



Case No.: 2005-00174  
Questions From: Public Service Commission – September 9, 2005  
Response from: Hopkinsville Water Environment Authority  
Sponsoring Witness:

**INFORMATION REQUEST NO. 17.**

Refer to the Direct Testimony of Mr. McKinley at 12.

b. List the similar systems that Mr. McKinley relied upon to determine the allocation factors.

**RESPONSE:**

Please see HWEA's Response to Commission Information Request No. 13a.



Case No.: 2005-00174  
Questions From: Public Service Commission – September 9, 2005  
Response from: Hopkinsville Water Environment Authority  
Sponsoring Witness: Jennings Rowe McKinley II

**INFORMATION REQUEST NO. 17.**

Refer to the Direct Testimony of Mr. McKinley at 12.

c. Describe in detail the method that Mr. McKinley used to determine the allocation factors.

**RESPONSE:**

A maximum day to average day ratio of 1.3 was used based on experienced demands in the HWEA water system. This indicates that approximately 76.9 (1.0/1.3) percent of the capacity of facilities designed and operated to meet maximum day demand is required for average day or base use. Accordingly, the remaining 23.1  $([1.3-1.0]/1.3)$  percent is required for maximum day extra capacity requirements. A ratio of maximum hour to annual average day demand ratio of 2.0 was used in the B&V Report. This ratio indicates that 50.0 (1.0/2.0) percent of the capacity of facilities designed and operated for maximum hour demand is needed for average or base use, while 15.0 (0.3/2.0) percent is utilized for maximum day extra capacity demands, and the remaining 35  $([2.0-1.3]/2.0)$  percent is required to meet maximum hour capacity extra capacity demand in excess of maximum day needs.



Case No.: 2005-00174  
Questions From: Public Service Commission – September 9, 2005  
Response from: Hopkinsville Water Environment Authority  
Sponsoring Witness: Lennis Franklin Hale

**INFORMATION REQUEST NO. 18.**

Provide all demand studies of its system that HWEA has performed or commissioned. If no demand studies of HWEA's system have been performed, explained why not.

**RESPONSE:**

HWEA hired Brandstetter, Carroll & Wolf, a consulting engineering firm in 1996 to conduct a Preliminary Engineering Report to project future water system growth. The Report is voluminous, however Section III of the Report investigates the existing capacity of the treatment system and projects future growth. Section III of the Report is attached as Exhibit No. 18.



Case No.: 2005-00174  
Questions From: Public Service Commission – September 9, 2005  
Response from: Hopkinsville Water Environment Authority  
Sponsoring Witness: Jennings Rowe McKinley II

**INFORMATION REQUEST NO. 19.**

Provide all written testimony and presentations that Mr. McKinley has submitted to other utility regulatory commissions or rate-making bodies since January 1, 1990 in proceedings regarding the adjustment of water utility rates.

**RESPONSE:**

Please see the CD attached as Exhibit No. 19 containing the written testimony from Mr. McKinley that was readily available and could be obtained without undue burden or expense.

2001 DIRECT TESTIMONY: Public Hearing on Proposed Water and Wastewater Rates 2001, Water Department of Philadelphia, Pennsylvania, Direct Testimony of J. Rowe McKinley and Exhibits JRM-1 and JRM-2

2004 TESTIMONY: Public Hearing on Proposed Water and Wastewater Rates 2004, Water Department of Philadelphia, Pennsylvania, Direct Testimony of J. Rowe McKinley and Exhibits JRM-1 and JRM-2



## EXHIBITS

- Exhibit No. 1a. Copy of the 1996 Agreement
- Exhibit No. 3a. Copy of all workpapers and schedules used to develop the cash flow for the FY 2005-2009 Study Period
- Exhibit No. 3b. Copy of the HWEA's FY 2005 Budget for the Hopkinsville Water Division
- Exhibit No. 3c. Copy of the YE Financial Statement, with the associated Budget figures applied
- Exhibit No. 4. Copy of the Indebtedness/Bond Spreadsheet prepared by York, Neel and Company
- Exhibit No. 5a. The Bond Ordinances
- Exhibit No. 5e. Copy of the applicable pages of the Audits referenced herein
- Exhibit No. 9a. The actual annual interest rate and bond term of the Series 2005A Bond
- Exhibit No. 9b. The actual amortization schedule for Series 2005A Bond
- Exhibit No. 13a. Copy of five years of historical average day and maximum day demands were provided by the HWEA
- Exhibit No. 18. Section III of the Preliminary Engineering Report to project future water system growth HWEA prepared by Brandstetter, Carroll & Wolf, a consulting engineering firm in 1996
- Exhibit No. 19. CD containing the written testimony from Mr. McKinley that was readily available and could be obtained without undue burden or expense.

## CONTRACT MODIFICATION AGREEMENT

**THIS AGREEMENT** is made and entered into by and between the City of Hopkinsville, Sewerage and Water Works Commission d/b/a Hopkinsville Water Environment Authority (hereinafter HWEA) and the Christian County Water District (hereinafter County) and is dated as of the 19th day of JUNE, 1996.

WHEREAS the County has requested reconsideration of rates charged for the sale of treated water by the HWEA to the County and the County has requested that the formula for determining water rates as presented in the 1973 Water Service Contract be revised; and

WHEREAS the County has a certain service territory set out in an Order of Christian Fiscal Court dated November 13, 1967, said service territory consisting of land located outside of the water service boundaries of the cities of Hopkinsville, Crofton, Pembroke, and Oak Grove; and

WHEREAS HWEA has requested that the County cede territory along US Highway 41-A south from the present HWEA boundary and all future non-residential customers;

### IT IS THEREFORE AGREED AS FOLLOWS:

1. **WATER RATE ADJUSTMENT:** The HWEA has agreed to adjust the current water rate to the County and to amend the contract conditions for determining future rate increases as follows:

a. Beginning in July 1, 1996 and continuing until June 30, 2001, the water rate from HWEA to the County will be \$1.44 per 1000 gallons for the first 10,000,000 gallons per month. All water purchased by the County in excess of 10,000,000 gallons per month will be billed at a rate of \$1.5425 per 1000 gallons. The contract conditions requiring a rate evaluation and adjustment every three years is hereby rescinded.

b. Beginning July 1, 2001, the new rates charged by HWEA to the County for the purchase of treated water will be based upon an index of 1.3 times the applicable City rates. The rates will only change as the City rates change.

**2. MASTER METER INSTALLATION:** The HWEA shall relocate the existing master meter at KY 1613 to another appropriate location to be determined by the County at no charge. Furthermore, two other master meters will be installed at no cost to the County by the HWEA within a reasonable period.

**3. SERVICE TERRITORY BOUNDARY ADJUSTMENT:** The service territory of HWEA and the County shall be adjusted to include the following changes:


a. The HWEA service boundary for US 41A shall include all customers located within 1000 feet of the center line of each outside lane (closest to US 41A R/W) on both sides of the said highway running from the present southern most boundary of the HWEA service territory to the north side of Interstate 24. Any development which fronts US Highway 41A and is entirely or partially within the 1000 foot service areas will be entirely served by HWEA. All existing customers of the County located within the 1000 foot service area along US Highway 41A will be relinquished to the HWEA on or before July 1, 1996, except for Pleasant View Acres and the Harry Berry Trailer Park. The existing 8" PVC water main along US Highway 41A from KY 1613 to Locust Grove Road will be transferred to the HWEA to facilitate serving South Christian and the I-24 area. If any residential customer outside the 1000 foot corridor or residential development starts outside the 1000 foot corridor desire water that the Christian County Water District cannot serve, HWEA may serve upon the request for permission from the Christian County Water District. Permission will not be unreasonably withheld for HWEA to serve.

b. The County will transfer to the HWEA all existing and future non-residential territory and non-residential customers in its service area upon the written request by the HWEA. The transferred territory would not include existing and future residential customers located in the County territory, although the customers could be served from HWEA installed facilities. This arrangement will remain in effect until the County can provide sewer service.

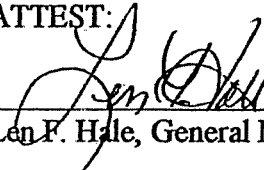
c. The HWEA will permanently transfer territory north and west of Hopkinsville to the County along the route of the Northwest By Pass. The boundary will be adjusted to follow the outside right-of-way of the Northwest By Pass.

4. **AGREEMENT BINDING:** This agreement shall be binding upon the successors and assigns of both parties.

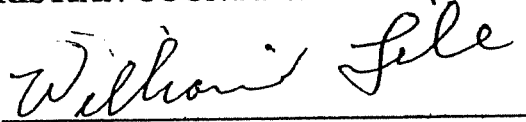
**CITY OF HOPKINSVILLE, SEWERAGE  
AND WATER WORKS COMMISSION d/b/a  
HOPKINSVILLE WATER ENVIRONMENT  
AUTHORITY**

BY:   
Wendell Lynch, Chairman

ATTEST:

  
Len F. Hale, General Manager

**CHRISTIAN COUNTY WATER DISTRICT**

BY:   
William Lile, Chairman

ATTEST:

  
Billy Poole, Manager



**Table 1**  
**HWEA**  
**Historical and Projected Number of Customers**

	Historical					Projected				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Hopkinsville</b>										
Residential	11,517	11,494	11,517	11,418	11,632	11,657	11,682	11,707	11,732	11,757
Commercial	1,721	1,743	1,740	1,847	1,845	1,850	1,855	1,860	1,865	1,870
Industrial	81	85	81	83	85	85	85	85	85	85
OM&G (a)	102	105	105	109	105	105	105	105	105	105
Gratis	14	15	16	17	18	18	18	18	18	18
<b>Crofton</b>										
Residential	0	524	519	523	523	523	523	523	523	523
Commercial	0	53	55	56	53	53	53	53	53	53
Industrial	0	0	0	0	0	0	0	0	0	0
OM&G (a)	0	0	0	0	0	0	0	0	0	0
Gratis	0	6	6	6	7	7	7	7	7	7
<b>Pembroke</b>										
Residential	240	236	240	242	241	241	241	241	241	241
Commercial	34	39	33	32	35	35	35	35	35	35
Industrial	0	0	0	0	0	0	0	0	0	0
OM&G (a)	3	2	3	3	3	3	3	3	3	3
Gratis	0	0	0	0	0	0	0	0	0	0
Wholesale	12	12	12	12	12	12	12	12	12	12
<b>Total</b>	<u>13,724</u>	<u>14,314</u>	<u>14,327</u>	<u>14,348</u>	<u>14,559</u>	<u>14,589</u>	<u>14,619</u>	<u>14,649</u>	<u>14,679</u>	<u>14,709</u>

(a) Excludes Gratis accounts.

**Table 2**  
**HWEA**  
**Historical and Projected Water Usage**

	Historical					Projected				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf
<b>Hopkinsville</b>										
Residential	807,864	792,668	760,565	776,020	762,546	763,534	765,171	766,809	768,446	770,084
Commercial	455,057	456,379	440,528	467,977	461,586	462,500	463,750	465,000	466,250	467,500
Industrial	518,977	443,754	349,911	351,013	339,125	338,725	338,725	338,725	338,725	338,725
OM&G (a)	151,163	134,885	142,214	131,328	140,599	138,600	138,600	138,600	138,600	138,600
Gratis	119,163	125,011	110,314	163,238	180,366	169,740	169,740	169,740	169,740	169,740
<b>Crofton</b>										
Residential	0	33,955	36,368	37,148	36,476	36,610	36,610	36,610	36,610	36,610
Commercial	0	6,680	7,280	7,468	8,277	7,420	7,420	7,420	7,420	7,420
Industrial	0	0	0	0	0	0	0	0	0	0
OM&G (a)	0	1,059	1,184	1,331	844	0	0	0	0	0
Gratis	0	114	217	185	1,444	700	700	700	700	700
<b>Pembroke</b>										
Residential	15,578	17,434	16,313	16,625	16,517	16,388	16,388	16,388	16,388	16,388
Commercial	11,225	10,693	9,682	11,091	10,674	10,850	10,850	10,850	10,850	10,850
Industrial	0	0	0	0	0	0	0	0	0	0
OM&G (a)	624	1,432	1,025	1,649	1,875	1,530	1,530	1,530	1,530	1,530
Gratis	0	0	0	0	0	0	0	0	0	0
Wholesale	345,858	386,837	387,926	430,273	434,603	432,000	432,000	432,000	432,000	432,000
<b>Total</b>	<b>2,425,509</b>	<b>2,410,901</b>	<b>2,263,527</b>	<b>2,395,346</b>	<b>2,394,932</b>	<b>2,378,597</b>	<b>2,381,484</b>	<b>2,384,372</b>	<b>2,387,259</b>	<b>2,390,147</b>

(a) Excludes Gratis accounts.

**Table 3**  
**HWEA**  
**Existing Water Rates**  
**(Effective January 1, 2001)**

**Hopkinsville**

<b>Meter Minimum Rate - \$/month</b>		
<u>Meter Size</u>	<u>Rate</u>	<u>Usage Included</u>
		Ccf
5/8"	5.31	3
3/4"	7.08	4
1"	10.62	6
1 1/2"	21.24	12
2"	35.40	20
3"	63.72	36
4"	106.20	60
6"	417.72	236

<b>Volume Charges - \$/Ccf</b>		
First	30 Ccf	1.77
Next	30 Ccf	1.55
Over	60 Ccf	1.12

**Pembroke**

First	3 Ccf	8.25
Next	17 Ccf	1.54
Next	20 Ccf	1.80
Next	30 Ccf	1.40
Next	30 Ccf	1.10
Over	100 Ccf	0.99

**Crofton**

		<u>City</u>	<u>County</u>
First	3 Ccf	10.18	11.83
Over	3 Ccf	2.14	2.14

**Wholesale (a)**

First	30 Ccf	2.30
Next	30 Ccf	2.02
Next	30 Ccf	1.46
Over	90 Ccf	1.19

**Private Fire Protection - \$/year**

<u>Meter Size</u>	<u>Rate</u>
2"	85.53
3"	123.54
4"	199.57
6"	361.13
8"	522.69
10"	798.28
12"	1,140.40

**Public Fire Protection - \$/hydrant/year**

Hydrants	57.00
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(a) Wholesale rates effective December 29, 2003.



**Table 4**

**HWEA  
Historical and Projected Service Charge Revenue**

	Historical					Projected				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Hopkinsville	2,871,013	2,895,430	2,908,432	2,859,099	2,866,044	2,841,500	2,846,500	2,851,500	2,856,400	2,861,400
Crofton	0	123,692	133,873	136,513	147,999	132,300	132,300	132,300	132,300	132,300
Pembroke	52,994	58,715	55,805	57,704	56,992	57,800	57,800	57,800	57,800	57,800
Wholesale	482,221	536,360	527,105	603,068	599,669	529,500	529,500	529,500	529,500	529,500
Total	3,406,227	3,614,198	3,625,215	3,656,384	3,670,704	3,561,100	3,566,100	3,571,100	3,576,000	3,581,000

**Table 5**  
**HWEA**  
**Historical and Projected Miscellaneous Revenue**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Operating Revenue				Non-Operating Revenue						
Year	Fire Protection		Connect Fees	Service Fees	Interest Income (a)	Bad Debt Recovered	Sales & Use Comp.	Capital by Developers	Gain on Sale	Misc Income	Total
	Public	Private									
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Historical</b>											
2000	49,818	65,142	90,777	49,068	285,670	8,927	868	27,067	3,450	5,120	549,402
2001	53,195	76,692	63,602	49,255	329,395	9,613	889	35,000	2,250	4,456	581,753
2002	53,323	76,282	72,100	48,881	217,140	10,669	842	145,146	0	22,397	478,395
2003	54,549	83,600	76,350	50,780	117,516	10,137	869	57,104	650	16,799	392,932
2004	56,340	86,527	72,061	57,308	89,445	8,237	828	112,079	13,697	20,993	369,918
<b>Projected</b>											
2005	56,000	86,000	73,500	55,000	210,300	9,700	800	104,800	4,800	20,100	490,500
2006	56,000	87,000	73,500	55,000	460,300	9,700	800	104,800	4,800	20,100	741,500
2007	56,000	88,000	73,500	55,000	199,300	9,700	800	104,800	4,800	20,100	481,500
2008	56,000	89,000	73,500	55,000	102,600	9,700	800	104,800	4,800	20,100	385,800
2009	56,000	90,000	73,500	55,000	104,500	9,700	800	104,800	4,800	20,100	388,700

(a) Includes interest on Sinking Fund, Depreciation Fund, Operating Fund, and Construction fund.

**Table 6**

**HWEA  
Historical and Projected O&M Expense**

	<u>Source of Supply</u>	<u>Purification</u>	<u>Distribution</u>	<u>Technical Services</u>	<u>Admin. &amp; General</u>	<u>Total</u>
	\$	\$	\$	\$	\$	\$
<b>Historical</b>						
2000	50,872	844,427	495,612	57,547	898,421	2,346,879
2001	18,126	1,057,464	469,962	58,938	974,517	2,579,007
2002	7,395	1,013,107	482,793	55,396	1,079,476	2,638,167
2003	7,205	927,502	485,142	76,116	1,008,233	2,504,198
2004	8,501	981,230	517,557	72,933	1,020,474	2,600,695
<b>Projected</b>						
2005	7,500	1,025,500	462,700	95,900	1,054,400	2,646,000
2006	7,700	1,057,000	476,400	98,700	1,086,000	2,725,800
2007	284,400	1,089,500	490,500	101,600	1,118,400	3,084,400
2008	569,700	1,123,100	505,000	104,600	1,151,900	3,454,300
2009	587,400	1,157,700	520,000	107,700	1,186,400	3,559,200

**Table 7**  
**HWEA**  
**Proposed Capital Improvement Program**

Line No.	2005	2006	2007	2008	2009	Total
	\$	\$	\$	\$	\$	\$
1	0	17,666,700	8,833,300	0	0	26,500,000
2	0	0	0	0	0	0
3	260,000	220,000	211,000	230,000	145,000	1,066,000
4	0	110,000	0	0	0	110,000
5	130,000	0	165,000	0	0	295,000
6	0	0	0	0	0	0
7	20,000	15,000	25,000	20,000	30,000	110,000
8	0	0	0	0	0	0
9	15,000	15,000	15,000	15,000	0	60,000
10	0	36,000	36,000	36,000	36,000	144,000
11	425,000	18,062,700	9,285,300	301,000	211,000	28,285,000

**Table 8**

**HWEA  
Capital Improvement Program Financing**

Line No.	Description	Year Ending June 30,				
		2005	2006	2007	2008	2009
		\$	\$	\$	\$	\$
<b>Sources of Funds</b>						
1	Beginning of Year Balance	100,000	25,111,000	9,026,700	177,400	630,432
2	Revenue Bond Proceeds	25,750,000	0	0	0	0
3	KIA Loan Proceeds	0	1,542,400	0	0	0
4	Cash Financing of Construction	436,000	436,000	436,000	336,000	236,000
5	Grants/Developer Contributions	0	0	0	0	0
6	Total Funds Available	26,286,000	27,089,400	9,462,700	513,400	866,432
<b>Application of Funds</b>						
7	Major Capital Improvements	425,000	18,062,700	9,285,300	301,000	211,000
8	Issuance Costs	696,300	0	0	0	0
9	Surety Bond Fee	53,700	0	0	0	0
10	Revenue Bond Reserve Fund	0	0	0	(418,032)	0
11	Total Application of Funds	1,175,000	18,062,700	9,285,300	(117,032)	211,000
12	End of Year Fund Balance	25,111,000	9,026,700	177,400	630,432	655,432

**Table 9****HWEA  
Existing and Proposed Debt Service**

<u>Year</u>	<u>Existing Revenue Bonds</u>	<u>Proposed Revenue Bonds</u>	<u>Existing KIA Loans</u>	<u>Proposed KIA Loans</u>	<u>Total</u>
	\$	\$	\$	\$	\$
<b>Deposits to Principal and Interest Account</b>					
2005	756,000	256,300	227,200	0	1,239,500
2006	768,100	1,437,600	226,900	89,100	2,521,700
2007	793,200	1,564,200	226,600	89,100	2,673,100
2008	264,600	1,867,300	226,300	89,100	2,447,300
2009	87,800	1,970,100	226,000	89,100	2,373,000
<b>Payments to Bondholders</b>					
2005	744,400	256,300	227,200	0	1,227,900
2006	743,700	1,025,100	226,900	11,000	2,006,700
2007	758,200	1,567,800	226,600	89,100	2,641,700
2008	784,300	1,552,500	226,300	89,100	2,652,200
2009	84,700	1,954,900	226,000	89,100	2,354,700

**Table 10**

**HWEA  
Comparison of Projected Revenue Under Existing  
Rates With Projected Revenue Requirements**

Line No.	Description	Year Ending June 30,				
		2005	2006	2007	2008	2009
		\$	\$	\$	\$	\$
1	Revenue Under Existing Rates	3,561,100	3,566,100	3,571,100	3,576,000	3,581,000
2	Fire Protection Revenue	142,000	143,000	144,000	145,000	146,000
	Additional Revenue Required					
	Fiscal Year	Revenue Increase	Months Effective			
3	2005	32.0%	1.5	148,100	1,186,900	1,188,800
4	2006	0.0%	12.0		0	0
5	2007	13.0%	12.0		637,500	638,500
6	2008	13.0%	12.0			721,500
7	2009	0.0%	12.0			0
8	Total Additional Revenue	148,100	1,186,900	1,826,300	2,550,700	2,554,800
9	Total Service Charge Revenue	3,851,200	4,896,000	5,541,400	6,271,700	6,281,800
10	Other Operating Revenue	128,500	128,500	128,500	128,500	128,500
11	Other Non-Operating Revenue	140,200	140,200	140,200	140,200	140,200
12	Interest Income - Reserve Funds	79,900	93,400	95,000	86,400	79,300
13	Interest Income - Operations	1,600	0	0	0	8,200
14	Interest Income - Construction	128,800	366,900	104,300	16,200	17,000
15	Total Revenue	4,330,200	5,625,000	6,009,400	6,643,000	6,655,000
16	Operation and Maintenance Expense	2,646,000	2,725,800	3,084,400	3,454,300	3,559,200
17	Payments to CCWD	112,300	80,200	0	0	0
18	Net Revenue	1,571,900	2,819,000	2,925,000	3,188,700	3,095,800
	Debt Service					
19	Existing Revenue Bonds	756,000	768,100	793,200	264,600	87,800
20	Proposed Revenue Bonds (a)	256,300	1,437,600	1,564,200	1,867,300	1,970,100
21	Total Parity Debt	1,012,300	2,205,700	2,357,400	2,131,900	2,057,900
22	Existing KIA Loans	227,200	226,900	226,600	226,300	226,000
23	Proposed KIA Loans	0	89,100	89,100	89,100	89,100
24	Total Subordinate Debt	227,200	316,000	315,700	315,400	315,100
25	Total Debt Service	1,239,500	2,521,700	2,673,100	2,447,300	2,373,000
26	Cash Financing of Major Improvements	436,000	436,000	436,000	336,000	236,000
27	Net Annual Balance	(103,600)	(138,700)	(184,100)	405,400	486,800
28	Beginning of Year Balance (b)	267,500	163,900	25,200	(158,900)	246,500
29	End of Year Balance (b)	163,900	25,200	(158,900)	246,500	733,300

(a) Proposed 2005 series assumes Deferred debt service schedule.

(b) Excludes operating reserve fund balances.

**Table 11**

**HWEA  
Coverage Requirements**

Line No.		Year Ending June 30,				
		2005	2006	2007	2008	2009
		\$	\$	\$	\$	\$
<b>Rate Covenant Coverage</b>						
1	Projected Net Revenues	1,571,900	2,819,000	2,925,000	3,188,700	3,095,800
2	Net Revenue Adjustment (a)	1,036,900	0	0	0	0
3	Adjusted Net Revenue	2,608,800	2,819,000	2,925,000	3,188,700	3,095,800
4	Maximum Annual Debt Service (b)	2,336,800	2,336,800	2,336,800	2,336,800	2,044,300
5	Projected Actual Net Revenue as a Percentage of Maximum Debt Service	111.64%	120.64%	125.17%	136.46%	151.44%
<b>Additional Bond Coverage</b>						
6	<u>Preceding Year Projected Net Revenues</u>	1,587,523				
7	Net Revenue Adjustment (a)	1,174,625				
8	Adjusted Net Revenue	2,762,148				
9	Maximum Annual Debt Service (b)	2,336,800				
10	Projected Actual Net Revenue as a Percentage of Maximum Debt Service	118.20%				
<b>Combined Utility Additional Bond Coverage</b>						
11	<u>Preceding Year Projected Net Revenues</u>	3,058,837				
12	Net Revenue Adjustment (a)	1,174,625				
13	Adjusted Net Revenue	4,233,462				
14	Maximum Annual Debt Service (b)	3,091,400				
15	Projected Actual Net Revenue as a Percentage of Maximum Debt Service	136.94%				

(a) Annualized revenue increase of 32 percent in Fiscal Year 2005.

(b) Maximum annual debt service on parity bonds, including the Series 1993, Series 1996, Series 2002, and the proposed Series 2005 Bonds.



**Table 12**

**HWEA  
Cost of Service  
Test Year 2006**

<u>Line No.</u>		<u>Operating Expense</u>	<u>Capital Cost</u>	<u>Total</u>
		\$	\$	\$
	<b>Revenue Requirements</b>			
1	Operation & Maintenance Expense	2,725,800		2,725,800
2	Debt Service Requirements		2,521,700	2,521,700
3	Cash Financing of Construction		436,000	436,000
4	Payments to CCWD	80,200		80,200
5	Total	<u>2,806,000</u>	<u>2,957,700</u>	<u>5,763,700</u>
	Revenue Requirements Met from Other Sources			
6	Other Operating Revenue	128,500		128,500
7	Other Nonoperating Revenue		140,200	140,200
8	Interest Income	25,200	435,100	460,300
9	Change in Funds Available	67,500	71,200	138,700
10	Full Year Rate Adjustment		0	0
11	Total	<u>221,200</u>	<u>646,500</u>	<u>867,700</u>
12	Net Costs to be Met from Charges	<u>2,584,800</u>	<u>2,311,200</u>	<u>4,896,000</u>

Table 13

HWEA  
Allocation of Net Plant Investment  
To Functional Cost Components  
Test Year 2006

Line No.	Description	Net Plant Investment	Retail						Wholesale				
			Base	Extra Capacity		Meter Reading & Billing	Meters & Services	Direct Fire Protection		Crofton Direct	Base	Extra Capacity	
			Maximum Day	Maximum Hour					Public		Private		Maximum Day
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	Source of Supply	483,800	297,600	89,400							74,400	22,400	
2	Small Distribution Mains	313,000	156,500	47,000	109,500								
3	Large Distribution Mains	8,431,100	3,372,500	1,011,800	2,360,600						843,100	252,900	590,200
4	Pumping	284,000	174,700	52,500							43,700	13,100	
5	Storage	1,516,900	606,800	182,000	424,700						151,700	45,500	106,200
6	Treatment Plant	8,971,300	5,519,100	1,657,900							1,379,800	414,500	
7	Meters & Services	1,466,600					1,466,600						
8	Hydrants	386,200						386,200					
9	Administrative & General	879,900	397,900	119,500	113,700	0	57,600	15,200	0		111,400	33,500	31,100
10	Total	22,732,800	10,525,100	3,160,100	3,008,500	0	1,524,200	401,400	0	0	2,604,100	781,900	727,500
11	Capital Costs from Rates	2,311,200	1,053,400	316,300	301,100	0	152,500	40,200	0	36,000	260,600	78,300	72,800

**Table 14**

**HWEA  
Allocation of Operation & Maintenance Expense  
To Functional Cost Components  
Test Year 2006**

Line No.	Description	Total O&M Cost	Retail						Wholesale			
			Base	Extra Capacity		Meter Reading & Billing	Meters & Services	Direct Fire Protection		Base	Extra Capacity	
				Maximum Day	Maximum Hour			Public	Private		Maximum Day	Maximum Hour
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	Source of Supply	7,700	6,200							1,500		
	Purification											
2	Chemicals	357,300	287,500							69,800		
3	Power	216,600	139,400	29,000						33,900	14,300	
4	All Other	483,100	298,900	74,600						72,600	37,000	
	Distribution											
5	Small Mains	2,200	1,100	300	800							
6	Large Mains	60,100	24,200	6,000	18,400					5,900	3,000	2,600
7	Hydrants	4,100						4,100				
8	Meters and Services	58,400					58,400					
9	All Other (a)	351,600	120,000	36,000	84,000	0	42,600	11,200	0	28,900	8,700	20,200
10	Technical Services (b)	98,700	36,700	9,600	11,200	5,300	19,100	1,900	0	8,800	4,000	2,100
	Admin. & General											
11	Meter Reading & Collection	44,900				44,900						
12	Postage	29,600				29,600						
13	All Other (b)	1,011,500	375,100	98,100	115,200	54,100	195,900	19,700	0	90,600	41,200	21,600
14	Total Operating Expenses	2,725,800	1,289,100	253,600	229,600	133,900	316,000	36,900	0	312,000	108,200	46,500
15	Payments to CCWD	80,200	37,800	7,500	6,800	3,900	9,300	1,100	0	9,200	3,200	1,400
16	Less Expenses Met from Other Sources	221,200	104,600	20,600	18,600	10,900	25,600	3,000	0	25,300	8,800	3,800
17	Total Operating Expenses	2,584,800	1,222,300	240,500	217,800	126,900	299,700	35,000	0	295,900	102,600	44,100

(a) Allocated on the basis of plant investment in Small Distribution Mains, Large Distribution Mains, Storage, Meters & Services, and Hydrants.

(b) Allocated on the basis of all other expenses excluding Chemicals, Power, Technical Services, and Admin. & General All Other.

**Table 15**  
**HWEA**  
**Units of Service**  
**Test Year 2006**

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	Water Usage		Maximum Day			Maximum Hour			Equivalent	Direct Fire Protection			
	Annual	Average Day	Capacity Factor	Total Capacity	Extra Capacity	Capacity Factor	Total Capacity	Extra Capacity	Meters & Services	Bills	Public	Private	
	Ccf	Ccf/day		Ccf/day	Ccf/day		Ccf/day	Ccf/day			Hydrants	Hydrants	
1	Hopkinsville	1,706,200	4,675	150%	7,013	2,338	210%	9,818	2,805	14,454	164,724		
2	Crofton	44,000	121	225%	272	151	315%	381	109	576	6,912		
3	Pembroke	28,800	79	225%	178	99	315%	249	71	279	3,348		
4	Wholesale	432,000	1,184	225%	2,664	1,480	315%	3,730	1,066	12	144		
5	Public Fire Protection				304	304		3,650	3,346			1,061	
6	Private Fire Protection				97	97		1,163	1,066			338	
7	<b>Total</b>	<b>2,211,000</b>	<b>6,059</b>		<b>10,528</b>	<b>4,469</b>		<b>18,991</b>	<b>8,463</b>	<b>15,321</b>	<b>175,128</b>	<b>1,061</b>	<b>338</b>

**Table 16**  
**HWEA**  
**Unit Cost of Service**  
**Test Year 2006**

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Total	Base	Extra Capacity		Meter	Meters & Services	Direct Fire Protection		Crofton Direct	Base	Extra Capacity	
	\$	Ccf	Maximum Day	Maximum Hour	Reading & Billing	Equiv. Meters	Public Hydrants	Private Hydrants	Ccf	Ccf	Maximum Day	Maximum Hour
			Ccf/day	Ccf/day	Bills						Ccf/day	Ccf/day
<b>Units of Service</b>												
1	Hopkinsville	1,706,200	2,338	2,805	164,724	14,454						
2	Crofton	44,000	151	109	6,912	576			44,000			
3	Pembroke	28,800	99	71	3,348	279						
4	Public Fire Protection		304	3,346			1,061					
5	Private Fire Protection		97	1,066				338				
6	Total Retail	1,779,000	2,989	7,397	174,984	15,309	1,061	338	44,000	0	0	0
7	Wholesale									432,000	1,480	1,066
8	Total	1,779,000	2,989	7,397	174,984	15,309	1,061	338	44,000	432,000	1,480	1,066
<b>Costs of Service</b>												
Net Operating Expense												
9	Total Cost - \$	2,584,800	1,222,300	240,500	217,800	126,900	299,700	35,000	0	295,900	102,600	44,100
10	Unit Cost - \$/unit		0.68707	80.46169	29.44437	0.72521	19.57659	32.98775	0.00000	0.68495	69.32432	41.36961
Capital Costs												
11	Total Cost - \$	2,311,200	1,053,400	316,300	301,100	0	152,500	40,200	0	36,000	260,600	78,300
12	Unit Cost - \$/unit		0.59213	105.82134	40.70569	0.00000	9.96140	37.88878	0.00000	0.81818	0.60324	52.90541
13	Total Unit Cost of Service		1.27920	186.28304	70.15006	0.72521	29.53799	70.87653	0.00000	0.81818	1.28819	109.66229
Total Cost of Service												
14	Retail - \$	4,041,700	2,275,700	556,800	518,900	126,900	452,200	75,200	0	36,000	0	0
15	Wholesale - \$	854,300	0	0	0	0	0	0	0	556,500	180,900	116,900
16	Total	4,896,000	2,275,700	556,800	518,900	126,900	452,200	75,200	0	36,000	556,500	116,900

Table 17

HWEA

Allocated Costs of Service to Customer Classes  
Test Year 2006

Line No.	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Retail								
Total	\$	Base	Extra Capacity		Meter		Meters & Services	Direct Fire Protection		Crofton Direct	Base	Extra Capacity	
			Maximum Day	Maximum Hour	Reading & Billing	Hour		Public	Private			Maximum Day	Maximum Hour
1		1.27920	186.28304	70.15006	0.72521	29.53799	70.87653	0.00000	0.81818	1.28819	122.22973	109.66229	
<b>Unit Cost of Service - \$/unit</b>													
<b>Retail</b>													
Hopkinsville													
2		1,706,200	2,338	2,805	164,724	14,454							
3	3,361,500	2,182,800	435,500	196,800	119,500	426,900							
Crofton													
4		44,000	151	109	6,912	576			44,000				
5	150,000	56,300	28,100	7,600	5,000	17,000			36,000				
Pembroke													
6		28,800	99	71	3,348	279							
7	70,800	36,800	18,400	5,000	2,400	8,200							
8	3,582,300	2,275,900	482,000	209,400	126,900	452,100							
<b>Wholesale</b>													
9										432,000	1,480	1,066	
10	854,300									556,500	180,900	116,900	
<b>Public Fire Protection</b>													
11			304	3,346			1,061						
12	366,500		56,600	234,700			75,200						
<b>Private Fire Protection</b>													
13			97	1,066				338					
14	92,900		18,100	74,800				0					
15	4,896,000	2,275,900	556,700	518,900	126,900	452,100	75,200	0	0	556,500	180,900	116,900	

**Table 18**

**HWEA  
Comparison of Allocated Cost of Service  
with Revenue Under Existing Rates  
Test Year 2006**

<u>Line No.</u>		(1)  Allocated Cost of Service <u>          </u> \$	(2)  Revenue Under Existing Rates <u>          </u> \$	(3)  Indicated Revenue Adjustment <u>          </u>
1	Hopkinsville	3,361,500	2,846,500	18.1%
2	Crofton	150,000	132,300	13.4%
3	Pembroke	70,800	57,800	22.5%
4	Wholesale	854,300	529,500	61.3%
5	Public Fire Protection	366,500	56,000	554.5%
6	Private Fire Protection	<u>92,900</u>	<u>87,000</u>	6.8%
7	Total	4,896,000	3,709,100	32.0%

**Table 19****HWEA****Existing and Proposed Water Rates****(Proposed Rates Effective May 1, 2005)**

	<u>Usage Allowance</u>	<u>Existing Rates</u>	<u>Proposed Rates</u>
<b>Hopkinsville</b>			
<b>Minimum Bill - \$/month</b>			
5/8"	3 Ccf	5.31	6.25
3/4"	4 Ccf	7.08	11.35
1"	6 Ccf	10.62	16.10
1 1/2"	12 Ccf	21.24	29.10
2"	20 Ccf	35.40	47.80
3"	36 Ccf	63.72	99.50
4"	60 Ccf	106.20	155.00
6"	236 Ccf	417.72	525.00
<b>Volume Charges - \$/Ccf</b>			
		1.77	2.09
		1.55	1.83
		1.12	1.32
<b>Pembroke</b>			
		8.25	9.20
		1.54	2.05
		1.80	2.39
		1.40	1.86
		1.10	1.46
		0.99	1.31
<b>Crofton</b>			
		10.18	11.61
		2.14	2.44
<b>Wholesale</b>			
		2.30	2.72
		2.02	2.38
		1.46	1.72
		1.19	1.93
<b>Private Fire Protection - \$/year</b>			
		85.53	44.40
		123.54	44.40
		199.57	94.62
		361.13	274.85
		522.69	585.71
		798.28	1,053.31
		1,140.40	1,701.39
<b>Public Fire Protection - \$/hydrant/year</b>			
		57.00	350.00



## Table 20

### HWEA

#### Comparison of Revenue Under Proposed Rates with Allocated Cost of Service Test Year 2006

<u>Line No.</u>		<u>Revenue Under Proposed Rates</u>	<u>Allocated Cost of Service</u>	<u>Revenue As A Percent of Cost of Service</u>
		\$	\$	
1	Hopkinsville	3,354,000	3,361,500	99.8%
2	Crofton	151,100	150,000	100.7%
3	Pembroke	70,900	70,800	100.1%
4	Wholesale	858,800	854,300	100.5%
5	Public Fire Protection	366,500	366,500	100.0%
6	Private Fire Protection	<u>92,800</u>	<u>92,900</u>	99.9%
7	Total	4,894,100	4,896,000	100.0%

Table 21

**HWEA**  
**Comparison of Typical Monthly Water Bills**  
**Under Existing and Proposed Rates**  
 (Proposed Rates Effective May 1, 2005)

Meter Size	Monthly Usage	Existing Rates	Proposed Rates	Increase	Percent Increase
	Ccf	\$	\$	\$	%
<b>Hopkinsville</b>					
5/8"	2	5.31	6.25	0.94	17.70
5/8"	5	8.85	10.45	1.60	18.08
5/8"	10	17.70	20.90	3.20	18.08
3/4"	2	7.08	11.35	4.27	60.31
3/4"	5	8.85	10.45	1.60	18.08
3/4"	10	17.70	20.90	3.20	18.08
1"	5	10.62	16.10	5.48	51.60
1"	15	26.55	31.35	4.80	18.08
1 1/2"	10	21.24	29.10	7.86	37.01
1 1/2"	20	35.40	41.80	6.40	18.08
2"	15	35.40	47.80	12.40	35.03
2"	50	84.10	99.30	15.20	18.07
3"	35	63.72	99.50	35.78	56.15
3"	100	144.40	170.40	26.00	18.01
4"	55	106.20	155.00	48.80	45.95
4"	300	368.40	434.40	66.00	17.92
6"	230	417.72	525.00	107.28	25.68
6"	500	592.40	698.40	106.00	17.89
<b>Pembroke</b>					
	2	8.25	9.20	0.95	11.52
	5	11.33	13.30	1.97	17.39
	10	19.03	23.55	4.52	23.75
	15	26.73	33.80	7.07	26.45
	20	34.43	44.05	9.62	27.94
	30	52.43	67.95	15.52	29.60
	40	70.43	91.85	21.42	30.41
	75	117.93	154.95	37.02	31.39
	100	145.43	191.45	46.02	31.64
	250	293.33	387.95	94.62	32.26
	500	539.83	715.45	175.62	32.53
<b>Crofton</b>					
	2	10.18	11.61	1.43	14.05
	5	14.46	16.49	2.03	14.04
	10	25.16	28.69	3.53	14.03
	15	35.86	40.89	5.03	14.03
	20	46.56	53.09	6.53	14.02
	30	67.96	77.49	9.53	14.02
	40	89.36	101.89	12.53	14.02
	75	164.26	187.29	23.03	14.02
	100	217.76	248.29	30.53	14.02
	250	538.76	614.29	75.53	14.02
	500	1,073.76	1,224.29	150.53	14.02
<b>Wholesale</b>					
	25	57.50	68.00	10.50	18.26
	50	109.40	129.20	19.80	18.10
	75	151.50	178.80	27.30	18.02
	100	185.30	223.90	38.60	20.83
	250	363.80	513.40	149.60	41.12
	500	661.30	995.90	334.60	50.60
	1,000	1,256.30	1,960.90	704.60	56.09
	5,000	6,016.30	9,680.90	3,664.60	60.91
	10,000	11,966.30	19,330.90	7,364.60	61.54
	20,000	23,866.30	38,630.90	14,764.60	61.86
	50,000	59,566.30	96,530.90	36,964.60	62.06
	100,000	119,066.30	193,030.90	73,964.60	62.12

→ Per Ellis, do not include grants accounts

Customer Totals

	Residential	Commercial	Industrial	OM & G	Total	Grants	Whls
<b>Hopkinsville Division</b>							
FYE 6/30/00	11,517 ✓	1,721 ✓	81 ✓	127 ✓	13,446	14 ✓	12 ✓
FYE 6/30/01	11,494 ✓	1,743 ✓	85 ✓	131 ✓	13,453	15 ✓	12 ✓
FYE 6/30/02	11,517 ✓	1,740 ✓	81 ✓	132 ✓	13,470	16 ✓	12 ✓
FYE 6/30/03	11,418 ✓	1,847 ✓	83 ✓	137 ✓	13,485	17 ✓	12 ✓
FYE 6/30/04	11,632 ✓	1,845 ✓	85 ✓	134 ✓	13,696	18 ✓	12 ✓
<b>Pembroke Division</b>							
FYE 6/30/00	240 ✓	34 ✓	-	4 ✓	278		1 ✓
FYE 6/30/01	236 ✓	39 ✓	-	3 ✓	278		1 ✓
FYE 6/30/02	240 ✓	33 ✓	-	4 ✓	277		1 ✓
FYE 6/30/03	242 ✓	32 ✓	-	4 ✓	278		1 ✓
FYE 6/30/04	241 ✓	35 ✓	-	4 ✓	280		1 ✓
<b>Crofton Division</b>							
FYE 6/30/00	N/A	N/A	N/A	N/A	N/A		
FYE 6/30/01	524 ✓	53 ✓	-	2	579		
FYE 6/30/02	519 ✓	55 ✓	-	4	578		
FYE 6/30/03	523 ✓	56 ✓	-	4	583		
FYE 6/30/04	523 ✓	53 ✓	-	3	579		

Black & Veatch

TELEPHONE MEMORANDUM

Client HWEA  
Project \_\_\_\_\_  
Subject \_\_\_\_\_

B&V Project \_\_\_\_\_  
B&V File \_\_\_\_\_  
Date 2/1  
Time \_\_\_\_\_

To/From: Ellis Joiner  
Company: \_\_\_\_\_  
Phone No.: \_\_\_\_\_  
Recorded by: A White

Call from Ellis. The historical usage for  
1 CCWD account (HWY 272) was wrong.  
Need to deduct the following usage amounts  
from the actual amounts in 'Ellis'  
2/1 e-mail.

2000	11,069,300 cf
2001	11,770,700 cf
2002	11,357,200 cf
2003	12,729,400 cf
2004	12,435,500 cf

Usage from this one meter should be  
approximately 1,000,000 cf/year.

~~2/1~~ Start with actual consumption from 2/1  
and, less amounts listed above plus  
1,000,000 cf/year.

cc: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

P-6N-277A FOR HANDWRITTEN MEMORANDA ONLY

**White, Anna M.**

---

**From:** Ellis Joiner [ejoiner@hwea-ky.com]  
**Sent:** Tuesday, February 01, 2005 5:40 AM  
**To:** White, Anna M.  
**Subject:** Christian County Water District, Gratis and Fire Charges

Anna,

The following numbers should be taken out of the revenue and consumption totals (OM & G) that you received last week.

Christian County Water District Consumption: *Actual CONS.*  
FYE 6/30/00 44,650,070 Cubic Feet  
FYE 6/30/01 49,662,940 Cubic Feet  
FYE 6/30/02 49,149,800 Cubic Feet (1,600 Cubic Feet is Pembroke Division)  
FYE 6/30/03 54,756,630 Cubic Feet (8,961 Cubic Feet is Pembroke Division)  
FYE 6/30/04 54,895,860 Cubic Feet (13,818 Cubic Feet is Pembroke Division)

Christian County Water District Revenue (FYE 6/30/04)  
Hopkinsville \$683,902.11  
Pembroke \$ 2,109.32

Gratis Consumption - Hopkinsville Division  
FYE 6/30/00 11,927,420 Cubic Feet 14 Customers  
FYE 6/30/01 12,501,080 Cubic Feet✓ 15 Customers  
FYE 6/30/02 11,031,350 Cubic Feet✓ 16 Customers  
FYE 6/30/03 16,323,770 Cubic Feet✓ 17 Customers  
FYE 6/30/04 18,036,570 Cubic Feet✓ 18 Customers

Fire Hydrant Charges - Hopkinsville Division  
FYE 6/30/00 \$49,818.00  
FYE 6/30/01 \$53,195.25  
FYE 6/30/02 \$53,523.00  
FYE 6/30/03 \$54,549.00  
FYE 6/30/04 \$56,339.75

Fire Service Fees - Hopkinsville Division  
FYE 6/30/00 \$65,141.50  
FYE 6/30/01 \$76,692.29  
FYE 6/30/02 \$76,282.30  
FYE 6/30/03 \$83,599.78  
FYE 6/30/04 \$86,526.80

**White, Anna M.**

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**From:** Ellis Joiner [ejoiner@hwea-ky.com]  
**Sent:** Tuesday, February 01, 2005 1:22 PM  
**To:** White, Anna M.  
**Subject:** Crofton Gratis

Anna,

The numbers for Crofton are as follows:

FYE 6/30/00	N/A	
FYE 6/30/01	11,400 Cubic Feet ✓	6 Customers
FYE 6/30/02	21,690 Cubic Feet ✓	6 Customers
FYE 6/30/03	18,540 Cubic Feet ✓	6 Customers
FYE 6/30/04	144,400 Cubic Feet ✓	7 Customers

Schedule of Consumption  
in Cubic Feet  
FYE 6/30/00-FYE 6/30/04

*includes gas  
accounts  
i wholesale*

Hopkinsville Division

	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>OM &amp; G</u>	<u>Total</u>
FYE 6/30/00	80,786,400 ✓	45,505,720 ✓	51,897,720 ✓	71,693,750	249,883,590
FYE 6/30/01	79,266,820 ✓	45,637,920 ✓	44,375,430 ✓	75,652,520	244,932,690
FYE 6/30/02	76,056,500 ✓	44,052,780 ✓	34,991,120 ✓	74,400,900	229,501,300
FYE 6/30/03	77,602,010 ✓	46,797,650 ✓	35,101,290 ✓	84,204,270	243,705,220
FYE 6/30/04	76,254,610 ✓	46,158,640 ✓	33,912,520 ✓	86,978,520	243,304,290

Pembroke Division

FYE 6/30/00	1,557,770 ✓	1,122,540 ✓	N/A	62,390	2,742,700
FYE 6/30/01	1,743,390 ✓	1,069,300 ✓	N/A	143,150	2,955,840
FYE 6/30/02	1,631,260 ✓	968,220 ✓	N/A	104,120	2,703,600
FYE 6/30/03	1,662,530 ✓	1,109,080 ✓	N/A	173,910	2,945,520
FYE 6/30/04	1,651,720 ✓	1,067,430 ✓	N/A	201,320	2,920,470

Crofton Division

FYE 6/30/00	N/A	N/A	N/A	N/A	0
FYE 6/30/01	3,395,510 ✓	667,960 ✓	N/A	117,280	4,180,750
FYE 6/30/02	3,636,760 ✓	727,970 ✓	N/A	140,100	4,504,830
FYE 6/30/03	3,714,840 ✓	746,770 ✓	N/A	151,610	4,613,220
FYE 6/30/04	3,647,590 ✓	827,730 ✓	N/A	228,750	4,704,070

operation, maintenance, and replacement of the wastewater works, debt service obligations, and user charge rates. Based on such review, the City Council shall revise, when necessary, the schedule of user charge rates to accomplish the following:

(1) Maintain an equitable distribution of operation, maintenance, and replacement costs among users of the treatment system; and

(2) Generate sufficient revenues to offset costs associated with the proper operation and maintenance of the wastewater system and to meet debt service requirements.

(C) Excessive strength and toxicity surcharges shall be reviewed at the time of and in conjunction with the review of user charges. Surcharge rates shall be revised where necessary to reflect current treatment and monitoring costs. Surcharge rates may be modified by regulation duly passed by the Sewerage and Water Works Commission.

(D) Each user shall be notified, at least annually, in conjunction with a regular bill of the rate and that portion of the total charge which is attributable to operation, maintenance, and replacement of the wastewater system. (Ord. 34-93, passed 12-21-93)

§ 53.20 METHOD OF BILLINGS AND COLLECTIONS; DISCONTINUATION OF SERVICE FOR NONPAYMENT.

(A) All users shall be billed monthly. Bills for water and sewer services shall be billed, collected, and enforced together, so that when any bill has remained unpaid and becomes delinquent, the water service to the delinquent premises can be and will be discontinued and will not be reinstated until the entire bill for both water and sewer service is paid in full.

(B) Sewer charges shall be billed monthly on the basis of each user's monthly water consumption/sewerage contribution. Sewer charges to any customer who is initially rendered services for less than one month shall be prorated on the basis of the charges set forth in § 53.18 for the fractional part of the month for which service was rendered. (Ord. 34-93, passed 12-21-93)

§ 53.21 CUTOFF FOR NONPAYMENT.

(A) In the event the water rate or the sewerage rate is not paid by the fifteenth day after the due date, the Sewerage and Water Works Commission is authorized to disconnect and cut off the water service to the premises. (Ord. 34-93, passed 12-21-93; Am. Ord. 28-99, passed 8-17-99; Am. Ord. 13-2000, passed 8-15-00)

§ 53.22 DELINQUENT ACCOUNT TO BE PAID IN FULL PRIOR TO NEW SERVICE.

No new service for sewer or water will be made available to any customer who remains delinquent on any

previously existing account for either sewer or water service. (Ord. 34-93, passed 12-21-93)

§ 53.23 LATE PAYMENT PENALTY.

A late payment penalty of 10% will be added to each delinquent bill. A bill will be considered delinquent on the fifth day after the due date. (Ord. 34-93, passed 12-21-93)

WATER RATES

§ 53.35 MONTHLY WATER RATES.

The monthly rates and charges for water service furnished by the system are fixed and established on a monthly basis as follows:

(A) Meter minimum rate.

	<u>Rates</u>
1 Monthly minimum for 5/8 inch meter	\$ 5.31 per 300 cu. ft.
2 Monthly minimum for 3/4 inch meter	\$ 7.08 per 400 cu. ft.
3 Monthly minimum for 1 inch meter	\$ 10.62 per 600 cu. ft.
4 Monthly minimum for 1-1/2 inch meter	\$ 21.24 per 1,200 cu. ft.
5 Monthly minimum for 2 inch meter	\$ 35.40 per 2,000 cu. ft.
6 Monthly minimum for 3 inch meter	\$ 63.72 per 3,600 cu. ft.
7 Monthly minimum for 4 inch meter	\$ 106.20 per 6,000 cu. ft.
8 Monthly minimum for 6 inch meter	\$ 417.72 per 23,600 cu. ft.



(B) Water consumption rates for Hopkinsville Division water usage. Subject to the minimum monthly water rate specified above, the following metered charges shall be made for each 100 cubic feet of water consumption per month to customers of all size connections to the Hopkinsville Division:

1	Number of Cubic Feet of Water Per Month	Monthly Charge Per 100 Cubic Feet
2	Minimum bill - 300 feet or less	\$5.31
3	Next 2,700 cu. ft.	1.77
4	Next 3,000 cu. ft.	1.55
5	All over 6,000 cu. ft.	1.12

(C) Water consumption rates for Pembroke Division usage. Subject to the minimum monthly water rate specified above, the following metered charges shall be made for each 100 cubic feet of water consumption per month to customers of all size connections to the Pembroke Utility Division.

**PEMBROKE DIVISION  
WATER SERVICES  
MONTHLY RATE SCHEDULE**

1	Water Consumption Per Month	Rate
2	First 300 cu. ft.	\$8.25
3	Next 1,700 cu. ft.	1.54/100 cu. ft.
4	Next 2,000 cu. ft.	1.80/100 cu. ft.
5	Next 3,000 cu. ft.	1.40/100 cu. ft.
6	Next 3,000 cu. ft.	1.10/100 cu. ft.
7	All over 10,000 cu. ft.	0.986/100 cu. ft.

(D) Water consumption rates for Crofton Utility Division usage. The following schedule of rates shall be made for each 100 cubic feet of water consumption per month to customers of all size connections to the Crofton Utility Division.

**CROFTON UTILITY DIVISION  
WATER SERVICES  
MONTHLY RATE SCHEDULE**

<b>Inside Crofton City Limits</b>	
First 300 CF	\$10.18 Flat Rate
All over 300 CF	2.14 per 100 CF
<b>Outside Crofton City Limits</b>	
First 300 CF	\$11.83 Flat Rate
All over 300 CF	2.14 per 100 CF

(Ord. 35-93, passed 12-21-93; Am. Ord. 9-95, passed 5-16-95; Am. Ord. 28-99, passed 8-17-99; Am. Ord. 13-2000, passed 8-15-00; Am. Ord. 30-2000, passed 11-21-00)

**§ 53.36 FIRE HYDRANT RENTALS.**

(A) Private fire protection (not metered). The rates or charges for fire protection afforded by private hydrants which are not metered shall be based on the respective sizes of the connections of such private fire hydrants, as following:

1	Size of Fire Hydrant Connection	Annual Charge (Apart From Metered Rates)
2	2 inch	\$ 85.53
3	3 inch	123.54
4	4 inch	199.57
5	6 inch	361.13
6	8 inch	522.69
7	10 inch	798.28
8	12 inch	1,140.40

(B) Public fire protection. All standard fire hydrants shall be billed at the rate of \$57.00 per year, and the city will pay the sum of \$4.75 per month for each fire hydrant maintained by the city, the sum to be deposited in the same fund as the fund in which all other revenues of the municipal water works and sewer system are deposited. (Ord. 35-93, passed 12-21-93; Am. Ord. 10-95, passed 5-16-95)

**§ 53.37 BILLING.**

(A) Bills for water and sewer services shall be billed, collected, and enforced together, so that when any bill has remained unpaid and becomes delinquent, the water service to the delinquent premises can be disconnected and will not be reinstated until the entire bill for both water and sewer service is paid in full.

FOR \_\_\_\_\_  
Community, Town or City

P.S.C. KY. NO. \_\_\_\_\_

SHEET NO. \_\_\_\_\_

CANCELLING P.S.C. KY. NO. \_\_\_\_\_

SHEET NO. \_\_\_\_\_

**Christian County Water Environment Authority**  
(Name of Utility)

**RATES AND CHARGES**

New rates effective immediately - per LH 12/29/03  
**Wholesale Water Rate for Christian County Water District**

	Rate per 100 cubic feet	Equivalent Rate per 1,000 Gallons
First 3,000 cubic feet	2.30	3.08
Next 3,000 cubic feet	2.02	2.70
Next 3,000 cubic feet	1.46	1.95
All Over 9,000 cubic feet	1.19	1.59

Point-It <sup>®</sup> Fax Note	7671	Date 1/24/05	# of pages 1
To: Anna	From: Ladonna Downs	Co. HWEA	
Col/Dept: Black + Veatch	Phone #: 270-837-4049	Fax #	
Phone #			
Fax # 913-458-3817			

(signature or initials)

TITLE Chairman

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2003-0007

DATED December 17, 2003

UT435R- Rate Study 2-8-05.txt

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UT436R

HWEA

WATER RATE STUDY REPORT

7/2003 TO 6/2004

# 1

DISTRICT-CROFTON

RATE	CONS	# ACCTS	AVG. CONS
02 CROFTON - CITY - CUFT 300	73,280	534	137
OVER 300	620,760	872	712
02 - TOTAL	694,040 ✓	1,406 ✓	
04 CROFTON - COUNTY - CUFT 300	26,080	176	148
OVER 300	612,670	479	1,279
04 - TOTAL	638,750 ✓	655 ✓	
08 CROFTON-CITY-GALLONS 300	184,470	1,078	171
OVER 300	1,303,510	1,625	802
08 - TOTAL	1,487,980 ✓	2,703 ✓	
09 CROFTON-COUNTY-GALLONS 300	83,830	555	151
OVER 300	1,655,070	1,627	1,017
09 - TOTAL	1,738,900 ✓	2,182 ✓	
99 NO CHARGE RATE (GRATIS ACCT) 300	2,580	44	59
OVER 300	141,820	21	6,753
99 - TOTAL CROFTON	144,400 ✓	65 ✓	
	4,704,070 ✓	7,011 ✓	

DISTRICT-HOPKINSVILLE

RATE	CONS	# ACCTS	AVG. CONS
06 WESTERN STATE HOSPITAL OVER 23,700	3,156,650	12	263,054
06 - TOTAL	3,156,650 ✓	12 ✓	
14 5/8" - 4 DIALS 100	97,110	2,482	39
200	432,490	2,726	159

UT435R- Rate Study 2-8-05.txt

300		921,210	3,594	256
400		1,288,940	3,636	354
500		1,597,350	3,525	453
600		1,618,730	2,924	554
700	- 1200	5,862,900	7,208	813
1300	- 2000	1,495,460	1,026	1,458
2100	- 3000	535,190	221	2,422
3100	- 3600	124,680	38	3,281
3700	- 6000	281,310	64	4,395
6100	- 23,600	190,120	25	7,605
		14,445,490✓	27,469✓	

14 - TOTAL  
15 5/8" - 5 DIALS

100		513,410	17,479	29
200		1,800,660	11,459	157
300		3,527,840	13,787	256
400		5,074,490	14,292	355
500		6,342,330	13,957	454
600		6,951,580	12,558	554
700	- 1200	29,800,540	36,104	825
1300	- 2000	9,123,450	6,249	1,460
2100	- 3000	2,693,300	1,129	2,386
3100	- 3600	896,220	275	3,259
3700	- 6000	1,946,840	430	4,528
6100	- 23,600	2,107,010	210	10,033
OVER	23,700	274,850	7	39,264
		71,052,520✓	127,936✓	

15 - TOTAL  
UT436R

HWEA

WATER RATE STUDY REPORT  
7/2003 TO 6/2004

# 1

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DISTRICT-HOPKINSVILLE  
RATE  
25 3/4" - 5 DIALS

	CONS	# ACCTS	AVG. CONS
100	1,340	111	12
200	2,060	13	158

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300		4,650	18	258
400		5,200	15	347
500		3,650	8	456
600		5,510	10	551
700	- 1200	50,330	58	868
1300	- 2000	62,870	40	1,572
2100	- 3000	64,810	25	2,592
3100	- 3600	29,540	9	3,282
3700	- 6000	60,010	12	5,001
6100	- 23,600	46,340	5	9,268
		336,310✓	324✓	

25 - TOTAL  
26 3/4" - 6 DIALS

100		330	9	330
400		1,710	2	855
700	- 1200	18,790	12	1,566
1300	- 2000	20,830✓	24✓	

26 - TOTAL  
35 1" - 5 DIALS

100		7,430	382	19
200		24,300	154	158
300		30,310	117	259
400		37,390	108	346
500		25,430	56	454
600		33,680	61	552
700	- 1200	192,210	216	890
1300	- 2000	190,220	125	1,522
2100	- 3000	245,360	101	2,429
3100	- 3600	148,310	45	3,296
3700	- 6000	600,230	125	4,802
6100	- 23,600	1,625,600	166	9,793
OVER	23,700	1,138,710	28	40,668
		4,299,180✓	1,684✓	

35 - TOTAL  
36 1" - 6 DIALS

100		3,370	192	18
-----	--	-------	-----	----

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200	13,250	88	151
300	18,890	75	252
400	35,350	100	354
500	28,940	63	459
600	29,480	53	556
700 - 1200	216,720	256	847
1300 - 2000	288,250	172	1,676
2100 - 3000	344,740	142	2,428
3100 - 3600	160,580	48	3,345
3700 - 6000	827,600	177	4,676
6100 - 23,600	827,570	87	9,512
OVER 23,700	1,101,620	26	42,370
	3,896,360 ✓	1,479 ✓	

36 - TOTAL  
46 1-1/2" - 6 DIALS

100	1,550	84	18
200	5,770	41	141
300	5,630	23	245
400	5,360	15	357
500	5,260	12	438
600	4,950	9	550
700 - 1200	84,970	92	924
1300 - 2000	179,610	114	1,576
2100 - 3000	299,330	122	2,454
3100 - 3600	122,110	37	3,300
3700 - 6000	634,160	138	4,595
6100 - 23,600	2,955,040	236	12,521
OVER 23,700	1,466,920	38	38,603
	5,770,660 ✓	961 ✓	

46 - TOTAL  
UT436R

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WATER RATE STUDY REPORT  
7/2003 TO 6/2004

DISTRICT-HOPKINSVILLE  
RATE  
56 2" - 6 DIALS

CONS # ACCTS AVG. CONS

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100	1,860	165	11
200	3,460	23	150
300	5,920	22	269
400	12,640	36	351
500	13,170	29	454
600	20,880	38	549
700 - 1200	132,300	155	854
1300 - 2000	221,720	138	1,607
2100 - 3000	362,600	144	2,518
3100 - 3600	215,860	66	3,271
3700 - 6000	688,520	144	4,781
6100 - 23,600	7,200,190	550	13,091
OVER 23,700	24,534,730	413	59,406
	33,413,850 ✓	1,923 ✓	

56 - TOTAL  
66 3" - 6 DIALS

100	20	6	3
200	170	1	170
300	750	3	250
400	780	2	390
500	420	1	420
600	1,070	2	535
700 - 1200	15,560	17	915
1300 - 2000	2,980	2	1,490
2100 - 3000	5,400	2	2,700
3100 - 3600	6,960	2	3,480
3700 - 6000	30,630	6	5,105
6100 - 23,600	850,080	57	14,914
OVER 23,700	5,509,760	97	56,802
	6,424,580 ✓	198 ✓	

66 - TOTAL  
76 4" - 6 DIALS

400	3,210	9	357
500	860	2	430
700 - 1200	720	1	720
3700 - 6000	42,740	9	4,749

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6100 - 23,600	468,040	32	14,626
OVER 23,700	9,924,730	127	78,147
76 - TOTAL	10,440,300 ✓	180 ✓	
86 6" - 6 DIALS			
100		11	
6100 - 23,600	7,900	1	7,900
OVER 23,700	16,151,960	48	336,499
86 - TOTAL	16,159,860 ✓	60 ✓	
87 6" - 7 DIALS			
OVER 23,700	1,096,390	12	91,366
87 - TOTAL	1,096,390 ✓	12 ✓	

98 SEWER-NO WT CONS IN HISTORY			
200	190	1	190
400	320	1	320
3100 - 3600	3,270	1	3,270
6100 - 23,600	47,010	3	15,670
OVER 23,700	279,640	5	55,928
98 - TOTAL	330,430	11	

UT436R

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WATER RATE STUDY REPORT  
7/2003 TO 6/2004

DATE - 2/08/05

TIME - 20.30

DISTRICT-HOPKINSVILLE

RATE

CONS

# ACCTS

AVG. CONS

99 NO CHARGE RATE (GRATIS ACCT)

100	820	418	2
200	420	3	140
300	1,490	6	248
400	730	2	365
500	1,340	3	447
600	2,760	5	552
700 - 1200	23,430	29	808
1300 - 2000	21,690	14	1,549
2100 - 3000	15,680	6	2,613
3100 - 3600	6,420	2	3,210



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	3700 - 6000	7,740	2	3,870
	6100 - 23,600	147,580	11	13,416
	OVER 23,700	18,415,420	76	242,308
99 - TOTAL		18,645,520 ✓	577 ✓	
HOPKINSVILLE		189,488,930	162,850	
DISTRICT-PEMBROKE		<u>330,430</u>	<u>11</u>	
RATE		<u>189,158,900</u> ✓	<u>162,839</u> ✓	
		CONS	# ACCTS	AVG. CONS
01 PEMBROKE - CUFT CHART				
	100	5,770	167	35
	200	21,130	140	151
	300	34,380	133	258
	400 - 2000	793,110	1,157	685
	2100 - 4000	97,780	35	2,794
	4100 - 7000	58,080	11	5,280
	7100 - 10,000	9,620	1	9,620
	OVER 10,000	503,840	24	20,993
01 - TOTAL		1,523,710 ✓	1,668 ✓	
07 PEMBROKE-GALLON CONVERSION				
	100	9,070	218	42
	200	28,250	174	162
	300	47,890	189	253
	400 - 2000	672,170	1,023	657
	2100 - 4000	72,740	25	2,910
	4100 - 7000	77,920	13	5,994
	7100 - 10,000	118,660	15	7,911
	OVER 10,000	231,640	16	14,478
07 - TOTAL		1,258,340 ✓	1,673 ✓	
99 NO CHARGE RATE (GRATIS ACCT)				
	100	40	17	2
99 - TOTAL		40 ✓	17 ✓	
PEMBROKE		2,782,090 ✓	3,358 ✓	
WHOLESALE ACCOUNTS				
	3000	1,320	2	660
	3100 - 6000	27,890	5	5,578

UT435R- Rate Study 2-8-05.txt			
6100 - 9000	212,410	29	7,324
OVER 9000	55,571,460	106	524,259
WHOLESALE ACCOUNTS	55,813,080 ✓	142 ✓	
REPORT TOTAL	252,788,170	173,361	

**White, Anna M.**

---

**From:** Carol Cohoon [ccohoon@mail.cornerstonemail.com]  
**Sent:** Wednesday, February 09, 2005 8:49 AM  
**To:** White, Anna M.  
**Cc:** ejoiner@hwea-ky.com  
**Subject:** Rate Study - Ver.3  
**Attachments:** UT435R- Rate Study 2-8-05.txt

Anna,

I have made the change to multiply consumption by 10  
and apply to blocks.

Please review this revised report and let me know if there are  
any changes to be made.

Hopefully third time is "charm".

Thanks,

Carol Cohoon

2/9/2005