

ORIGINAL

BEFORE THE PUBLIC SERVICE COMMISSION

In re: Application for rate)
increase in Pinellas County)
_____)

DOCKET NO. 971065-SU

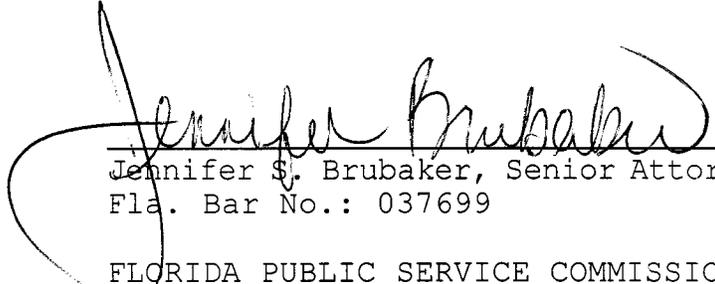
Filed: April 19, 1999

Certificate of Service

I HEREBY CERTIFY that a true and correct copy of Direct Testimonies and Exhibits of Robert J. Crouch, Barry F. Davis, Charleston J. Winston, and Hillary Y. Sweeney have been furnished by U.S. Mail this 19th day of April, 1999 to:

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Sweeney
DOCUMENT NUMBER-DATE
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FPSC RECORDS/REPORTING

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Crouch
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Davis
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Winston Sweeney
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04927 APR 19 99
FPSC-RECORDS/REPORTING

ORIGINAL

DOCKET NO.: 971065-SU - Application for rate increase in Pinellas County by Mid-County Services, Inc.

WITNESS: Direct Testimony of Barry F. Davis, Appearing On Behalf of Florida Public Service Commission

DATE FILED: April 19, 1999

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~~04926~~ APR 19 99

FPSC-RECORDS/REPORTING

DIRECT TESTIMONY OF BARRY F. DAVIS

1
2 Q. Would you please state your name and business address?

3 A. My name is Barry F. Davis and my business address is 2540 Shumard Oak
4 Boulevard, Tallahassee, Florida 32399-0850.

5 Q. By whom are you employed?

6 A. The Florida Public Service Commission.

7 Q. How long have you been so employed?

8 A. I have been employed with the Commission since September 4, 1979.

9 Q. Would you state your educational background and experience?

10 A. I received a Bachelor of Science degree in mathematics from Florida
11 State University in May 1964. I served on active duty with the United States
12 Air Force from 1964 to 1976 when I left active duty to pursue graduate studies
13 at Florida State University. I received a Master of Accounting degree in
14 August 1980. I was employed by the Florida Public Service Commission as a
15 Public Utilities Auditor from September 1979. In December 1980 I accepted the
16 position of what is now called a Regulatory Analyst with the Accounting Bureau
17 of the Division of Water and Sewer. I transferred to the Accounting Bureau
18 of the Communications Division in 1987. The Bureau was later transferred to
19 the Division of Auditing and Financial Analysis and was retitled
20 Communications Revenue Requirement Section. After the initial deregulation
21 of communications utilities, I was assigned temporarily back to the Division
22 of Water and Wastewater in January 1996. My position was permanently
23 reassigned to the Accounting Section of the Bureau of Economic Regulation in
24 the Division of Water and Wastewater in July 1996. I am currently a
25 Professional Accountant Specialist.

1 Q. Would you explain what your general responsibilities are as a
2 Professional Accountant Specialist with the Bureau of Economic Regulation in
3 the Division of Water and Wastewater?

4 A. I am responsible for reviewing and conducting in-depth cost analysis of
5 applications assigned to me by my supervisor. I am responsible for developing
6 alternative proposals, preparing expert testimony, exhibits or financial
7 statements for regulatory proceedings, testifying and writing cross-
8 examination questions for hearings involving complex accounting, finance and
9 rate issues affecting utility revenue requirements. My duties also involve
10 preparing and analyzing special studies related to the water and wastewater
11 industry.

12 Q. Have you testified in any other cases before this commission?

13 A. Yes. I have testified in several cases between 1980 and the present
14 before this Commission and the Division of Administrative Hearings. The most
15 recent case was Docket No. 880069-TL, Southern Bell, in 1992. The most recent
16 water and wastewater case was Docket No. 850062-WS, Meadowbrook Utilities,
17 Inc. in 1987. Before that I have testified in Docket No. 870166-WS, Palm
18 Coast Utilities, Docket No. 850051-WS, Park Manor Waterworks, Inc., Docket No.
19 840419-SU, Florida Cities Water Company, Docket No. 800621-WS, Gulfstream
20 Utility Company.

21 Q. What is the purpose of your testimony in this case?

22 A. My testimony will address the following issues from Order No. PSC-89-
23 0524-FOF-SU which were protested by Mid-County Services, Inc. (Mid-County or
24 utility) on May 7, 1998: The proper amount of Contributions In Aid of
25 Construction, or CIAC, Accumulated Amortization and annual amortization of

1 CIAC that should be imputed in rate base and net operating income for the test
2 year based on the margin reserve granted in this case. I will address the
3 amount of intracompany allocations of common costs which should be included
4 in operating income. I will testify to the proper rates for Mid-County
5 Services.

6 Q. Should the Commission include an imputation of CIAC on the margin
7 reserve?

8 A. Yes. The Commission should include an imputation of CIAC as a matching
9 provision to the margin reserve calculation. However, as an averaging method,
10 only 50 percent of the imputed CIAC should be recognized since the imputed
11 amount will be collected over the life of the margin reserve period rather
12 than all at the beginning of the period. In addition, the imputation should
13 be limited to the amount of net plant included in the margin reserve.

14 Q. Please explain your interpretation of the margin reserve and why that
15 interpretation leads you to your conclusions?

16 A. The margin reserve reflects the utility's obligation to serve potential
17 customers, and the utility invests in central plant to meet this service
18 obligation. If a margin reserve is included in the used and useful
19 calculations, then, to achieve proper matching, an amount of CIAC equivalent
20 to the number of equivalent residential connections (ERCs) represented by the
21 margin reserve should be reflected in rate base. When determining the amount
22 of imputed CIAC, the Commission should use the existing or new capacity
23 charges, since this is a forward-looking adjustment. Also, the amount of CIAC
24 recognized in rate base should be no greater than the amount of net plant
25 included in the margin reserve. My testimony on the imputation of CIAC on the

1 | margin reserve is consistent with Order No. 20434, issued on December 8, 1988
2 | in Docket No. 871134-WS; Order No. 20272, issued on November 7, 1988 in Docket
3 | No. 880308-SU; Order No. 24735, issued on July 1, 1991 in Docket No. 900718-
4 | WU; and Order No. PSC-93-0301-FOF-WS, issued on February 25, 1993 in Docket
5 | No. 911188-WS, where the lesser of the amount of the margin reserve or the
6 | number of ERC in the margin reserve was multiplied by the current connection
7 | charge.

8 | Q. Why have you only included 50 percent of the CIAC estimated to be
9 | collected?

10 | A. During the margin reserve period, CIAC will not be collected on day-one
11 | of the period, but evenly over the period. Since the actual collections are
12 | unknown, it is impossible to predict at what rate the growth will occur. I
13 | believe it is a reasonable assumption to spread growth ratably across the
14 | period. Staff witness Crouch has testified that 18 months is the appropriate
15 | margin reserve period. The Commission has approved this allocation in Order
16 | No. PSC-97-0388-FOF-WS, issued on April 7, 1997; Order No. PSC-96-1320-FOF-WS,
17 | issued on October 30, 1996; and Order No. PSC-96-1338-FOF-WS, issued on
18 | November 7, 1996. The gross CIAC for the wastewater system is 109.49 ERCs,
19 | 26,825 gallons per day (gpd) divided by 245 gpd per ERC, multiplied by the
20 | \$1,235 connection charge. This results in \$135,220, 50 percent of which is
21 | \$67,610.

22 | Q. Why have you limited the amount of CIAC to be included in rate base?

23 | A. Since net plant included in the margin reserve is only \$50,733, the
24 | amount of CIAC recognized in rate base should be no greater. Allowing the
25 | full \$67,610 would reduce used and useful plant serving current customers.

1 For the wastewater system, it is appropriate to impute additional CIAC of
2 \$50,733. Adjustments should also be made to increase accumulated amortization
3 of CIAC by \$943 and test year amortization expense by \$1,887.

4 As discussed by staff witness Crouch, DOAH has issued a final order
5 which invalidated the PSC's proposed rule on the computation of margin reserve
6 and imputation of CIAC. For the same reasons stated by staff witness Crouch,
7 I do not believe that DOAH's invalidation of the proposed rule has a direct
8 effect on the instant case, or my position in this issue. I believe that the
9 Commission should include an imputation of CIAC on the margin reserve. For
10 the wastewater facilities this equates to \$135,220, based on the 109.49 ERCs
11 included in the margin reserve times the current \$1,235 plant capacity charge.
12 As stated previously, this amount should be an average amount, therefore CIAC
13 of \$67,610 is appropriate for inclusion in rate base. Since the amount of
14 plant in the margin reserve is only \$50,733, 2.98 percent multiplied by
15 adjusted treatment and disposal plant of \$2,281,624, the adjustment should be
16 limited to that amount.

17 Q. Are the allocations from Utilities, Inc. a reasonable distribution of
18 the cost of the services provided to Mid-County?

19 A. No, the allocation methods employed by Utilities, Inc. at the time of
20 this filing overstate costs to Mid-County. Utilities, Inc., Mid-County's
21 parent company, through its subsidiary Water Service Corporation (WSC),
22 allocates common costs, including billing costs, to all of its subsidiary
23 utilities, including Mid-County. Upon review of the minimum filing
24 requirements (MFRs), I was concerned with the large increase in operating and
25 maintenance expenses since the last rate case, as shown on MFR Schedule B-8.

1 | the benchmark analysis. This schedule compares the operation and maintenance
2 | expenses allowed in the last rate case with those requested in the current
3 | case. Allowances are made for customer growth and inflation. The majority
4 | of the increases above customer growth and inflation are from the WSC
5 | allocations, in particular those allocations based on customer equivalents.
6 | For instance, office salaries and wages increased by 1,652.2 percent and
7 | miscellaneous expenses increased by 1,327.5 percent. Customer growth during
8 | this period only accounted for a 10.9 percent increase. The difference in
9 | these allocated costs is very close to the requested revenue increase. The
10 | utility explained this increase in costs on MFR B-8, page 1 of 2:

11 | The increase in expenses from the last case to the test year is
12 | primarily due to our change in method of allocating indirect
13 | costs. Indirect costs are based on customer equivalents. In
14 | prior years, customer equivalents were calculated by multiplying
15 | the number of customers by approximately one-third. In 1996,
16 | customer equivalents correspond to the number of customers served.

17 | At the customer meeting conducted by Commission staff, the customers' main
18 | concern surrounded the large increase in operation and maintenance expenses.
19 | Further, the last rate case was only four years ago and Mid-County was granted
20 | a 52.69 percent increase. The requested rates in the current case represent
21 | a 34 percent increase and according to the customers there had been no
22 | corresponding change in service.

23 | Q. What factors used for these allocations did you examine?

24 | A. One of the primary allocation factors used by WSC is what WSC refers to
25 | as a customer equivalent. A customer equivalent is any household or entity

1 that receives water or wastewater service. This definition of customer
2 equivalent is used in the allocations that depend on relative utility size and
3 the utility argues that it is applied uniformly and consistently throughout
4 all jurisdictions in which Utilities, Inc. has subsidiary utilities. The
5 customer equivalent goes behind the meter and attempts to count the total
6 number of dwelling units that the utility serves. An example would be that
7 a master-metered apartment complex with one meter would generate as many
8 customer equivalents as there are apartments in the complex.

9 Q. Why is it appropriate to use some form of customer measurement in these
10 allocations?

11 A. The use of some kind of customer measurement is appropriate and commonly
12 used when the size of the utility drives the demand for indirect services from
13 the parent. Many of the services are allocated directly to the subsidiaries
14 where it is economically feasible to do so. Costs allocated directly include
15 rate case expenses and billing costs, to name a few. These costs can be
16 directly identified with a specific subsidiary and can be easily allocated
17 directly to that subsidiary. Indirect allocations arise when a cost can not
18 be directly attributed to a specific subsidiary or the costs benefit all the
19 subsidiaries. In this case, an allocation method must be developed to
20 allocate these costs on a reasonable basis.

21 Normally, this Commission has seen equivalent residential connections,
22 customers factored based on their usage, factored bills, applying the American
23 Waterworks Association (AWWA) or some other established factor for the meter
24 size to the number of bills issued to that size meter, used to indicate
25 relative utility size. As stated in Order No. 17043, Docket No. 860325-WS.

1 Southern States Utilities, Inc., the Commission favored a customer measurement
2 for allocation of common administrative and general expenses. This treatment
3 was consistent with past measurements for these allocations. This position
4 is also supported by Order No. 18367, Docket No. 861201-WS, Hydratech
5 Utilities, Inc., where the Commission favored allocating administrative and
6 general expenses based on average customers.

7 Q. Do the Commission Rules provide a definition of "customers"?

8 A. Yes. Rule 25-30.210(1), Florida Administrative Code, defines a customer
9 as: "any person, firm, association, corporation, governmental agency, or
10 similar organization who has an agreement to receive service from the
11 utility."

12 Q. What did you find as the cause of the increases you have previously
13 referred to?

14 A. Prior to 1995, Mid-County was receiving allocations for the costs of
15 billing services from WSC even though Pinellas County provides all the water
16 service for Mid-County customers, does all the billing, and charges Mid-County
17 directly. Therefore, Mid-County does not receive billing services from WSC
18 and it is improper to have those costs allocated to Mid-County. WSC, at the
19 time, was unable to separate billing costs from other administrative expenses
20 and allocated the billing costs for all their other systems to all the systems
21 as part of the administrative allocations. Prior to the test year in this
22 case, to avoid a double charge of billing costs to Mid-County, WSC reduced
23 Mid-County's customer equivalents by one third when making cost allocations.
24 In 1995, WSC was able to identify the billing costs separately from other
25 administrative costs and began billing them directly to the subsidiary

1 utilities. WSC eliminated all allocations of billing expense to Mid-County
2 and used Mid-County's customer equivalents at full value for other
3 allocations. Although staff would expect this to be a break-even change,
4 trading the billing costs for a greater share in the other common costs, the
5 allocations to Mid-County increased dramatically, one of the major reasons
6 that Mid-County filed the present case.

7 Q. Why is this a problem for Mid-County?

8 A. In the other Utilities, Inc. Florida systems, using customer equivalents
9 does not differ much from the standard measuring units seen by the Commission.
10 Mid-County, however, has several master-metered apartment complexes and mobile
11 home parks as customers. As an example, an apartment complex with 354
12 dwelling units, served by a six-inch master-meter, would be 354 customer
13 equivalents. Using standard meter ratings, this customer would be equivalent
14 to only 50 single family dwellings and since it is master-metered, it would
15 only represent one customer. The average Mid-County single family residence
16 consumed 16,408 gallons of water per billing period. The average multi-
17 residential customer with a six inch meter consumed 1,740,888 gallons of water
18 per billing period, the equivalent of 106 single family residences, not 354
19 as the customer equivalent would indicate. By counting apartments as one full
20 customer, the utility's number of customers equivalents for Mid-County is
21 greatly inflated and indicates that the Mid-County operation is much larger
22 than it is, and as such, appears to require more services from the parent than
23 it actually does.

24 Q. How does the customer equivalent measurement affect Mid-County?

25 A. Using Utilities, Inc.'s customer equivalent calculation, Mid-County has

1 | 6,112 wastewater customer equivalents for allocation purposes. In Mid-
2 | County's last rate case, the utility reported 1,237 customers. The bills
3 | issued show that Mid-County had an average of 1,507 customers for the test
4 | year. The factored or weighted bills, applying the AWWA factor for the meter
5 | size to the number of bills issued to that size meter, only show 2,255
6 | equivalent customers, about a third of the customer equivalents. The
7 | wastewater customer equivalents is 4,637 for Alafaya Utilities, Inc. and 1,812
8 | for Utilities, Inc. of Longwood, both Utilities, Inc. subsidiaries. Mid-
9 | County, therefore, is absorbing one and one-third more of the common costs as
10 | Alafaya and three and one-third more than Longwood. The 1996 Annual Report
11 | shows that Alafaya treated 295,535,000 gallons of wastewater, which is two and
12 | one quarter more than the 130,627,000 gallons treated by Mid-County. Longwood
13 | shows 151,133,000 gallons treated. Based on the volume treated as an
14 | indicator of plant size and, therefore, demand on common services, Alafaya
15 | should have absorbed two and one-quarter the costs as Mid-County, not one and
16 | one-third less, and Longwood should have absorbed slightly more of the costs,
17 | not three and one-third less. This greatly inflates Mid-County's apparent use
18 | of the common services.

19 | Q. Has this system been used consistently in the past?

20 | A. In a reply to a staff data request regarding this calculation, the
21 | utility noted that the customer equivalent allocation system has been in place
22 | for 32 years and has been found reasonable in Illinois and North Carolina as
23 | well as at least five rate cases here in Florida, including Mid-County's last
24 | rate case. In the Florida cases, my research indicates that the allocation
25 | method itself has not been an issue and has not been litigated. Thus, while

1 | the Commission may have accepted the expenses of Mid-County, Docket No.
2 | 921293-SU; Utilities, Inc. of Florida, Dockets Nos. 910020-WS, 930826-WS and
3 | 940917-WS; Miles Grant, Docket No. 891017-WS; and Lake Placid, Docket No.
4 | 951027-WS and found them to be reasonable, no further action was taken nor was
5 | the issue of allocation method raised. This leads me to the conclusion that,
6 | contrary to the utility's position that there have been under-allocations to
7 | Mid-County in the past, under-allocations are currently affecting Utilities,
8 | Inc.'s other systems. In other words, instead of fixing the problem, it seems
9 | that Utilities, Inc. Has created another problem.

10 | The problem appears to me to arise from the multi-family units and other
11 | master-metered customers. Most of the other Florida customers of the
12 | Utilities, Inc., systems are predominantly single family dwellings and
13 | commercial customers and the expense allocation problem, for all practical
14 | purposes, did not exist. It is only on inspection of a utility with a
15 | customer base as diverse as Mid-County's that the problem shows up.
16 | Utilities, Inc. could compensate by reducing the weighting of the master-
17 | metered customers to approximate the demand they have on the system and give
18 | a more reasonable approximation of Mid-County's size and, therefore, its
19 | demand on common services or simply use customers.

20 | As an example, I have compared the allocation of salaries from the
21 | Florida office, showing the allocation by customer equivalents and by gallons
22 | of wastewater treated, as shown on Exhibit BFD-1, attached as an Exhibit to
23 | my testimony.

24 | The utility further contended, in noticed meetings with staff, that Mid-
25 | County has responsibility for maintenance of lines behind the meter on the

1 customers' premises, contrary to the normal situation of the utility's
2 responsibility ending at the meter. This cost is normally not allowed for
3 rate setting, as shown in Order No. PSC-92-0807-FOF-WS, Docket No. 910560-WS,
4 Tamiami Village Utilities, Inc. If this is a problem as far as assigning
5 costs, it should be removed from regulated expenses, as in the Tamiami case
6 and recovered through maintenance fees charged to the property owner/customer.
7 No evidence has been presented in this case nor has this item been litigated
8 in prior cases, probably based on the minor effect on revenue requirement.
9 I believe that this additional expense has little to do with the demand for
10 common services.

11 Q. Based on your analysis, what is your recommendation?

12 A. I recommend that the Commission reject the utility's use of customer
13 equivalents as an appropriate allocation basis for distribution of common
14 costs to Mid-County, even though it may produce reasonable allocations
15 elsewhere. I recommend recalculating those cost allocations which use
16 customer equivalents based on equivalent residential connections, as
17 calculated by Staff Witness Crouch. This measurement is based on the actual
18 amounts treated by Mid-County. This is closer to the distribution of the base
19 facility charge in the rate design in both the last rate case and the current
20 rate case. Recalculated using equivalent residential connections, I find that
21 allocated operation and maintenance expenses should be reduced by \$96,821,
22 allocated depreciation expense should be reduced by \$11,063 and allocated
23 payroll taxes generated by the allocated salaries should be reduced by \$1,832
24 for a total reduction in expense of \$109,717.

25 Q. Since you are recommending an adjustment to the utility's allocation

1 method for common expenses, do you recommend using a different factor for the
2 base facility charge?

3 A. Yes. As I said in my discussion of the common cost allocations, some
4 of the water meters installed by Pinellas County may be undersized and,
5 therefore, those customers may not be contributing their fair share of the
6 revenue requirement through the base facility charges. I have examined the
7 billing information provided in the MFRs. I noticed that the usage
8 characteristics were similar to United Water Florida (UWF) in Docket No.
9 960451-WS, as discussed in Order No. PSC-97-0618-FOF-WS, issued May 30, 1997.
10 The UWF base facility charges were calculated using meter factors based on
11 hydraulic factors in the Clow Pipe Economy Usage scale. This is a measurement
12 of the contents of pipe in U.S. Gallons per foot length developed in 1975 by
13 the Pressure Pipe Products Group of the Clow Corporation. I recommend that
14 these factors be used for determining the base facility charges for Mid-
15 County. Exhibit BFD-2, attached to my testimony, compares the AWWA factors
16 with the recommended Clow Pipe factors.

17 Q. Does this fully address the your concerns about the factors to be used for
18 all meter sizes?

19 A. No. Multi-Family customers with 1 1/2-inch, 2-inch and 3-inch meters show
20 usage at a higher level than expected. The usage for these meter sizes is two
21 to three times the expected level. After analyzing the usage of these
22 customers, the number of units behind the meter, and the Clow Pipe values, I
23 believe that the factors for these multi-family meters should be the Clow Pipe
24 factor for the next higher meter. In other words, the multi-family 1 1/2-inch
25 meters should use the factor for the 2-inch meter, the 2-inch meters should

1 | the factor for the 3-inch meter and the 3-inch meters should use the factor
2 | for the 4-inch meter. The resulting factors for multi-family are shown on
3 | Exhibit BFD-2, attached to my testimony.

4 | Q. Does this conclude your testimony?

5 | A. Yes.

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Comparison of the Allocation of Salaries from the Florida Office
 Showing the Allocation by Customer Equivalents
 and by Gallons of Wastewater Treated

<u>Subsidiary</u>	<u>Customer</u> <u>Equiv.</u>	<u>Percent</u> <u>of Total</u>	<u>Gross</u> <u>Salaries</u>	<u>Gallons</u> <u>Treated</u> <u>(000)</u>	<u>Percent</u> <u>of Total</u>	<u>Gross</u> <u>Salaries</u>	<u>Allocation</u> <u>Difference</u>
Alafaya	4,637	18.41%	\$35,010	295,535	32.13%	\$61,103	\$26,094
Lake Placid	313	1.24%	\$2,363	9,078	0.99%	\$1,877	\$(486)
Lake Utility	1,108	4.40%	\$8,363	0	0.00%	\$0	\$(8,363)
Longwood	1,812	7.19%	\$13,681	151,133	16.43%	\$31,247	\$17,567
Mid-County	6,112	24.26%	\$46,146	130,627	14.40%	\$27,008	\$(19,138)
Miles Grant	1,806	7.17%	\$13,635	43,795	4.76%	\$9,055	\$(4,581)
Tierra Verde	1,986	7.88%	\$14,994	139,063	15.12%	\$28,752	\$13,757
UIFL	6,294	24.98%	\$47,520	102,603	11.15%	\$21,214	\$(26,306)
Wedgfield	<u>1,124</u>	<u>4.46%</u>	<u>\$8,486</u>	<u>48,103</u>	<u>5.23%</u>	<u>\$9,946</u>	<u>\$1,459</u>
Total	<u>25,182</u>	<u>100.00%</u>	<u>\$181,835</u>	<u>817,334</u>	<u>100.00%</u>	<u>\$181,835</u>	

CONTENTS OF PIPE

Capacities in United States
Gallons (231 Cubic Feet)

Per Foot Length

Diameter <u>Inches</u>	<u>U.S.</u> <u>Gallons</u>	Meter <u>Factor</u>	AWWA Meter <u>Factor</u>	Multi- Residential <u>Customers</u>
5/8"	0.0159	1.0000	1.0000	1.0000
3/4"	0.0230	1.4465	1.5000	1.4465
1"	0.0408	2.5660	2.5000	2.5660
1 1/2"	0.0918	5.7736	5.0000	10.2642
2"	0.1632	10.2642	8.0000	23.1006
3"	0.3673	23.1006	15.0000	41.0566
4"	0.6528	41.0566	25.0000	41.0566
6"	1.4690	92.3899	50.0000	92.3899
8"	2.6110	164.2138	80.0000	164.2138
10"	4.0810	256.6667	115.0000	256.6667
12"	5.8760	369.5597	215.0000	369.5597