

Direct Testimony
Of
Christopher L. Boggs

Rates Department
Financial Analysis Division
Illinois Commerce Commission

Northern Hills Water and Sewer Company

Proposed General Increase in Water and Sewer Rates

Docket No. 10-0298

July 8, 2010

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

2 A. My name is Christopher L. Boggs and my business address is 527 E. Capitol
3 Avenue, Springfield, IL 62701.

4

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

6 A. I am employed by the Illinois Commerce Commission (“Commission” or “ICC”)
7 as a Rate Analyst in the Rates Department of the Financial Analysis Division. My
8 responsibilities include rate design and cost of service analyses for electric, gas,
9 water and sewer utilities and the preparation of testimony on rates and rate
10 related matters.

11

12 **Q. How long have you been employed by the Illinois Commerce Commission?**

13 A. I have been employed as Staff (“Staff”) of the Commission since April of 2008.

14

15 **Q. Please discuss your educational and professional background.**

16 A. I received a BS in Economics/Business Administration from Knox College in
17 1987. In my work as a Rates Analyst I have testified in several rate cases on
18 issues including tariff language, miscellaneous fees and rates. Prior to my
19 employment at the ICC, I worked more than 16 years in mortgage finance and

20 mortgage operations management. I was employed by Illini Bank, Norwest
21 Mortgage, and Illinois National Bank.

22

23 **Q. What is the purpose of your direct testimony?**

24 A. The purpose of my direct testimony is to discuss Northern Hills Water and Sewer
25 Company's ("Northern Hills" or "Company"), a wholly owned subsidiary of
26 Utilities, Inc. ("UI"), proposed water and sewer rates and to present testimony
27 and exhibits that address my proposed rate design. I will also discuss my
28 recommendations regarding Company proposed tariff changes.

29

30 **Q. How is your testimony organized?**

31 A. I start by discussing water and sewer rate design, followed by discussions of bill
32 impacts and lastly miscellaneous tariff changes.

33

34 **Water Rate Design**

35 **Q. Please describe the Company's present water rate design.**

36 A. The Company's present rate structure consists of flat customer, usage and sewer
37 charges, which are billed monthly and can be found on ICC Staff Exhibit 4.0,
38 Schedules 4.1 and 4.2.

39

40 **Q. What changes does the Company propose to those rates in the current**
41 **case?**

42 A. The Company is proposing to increase its water usage charge from \$3.16 per
43 1,000 gallons to \$8.01 per 1,000 gallons, a 153% increase. It is also proposing
44 to increase its customer charge for water from \$5.55 per month to \$14.43 per
45 month, a 160% increase. Because the percentage increases are close, I regard
46 this as essentially an across-the-board equal percentage increase in water rates.

47

48 **Q. What is your opinion of the Company's proposed rate design?**

49 A. The Company's across-the-board, equal percentage increase to current rates is
50 an approach consistent with past Commission practice in setting rates in the
51 absence of a viable cost of service study. The Company's current rate structure
52 has been determined as just and reasonable by the Commission in its last rate
53 case. In the absence of new information to justify a different rate structure, the
54 most reasonable approach is to set new rates based upon current rates using an
55 across-the-board increase as was done by the Company.

56

57 **Q. Have you calculated the resulting rates at Staff's proposed water revenue**
58 **requirement for this case?**

59 A. Yes. I began the process of calculating my proposed water rates by subtracting
60 out Other Operating Revenues from Staff's proposed water revenue requirement.

61 Next, I reduced the Company's proposed customer and usage charges on an
62 equal percentage basis to conform to Staff's proposed water revenue
63 requirement.

64

65 **Q. What are the customer charges and usage charges for water service that**
66 **you are recommending in this case?**

67 A. My proposed flat monthly water customer charges and water usage charges are
68 shown on ICC Staff Exhibit 4.0, Schedule 4.1.

69

70 **Q. Does Staff Exhibit 4.0, Schedule 4.1 also present comparisons of the**
71 **Company and Staff-proposed rates?**

72 A. Yes. Column C, line 4 in Schedule 4.1 shows the Company's proposed water
73 revenue requirement taken from the Company's Schedule E. Column E, line 4 in
74 Schedule 4.1 shows Staff's proposed water revenue requirement while Column
75 G, line 4 shows the difference between the Company proposed dollar increase in
76 water revenues versus the Staff proposed dollar increase in water revenues.
77 Finally, Column H, line 4 in Schedule 4.1 shows the percentage difference in
78 water revenue increase between the Company's and Staff's proposals.

79

80 **Q. In the event the Commission chooses a different revenue requirement than**
81 **that proposed by the Company, how should the Company's new rates be**
82 **set?**

83 A. I recommend an across-the-board, equal percentage adjustment to the
84 Company's proposed rates to recover the final revenue requirement approved in
85 this case for the reasons stated above. This method provides the most equitable
86 way to recover the Commission-approved revenue increase.

87

88 **Sewer Rate Design**

89 **Q. Is the Company in compliance with 220 ILCS 5/8-306(h) of the Public**
90 **Utilities Act ("Act")?**

91 A. It has not been determined if the Company is in compliance with Sec.8-306(h).
92 Sec. 8-306(h) of the Act states:

93 Water and sewer utilities; low usage. Each public utility that provides
94 water and sewer service must establish a unit sewer rate, subject to
95 review by the Commission, which applies only to those customers who
96 use less than 1,000 gallons of water in any billing period. (220 ILCS 5/8-
97 306(h))

98

99 The Company did not provide a separate sewer rate that applies only to those
100 customers who use less than 1,000 gallons of water in any billing period. I am
101 awaiting a response to a data request that seeks to determine if the Company
102 has established such a rate.

103

104 **Q. What is your recommendation?**

105 A. Although I am not a lawyer, Staff counsel advises me that Section 8-306(h) of the
106 Act mandates that the Company establish “a unit sewer rate...that applies *only* to
107 those customers who use less than 1,000 gallons of water in any billing period.”
108 (Emphasis added.) If the Company has not already done so, I recommend that
109 the Company design such a rate that would comply with Section 8-306(h) of the
110 Act and provide it in its rebuttal testimony.

111

112 **Q. Is the Company in compliance with 220 ILCS 5/8-306(i) of the Act?**

113 A. It has not been determined if the Company is in compliance with Sec.8-306(i).
114 Sec. 8-306(i) of the Act states:

115 Water and sewer utilities; separate meters. Each public utility that
116 provides water and sewer service must offer separate rates for water and
117 sewer service to any commercial or residential customer who uses
118 separate meters to measure each of those services. In order for the
119 separate rate to apply, a combination of meters must be used to measure
120 the amount of water that reaches the sewer system and the amount of
121 water that does not reach the sewer system. (220 ILCS 5/8-306(i))

122

123 The Company did not provide separate rates for a residential customer who uses
124 separate meters to measure the amount of water that reaches the sewer system
125 and the amount of water that does not reach the sewer system. I am awaiting a

126 response to a data request to determine if the Company has established such a
127 rate.

128

129 **Q. What is your recommendation?**

130 A. Although I am not a lawyer, Staff counsel advises me that Section 8-306(i) of the
131 Act mandates that the Company “must offer separate rates for water and sewer
132 service to any commercial or residential customer who uses separate meters to
133 measure each of those services.” If the Company has not already done so, I
134 recommend that the Company design a rate that would comply with Section 8-
135 306(i) of the Act and provide it in its rebuttal testimony.

136

137 **Q. What are the Company’s current rates for sewer service?**

138 A. The current rate is a flat monthly charge of \$25.70 for all customers.

139

140 **Q. How do you assess this proposal of a flat fee rate structure?**

141 A. I find the proposal of a flat fee rate structure reasonable because it is consistent
142 with the current rate structure and the Company has provided no further cost
143 information for the record to support an alternative approach.

144

145 **Q. What changes does the Company propose to those sewer rates?**

146 A. The Company proposes to increase the current monthly charge of \$25.70 to
147 \$119.44.

148

149 **Q. Have you calculated the monthly sewer charge to recover Staff's proposed**
150 **sewer revenue requirement?**

151 A. Yes.

152

153 **Q. How did you develop this monthly sewer charge?**

154 A. The sewer revenue requirement that Staff is proposing is 21.5% less than the
155 sewer revenue requirement that the Company is proposing. To calculate my
156 proposed sewer charge, I reduced the Company's proposed monthly sewer
157 charge by that same 21.5%. This charge, when multiplied by the number of
158 sewer billing determinants, produces Staff's proposed sewer revenue
159 requirement for the Company.

160

161 **Q. What is the sewer charge that you are recommending in this case?**

162 A. My proposed flat sewer charge is shown on ICC Staff Exhibit 4.0, Schedule 4.2.

163

164 **Q. Does Staff Exhibit 4.0, Schedule 4.2 also compare Staff and Company**
165 **sewer rates?**

166 A. Yes, it does. Column C, line 2 in Schedule 4.2 shows the Company's proposed
167 sewer revenue requirement taken from the Company's Schedule E. Column E,
168 line 2 in Schedule 4.2 shows Staff's proposed sewer revenue requirement while
169 Column G, line 2 shows the difference between the Company proposed dollar
170 increase in sewer revenues versus the Staff proposed dollar increase in sewer
171 revenues. Finally, Column H, line 2 in Schedule 4.2 shows the percentage
172 difference in sewer revenue increase between the Company's and Staff's
173 proposals.

174

175 **Q. In the event the Commission chooses a different revenue requirement than**
176 **that proposed by the Company, how should the Company's new rates be**
177 **set?**

178 A. If the Commission decides to adopt a revenue requirement other than that
179 proposed by Staff, the sewer charge proposed by Staff as shown on Schedule
180 4.2 should be adjusted on an equal percentage basis to recover the revenue
181 requirement adopted in the Final Order.

182

183 **Bill Impacts**

184 **Q. Have you developed a typical bill comparison to illustrate the impact of**
185 **current versus proposed rates?**

186 A. Yes, I have. The results for water and sewer customers are illustrated in
187 Schedules 4.3¹, 4.4² and 4.5³.

188

189 **Q. Please explain the concept of “rate shock.”**

190 A. Rate shock occurs when a customer purchasing a commodity, such as water,
191 must pay a significantly higher amount for comparable service. While customers
192 generally do not expect prices to remain unchanged forever, they also typically
193 do not expect an abrupt and extreme change in prices that could cause them
194 significant financial distress.

195

196 **Q. Does the typical bill comparison show that customers may experience rate**
197 **shock?**

198 A. The typical Northern Hills customer obtains both water and sewer service from
199 the Company. Based on the Company’s proposed percent increases to current
200 rates, it appears that the typical customer may experience rate shock. As
201 indicated in Schedules 4.3 and 4.4, the monthly bill to a typical water and sewer
202 customer with usage of 4,400 gallons, the percentage increase is 191% (\$86.17)

¹ Current rates vs. Staff proposed rates.

² Current rates vs. Company proposed rates.

³ Staff proposed rates vs. Company proposed rates.

203 and 275% (\$123.96) under Staff's and Company's proposed rates, respectively.
204 The Company's previously filed rate case dates back to June 18, 2003 and
205 customers have not had a rate increase since. The rates that I propose for this
206 rate case are based on Staff's proposed revenue requirement and are slightly
207 lower. Although an average increase of 191% might be considered steep in
208 some circumstances, it is noticeably lower than what is being proposed by the
209 Company and is necessary in order for the Company to recover the cost of
210 service.

211

212 **Miscellaneous Tariff Changes**

213 **Q. Please discuss the Company's first proposed change to its tariff.**

214 A. The Company's first proposed tariff change is to increase the Non-Sufficient
215 Funds (NSF) Check charge from \$10 to \$25.

216

217 **Q. Why does the Company propose the NSF Check charge increase from \$10
218 to \$25?**

219 A. In her Supplemental response to Staff Data Request ("DR") CB-1.01, Company
220 witness Dhvani S. Mehta (NH Ex. 1.0, p. 10) states that the increase is intended
221 to enable Northern Hills Water and Sewer Company to cover costs associated
222 with NSF checks in addition to becoming up to date with industry standards.
223 Furthermore, in response to Staff DR CB-1.01, which requested a detailed

224 calculation of how the charge was determined, she stated that banks generally
225 charge NSF fees of \$25-\$35 and that the Company is proposing more consistent
226 fees throughout the organization, presumably referring to UI. Ms. Mehta also
227 referred to Section 3-806 of the Illinois Commercial Code (810 ILCS 3-806) which
228 provides for a \$25 fee or “costs and expenses, including reasonable attorneys
229 fees, incurred by any person in connection with the collection in the amount for
230 which the check or other draft was written whichever is greater” for NSF checks.

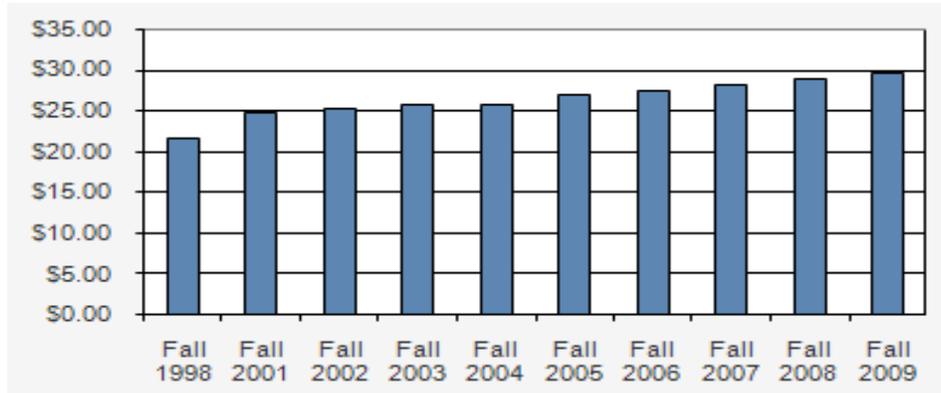
231

232 **Q. How do you respond to the Company’s proposed NSF Check charge**
233 **increase?**

234 A. The Commission has approved a \$25 NSF Check charge in recent previous rate
235 cases⁴ to allow companies to recover costs incurred and to act as a deterrent to
236 customers from issuing NSF checks. In addition, the \$25 fee is consistent with
237 Section 3-806 of the Illinois Commercial Code. Moreover, according to
238 bankrate.com, NSF fees rose 2.1 percent to an average \$29.58 according to its
239 2009 Checking Study. The following table⁵ represents the average NSF fee
240 growth over the years in the United States:

⁴ People’s Gas and North Shore Gas Docket Numbers 07-0421 and 07-0242 and Nicor Gas 08-0363.

⁵ <http://www.bankrate.com/finance/checking/bounced-check-fees-rise-again.aspx>



241

242

According to the Company's response to Staff DR CB-1.02, the Company only

243

had three NSF checks combined in the years 2007-2009. Due to minimal

244

occurrences in the last three years, a \$25 NSF charge would not produce a

245

significant revenue source. Nevertheless, it will allow the Company to recover

246

costs associated with processing NSF checks. Furthermore, for comparison

247

purposes, the following table presents examples of NSF fees charged by other

248

utilities:

Utility Name	NSF Fee
Aqua IL - University Park	\$ 15.00
Aqua IL - Oak Run	\$ 15.00
Cedar Water Company, Inc.	\$ 30.00
Sundale Utilities, Inc.	\$ 15.00
Lake Wildwood	\$ 25.00 (proposed)
Apple Canyon	\$ 25.00 (proposed)
Peoples Gas	\$ 25.00
North Shore Gas	\$ 25.00

249

250 Based on the above information, I believe the \$25 NSF fee proposed by the
251 Company is reasonable and, therefore, should be approved.

252

253 **Q. Please discuss the Company's proposal to increase its New Customer**
254 **Charge from \$15 to \$25.**

255 A. The Company conducted a cost analysis to determine the average cost to add a
256 new customer for water and sewer service. The Company's supplemental
257 response to Staff DR CB-1.10, states, "[t]he Company would like to recover the
258 current average cost of labor to provide these services. It takes approximately
259 one to two hours for an operator to add a new customer. It takes approximately
260 1/6th of an hour for a customer service representative to add a new customer." In
261 a confidential response to Staff DR CB-1.10, the Company provides average
262 labor costs for hourly customer service staff, hourly field staff, and mileage to
263 support the proposed increase.

264

265 **Q. Do you recommend approval of the Company's proposal to increase its**
266 **New Customer Charge from \$15 to \$25?**

267 A. Yes, I do. Through its responses to Staff DR CB-1.10, the Company
268 demonstrated that an increase in its New Customer Charge is appropriate and
269 will allow the Company to recover costs associated with such service.

270

271 **Q. Please discuss the Company's proposed increase to its Reconnection**
272 **Charge.**

273 A. The Company proposes to increase its reconnection charge from \$20 to \$37.50.
274 In her supplemental response to Staff DR CB-1.08, Company witness Mehta
275 states the Company would like to recover the current average cost of labor for
276 one hour of employee time to provide the reconnection service. In a confidential
277 response to Staff DR CB-1.08 (Attachment CB-1.03), the Company provides
278 average labor costs for hourly customer service staff, hourly field staff, and
279 mileage to support the proposed increase.

280

281 **Q. Do you recommend approval of the Company's proposal to increase its**
282 **reconnection fee to \$37.50?**

283 A. Yes, I do. Based on my review of the data provided by the Company, I find the
284 proposed increase to be reasonable because the proposed fee will allow the
285 Company to nearly recover the total costs that it incurs while reconnecting a
286 customer. I recommend that the Commission approve the Company's proposal
287 to increase its reconnection fee to \$37.50.

288

289 **Q. Please discuss the Company's proposal to establish an After Hour Call-out**
290 **charge.**

291 A. The Company proposes to establish an After Hour Call-out charge as described
292 in section 4C of the Company tariff Rules, Rates and Conditions of Service
293 section. The Company proposed minimum rate is equal to two hours at the
294 current labor rate or \$106. For all time accumulated above the two hour
295 minimum, the Company proposes to bill customers at the rate of \$53 per hour.
296 The Company, in response to Staff DR CB-1.09 (Attachment CB-1.03),
297 documented the average operator overtime costs, customer service costs to
298 process the overtime request and roundtrip mileage to premises. Furthermore, in
299 a supplemental response to Staff DR CB-1.09, the Company stated that such a
300 minimum charge would act as a deterrent in instances when a customer calls
301 and requests service to an issue that can be otherwise handled during normal
302 business hours and stated the collected fee will offset the operating cost and
303 prevent the cost from being passed on to the rate payers of the system. Based
304 on my review of the data provided by the Company, the proposed after hour
305 rates reflect a reasonable amount needed to recover those costs.

306

307 **Q. Do you recommend approval of the Company's proposal to establish its**
308 **minimum After Hour Call-out charge at \$106?**

309 A. Yes, I do. The Company sufficiently demonstrated in Attachment CB-1.03 that
310 the \$106 charge is reasonable for the reasons discussed above, and I
311 recommend that this charge be approved.

312

313 **Q. Does this conclude your direct testimony?**

314 **A.** Yes, it does.

Northern Hills Water & Sewer Company
 Comparison of Company Proposed and Staff Proposed
 Water Rates

All Customer Classifications

Line No.	Class/Description (A)	Sales 1,000 Gallons (B)	Company Proposed Total Revenue (C)	% of Revenue to Total (D)	Staff Proposed Total Revenue (E)	% of Revenue to Total (F)	Dollar Difference [(E)-(C)] (G)	Total Revenue % Difference [(G)/(C)] (H)
1	Water Residential	9,239	\$ 103,672.00	99.91%	\$ 78,474.00	99.55%	\$ (25,198.00)	-24.31%
2	Total Water Sales	9,239	\$ 103,672.00	99.91%	\$ 78,474.00	99.55%	\$ (25,198.00)	-24.31%
3	Other Operating Revenues		<u>\$ 95.00</u>	<u>0.09%</u>	<u>\$ 358.00</u>	<u>0.45%</u>	<u>\$ 263.00</u>	<u>276.84%</u>
4	Total Operating Revenues		\$ 103,767.00	100.00%	\$ 78,832.00	100.00%	\$ (24,935.00)	-24.03%

Northern Hills Water & Sewer Company
 Comparison of Company Proposed and Staff Proposed
 Water Rates

<u>Water Residential</u>								
Line No.	Description (A)	Customer Meter Billings (B)	Proposed Sales 1000 Gallons (C)	Company Proposed Rates (D)	Company Proposed Total Revenue (E)	Proposed Sales 1000 Gallons (F)	Staff Proposed Rates (G)	Staff Proposed Total Revenue (H)
1	Customer Charges:							
2	5/8 inch	2,056.00		\$ 14.43	\$ 29,668.00		\$ 10.91	\$ 22,431.00
3	Usage Charges:							
4	5/8 inch		9,239.00	\$ 8.01	<u>\$ 74,004.00</u>	9,239.00	\$ 6.0650	<u>\$ 56,035.00</u>
5	Residential Total	2,056.00	9,239.00		\$ 103,672.00	9,239.00		\$ 78,466.00

Source: Company Schedule E
 ICC Staff Exhibit 1.0 , Schedule 1.1 W

Northern Hills Water & Sewer Company
 Comparison of Company Proposed and Staff Proposed
 Water Rates

Other Operating Revenues

Line No.	Description (A)	Customer Meter Billings (B)	Proposed Sales 1000 Gallons (C)	Company Proposed Rates (D)	Company Proposed Total Revenue (E)	Proposed Sales 1000 Gallons (F)	Staff Proposed Rates (G)	Staff Proposed Total Revenue (H)
1	Other Operating Revenues Total	-	-		\$ 95.00	-		\$ 358.00

Source: Company Schedule E
 ICC Staff Exhibit 1.0 , Schedule 1.1 W

Northern Hills Water and Sewer Company
 Comparison of Company Proposed and Staff Proposed
 Sewer Rates

All Customer Classifications								
Line No.	Class/Description (A)	Sales 1,000 Gallons (B)	Company Proposed Total Revenue (C)	% of Revenue to Total (D)	Staff Proposed Total Revenue (E)	% of Revenue to Total (F)	Dollar Difference [(E)-(C)] (G)	Total Revenue % Difference [(G)/(C)] (H)
1	Total Sewer Sales	2,102	\$ 251,063.00	100.00%	\$ 197,023.00	100.00%	\$ (54,040.00)	-21.52%
2	Total Operating Revenues		<u>\$ 251,063.00</u>	100.00%	<u>\$ 197,023.00</u>	100.00%	\$ (54,040.00)	<u>-21.52%</u>

Sewer Residential

Description (A)	Customer Meter Billings (B)	Proposed Sales 1000 Gallons (C)	Company Proposed Rates (D)	Company Proposed Total Revenue (E)	Proposed Sales 1000 Gallons (F)	Staff Proposed Rates (G)	Staff Proposed Total Revenue (H)
3 Sewer Fixed Charge	2,102.00		\$ 119.44	\$ 251,063.00		\$ 93.73	\$ 197,020.00

Source: Company Schedule E
 ICC Staff Exhibit 1.0 , Schedule 1.1 S

Northern Hills Water and Sewer Company
 Bill Impact Comparison of Current Rates and Staff Proposed Rates

Northern Hills 5/8" meter size

5/8" Usage Charge Comparison

	Present Rates		Staff Proposed Rates		Percent Change
	Usage	Amount	Usage	Amount	
Per 1,000 Gallons		\$ 3.16		\$ 6.065	91.93%

5/8" Monthly Meter Customer Charge Comparison

Fixed charges per month	Water	\$ 5.55	\$ 10.91	96.58%
	Sewer	\$ 25.70	\$ 93.73	264.71%
	Total	\$ 31.25	\$ 104.64	234.85%

5/8" Bill Comparison

Level of Usage (1,000 Gal)	Current Monthly Bill	Staff Proposed Monthly Bill	Dollar Change	Percent Difference
0.000	\$ 31.25	\$ 104.64	\$ 73.39	235%
1.000	\$ 34.41	\$ 110.71	\$ 76.30	222%
1.200	\$ 35.04	\$ 111.92	\$ 76.88	219%
1.400	\$ 35.67	\$ 113.13	\$ 77.46	217%
1.600	\$ 36.31	\$ 114.34	\$ 78.04	215%
1.800	\$ 36.94	\$ 115.56	\$ 78.62	213%
2.000	\$ 37.57	\$ 116.77	\$ 79.20	211%
2.200	\$ 38.20	\$ 117.98	\$ 79.78	209%
2.400	\$ 38.83	\$ 119.20	\$ 80.36	207%
2.600	\$ 39.47	\$ 120.41	\$ 80.94	205%
2.800	\$ 40.10	\$ 121.62	\$ 81.52	203%
3.000	\$ 40.73	\$ 122.84	\$ 82.11	202%
3.200	\$ 41.36	\$ 124.05	\$ 82.69	200%
3.400	\$ 41.99	\$ 125.26	\$ 83.27	198%
3.600	\$ 42.63	\$ 126.47	\$ 83.85	197%
3.800	\$ 43.26	\$ 127.69	\$ 84.43	195%
4.000	\$ 43.89	\$ 128.90	\$ 85.01	194%
4.200	\$ 44.52	\$ 130.11	\$ 85.59	192%
* 4.400	\$ 45.15	\$ 131.33	\$ 86.17	191%
4.600	\$ 45.79	\$ 132.54	\$ 86.75	189%
4.800	\$ 46.42	\$ 133.75	\$ 87.33	188%
5.000	\$ 47.05	\$ 134.97	\$ 87.92	187%
5.200	\$ 47.68	\$ 136.18	\$ 88.50	186%
5.400	\$ 48.31	\$ 137.39	\$ 89.08	184%
5.600	\$ 48.95	\$ 138.60	\$ 89.66	183%
5.800	\$ 49.58	\$ 139.82	\$ 90.24	182%
6.000	\$ 50.21	\$ 141.03	\$ 90.82	181%
6.200	\$ 50.84	\$ 142.24	\$ 91.40	180%
6.400	\$ 51.47	\$ 143.46	\$ 91.98	179%
6.600	\$ 52.11	\$ 144.67	\$ 92.56	178%
6.800	\$ 52.74	\$ 145.88	\$ 93.14	177%
7.000	\$ 53.37	\$ 147.10	\$ 93.73	176%
7.200	\$ 54.00	\$ 148.31	\$ 94.31	175%
7.400	\$ 54.63	\$ 149.52	\$ 94.89	174%
7.600	\$ 55.27	\$ 150.73	\$ 95.47	173%
7.800	\$ 55.90	\$ 151.95	\$ 96.05	172%
8.000	\$ 56.53	\$ 153.16	\$ 96.63	171%
		Average	\$ 86.11	193%

* Denotes avg. consumption

Northern Hills Water and Sewer Company
 Bill Impact Comparison of Current Rates and Company
 Proposed Rates

Northern Hills 5/8" meter size

5/8" Usage Charge Comparison

	Present Rates		Company Proposed Rates		Percent Change
	Usage	Amount	Usage	Amount	
Per 1,000 Gallons		\$ 3.16	Per 1,000 Gallons	\$ 8.01	153.48%

5/8" Monthly Meter Customer Charge Comparison

Fixed charges per month	Water	\$ 5.55		\$ 14.43	160.00%
	Sewer	\$ 25.70		\$ 119.44	364.75%
	Total	\$ 31.25		\$ 133.87	328.38%

5/8" Bill Comparison

Level of Usage (1,000 Gal)	Current Monthly Bill	Company Proposed Monthly Bill	Dollar Change	Percent Difference
0.000	\$ 31.25	\$ 133.87	\$ 102.62	328%
1.000	\$ 34.41	\$ 141.88	\$ 107.47	312%
1.200	\$ 35.04	\$ 143.48	\$ 108.44	309%
1.400	\$ 35.67	\$ 145.08	\$ 109.41	307%
1.600	\$ 36.31	\$ 146.69	\$ 110.38	304%
1.800	\$ 36.94	\$ 148.29	\$ 111.35	301%
2.000	\$ 37.57	\$ 149.89	\$ 112.32	299%
2.200	\$ 38.20	\$ 151.49	\$ 113.29	297%
2.400	\$ 38.83	\$ 153.09	\$ 114.26	294%
2.600	\$ 39.47	\$ 154.70	\$ 115.23	292%
2.800	\$ 40.10	\$ 156.30	\$ 116.20	290%
3.000	\$ 40.73	\$ 157.90	\$ 117.17	288%
3.200	\$ 41.36	\$ 159.50	\$ 118.14	286%
3.400	\$ 41.99	\$ 161.10	\$ 119.11	284%
3.600	\$ 42.63	\$ 162.71	\$ 120.08	282%
3.800	\$ 43.26	\$ 164.31	\$ 121.05	280%
4.000	\$ 43.89	\$ 165.91	\$ 122.02	278%
4.200	\$ 44.52	\$ 167.51	\$ 122.99	276%
* 4.400	\$ 45.15	\$ 169.11	\$ 123.96	275%
4.600	\$ 45.79	\$ 170.72	\$ 124.93	273%
4.800	\$ 46.42	\$ 172.32	\$ 125.90	271%
5.000	\$ 47.05	\$ 173.92	\$ 126.87	270%
5.200	\$ 47.68	\$ 175.52	\$ 127.84	268%
5.400	\$ 48.31	\$ 177.12	\$ 128.81	267%
5.600	\$ 48.95	\$ 178.73	\$ 129.78	265%
5.800	\$ 49.58	\$ 180.33	\$ 130.75	264%
6.000	\$ 50.21	\$ 181.93	\$ 131.72	262%
6.200	\$ 50.84	\$ 183.53	\$ 132.69	261%
6.400	\$ 51.47	\$ 185.13	\$ 133.66	260%
6.600	\$ 52.11	\$ 186.74	\$ 134.63	258%
6.800	\$ 52.74	\$ 188.34	\$ 135.60	257%
7.000	\$ 53.37	\$ 189.94	\$ 136.57	256%
7.200	\$ 54.00	\$ 191.54	\$ 137.54	255%
7.400	\$ 54.63	\$ 193.14	\$ 138.51	254%
7.600	\$ 55.27	\$ 194.75	\$ 139.48	252%
7.800	\$ 55.90	\$ 196.35	\$ 140.45	251%
8.000	\$ 56.53	\$ 197.95	\$ 141.42	250%
		Average	\$ 123.86	278%

* Denotes avg. consumption

Northern Hills Water and Sewer Company
 Bill Impact Comparison of Company Proposed and Staff
 Proposed Rates

Northern Hills 5/8" meter size

5/8" Usage Charge Comparison

Staff Proposed Rates		Company Proposed Rates		Percent Change
Usage	Amount	Usage	Amount	
Per 1,000 Gallons	\$ 6.07	Per 1,000 Gallons	\$ 8.01	32.07%

5/8" Monthly Meter Customer Charge Comparison

Fixed charges per month	Water	\$ 10.91	\$ 14.43	32.26%
	Sewer	\$ 93.73	\$ 119.44	27.43%
	Total	\$ 104.64	\$ 133.87	27.93%

5/8" Bill Comparison

Level of Usage (1,000 Gal)	Staff Proposed Monthly Bill	Company Proposed Monthly Bill	Dollar Change	Percent Difference
0.000	\$ 104.64	\$ 133.87	\$ 29.23	27.93%
1.000	\$ 110.71	\$ 141.88	\$ 31.18	28.16%
1.200	\$ 111.92	\$ 143.48	\$ 31.56	28.20%
1.400	\$ 113.13	\$ 145.08	\$ 31.95	28.24%
1.600	\$ 114.34	\$ 146.69	\$ 32.34	28.28%
1.800	\$ 115.56	\$ 148.29	\$ 32.73	28.32%
2.000	\$ 116.77	\$ 149.89	\$ 33.12	28.36%
2.200	\$ 117.98	\$ 151.49	\$ 33.51	28.40%
2.400	\$ 119.20	\$ 153.09	\$ 33.90	28.44%
2.600	\$ 120.41	\$ 154.70	\$ 34.29	28.48%
2.800	\$ 121.62	\$ 156.30	\$ 34.68	28.51%
3.000	\$ 122.84	\$ 157.90	\$ 35.07	28.55%
3.200	\$ 124.05	\$ 159.50	\$ 35.45	28.58%
3.400	\$ 125.26	\$ 161.10	\$ 35.84	28.61%
3.600	\$ 126.47	\$ 162.71	\$ 36.23	28.65%
3.800	\$ 127.69	\$ 164.31	\$ 36.62	28.68%
4.000	\$ 128.90	\$ 165.91	\$ 37.01	28.71%
4.200	\$ 130.11	\$ 167.51	\$ 37.40	28.74%
* 4.400	\$ 131.33	\$ 169.11	\$ 37.79	28.77%
4.600	\$ 132.54	\$ 170.72	\$ 38.18	28.80%
4.800	\$ 133.75	\$ 172.32	\$ 38.57	28.83%
5.000	\$ 134.97	\$ 173.92	\$ 38.96	28.86%
5.200	\$ 136.18	\$ 175.52	\$ 39.34	28.89%
5.400	\$ 137.39	\$ 177.12	\$ 39.73	28.92%
5.600	\$ 138.60	\$ 178.73	\$ 40.12	28.95%
5.800	\$ 139.82	\$ 180.33	\$ 40.51	28.97%
6.000	\$ 141.03	\$ 181.93	\$ 40.90	29.00%
6.200	\$ 142.24	\$ 183.53	\$ 41.29	29.03%
6.400	\$ 143.46	\$ 185.13	\$ 41.68	29.05%
6.600	\$ 144.67	\$ 186.74	\$ 42.07	29.08%
6.800	\$ 145.88	\$ 188.34	\$ 42.46	29.10%
7.000	\$ 147.10	\$ 189.94	\$ 42.85	29.13%
7.200	\$ 148.31	\$ 191.54	\$ 43.23	29.15%
7.400	\$ 149.52	\$ 193.14	\$ 43.62	29.18%
7.600	\$ 150.73	\$ 194.75	\$ 44.01	29.20%
7.800	\$ 151.95	\$ 196.35	\$ 44.40	29.22%
8.000	\$ 153.16	\$ 197.95	\$ 44.79	29.24%
		Average	\$ 37.75	29%

*Denotes avg. consumption