982	Township of South Brunswick	New Jersey	Municipal
1982	Woodhaven Utilities Corporation	Illinois	82-0167
1983	Country Knolls Water Works, Inc.	New York	28194
1983 1984	Heritage Hills Water Works Corp. Crestwood Village Sewer Company	New York New Jersey	28453 8310-861
1984	Crestwood Village Water Company	New Jersey	8310-860
1984	Environmental Disposal Corp.	New Jersey	816-552
1984	GDU, Inc Port St. Lucie	Florida	830421
1984	Heritage Village Water (water/sewer)	Connecticut	84-08-03
1984	Hurley Water Company, Inc.	New York	28820
1984 1985	New York Water Service Corporation Deltona Utilities (water/sewer)	New York Florida	28901 830281
1985	J. Filiberto Sanitation, Inc.	New Jersey	8411-1213
1985	Sterling Forest Pollution Control	New York	Municipal
1985	Water Works Enterprise, Grand Forks	North Dakota	Municipal
1986	GDU, Inc Port Charlotte	Florida	Municipal
1986	GDU, Inc Sebastian Highlands	Florida	Municipal

John F. Guastella List of Proceedings in which Expert Testimony was Presented

Year	Client	State	Regulatory Docket/Case Number
1986	Kings Grant Water/Sewer Companies (settled)	New Jersev	WR8508-868
1986	Mt. Ebo Sewage Works, Inc.	New York	Municipal
1986	Sterling Forest Pollution Control	New York	Municipal
1987	Country Knolls Water Works, Inc.	New York	29443
1987	Crestwood Village Sewer Co. (settled)	New Jersey	WR8701-38
1987	Deltona Utilities - Marco Island	Florida	850151-WS
1987	Deltona Utilities, Inc Citrus Springs (settled)	Florida	870092-WS
1987	First Brewster Water Corp. v. Town of Southeast (settled)	New York	Supreme Court
1987	GDU, Inc Silver Springs Shores	Florida	870239-WS
1987	Ocean County Landfill Corporation	New Jersey	SR-8703117
1987	Palm Coast Utility Corporation	Florida	870166-WS
1987	Sanlando Utilities Corp. (settled)	Florida	860683-WS
1987	Township of South Brunswick	New Jersey Illinois	Municipal 87-0047
1987 1988	Woodhaven Utilities Corp. (settled) Crescent Estates Water Co., Inc.	New York	88-W-035
1988	Elizabethtown Water Co.	New Jersey	OAL PUC3464-88
1988	Heritage Village Water Company	Connecticut	87-10-02
1988	Instant Disposal Service, Inc.	New Jersey	SR-87080864
1988	J. Filiberto Sanitation v. Morris County Transfer Station	New Jersey	01487-88
1988	Ohio Water Service Co.	Ohio	86-1887-WW-CO1
1988	St. Augustine Shores Utilities	Florida	870980-WS
1989	Elizabethtown Water Co.	New Jersey	BPU WR89020132J
1989	GDU (FPSC generic proceeding as to rate setting procedures)	Florida	880883-WS
1989	Gordon's Corner Water Co.	New Jersey	OAL PUC479-89
1989	Heritage Hills Sewage Works	Connecticut	Municipal
1989	Heritage Village Water Company	Connecticut	87-10-02
1989	Palm Coast Utility Corporation	Florida	890277-WS
1989	Southbridge Water Supply Co.	Massachusetts	DPU 89-25
1989	Sterling Forest Water Co.	New York	PSC 88-W-263
1990	American Utilities, Inc United States Bankruptcy Court	New Jersey	85-00316
1990	City of Carson City	Nevada	Municipal
1990	Country Knolls Water Works, Inc.	New York	90-W-0458
1990	Elizabethtown Water Company	New Jersey	WR900050497J
1990	Kent County Water Authority	Rhode Island	1952
1990	Palm Coast Utility Corporation	Florida	871395-WS
1990	Southern States Utilities, Inc.	Florida	Workshop
1990	Trenton Water Works	New Jersey	WR90020077J
1990	Waste Management of New Jersey	New Jersey	SE 87070552
1990	Waste Management of New Jersey	New Jersey	SE 87070566
1991	City of Grand Forks	North Dakota	Municipal
1991	Gordon's Corner Water Co.	New Jersey	OAL PUC8329-90
1991	Southern States Utilities, Inc.	Florida	900329-WS
1992	Elizabethtown Water Co.	New Jersey	WR 91081293J
1992	General Development Utilities, Inc Port Malabar Division	Florida	911030-WS
1992	General Development Utilities, Inc West Coast Division	Florida	911067-WS
1992	Heritage Hills Water Works, Inc.	New York	92-2-0576
1993	General Development Utilities, Inc Port LaBelle Division	Florida	911737-WS
1993	General Development Utilities, Inc Silver Springs Shores	Florida	911733-WS
1993	General Waterworks of Pennsylvania - Dauphin Cons. Water Supply	Pennsylvania	R-00932604
1993	Kent County Water Authority	Rhode Island	2098
1993	Southern States Utilities - FPSC Rulemaking	Florida	911082-WS
1993	Southern States Utilities - Marco Island	Florida	920655-WS
1994	Capital City Water Company	Missouri	WR-94-297
1994	Capital City Water Company	Missouri	WR-94-297
1994	Elizabethtown Water Company	New Jersey	WR94080346
1994	Elizabethtown Water Company	New Jersey	WR94080346
1994	Environmental Disposal Corp.	New Jersey	WR94070319
1994	General Development Utilities - Port Charlotte	Florida	940000-WS
1994	General Waterworks of Pennsylvania	Pennsylvania	R-00943152
1994	Hoosier Water Company - Mooresville Division	Indiana	39839
1994	Hoosier Water Company - Warsaw Division	Indiana	39838
1994	Hoosier Water Company - Winchester Division	Indiana	39840
1994	West Lafayette Water Company	Indiana	39841
1994	Wilmington Suburban Water Corporation	Delaware	94-149 (stld)
1995	Butte Water Company	Montana	Cause 90-C-90
1995	Heritage Hills Sewage Works Corporation	New York	Municipal
1996	Consumers Illinois Water Company	Illinois	95-0342
1996	Elizabethtown Water Company	New Jersey	WR95110557
1996	Palm Coast Utility Corporation	Florida	951056-WS
1996	PenPac, Inc.	New Jersey	OAL-00788-93N
1996	Southern States Utilities, Marco Island	Florida	950495-WS
1997	Crestwood Village Water Company	New Jersey	BPU 96100739
1997	Indiana American Water Co., Inc.	Indiana	IURC 40703
1997	Missouri-American Water Company	Missouri	WR-97-237
1997	South County Water Corp	New York	97-W-0667
1997	United Water Florida	Florida	960451-WS
1998	Consumer Illinois Water Company	Illinois	98-0632
1998	Consumers Illinois Water Company	Illinois	97-0351
1998	Heritage Hills Water Company	New York	97-W-1561
1998	Missouri-American Wastewater Company	Missouri	SR-97-238

John F. Guastella List of Proceedings in which Expert Testimony was Presented

Year	Client	State	Regulatory Docket/Case Number
1999	Consumers Illinois Water Company	Illinois	99-0288
1999	Environmental Disposal Corp.	New Jersey	WR99040249
1999	Indiana American Water Co., Inc.	Indiana	IURC 41320
2000	South Haven Sewer Works, Inc.	Indiana	Cause: 41410
2000	Utilities Inc. of Maryland	Maryland	CAL 97-17811
2001	Artesian Water Company	Delaware	00-649
2001	Citizens Utilities Company	Illinois	01-0001
2001	Elizabethtown Water Company	New Jersey	WR-0104205
2001	Kiawah Island Utility, Inc.	South Carolina	2001-164-W/S
2001	Placid Lakes Water Company	Florida	011621-WU
2001	South Haven Sewer Works, Inc.	Indiana	41903
2001	Southlake Utilities, Inc.	Florida	981609-WS
2002	Artesian Water Company	Delaware	02-109
2002	Consumers Illinois Water- Grant Park	Illinois	02-0480
2002	Consumers Illinois Water- Village Woods	Illinois	02-0539
2002	Valencia Water Company	California	02-05-013
2003	Consumers Illinois Water - Indianola	Illinois	03-0069
2003	Elizabethtown Water Company	New Jersey	WR-030-70510
2003	Golden Heart Utilities, Inc.	Alaska	U-02-13, 14 & 15
2003	Utilities, Inc. – Georgia	Georgia	CV02-0495-AB
2004	Aquarion Water Company	Connecticut	04-02-14
2004	Artesian Water Company	Delaware	04-42
2004	El Dorado Utilities, Inc.	New Mexico	D-101-CU-2004-
2004	Environmental Disposal Corp.	New Jersey	DPU WR 03 070509
2004	Heritage Hills Water Company	New York	03-W-1182
2004	Sun Valley Water & Washoe County Dept. of Water Revenues	Nevada	TMWA Municipal
2004	Jersey City MUA	New Jersey	Municipal
2004	Rockland Electric Company	New Jersey	EF02110852
2005	Aquarion Water Company	New Hampshire	DW 05-119
2005	Intercoastal Utilities, Inc.	Florida	04-0007-0011-0001
2005	Haig Point Utility Company, Inc.	South Carolina	2005-34-W/S
2005	South Central Connecticut Regional Water Auth.	Connecticut	Municipal
2006	Pennichuck Water Works, Inc.	New Hampshire	DW-04048
2006	Village of Williston Park	New York	Municipal
2006	Jersey City MUA	New Jersey	Municipal
2006	Groton Utilities	Connecticut	Municipal
2006	Connecticut Water Company	Connecticut	06-07-08
2006	Birmingham Utilities, Inc.	Connecticut	06-05-10
2006	Aqua Florida Utilities, Inc.	Florida	060368-WS
2007	Aquarion Water Company of CT	Connecticut	07-05-19
2007	Pennichuck Water Works, Inc.	New Hampshire	DW 04-048
2007	Aqua Indiana - Utility Center	Indiana	43331
2007	Environmental Disposal Corp.	New Jersey	WR 04 080760
2007	Aqua Florida Utilities, Inc.	Florida	07-0183
2007	Aqua Illinois, Inc Hawthorn Woods, Willowbrook & Vermilion	Illinois	07-0620/07-0621/08-0067
2007	Aqua Florida Utilities, Inc.	Florida	080121-WS
2008			
	Aquarion Water Company of MA	Massachusetts	D.P.U. 08-27
2008	Haig Point Utility Company, Inc.	South Carolina	2007-414-WS
2009	R.M.V. Land & C.M. Livestock, L.C.C.	New Jersey	EM02050313
2010	City of Griffin	Georgia	Civil Action No. 09V-2866
2010	Connecticut Water Company	Connecticut	09-12-11
2010	Montville WPCA	Connecticut	1400012464
2010	Milford Water Company	Massachusetts	DPU 10-78
2010	Arizona American Water Company	Arizona	W-01303A-10-0448
2011	Aqua Illinois	Illinois	ICC Docket (Consolidated)
2011	Artesian Water Company	Maryland	MPSC Case 9252
2011	Artesian Water Company	Delaware	PSC 11-207
2011	Kiawah Island Utility, Inc.	South Carolina	2011-317-WS
_011		South Curonila	

Papers and Presentations By John F. Guastella

Year	Title	Forum
1974	1. Basics of Rate Setting	Semi-annual seminars on utility rate regulation, National
through	2. Cost Allocation and Rate Design	Association of Regulatory Utility Commissioners, sponsored by
2011	3. Revenue Requirements	the University of South Florida, the University of Utah, Florida
		State University, The University of Florida and currently
		Michigan State University
1974	Rate Design Studies: A Regulatory Point-of-	Annual convention of the National Association of Water
	View	Companies, New Haven, Connecticut
1976	Lifeline Rates	Annual convention of the National Association of Water
		Companies, Chattanooga, Tennessee
1977	Regulating Water Utilities: The Customers'	Annual symposium of the New England Conference of Public
	Best Interest	Utilities Commissioners, Mystic Seaport, Connecticut
1978	Poto Docioni Procedino y Procetico	Annual convention of the National Association of Water
1978	Rate Design: Preaching v. Practice	
1979	Small Water Companies	Companies, Baton Rouge, Louisiana Annual symposium of the New England Conference of Public
1979	Sman water Companies	Utilities Commissioners, Newport, Rhode Island
1979	Rate Making Problems Peculiar to Private	Special educational program sponsored by Independent Water
17/7	Water and Sewer Companies	and Sewer Companies of Texas, Austin, Texas
1980	Water Utility Regulation	Annual meeting of the National Association of Regulatory
1700	water Offity Regulation	Utility Commissioners, Houston, Texas
1981	The Impact of Water Rates on Water Usage	Annual Pennsylvania Environmental Conference, Harrisburg,
1701	The impact of water Rates on water esage	Pennsylvania
1981	A Realistic Approach to Regulating Water	Mid-America Regulatory Conference, Clarksville, Indiana
1701	Utilities Viginianing Water	The famous regulatory completely classes, and and
1982	Issues in Water Utility Regulation	Annual symposium of the New England Conference of Public
		Utilities Commissioners, Rockport, Maine
1982	New Approaches to the Regulation of Water	Southeastern Association of Regulatory Utility Commissioners,
	Utilities	Asheville, North Carolina
1983	Allocating Costs and Revenues Fairly and	Maryland Water and Sewer Finance Conference, Westminster,
	Effectively	Maryland
1983	Lifeline and Social Policy Pricing	Annual conference of the American Water Works Association,
		Las Vegas, Nevada (published)
1984	The Real Cost of Service: Some Special	Annual New Jersey Section AWWA Spring Meeting, Atlantic
	Considerations	City, New Jersey
1987	Margin Reserve: It's Not the Issue	Florida Waterworks Association Newsletter, April/May/June
		1987 issue
1987	A "Current" Issue: CIAC	NAWC - New England Chapter November 6, 1987 meeting
1988	Small Water Company Rate Setting: Take It or Leave It	NAWC - New York Chapter June 14, 1988 meeting
1989	The Solution to all the Problems of Good Small Water Companies	NAWC Quarterly magazine, Winter issue
1989	Current Issues Workshop - Panel	New England Conference of Public Utilities Commissioners,
	r	Kennebunkport, Maine
1991	Alternative Rate Structures	New Jersey Section 1991 Annual Conference, AWWA, Atlantic
-		City, New Jersey
1994	Conservation Impact on Water Rates	New England NAWC and New England AWWA, Sturbridge,
	•	Massachusetts

Papers and Presentations By John F. Guastella

Year	Title	Forum
1996	Utility Regulation - 21st Century	NAWC Annual Meeting, Orlando, Florida
1997	Current Status Drinking Water State Revolving Fund	NAWC Annual Meeting, San Diego, California
1998	Small Water Companies - Problems and Solutions	NAWC Annual Meeting, Indianapolis, Indiana
1998	Basic Rate Regulation Seminar	New England Chapter - NAWC, Rockport, Maine
2000	Developer Related Water and Sewer Utilities Seminar	Florida State University, Orlando, Florida
2001	Developer Related Water and Sewer Utilities Seminar	Florida State University, Orlando, Florida
2002	Regulatory Cooperation - Small Company Education	New England Chapter - NAWC, Annual Meeting
2003	Developer Related Water and Sewer Utilities Seminar	University of Florida, Orlando, Florida
2004	Basic Regulation & Rate Setting Training Seminar	Office of Regulatory Staff, Columbia, South Carolina
2005	Municipal Water Rates	Nassua-Suffolk Water Commissioners Association, Franklin Square, New York
2005	Innovations in Rate Setting and Procedures	NAWC New York Chapter, West Point, New York
2006	Basics of Rate Setting	The Connecticut Water Company, Clinton, Connecticut
2006	Innovations in Rate Setting and Procedures	NAWC New York Chapter, Catskill, New York
2006	Best Practices as Regulatory Policy	NAWC New England Chapter, Ogunquit, Maine
2006	Rate and Valuation Seminar	NAWC New York Chapter
2006	Full Cost Pricing	U.S. Environmental Protection Agency Expert Workshop, Lansing, Michigan
2006	Innovations in Rate Setting	NAWC New England Chapter, Portsmouth, New Hampshire
2007	Weather Sensitive Customer Demands	NAWC Water Utility Executive Council, Half Moon Bay, California
2007	Basics of Rate Setting and Valuation Seminar	NAWC New England Chapter, Ogunquit, Maine
2007	Small Company Characteristics	National Drinking Water Symposium, La Jolla, California