

Dean J. Miller  
Chas. F. McDevitt  
McDEVITT & MILLER LLP  
537 W. Bannock, Suite 215  
P.O. Box 2564-83701  
Boise, ID 83702  
208.343.7500  
208.336.6912 (Fax)

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF UNITED WATER IDAHO INC.	)	CASE NO. <u>UWI-W-00-1</u>
FOR APPROVAL OF INCREASED RATES	)	
FOR WATER SERVICE	)	

DIRECT TESTIMONY OF FRANK GRADILONE III

ON BEHALF OF UNITED WATER IDAHO INC.

February 2000

1 Q. Please state your name and business address.

2 A. Frank Gradilone III, United Water Management and Services (UWM&S), 200 Old  
3 Hook Road, Harrington Park, New Jersey 07640.

4 Q. Please state your educational and professional background.

5 A. I hold Master Degrees in Business Administration and in City and Regional Planning  
6 from Rutgers, the State University of New Jersey. As an undergraduate, I majored  
7 in environmental studies and political science, and received a BA from the State  
8 University of New York at Stony Brook.

9 While a graduate student in the City and Regional Planning program at  
10 Rutgers University, I was a Research Associate at the Center for Urban Policy  
11 Research where I was involved in a number of research projects for local  
12 government agencies and organizations, and for the U.S. Department of Housing  
13 and Urban Development. My responsibilities included survey research, computer  
14 based quantitative analyses, and fiscal impact analysis. I am a contributing author  
15 to the 1980, Center for Urban Policy Research publication entitled, **The Adaptive**  
16 **Reuse Handbook**.

17 I have been a Licensed Professional Planner in the State of New Jersey  
18 since June of 1981. I was a member of the Vernon Township (NJ) Environmental  
19 Commission, and served as chairperson of that body from 1993 through 1995.

20 My professional affiliations include memberships in the American Water  
21 Works Association (where I also serve as a member of the Water Conservation  
22 Division), the American Marketing Association, the Water Wise Council of New  
23 York, and the Regional Plan Association.

24 I have authored and presented a number of technical papers at national and  
25 regional conferences in the field. These papers and presentations include: "A

Perspective on Outdoor Water Conservation Programs at United Water", jointly with R. Henning, UWNJ and M. Cahoon, UWID, at **Conserv '99**, "A Water Conservation Program for the Spring Valley Water Company", **Proceedings of Conserv '93**, Las Vegas, NV, 1993; "Seasonal Rates-the Pros and Cons: A Case Study", a paper presented at the American Society of Civil Engineers, Water Resources and Planning & Management '93 Conference, in Seattle, Washington, May 1993; **Automatic Meter Reading for the Water Industry**, co-authored with Donald L. Schlenger, American Water Works Association Research Foundation, Denver, Colorado, 1992; "Some Questions on Cost and Benefits of Rate Regulation," co-authored with Drs. Michael Crew and Donald L. Schlenger, published in **NAWC Water**, Summer 1986; "Water Conservation: A Case Study," a paper presented at the **Water for the 21st Century** conference in Dallas, Texas, 1984; "Impact of Summer/Winter Differential Rate Structure," a paper presented at the **ASCE, Urban Water 1984 Conference** in Baltimore, Maryland; and the "AWWA Survey of Remote Metering Practices," a paper presented jointly with Donald L. Schlenger at the **1984 AWWA Annual Conference** in Dallas, Texas.

Q. Please describe your employment experience with UWM&S.

A. I have been employed by UWM&S, and its predecessor companies, since August 1979. From 1979 to 1983, I was a Special Projects Researcher in the Research and Development Division of the Hackensack Water Company (now known as United Water New Jersey). My responsibilities included research design and quantitative analysis, system operation analysis, and survey research for the Company and its subsidiary, Spring Valley Water Company (now known as United Water New York).

From 1983 through 1987, I was Manager of Demand Forecasting. My

1 responsibilities included demographic and economic forecasting, capital projects  
2 planning, liaison with government agencies and regulatory bodies, and  
3 management of research personnel. I also provided testimony before the New York  
4 State Department of Environmental Conservation on the need and timing for a  
5 proposed reservoir and water filtration plant project for the United Water New York  
6 system, known as the Ambrey Project.

7 In 1988 I transferred to United Water Resources and am currently Manager-  
8 Resources Planning, Rates for UWM&S. In this capacity, I am responsible for water  
9 demand, demographic and economic forecasts for United Water's operating units.

10 With respect to my involvement in water demand forecasting, to date, I have  
11 conducted basic research to determine the appropriate forecasting methods. I have  
12 created forecasting databases, and I continued to provide long-range forecasts for  
13 both United Water New York and United Water New Jersey. I produced short-run  
14 water consumption and revenue forecasts for United Water Idaho in its last rate  
15 case (UWI-W-97-6). I have also provided short-run water consumption and revenue  
16 forecasts for a number of other United Water operations including: United Water  
17 New York in its last two rate cases (NYS PSC Case 92-W-0645 and Case 94-W-  
18 0486); United Water New Jersey (NJ BPU Case WR-90080792J); United Water  
19 Toms River (NJ BPU Case WR-95050219); United Water New Rochelle (NYS PSC.  
20 Case 96-W-1168 and Case 99-W-0948), United Water Florida (FPSC Case  
21 960451-WS), United Water Delaware (DPSC. Case 96-164), United Water  
22 Pennsylvania (PPUC. Docket No. R-00973947), and United Water Arkansas (APSC  
23 Case 960451-WS).

24 Q. Could you describe your responsibilities in connection with this rate filing?

1 A. The purpose of my testimony is to present an assessment of pro forma revenues for  
2 metered water revenues, private fire protection service revenues, and other  
3 revenues for a test year covering the twelve month period ended September 30,  
4 1999 for United Water Idaho.

5 Q. How did you prepare these projections?

6 A. Separate assessments of metered water consumption and revenues were made for  
7 each customer sector in the system; residential, commercial, and public authority.  
8 Revenues for private fire protection services and other revenues were also  
9 analyzed. This analysis, and supporting tables and figures detailing this  
10 assessment, is contained in Exhibit 16, Schedules 1 through 4.

11 Q. What was the level of metered water sales for the test year in this case based on  
12 the Company's financial records?

13 A. Test year metered water sales revenue for the twelve-month period ended  
14 September 30, 1999 under existing tariff schedules totaled \$26,355,512. Private  
15 fire protection services for the test year were \$434,698. Other revenue sources,  
16 including miscellaneous revenues from customer fees and charges, guaranteed  
17 revenue contracts, rents, and unbilled revenues totaled (\$603,900) for the test year.  
18 Overall as shown in Exhibit 16, Schedule 1, Page 1 of 2, Column 1, total revenue  
19 per the income statement for United Water Idaho for the test year was \$26,186,310.

20 Q. Was it necessary to adjust the test year revenues as shown on the income  
21 statement of United Water Idaho?

22 A. Yes. In order to determine a fair evaluation of the revenues that would be expected  
23 under normal circumstances, and to take into account one-time events that affected  
24 the revenue stream in test year, a number of adjustments needed to

1 be made to the revenues as recorded on the income statement.

2 Q. Could you detail the adjustments you made to test year revenues?

3 A. Yes. The first set of adjustments involved a number of eliminations for revenue  
4 items that represented one-time events that occurred in the test year that will not  
5 occur again, thus representing revenues that the Company could not reasonably be  
6 expected receive in the future. These eliminations are summarized in Column 2 of  
7 Exhibit 16, Schedule 1, Page 1 of 2.

8 The first elimination was a \$14,308 reduction for the revenue derived from  
9 the one-time sale of water to Crandlemire. Next was the elimination of revenues  
10 from a number of multi-year Guaranteed Revenue Contracts that have nearly  
11 expired. The \$5,848 recorded in the test year represents the payments on these  
12 contracts. The third elimination involves one-time sales of water to the Hidden  
13 Springs to fill a landscape amenity on their site, and the end of temporary sales of  
14 phosphate to Garden City Water. The fourth elimination involves the  
15 discontinuation of our Geoscience operation. This operation yielded \$39,565 in  
16 revenues in the test year, which will not be realized in the future. Finally, in a related  
17 category unbilled revenues of (\$786,504) were added back to the revenue stream  
18 since once total billed consumption for the test year is assessed, all water used is  
19 priced and assumed to be billed, and collected, during the pro forma test period.

20 Q. Did you make any other adjustments to metered sales revenues before you  
21 conducted the bill analysis for the analysis?

22 A. Yes. Three additional adjustments needed to be made to total metered sales  
23 before the bill analysis proceeded.

24 The first adjustment involved Micron Industries. Micron is the Company's

1 largest customer, and is also one that has had considerable shifts in its usage  
2 pattern over time. Given the size of the service, the historical variability in Micron's  
3 demand, and owing to the special interest that various parties have shown in Micron  
4 in prior proceedings, Micron was broken out of total metered sales so it could be  
5 examined and evaluated separately.

6 The second adjustment was the elimination, of \$70,148 of revenue that was  
7 recorded on the books of UWID but not in individual customer records during  
8 February 1999. This revenue represents the first month of billings to the newly  
9 acquired South County service area. When the first billing cycle for these  
10 customers was due, the customer records had not been fully integrated into the new  
11 customer information system (CIS). For this first cycle the customers in the South  
12 County system were billed using the Company's previous CIS system, and then the  
13 total billed consumption and revenue for the cycle was added to the income  
14 summary for the month of February. The result was that the books contained the  
15 revenue for these billing cycles, but the bill analysis did not. Since the newly  
16 acquired systems were handled separately in the subsequent analysis of pro forma  
17 revenues in the test year these revenues were also removed from the metered  
18 service total.

19 The third adjustment also involved South County. The revenues for South  
20 County for the test year billed under the new CIS system were also segregated from  
21 the bill analysis in order to simplify the analysis of pro forma revenue for the main  
22 portion of the UWID system, and to allow a separate analysis of South County.  
23 Thus as shown in Exhibit 16, Schedule 1, Page 1 of 2, Column 5, Row 4, the total  
24 metered sales revenue for bill analysis purposes amounts to \$25,649,468

25 Q. Did you obtain a bill analysis for the test year period?

1     A.     Yes. But the process was complicated by the introduction of the Company's new  
2           CIS system in November 1998. As a result of this change two bill analyses were  
3           combined to create a bill analysis for the entire test year period. The first portion of  
4           the bill analysis represented the billings under the old ACBS CIS system for the  
5           period October 1 through the conversion in November. The second portion  
6           represented the billings under the new Customer Star II (CS2) CIS system for the  
7           period from the conversion through September 30, 1999.

8                     With respect to the ACBS portion of the bill analysis one additional  
9                     adjustment needed to be made. The implementation of the CIS system in the middle  
10                    of a month created complications in obtaining a bill analysis for the period from  
11                    October 1, 1998 to the CIS change over. Bill analyses under the old ACBS system  
12                    were typically run on a 12 month basis, with careful attention being paid to the timing  
13                    and sequence of meter reading routes actually read and booked in the period in  
14                    question. After the conversion to the new system, there was a limited period of time  
15                    available to access and archive the data on the old system. The Regulatory  
16                    Business Department requested that a special, one-time program be created to  
17                    produce a bill analysis for UWID utilizing the old system covering the period from  
18                    October 1, 1998 through the time of conversion. This programming was done and  
19                    the report was produced on a one-time basis for United Water Idaho in early 1999.

20                    In this analysis for United Water Idaho it was discovered that the  
21                    programming was not as precise as would have been desired. The program was  
22                    set up to cut off all billed usage strictly as of October 1, 1998. However, as is  
23                    typically the case, a number of meter reading cycles that were physically read late in  
24                    September 1998 were booked in October 1998. The consumption for these



1 books was therefore not included in the bill analysis, resulting in a shortfall in the bill  
2 analysis relative to the amount of billed consumption recorded on the books during  
3 this period. An analysis of the pattern of cycle billing in late September 1998  
4 identified those books that were read in September but booked in October. The bill  
5 analysis for the period of time prior to implementation of the new system was  
6 therefore adjusted upwards by 1,387,925 CCF to account for this billed  
7 consumption. With this adjustment, billed consumption as per the books and bill  
8 analysis were within 0.9% of each other.

9 The primary bill analysis for the period under the new CIS system also  
10 needed to be adjusted because of the way the new system handles cancel and  
11 rebill situations. Under the old ACBS system, when a cancel and rebill occurred  
12 customer usage histories were simply changed (the old readings were eliminated,  
13 and new readings were over written). The new system doesn't allow this to occur.  
14 As a result of the way the new system manages cancel and rebills, cancel and  
15 rebills that have occurred subsequent to the close of books in September 1999 were  
16 not picked up by the primary bill analysis report. In order to pickup this activity, a  
17 separate report was developed that identified the rebills that occurred subsequent to  
18 September 30, 1999, but were rebills of use prior to September 30. When the  
19 usage from the cancel and rebill report was added to the primary bill analysis the  
20 amount of consumption as recorded on the books also matched closely to the level  
21 of usage in the bill analysis; within 0.3% as shown in Schedule 2. Overall, the level  
22 of consumption in the combined bill analysis for the test year was 25,277 ccf less  
23 than the books, or in percentage terms only -0.13%.

24 The pricing of the bill determinants from the bill analysis likewise produced  
25 revenues that matched book revenue, as shown in Exhibit 6, Schedule 1, Column

1 9.

2 Q. Did you have to make any adjustments to revenues as per the bill analysis to  
3 normalize revenues for the test period?

4 A. Yes. These adjustments fell into three areas. First was weather normalization,  
5 to correct for the impact of deviations in weather conditions from normal that  
6 affected consumption in the test year. Second, was the elimination of the  
7 consumption and revenues from a series of meter books that were read 7 times  
8 during the test year. And third, were a series of adjustments to annualize for growth  
9 in the system during the test year and to fully account for the acquisition of the  
10 South County, Raintree and Barber systems.

11 Q. How did you proceed with the weather normalization for the test year?

12 A. To asses the impact of the weather on demand during the test year a detailed  
13 analysis of the usage trends in the residential, commercial and public sectors in the  
14 system was conducted. These analyses, which involved the use of multiple  
15 regression modeling of historical consumption patterns versus weather data, are  
16 detailed in Exhibit accompanying my testimony. As developed in this analysis a  
17 weather normalizing adjustment of (565,771) CCF was indicated for the test year.  
18 Pricing this consumption at current rates yields a weather normalizing adjustment of  
19 (\$635,562) for the test year.

20 Q. Could you discuss the adjustment you made to eliminate the books that were read  
21 seven times during the rate year?

22 A. Yes. One of the benefits of the new CIS system was a shortening of the time  
23 between meter reading and billing. This time was reduced from as much as one  
24 week, to two days or less. As a result of this change a number of billing cycles that  
25 would not have been booked until October 1999, if the change had not occurred,

1 were booked in September 1999. In order to account for this, and normalize usage  
2 and revenue for the test year, these billing cycles needed to be eliminated from the  
3 bill analysis. A detailed analysis of the pattern of billing cycles was conducted to  
4 determine the cycles that were read and booked earlier under the new system. In  
5 total these books represented 620,211 CCF in billed use, and \$791,239 in  
6 revenues.

7 Q. Could you discuss the annualization adjustments that were made in your analysis?

8 A. Yes. Annualization adjustments for growth in the main portion of the UWID system  
9 and to account for a full year of service in the newly acquired systems—Barber,  
10 Raintree and South County—were made.

11 During the test year an additional 1,606 customers were added to UWID  
12 system (exclusive of the newly acquired systems). Using the half-year convention,  
13 on an annualized basis these customers represent an additional 4,818 bills  
14 rendered and 244,194 CCF in consumption. Priced at current rates this yields an  
15 additional \$330,203 in revenues in the test year.

16 UWID continues to add new systems to its service area. With respect to  
17 assessing the revenues that can be expected in the near term, the addition of the  
18 Barber Water Company, Raintree Mutual, Water Company, and South County  
19 Water Company need to be considered.

20 The Barber water system consists of 240 mobile homes. Based on the  
21 1998 use in two other mobile home parks UWID serves (Casa Real and Coach  
22 Royale) we estimate that the customers in Barber will use on average 99 CCF per  
23 year, split 50/50 between winter and summer. Assuming these parameters the  
24 customers in the Barber system would have generated \$43,810 in revenue if they  
25 had been on the system for the full test year.

1           Assessing the Raintree system was a bit more complicated. First, UWID  
2 sold water to Raintree Mutual on a wholesale basis during the test year. These  
3 sales yielded \$65,258 in revenue during the year. Fortunately since Raintree was  
4 being served by a UWID subsidiary (EM<sup>2</sup>), and was being charged at the same  
5 rates as UWID the Company was able to obtain good billing records for Raintree for  
6 the test year. Based on this data it was estimated that the customers in the Raintree  
7 system would have generated \$154,266 in the test year on a fully annualized basis.  
8 Therefore, net of the revenue received from the wholesale service to Raintree an  
9 adjustment of \$89,008 in revenues was made to account for the addition of Raintree  
10 to the system.

11           The third system added was South County. The South County system was  
12 added to UWID as of January 1, 1999. The existing 3,885 customers in the South  
13 County system were billed under a separate phase-in tariff during the test year.  
14 New customers added to the system and existing customer premises that turnover  
15 and occupied by new owners are charged at UWID's base rates. Assuming the  
16 existing customers had been in the system since October 1, 1998 (the start of the  
17 test year) it is estimated that they would have generated \$563,364 in revenues.  
18 Total revenue realized by UWID for these customers in the test year (i.e., from  
19 January through September) amounted to \$371,894, resulting in a net adjustment of  
20 \$191,470 in the test year. The rates for South County were increased to the next  
21 phase-in level on January 1, 2000. For the purposes of this analysis this represents  
22 a known and measurable change that needs to be reflected in this assessment of  
23 what UWID can expect to receive in revenues from current tariffs. The assessment  
24 of revenues that would be anticipated under the new tariff was evaluated based on  
25 the customer count of the remaining existing South County

1 customers at September 30, 1999; 3,581. Pricing the projected water use and  
2 fixed charges for this customer count yields total revenue for the test year of  
3 \$799,630, versus the total revenue under existing rate of \$563,353. This represents  
4 an additional adjustment of \$236,266, bringing the total adjustment for South  
5 County to \$427,736 for the test year.

6 As shown in Exhibit 16, Schedule 1, Page 2 of 2, Column 6, the total net  
7 adjustment to test year revenues (above the amount already accounted for in the  
8 revenue stream as shown in Column 1) amounts to \$555,663. Total normalized  
9 revenue for the three newly acquired systems for the test year are \$897,705.

10 Q. What is your assessment of the proper level of revenue for Micron Industries for the  
11 test year?

12 A. As mentioned earlier, Micron Technologies is UWID's largest customer, representing  
13 nearly \$250,000 in revenues during the test year. Micron has embarked on a major  
14 efficiency and water reuse program. Based on the results for Micron for the test  
15 year it appears that this program has been highly successful. From a high of  
16 451,025 CCF in the 1995-96 period, Micron dropped to 439,347 and then 283,595,  
17 in the following two years, and consumed only 180,978 during the test period. In the  
18 absence of any definitive evidence that Micron will use either more or less water in  
19 the near term it was assumed that the metered consumption sales for Micron during  
20 the test year is the best measure of what Micron consumed during the test year. At  
21 current rates this is \$249,694 in revenues as shown in Exhibit 16, Schedule 1, Page  
22 1 of 2, Column 9).

23 Q. Could you please discuss your assessment of private fire service revenues for the  
24 test year?

25 A. UWID provides private fire protection services to about 100 customers through

1 separate service lines and hydrants. Test year revenues for these services were  
2 \$434,697. The private fire sector was also subject to extra billings during the test  
3 year due to the change over to the new CIS system. These extra billings amounted  
4 to \$14,970. Due to growth in the number of private fire services during the year an  
5 additional \$2,491 in revenues were added to the total to derive normalized private  
6 fire revenues of \$422,218 for the test year (Exhibit 16, Schedule 1, Page 2 of 2,  
7 Column 7).

8 Q. Could you please discuss your assessment of the proper level of other revenues  
9 that should be considered on a pro forma basis for the test year?

10 A. As discussed earlier there were a number of one-time, non-recurring  
11 revenues realized in the test year that will not be realized in the future. Looking  
12 ahead the Company can be reasonably expected to receive revenues from only two  
13 additional sources—rents of water property (for antennas and such on a number of  
14 Company facilities) and miscellaneous service revenues (reconnection charges, bad  
15 check fees, etc.). The Company received \$22,847 in revenues from rents; this level  
16 is not expected to change. Miscellaneous service charges amounted to \$94,431 in  
17 the test year. Based on the average rate of miscellaneous revenue per customer  
18 that this level of revenues represents and the growth in the customer count of 1,606  
19 customers, another \$1,222 in miscellaneous service revenues were added to the  
20 test year total.

21 Q. Based on your analysis what conclusions do you draw for total pro forma revenues  
22 for the test year?

23 A. Pro forma metered water sales, fire service and other revenues under the existing  
24 tariff schedule for the twelve month test year ended September 30, 1999 total  
25 \$26,412,890 (as shown in Exhibit 16, Schedule 1 Page 2 of 2, Column 7).

1 Q. Have you prepared any other schedules for this Application for Rate Increase?

2 A. Yes. I also prepared Exhibit 17, which shows the existing tariffs and proposed tariffs

3 for this case.

4 Q. How does the Company propose to change its tariffs to reflect the change in rates

5 proposed in this rate case?

6 A. The Company proposes that the tariffs be changed on an across-the-board basis.

7 Q. Are there any other tariff changes being proposed by the Company?

8 A. No.

9 Q. Have you developed a rate proof to show that the proposed tariffs will generate the

10 revenues needed to meet the revenue requirement?

11 A. Yes. This analysis is shown in Exhibit 16, Schedule 1 Page 2 of 2, Column 8. The

12 overall rate increase requested is \$3,057,100, or 11.57%, representing a revenue

13 requirement of \$29,469,990. The rate proof generates \$29,468,989 in revenues; a

14 difference of less than \$2 with respect to the revenue requirement.

15 Q. Does this conclude your testimony?

16 A. Yes it does.

Dean J. Miller  
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EXHIBITS TO ACCOMPANY  
THE DIRECT TESTIMONY OF  
FRANK GRADILONE III  
ON BEHALF OF UNITED WATER IDAHO INC.

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