

STATE OF NEW JERSEY  
BOARD OF PUBLIC UTILITIES  
OFFICE OF ADMINISTRATIVE LAW

IN THE MATTER OF THE PETITION	)	BPU Docket No. WR05121056
OF MONTAGUE SEWERCOMPANY	)	
FOR AN INCREASE IN RATES	)	OAL Docket No. PUC 1862-06
FOR SEWER SERVICE	)	

DIRECT TESTIMONY OF  
ANDREA C. CRANE  
ON REVENUE REQUIREMENTS

ON BEHALF OF  
THE DIVISION OF THE PUBLIC ADVOCATE

May 18, 2006

TABLE OF CONTENTS

I. STATEMENT OF QUALIFICATIONS .....3

II. PURPOSE OF TESTIMONY.....4

III. SUMMARY OF CONCLUSIONS.....5

IV. BACKGROUND OF THE PROCEEDING .....6

V. DISCUSSION OF THE ISSUES.....8

APPENDICES

APPENDIX A Andrea C. Crane Testimony List

APPENDIX B Supporting Schedules

APPENDIX C Responses to Interrogatories

1 **I. STATEMENT OF QUALIFICATIONS**

2 **Q. Please state your name and business address.**

3 A. My name is Andrea C. Crane and my business address is One North Main Street, PO Box  
4 810, Georgetown, Connecticut 06829.

5  
6 **Q. By whom are you employed and in what capacity?**

7 A. I am Vice President of The Columbia Group, Inc., a financial consulting firm that  
8 specializes in utility regulation. In this capacity, I analyze rate filings, prepare expert  
9 testimony, and undertake various studies relating to utility rates and regulatory policy. I  
10 have held several positions of increasing responsibility since I joined The Columbia  
11 Group, Inc. in January 1989.

12  
13 **Q. Please summarize your professional experience in the utility industry.**

14 A. Prior to my association with The Columbia Group, Inc., I held the position of Economic  
15 Policy and Analysis Staff Manager for GTE Service Corporation, from December 1987  
16 to January 1989. From June 1982 to September 1987, I was employed by various Bell  
17 Atlantic subsidiaries. While at Bell Atlantic, I held assignments in the Product  
18 Management, Treasury, and Regulatory Departments.

19  
20 **Q. Have you previously testified in regulatory proceedings?**

1 A. Yes, since joining The Columbia Group, Inc., I have testified in over 225  
2 regulatory proceedings in the states of Arizona, Arkansas, Connecticut, Delaware,  
3 Hawaii, Kansas, Kentucky, Maryland, New Jersey, New Mexico, New York,  
4 Oklahoma, Pennsylvania, Rhode Island, South Carolina, Vermont, West Virginia  
5 and the District of Columbia. These proceedings involved water, wastewater, gas,  
6 electric, telephone, solid waste, cable television, and navigation utilities. A list of  
7 dockets in which I have filed testimony is included in Appendix A.

8

9 **Q. What is your educational background?**

10 A. I received a Masters degree in Business Administration, with a concentration in  
11 Finance, from Temple University in Philadelphia, Pennsylvania. My  
12 undergraduate degree is a B.A. in Chemistry from Temple University.

13

14 **II. PURPOSE OF TESTIMONY**

15 **Q. What is the purpose of your testimony?**

16 A. On December 8, 2005, Montague Sewer Company (“Montague” or “Company”)  
17 filed a Petition to increase rates by \$129,237 to reflect the rate base, depreciation  
18 expense, and associated tax impacts of four new leach fields installed by the  
19 Company between September 15, 2005 and November 15, 2005. The Columbia  
20 Group, Inc. was engaged by The State of New Jersey, Division of the Ratepayer  
21 Advocate (“Ratepayer Advocate”) to review the Company’s Petition and to  
22 provide recommendations to the New Jersey Board of Public Utilities (“BPU” or  
23 “Board”) regarding the Company’s revenue requirement request. To develop my

1 recommendations, I reviewed the prefiled testimony and exhibits of the Company,  
2 the responses to data requests propounded upon the Company by the Ratepayer  
3 Advocate and by the Staff of the BPU, and certain information from the  
4 Company's last base rate case, which was litigated in 2004-2005. I have also  
5 relied upon the engineering testimony being submitted on behalf of the Ratepayer  
6 Advocate by Howard J. Woods, Jr.

7

8 **III. SUMMARY OF CONCLUSIONS**

9 **Q. What are your conclusions concerning the Company's rate increase request?**

10 A. Based on my analysis of the Company's filing and other documentation in this  
11 case, I recommend a rate increase for Montague in the amount of \$83,501 (see  
12 Schedule ACC-1). My recommendation is \$45,737 less than the revenue  
13 requirement increase of \$129,237 requested by Montague in its filing. My  
14 recommendation is based on a cost of equity of 9.75% and on an overall rate of  
15 return of 7.66%.

16

17 **Q. What is the impact on customer rates if your recommendation is adopted?**

18 A. Current pro forma revenues are approximately \$142,906. Thus, my  
19 recommendation would increase rates by approximately 58.4%. The monthly rate  
20 for residential service would increase from \$38.70 per month to \$61.31 per  
21 month, while the rate for the clubhouse would increase from \$1,935.40 per month  
22 to \$3,066.27 per month.

1 **IV. BACKGROUND OF THE PROCEEDING**

2 **Q. Please provide a brief background of this proceeding.**

3 A. On December 31, 2003, Montague filed an Application to increase its base rates  
4 for service by \$281,387. That case was docketed as BPU Docket No.  
5 WR03121035. The most significant factor contributing to the Company's base  
6 rate increase request was sludge hauling costs incurred by Montague since  
7 January 2003 as a result of failures at leach fields 3A and 3B. In its filing, the  
8 Company had requested that sludge hauling costs incurred between the beginning  
9 of the Test Year and June 30, 2004 be amortized over a three-year period. In  
10 addition, Montague requested that capital costs associated with correcting the  
11 problems at leach fields 3A and 3B, as well as certain costs relating to corrective  
12 action at leach field 2, be recovered through a Phase II increase once these  
13 projects were completed.

14 In May 2004, I filed testimony on behalf of the Ratepayer Advocate,  
15 recommending a rate increase of \$6,938. This recommendation reflected the  
16 Ratepayer Advocate's proposal that sludge hauling costs be deferred and  
17 amortized over a 20-year period once the corrective action had been completed.  
18 In addition, I recommended that no Phase II increase be approved until the  
19 corrective action had been taken and the capital costs were known.

20 A Memorandum of Understanding ("MOU") was reached among the  
21 parties on all issues to the base rate case except for the issue of the sludge hauling  
22 costs and the Phase II increase. The MOU reflected a base rate increase of  
23 \$10,600. This amount was based on my recommendation of \$6,938, adjusted to

1 reflect a 9.75% return on equity (instead of the 9.00% I had recommended), and  
2 adjusted to reflect approximately 45% of the Company's cash working capital  
3 claim.

4 After litigation of the issues surrounding the sludge hauling costs, a  
5 Settlement Agreement was reached among the parties. The Settlement Agreement  
6 provided for recovery of \$500,000 in sludge hauling costs over a 20-year  
7 amortization period, without carrying costs.

8 On December 8, 2005, Montague filed a Petition to increase rates by an  
9 additional \$129,237 to reflect the rate base, depreciation expense, and associated  
10 tax impacts of the four new leach fields installed between September 15, 2005 and  
11 November 15, 2005. In its filing, the Company indicated that,

12 For purposes of this proceeding, Montague Sewer adopts  
13 all of the findings of the Board and stipulations made by  
14 the parties in the prior case described above. This case  
15 proceeds from these adopted findings to account only  
16 for the additions to rate base and associated depreciation,  
17 and their tax impact. It is hoped that this approach will  
18 limit controversy and enable the parties to streamline this  
19 proceeding.  
20

21 **Q. Have you limited your review of the Company's filing to the issues relating to**  
22 **the costs for rehabilitating the leach field, or have you expanded your review**  
23 **to include all aspects of the Company's revenue requirement?**

24 A. I conducted a preliminary review of the major components of the Company's  
25 revenue requirement to determine if additional adjustments were appropriate. For  
26 the most part, I believe that the revenue requirement components agreed to among  
27 the parties in the Company's prior base rate case, which was not resolved until

1 2005, are still reasonable. Therefore, with one exception, I am not recommending  
2 any adjustments to the revenue requirement components agreed to among the  
3 parties in the MOU or in the subsequent Settlement Agreement. The sole  
4 exception is the cost of debt, which will be discussed later in this testimony.

5

6 **V. DISCUSSION OF THE ISSUES**

7 **Q. How did the Company develop its claim in this case?**

8 A. Montague's incremental revenue requirement claim of \$129,237 includes the  
9 following components:

10	Return on Incremental Plant	\$ 64,594
11	Depreciation on Incremental Plant	\$ 15,907
12	Related Revenue Taxes	\$ 18,171
13	Related Income Taxes	\$ 15,616
14	Uncollectible Expense	\$ 1,616
15	Rate Case Expense	<u>\$ 13,333</u>
16	Total	<u>\$129,237</u>

17

18 In determining its incremental return, the Company started with its total  
19 incremental utility plant in service of \$795,372. It then reduced this plant balance  
20 to reflect one year of accumulated depreciation, resulting in a net rate base claim  
21 of \$779,465. Montague utilized an overall rate of return of 8.287% to develop the  
22 proposed incremental operating income of \$64,594.

23

1 **Q. What is the basis of the 8.287% overall return utilized by Montague?**

2 A. The 8.287% reflects the capital structure and cost of debt contained in my  
3 testimony filed in BPU Docket No. WR03121035, adjusted for a cost of equity of  
4 9.75% instead of the 9.00% that I had recommended. The 9.75% cost of equity  
5 was agreed to by the parties in the MOU and in the Settlement Agreement.

6

7 **Q. Has the Ratepayer Advocate accepted the Company's rate base claim in this**  
8 **case?**

9 A. No, the Ratepayer Advocate is recommending several adjustments to the rate base  
10 proposed by Montague. As discussed in the testimony of Mr. Woods, the  
11 Ratepayer Advocate is recommending several adjustments to the costs being  
12 claimed for the proposed work at the leach fields. The adjustments proposed by  
13 Mr. Woods, which are more fully described in his testimony, are summarized  
14 below:

Split Award Savings	\$41,023
Sludge Hauling Costs	\$10,000
Discarded Engineering Work	\$11,007
Collection System Maintenance Costs	\$2,745
Coding Errors	\$83,532
AFUDC Post-Construction	\$1,752
Engineering Fee Adjustment	\$88,258

15

16 Therefore, an adjustment should be made to the Company's utility plant-

1 in-service claim to eliminate these costs as proposed by Mr. Woods. This  
2 adjustment to utility plant-in-service is shown in Schedule ACC-3.

3

4 **Q. In addition to the adjustments proposed by Mr. Woods, is the Ratepayer**  
5 **Advocate proposing any other adjustments to the Company’s utility plant-in-**  
6 **service claim?**

7 A. Yes. In response to Data Request RAR-5, the Company provided the supporting  
8 calculations for its AFUDC rate. According to this response, the Company’s  
9 AFUDC claim was based on an overall cost of capital, which included a cost of  
10 equity of 10.70%. Montague indicated in response to RAR-12 that the 10.70%  
11 cost of equity “is derived from the most recent rate case for Carolina Pines  
12 Utilities, Inc. in North Carolina. The docket number for this particular rate case is  
13 W-1151-Sub 1, dated July 2004.” Moreover, in response to SR-MS-16,  
14 Montague stated that it “used this ROE because it was the most recent authorized  
15 ROE for UI’s operating sub.”

16

17 **Q. Do you believe that the use of a 10.70% return on equity is appropriate?**

18 A. No, I do not. Both the MOU, dated October 1, 2004, as well as the Settlement  
19 Agreement, dated July 29, 2004, utilize a return on equity for Montague of  
20 9.75%. While the Company could have filed for a different return on equity in  
21 this case, it chose not to do so, instead relying upon the 9.75% agreed to among  
22 the parties in the last case. In addition, the Ratepayer Advocate could have  
23 recommended a lower cost of equity in this case, but in order to minimize

1 controversy in this limited issue case, we have decided to accept the Company's  
2 claim of 9.75%. Therefore, if the overall cost of capital is used as the AFUDC  
3 rate, then the AFUDC rate should reflect the return on equity being used in the  
4 development of the overall cost of capital, i.e., 9.75%.

5  
6 **Q. What do you recommend?**

7 A. I recommend that the AFUDC included in utility plant-in-service be adjusted to  
8 reflect a cost of equity of 9.75%. My adjustment is shown in Schedule ACC-4. It  
9 should be noted that in calculating the AFUDC adjustment, I excluded the  
10 AFUDC that Mr. Woods recommends be disallowed. Mr. Woods' adjustment  
11 stands on its own. If I had included Mr. Woods' adjustment in the total AFUDC  
12 shown in Schedule ACC-4, then the Ratepayer Advocate would be double  
13 counting Mr. Woods' AFUDC adjustment.

14  
15 **Q. Do you have comments about the other components of the AFUDC rate, i.e.,**  
16 **the capital structure and cost of debt?**

17 A. It is my understanding that the Company recalculates an AFUDC rate every six  
18 months, updating the AFUDC rate for the actual capital structure and cost of debt.  
19 Since these are objective measures and reflect the actual financing of Montague's  
20 parent company, which is used as the proxy for Montague, I have no problem  
21 with the Company updating these components periodically, provided that these  
22 updates are reasonable. For example, the most recent capital structure used in the  
23 AFUDC calculation is relatively close to the capital structure utilized in the last

1 base rate case and therefore I have accepted the capital structure contained in the  
2 AFUDC calculation for that purpose. However, if the Company dramatically  
3 changed its capital structure, e.g., to reflect 100% equity financing, then the  
4 resulting AFUDC rate would not necessarily be reasonable and I would expect the  
5 Ratepayer Advocate to challenge the Company's utility plant-in-service claim in a  
6 future case. However, at this time, it appears that the updated capital structure is  
7 certainly within the range of reasonableness.

8 Similarly, the cost of debt is a subjective and relatively simple calculation.  
9 The cost of debt reflected in the AFUDC calculation appears reasonable given  
10 current market conditions and the fact that some debt expired in June 2005.

11

12 **Q. Are you advocating the use of the overall cost of capital as the AFUDC rate?**

13 A. No, I am not. While I am not challenging the use of the overall cost of capital as  
14 the AFUDC rate in this case, in many cases it is more appropriate to use some  
15 other rate, such as the short-term financing rate. Therefore, my acceptance of the  
16 overall cost of capital as the AFUDC rate in this case does not imply that I  
17 support the use of the overall cost of capital generally as an appropriate AFUDC  
18 rate.

19

20 **Q. Given the utility plant-in-service adjustments being recommended by the**  
21 **Ratepayer Advocate, how did you develop the pro forma rate base used in**  
22 **your revenue requirement determination?**

23 A. As shown in Schedule ACC-2, I began with pro forma utility plant-in-service,

1 adjusted to reflect the utility plant-in-service adjustments being recommended by  
2 the Ratepayer Advocate. I then reduced this balance to reflect one year of  
3 additions to the depreciation reserve, based on the 2% depreciation rate reflected  
4 in the Company's claim. This is the same methodology used by Montague in its  
5 filing. The result is a pro forma rate base of \$545,219.

6

7 **Q. Are you recommending that the overall rate of return used to determine the**  
8 **Company's incremental revenue requirement in this case be updated to**  
9 **reflect the current cost of debt?**

10 A. Yes, I am. As stated, the cost of debt is a relatively objective figure, unlike the  
11 cost of equity, which is usually subject to considerable debate in a base rate case.  
12 If the Company's debt costs have declined since the last case, then these lower  
13 costs should be utilized to determine the overall cost of capital associated with  
14 this incremental investment. Therefore, at Schedule ACC-5, I have recalculated  
15 the Company's overall required return, based on the updated cost of debt shown  
16 in the response to RAR-5. The Ratepayer Advocate is recommending an overall  
17 rate of return of 7.66%, which includes a return on equity of 9.75%.

18

19 **Q. Are you recommending that this lower overall rate of return be applied to all**  
20 **of Montague's investment or just to the incremental investment associated**  
21 **with the new leach fields?**

22 A. While the overall cost of capital of 7.66% may be appropriate for all of  
23 Montague's investment, in this case I have attempted to limit my adjustments to

1 the incremental investment associated with the leach fields. I believe that  
2 attempting to change rates associated with the Company's other plant investments  
3 may constitute single-issue ratemaking at this time. As previously stated, I did  
4 review the revenue requirement components approved in the MOU and  
5 Settlement Agreement and generally they are still reasonable. Therefore, my  
6 recommendation to update the cost of debt is limited to the calculation of the  
7 incremental return associated with the incremental leach field investment.

8

9 **Q. What is the overall level of incremental pro forma income that the Ratepayer**  
10 **Advocate is recommending?**

11 A. As shown in Schedule ACC-1, the recommended return of 7.66% applied to the  
12 Ratepayer Advocate's recommended rate base, results in pro forma income of  
13 \$41,759.

14

15 **Q. Are you recommending any operating expense adjustments to the**  
16 **Company's filing?**

17 A. Yes, I am recommending adjustments to depreciation expense, uncollectible  
18 expense, taxes other than income taxes, rate case expense, and income tax  
19 expense.

20

21 **Q. What adjustment have you made to the Company's depreciation expense**  
22 **claim?**

23 A. Since the Ratepayer Advocate's pro forma utility plant-in-service claim is less

1 than the amount requested by Montague, it is necessary to make a corresponding  
2 adjustment to eliminate the annual pro forma depreciation expense associated  
3 with the plant-in-service adjustment. The Ratepayer Advocate is not  
4 recommending any adjustment to the Company's proposed depreciation rate of  
5 2.0%. At Schedule ACC-6, I have made an adjustment to reflect annual  
6 depreciation expense on the Ratepayer Advocate's pro forma utility plant-in-  
7 service at a 2.0% depreciation rate.

8

9 **Q. What adjustment are you recommending to the Company's uncollectible**  
10 **expense claim?**

11 A. I have accepted the Company's pro forma uncollectible rate of 1.25%, which was  
12 the rate reflected in my testimony in the last base rate case. However, since the  
13 Ratepayer Advocate is recommending total incremental revenues that are less  
14 than the amount requested by Montague, it is necessary to make a corresponding  
15 adjustment to reflect uncollectible expense of 1.25% applied to the Ratepayer  
16 Advocate's recommended pro forma incremental revenues. This adjustment is  
17 shown in Schedule ACC-7.

18

19 **Q. What adjustment are you recommending to taxes other than income taxes?**

20 A. Taxes other than income taxes include gross receipts and franchise taxes.  
21 Montague calculated these taxes at a rate of 14.06% of revenue, which was the  
22 rate I used in my testimony in the last base rate case. However, similar to the  
23 discussion with regard to uncollectible expense, the Ratepayer Advocate is

1 recommending total incremental revenues that are less than the amount requested  
2 by Montague, and therefore it is necessary to make a corresponding adjustment to  
3 reflect revenue-related taxes of 14.06% applied to the Ratepayer Advocate's  
4 recommended pro forma incremental revenues. This adjustment is shown in  
5 Schedule ACC-8.

6

7 **Q. How did the Company develop its rate case expense claim?**

8 A. The Company's claim is based on total costs of \$80,000, which includes \$30,000  
9 in internal costs and \$50,000 in legal fees. The Company has allocated 50% of  
10 these costs to ratepayers and 50% to shareholders. The costs allocated to  
11 ratepayers were then amortized over a three-year period.

12

13 **Q. Are you recommending any adjustment to the Company's claim?**

14 A. Yes, I am. While I am not recommending any adjustment to the proposed three-  
15 year amortization period, I believe that the total rate case cost estimate of \$80,000  
16 is excessive. The issues in this case are very limited. In response to SR-MS-8,  
17 Montague stated that it has only incurred rate case costs of \$12,862 to date.  
18 Moreover, according to that response, the Company's actual rate case costs  
19 include \$3,948 in "Capitalized Time of Employees" however, Montague has  
20 included these costs as an operating expense in its rate case claim, not as a  
21 capitalized cost. The Company similarly stated in response to SR-MS-9 that its  
22 rate case claim included "an estimate for all capitalized labor used on the filing  
23 case...". However, capitalized labor is generally not an appropriate component of

1 rate case costs. In any event, it certainly appears that the Company's actual  
2 expenditures will fall far short of its \$80,000 cost estimate. Therefore, I am  
3 recommending a reduction of \$40,000 to the rate case cost estimate proposed by  
4 Montague. My recommendation still includes a considerable increase over the  
5 actual costs spent to date but appears more realistic than the amount included by  
6 Montague in its filing. At Schedule ACC-9, I have reflected my proposed rate  
7 case costs of \$40,000. I have allocated 50% of these costs to ratepayers and  
8 amortized the ratepayers' share of these costs over three years, consistent with the  
9 methodology used by the Company.

10

11 **Q. Please describe your adjustment to the Company's income tax claim?**

12 A. At Schedule ACC-10, I have recalculated pro forma income taxes, based on the  
13 levels of incremental revenue and operating expenses recommended in my  
14 testimony. As shown on Schedule ACC-1, the pro forma revenue level  
15 recommended by the Ratepayer Advocate will result in a pro forma operating  
16 income of \$41,759.

17

18 **Q. In calculating pro forma income taxes, did you include an interest  
19 synchronization adjustment?**

20 A. Yes, I did. The interest expense deduction shown in my income tax calculation is  
21 based on the synchronization of the interest expense with my recommended rate  
22 base and weighted cost of debt. The interest synchronization calculation is shown  
23 in Schedule ACC-11.

1 **Q. Please summarize the Ratepayer Advocate's recommendations?**

2 A. The Ratepayer Advocate is recommending a pro forma rate base of \$545,219, an  
3 overall cost of capital of 7.66%, and pro forma operating income of \$41,759.  
4 This requires an incremental rate increase of \$83,501, or approximately 58.4%  
5 over current rates.

6

7 **Q. Does this conclude your testimony?**

8 A. Yes, it does.

## APPENDIX C

### RESPONSES TO INTERROGATORIES

RAR-5

RAR12

SR-MS-C-1

SR-MS-C-8

SR-MS-C-9

SR-MS-C-16