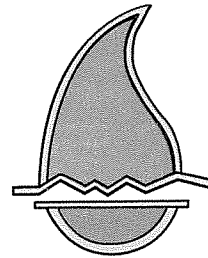


# Hopkinsville Water Environment Authority

401 East 9th Street • P.O. Box 628 • Hopkinsville, Kentucky 42241-0628

Len F. Hale  
General Manager



**HWEA**

Phone (270) 887-4246

Fax (270) 887-4244

July 7, 2005

Ms. Beth O'Donnell, Executive Director  
Kentucky Public Service Commission  
211 Sower Blvd.  
P.O. Box 615  
Frankfort, KY 40602-0615

RECEIVED

JUL 11 2005

PUBLIC SERVICE  
COMMISSION

Subject: Response to PSC Comments and Request for Information  
Case No. 2005-00174

Dear Ms. O'Donnell:

In your Order of June 15, 2005, which we received on June 17<sup>th</sup>, you included in Appendix B a list of information and questions for HWEA. This is the formal response to this request. Attached to this letter is a response to each of the 29 items in Appendix B of the Order and the information requested by the PSC.

For the record the Hopkinsville Water Environment Authority is referred to as HEWA in the Order rather than as HWEA.

As referenced in our letter of April 15, 2005 transmitting the tariff sheet, HWEA contracted with Black and Veatch Consulting Engineers to complete a Cost of Service Study, which was completed in June 2005. As you know Black and Veatch has significant experience in this field and is currently working on several similar projects involving the PSC. The Cost of Service Study fully supports the proposed wholesale rates, which have been presented in a format in compliance with the 1996 Rate Amendment approved by the PSC and the CCWD. A copy of the Cost of Service Study is attached. Much of your request for information can be found in the Cost of Service Study or the FY 2003-04 Audit.

HWEA has not submitted with this packet any of the requested information on the wastewater (sewer) department, since the operations and finances of the wastewater department are not relevant and were not considered in the Cost of Service Study. Furthermore, HWEA has submitted only financial information for the study period of July 2003 through June 2004. This period corresponds to the last audit period.

Ms. Beth O'Donnell

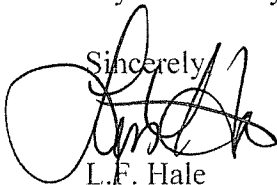
July 7, 2005

Page 2

HWEA intends to petition the PSC to permit the implementation of the proposed wholesale rates, with the understanding that once the PSC approves a wholesale rate, HWEA will make the necessary adjustments. The PSC took 23 months to approve a wholesale rate during the last objection by the CCWD. HWEA was unable to recover the lost revenue during the PSC deliberations, although the previous wholesale rate expired on July 1, 2001.

If you have any questions or need additional information, please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'L.F. Hale', written over the word 'Sincerely'.

L.F. Hale  
General Manager

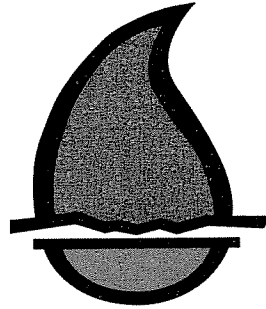
enclosures

c: HWEA Board of Commissioners  
Andrew Self, HWEA Attorney  
Hon. Steve Tribble, Judge-Executive  
Hon. Rich Liebe, Mayor  
Ashbel Brunson, CCWD Chairman  
Jack Hughes, CCWD Attorney

RECEIVED

JUN 1 1 2005

PUBLIC SERVICE  
COMMISSION



**HWEA**

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY**  
**WATER AND WASTEWATER DEPARTMENTS**  
*Hopkinsville, Kentucky*

---

**2004 ANNUAL FINANCIAL REPORT**

**HOPKINSVILLE WATER  
ENVIRONMENT AUTHORITY**

**REPORT ON AUDITS OF FINANCIAL STATEMENTS**

**FOR THE YEARS ENDED JUNE 30, 2004 AND 2003**

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
DIRECTORY OF OFFICIALS  
June 30, 2004**

**COMMISSIONERS**

**Bob Carter, Chairman**

**Robert Babbage**

**Breck Cayce**

**Charles Turner**

**Richard Covington, Council Member**

**ATTORNEY**

**Andrew Self**

**GENERAL MANAGER**

**Len F. Hale**

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
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**& CO. – HOPKINSVILLE, LLP**

CERTIFIED PUBLIC ACCOUNTANTS  
BUSINESS CONSULTANTS

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FIRM ID # 61-1313802

LEONARD F. ADCOCK, CPA  
JOHN M. DeANGELIS, CPA  
KERRY T. FORT, CPA

## Independent Auditor's Report

To the Members of the  
City of Hopkinsville Sewerage and  
Water Works Commission d/b/a  
Hopkinsville Water Environment Authority  
Hopkinsville, Kentucky

We have audited the accompanying financial statements of the Hopkinsville Water Environment Authority, Water and Wastewater Departments (HWEA), a component unit of the City of Hopkinsville, Kentucky, as of and for the years ended June 30, 2004 and 2003, as listed in the table of contents. These financial statements are the responsibility of the HWEA's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in **Government Auditing Standards**, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the HWEA, a component unit of the City of Hopkinsville, Kentucky, as of June 30, 2004 and 2003, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with **Government Auditing Standards**, we have also issued our report dated November 24, 2004 on our consideration of HWEA's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with **Government Auditing Standards** and should be read in conjunction with this report in considering the results of our audit.

Management's Discussion and Analysis is not a required part of the basic financial statements, but is supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit this information and express no opinion on it.

Our audit was conducted for the purpose of forming opinions on the financial statements of the Hopkinsville Water Environment Authority. The combining financial statements and other supplementary schedules presented on pages 23-33 are presented for purposes of additional analysis and are not a required part of the basic financial statements. The accompanying Schedule of Expenditures of Federal Awards is presented for purposes on additional analysis as required by U.S. Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, and is also not a required part of the basic financial statements of the Hopkinsville Water Environment Authority. The combining financial statements and other supplementary schedules, and Schedule of Expenditures of Federal Awards have been subjected to the auditing procedures applied in the audit of the basic financial statement, and in our opinion are fairly stated and in all material respects in relation to the basic financial statements taken as a whole.

As described in Note 12 to the financial statements, the HWEA restated 2003 financial statements due to an understatement in cash and a billing error regarding sales to Christian County Water District.

*York Neel & Co. - Hopkinsville, LLP*

Hopkinsville, Kentucky  
November 24, 2004



**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY**

**MANAGEMENT'S DISCUSSION AND ANALYSIS**

The Hopkinsville Water Environment Authority Water and Wastewater Department is presenting the following discussion and analysis in order to provide an overall review of financial activities for the fiscal years ending June 30, 2004 and 2003. We encourage readers to consider the information presented here in conjunction with the accompanying financial statements, and notes to the basic financial statements to enhance their understanding of financial performance.

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**FINANCIAL HIGHLIGHTS**

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- The HWEA's total assets increased by \$1.91 million while total liabilities increased \$1.65 million resulting in total net assets increasing approximately \$259,675 over the course of the year's operations.
- The HWEA's operating revenues increased .539%, while operating expenses in 2004 increased approximately 1.22% over operating expenses for 2003.
- Investment income decreased by \$53,884 during the period, reflective of the lower interest rates in 2004.
- Interest expense on outstanding debt decreased \$38,416.

**OVERVIEW OF THE FINANCIAL STATEMENTS**

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This annual report includes this management's discussion and analysis report, the independent auditor's report and the basic financial statements of the Hopkinsville Water Environment Authority. The financial statements also include notes that explain in more detail some of the information in the financial statements.

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**REQUIRED FINANCIAL STATEMENTS**

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The financial statements of the Hopkinsville Water Environment Authority report information using accounting methods similar to those used by private sector companies. These statements offer short- and long-term financial information about its activities. The Statement of Net Assets includes all HWEA's assets and liabilities and provides information about the nature and amounts of investments in resources (assets) and the obligations to the HWEA's creditors (liabilities). It also provides the basis for evaluating the capital structure of the HWEA and assessing the liquidity and financial flexibility of the HWEA.

All of the current year's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Net Assets. This statement measures the success of the HWEA's operations over the past year and can be used to determine whether the HWEA has successfully recovered all its costs through its user fees and other charges, profitability and credit worthiness.

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
 WATER AND WASTEWATER DEPARTMENT  
 A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY**

MANAGEMENT'S DISCUSSION AND ANALYSIS (cont.)

The final required financial statement is the Statement of Cash Flows. The statement reports cash receipts, cash payments, and net changes in cash resulting from operations, investing, and financial activities and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in the cash balance during the reporting period.

**FINANCIAL ANALYSIS OF THE HOPKINSVILLE WATER ENVIRONMENT AUTHORITY**

The most common financial question posed to the Hopkinsville Water Environment Authority is "How did we do financially during 2004?" The Statement of Net Assets and the Statement of Revenues, Expenses, and Changes in Net Assets report information about the HWEA's activities in a way that will help answer this question. These two statements report the net assets of the Authority and the changes in them. One can think of the HWEA's net assets – the difference between assets and liabilities – as one way to measure financial health or financial position. Over time, increases or decreases in the HWEA's net assets are one indicator of whether its financial health is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, and new or changed government legislation.

**NET ASSETS**

To begin our analysis, a summary of the HWEA's Statement of Net Assets is presented in Table A-1.

**Table A-1  
 Condensed Statements of Net Assets  
 (000's)**

	<u>FY 2004</u>	<u>FY 2003</u>	<u>Dollar Change</u>	<u>Total Percent Change</u>
Current and Other Assets	\$ 7,947	\$ 7,722	\$ 225	2.91%
Capital Assets	<u>55,916</u>	<u>54,233</u>	<u>1,683</u>	<u>3.10%</u>
Total Assets	63,863	61,955	1,908	3.07%
Long-term Debt Outstanding	24,364	21,125	3,239	15.33%
Other Liabilities	<u>1,453</u>	<u>3,044</u>	<u>(1,591)</u>	<u>(52.26)%</u>
Total Liabilities	25,817	24,169	1,648	6.81%
Invested in Capital Assets, Net of Related Debt	30,796	30,666	130	.42%
-Restricted	5,168	5,408	(240)	(4.43)%
-Unrestricted	<u>2,082</u>	<u>1,712</u>	<u>370</u>	<u>21.61%</u>
Total Net Assets	<u>\$38,046</u>	<u>\$37,786</u>	<u>\$ 260</u>	<u>.68%</u>

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY**

MANAGEMENT'S DISCUSSION AND ANALYSIS (cont.)

**NET ASSETS (cont.)**

As can be seen from the table above, net assets increased \$259,681 during 2004. The increases in the debit structure are essentially matched by the increase in capital assets, leaving the increase in net assets primarily due to the increase in current assets.

**Table A-2  
Condensed Statements of Revenues,  
Expenses, and Changes in Net Assets  
(000's)**

	<u>FY 2004</u>	<u>FY 2003</u>	<u>Dollar Change</u>	<u>Total Percent Change</u>
Operating revenues	\$ 7,892	\$ 7,850	\$ 42	0.54%
Nonoperating revenues	<u>254</u>	<u>254</u>	<u>-</u>	<u>-</u> %
Total Revenues	8,146	8,104	42	0.52%
Depreciation expense	2,326	2,296	30	1.31%
Other operating expense	5,068	5,009	59	1.18%
Interest expense	<u>663</u>	<u>701</u>	<u>(38)</u>	<u>(5.42)%</u>
Total Expense	8,057	8,006	51	(0.64)%
Income Before Capital Contributions	89	98	(9)	
Capital Contributions	<u>171</u>	<u>57</u>	<u>114</u>	
Changes in Net Assets	<u>260</u>	<u>155</u>	<u>105</u>	
Beginning Net Assets	<u>37,786</u>	<u>37,631</u>	<u>155</u>	
Ending Net Assets	<u>\$ 38,046</u>	<u>\$ 37,786</u>	<u>\$ 260</u>	

While the Statement of Net Assets shows the change in financial position of net assets, the Statement of Revenues, Expenses, and Changes in Net Assets provides answers as to the nature and source of these changes.

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY**

MANAGEMENT'S DISCUSSION AND ANALYSIS (cont.)

**BUDGETARY HIGHLIGHTS**

The HWEA adopts an annual Operating Budget, which includes proposed expenses and the means of financing them. This operating budget remains in effect the entire year.

**Table A-3  
Budget vs. Actual  
FY 2004**

	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
Operating Income	\$ 8,199	\$ 7,893	\$ (306)
Non-operating income	490	424	(66)
Operating expense & depreciation	(7,630)	(7,394)	236
Non-operating expense	<u>(694)</u>	<u>(663)</u>	<u>31</u>
 Net Income	 <u>\$ 365</u>	 <u>\$ 260</u>	 <u>\$ (105)</u>

**CAPITAL ASSETS**

At the end of 2004, the HWEA had \$93.5 million invested in capital assets as shown in Table A-4. The increase in Construction in Process primarily represents the Lake Barkley Raw Water Intake Project and a seven-phase project to include sewer rehabilitation, pump station rehabilitation and sewer extensions. These construction projects are being financed, in part, by federally assisted low interest rate loans extended by the Kentucky Infrastructure Authority.

**Table A-4  
Capital Assets**

	<u>FY 2004</u>	<u>FY 2003</u>	<u>Dollar Change</u>	<u>Total Percent Change</u>
Water	\$ 39,538,770	\$ 38,818,904	\$ 719,866	1.85%
Sewerage	<u>53,971,491</u>	<u>50,820,200</u>	<u>3,151,291</u>	<u>6.20%</u>
 Sub-total	 93,510,261	 89,639,104	 3,871,157	 4.31%
Less: Accumulated Depreciation	<u>(37,594,295)</u>	<u>(35,406,502)</u>	<u>(2,187,793)</u>	<u>6.17%</u>
 Net Property & Equipment	 <u>\$ 55,915,966</u>	 <u>\$ 54,232,602</u>	 <u>\$ 1,683,364</u>	 <u>3.10%</u>

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY**

MANAGEMENT'S DISCUSSION AND ANALYSIS (cont.)

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**DEBT ADMINISTRATION**

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The revenues of the water and sewer systems collateralize outstanding revenue bonds. After operation and maintenance expenses are paid, the ordinances specify that revenue bond funds be established and maintained. HWEA is in compliance with all bond ordinances. Debt obtained from the Kentucky Infrastructure Authority is for the purposes of upgrading and expanding the water and sewer systems. More detailed information about the HWEA's long-term liabilities is presented in Note 6 to the financial statements.

As noted in the discussion of Capital Assets, the KIA is currently making additional low interest rate loans available for the Lake Barkley Raw Water Intake Project and a seven-phase project to include sewer rehabilitation, pump station rehabilitation and sewer extensions.

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**FINAL COMMENTS**

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This financial report is designed to provide our customers and creditors with a general overview of the HWEA's finances and to demonstrate accountability for funds received. Anyone having questions regarding the report or desiring additional information may contact Len Hale, General Manager, Hopkinsville Water Environment Authority, 401 East 9<sup>th</sup> Street, Hopkinsville, KY 42240 or by phone (270) 887-4246.

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
 WATER AND WASTEWATER DEPARTMENT  
 A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
 STATEMENT OF NET ASSETS  
 June 30, 2004 and 2003**

	<b>2004</b>	<b>2003*</b>
<b>ASSETS</b>		
<b>Current assets</b>		
Cash and cash equivalents	\$ 937,289	\$ 670,061
Receivables	546,895	452,931
Inventory	228,509	239,452
Prepaid expenses	258,092	-
Total current assets	1,970,785	1,362,444
<b>Restricted assets</b>		
Cash and cash equivalents	5,167,762	5,407,774
Deferred charges	366,164	469,586
Other receivable	-	40,000
Note receivable	442,132	442,132
<b>Property, plant and equipment</b>		
Property, plant and equipment	88,792,466	87,612,939
Unclassified plant -- construction in progress, engineering fees, and other costs	4,717,787	2,026,165
Accumulated depreciation	(37,594,287)	(35,406,502)
Total assets	<b>\$63,862,809</b>	<b>\$61,954,538</b>

\*As restated

Continued

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
STATEMENT OF NET ASSETS (continued)  
June 30, 2004 and 2003**

**LIABILITIES AND EQUITY**

	<u>2004</u>	<u>2003*</u>
Current liabilities		
Current portion of long-term debt	\$ 892,231	\$ 877,259
Customer deposits	106,693	66,684
Accrued interest	19,942	21,676
Accounts payable	220,208	220,178
Accrued salaries and compensated absences	178,245	170,501
Note payable-Christian Co. Water District	<u>192,538</u>	<u>144,785</u>
Total current liabilities	1,609,857	1,501,083
Payable from restricted assets		
Accounts payable, restricted assets	284,471	197,156
Current portion of long-term debt	1,338,664	1,666,558
Accrued interest on bonded indebtedness	69,415	80,134
Construction retainage payable	381,838	90,758
Long-term debt		
Revenue bonds payable (net of current portion)	5,341,457	6,633,870
Capital lease obligation	25,972	68,478
KIA – Loans payable (net of current portion)	16,439,304	13,557,378
City of Crofton note payable	209,308	255,558
City of Hopkinsville-loan payable	<u>116,875</u>	<u>117,598</u>
Total liabilities	<u>25,817,161</u>	<u>24,168,571</u>
Net assets		
Invested in capital assets, net of related debt	30,796,489	30,666,185
Net assets, restricted	5,167,762	5,407,774
Net assets, unreserved	<u>2,081,397</u>	<u>1,712,008</u>
Total net assets	<u>38,045,648</u>	<u>37,785,967</u>
Total liabilities and net assets	<u>\$ 63,862,809</u>	<u>\$ 61,954,538</u>

\*As restated

See accompanying notes to financial statements.

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS  
For the years ended June 30, 2004 and 2003**

	<u>2004</u>	<u>2003*</u>
Operating revenues		
Charges for services	\$ 7,892,465	\$ 7,850,187
Operating expenses		
Water source of supply	8,501	7,206
Water purification	981,230	927,502
Water distribution	517,557	485,142
Sewerage plant	1,148,199	1,158,353
Sewerage mains and laterals	210,796	214,024
Administrative and general	2,050,507	2,059,957
Technical services	151,788	157,251
Depreciation	<u>2,325,538</u>	<u>2,295,585</u>
Total operating expenses	<u>7,394,116</u>	<u>7,305,020</u>
Income from operations	<u>498,349</u>	<u>545,167</u>
Non-operating revenues (expenses)		
Interest revenues	159,686	213,570
Capital assets provided by developers	171,294	57,104
Miscellaneous	75,264	37,219
Gain on sale of fixed assets	17,883	2,800
Interest expense	<u>(662,795)</u>	<u>(701,211)</u>
Total non-operating revenues (expenses)	<u>(238,668)</u>	<u>(390,518)</u>
Change in Net Assets	259,681	154,649
Net Assets – beginning of the year	<u>37,785,967</u>	<u>37,631,318</u>
Net Assets – end of the year	<u>\$ 38,045,648</u>	<u>\$ 37,785,967</u>

\*As restated

See accompanying notes to financial statements.



**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
STATEMENT OF CASH FLOWS  
For the years ended June 30, 2004 and 2003**

	<u>2004</u>	<u>2003*</u>
<b>Cash flows from operating activities</b>		
Received from customers	\$ 7,963,092	\$ 8,101,519
Paid to suppliers for goods and services	(2,195,624)	(2,473,619)
Paid to employees for services-including benefits	<u>(2,493,638)</u>	<u>(2,017,992)</u>
Net cash flows from operating activities	3,273,830	3,609,908
<b>Cash flows from capital and related financing activities</b>		
Acquisition of fixed assets	(3,948,645)	(1,815,446)
Proceeds from disposition of fixed assets	20,277	2,800
Proceeds of long-term debt	3,731,989	123,531
Principal paid on long-term debt	(2,547,125)	(1,763,710)
Interest paid on long-term debt	<u>(662,795)</u>	<u>(701,210)</u>
Net cash used by capital and related financing activities	<u>\$(3,406,299)</u>	<u>\$(4,154,035)</u>
<b>Cash flows from investing activities</b>		
Sale of investments	\$ -	\$ -
Collection of note receivable	-	23,665
Interest earned on investments	<u>159,685</u>	<u>213,570</u>
Net cash provided (used) by investing activities	<u>159,685</u>	<u>237,235</u>
Net increase in cash and cash equivalents	27,216	(453,716)
Cash and cash equivalents at beginning of year (includes restricted assets of \$5,407,774 and \$5,853,003 for 2004 and 2003, respectively)	<u>6,077,835</u>	<u>6,384,727</u>
Cash and cash equivalents at end of year (includes restricted assets of \$5,167,762 and \$5,407,774 for 2004 and 2003, respectively)	<u>\$ 6,105,051</u>	<u>\$ 6,077,835</u>

\*As restated

Continued

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
STATEMENT OF CASH FLOWS (continued)  
For the years ended June 30, 2004 and 2002**

	<b>2004</b>	<b>2003*</b>
<b>Reconciliation of Operating Income to Cash Flows from Operating Activities</b>		
Cash flows from operating activities		
Income from operations	\$ 498,349	\$ 545,167
Adjustments to reconcile net income to cash provided by operating activities		
Depreciation	2,325,538	2,295,584
Amortization	108,641	122,321
Gain on sale of fixed assets	(17,883)	(2,800)
Change in assets and liabilities		
Change in accounts receivable	(93,964)	140,752
Change in other receivable	40,000	(40,000)
Change in inventory	10,943	48,463
Change in prepaid expenses	(258,092)	50,378
Change in accounts payable	87,351	341,292
Change in accrued interest	(12,453)	(24,500)
Change in customer deposits	40,009	(4,371)
Change in accrued salaries and compensated absences	7,753	(42,020)
Change in construction retainage payable	291,080	85,205
Miscellaneous income	246,558	94,437
Net cash provided by operating activities	<b><u>\$3,273,830</u></b>	<b><u>\$3,609,908</u></b>
 <u>Supplemental Disclosures of Cash Flows Information</u>		
Cash paid during the period for:		
Interest expense (net of \$0 and \$0 capitalized interest for 2004 and 2003, respectively)	\$ 675,248	\$ 725,710

\*As restated

See accompanying notes to financial statements.

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
NOTES TO FINANCIAL STATEMENTS**

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

a. Reporting entity

The Hopkinsville Water Environment Authority (HWEA) is responsible for sewerage and water service for residents of the City of Hopkinsville, Kentucky (City). The City's governing body appoints the HWEA's governing board. The City's governing body also approves the rates for user charges and bond issuance authorizations. The legal liability for the general obligation portion of the HWEA's debt remains with the City. The HWEA is shown as a discretely presented component unit in the City's financial statements.

b. Basis of accounting

The operations of the HWEA are accounted for as a governmental enterprise fund, a proprietary fund type. Enterprise funds are used to account for operations which are financed and operated in a manner similar to private business enterprises in that costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis are financed or recovered primarily through user charges. Proprietary fund types use the accrual basis of accounting whereby revenues are recognized when they are earned and expenses are recognized when they are incurred. The HWEA applies all applicable FASB pronouncements in accounting and reporting its operations.

The basic financial statements includes a statement of net assets, a statement of activities and changes in net assets and a statement of cash flows. It requires the classification of net assets into three components – invested in capital assets, net of related debt; restricted; and unrestricted. These classifications are defined as follows:

- *Invested in capital assets, net of related debt* – This component of net assets consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of invested in capital assets, net of related debt. Rather, that portion of the debt is included in the same net assets component as the unspent proceeds.
- *Restricted* - This component of net assets consists of constraints placed on net assets through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

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**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, continued**

- *Unrestricted net assets* – This component of net assets consists of net assets that do not meet the definition of “restricted” or “invested in capital assets, net of related debt.”

c. Separate accounting

On December 17, 1992, the HWEA was approved for a low interest loan from the Kentucky Infrastructure Authority (KIA). Due to federal requirements under this loan program, the HWEA as of July 1, 1993, began accounting for the water and sewer systems separately. (See Supplemental Schedules)

d. Deposits and investments

The HWEA invests all deposits not necessary for current expenditures. Investments are stated at cost, which approximates market value.

Kentucky Revised Statute 66.480 permits the HWEA to invest in U.S. Treasury obligations, U.S. Agency obligations, certain Federal instruments, repurchase agreements, commercial banks' certificates of deposits, savings and loan deposits and the Commonwealth of Kentucky investment pool.

As security for deposits of the HWEA, any bank doing such business is generally required to pledge securities in an amount to exceed funds on deposit by the HWEA. In addition, the HWEA is insured under FDIC up to \$100,000.00 at each bank.

For purposes of the statement of cash flows, the HWEA considers all highly liquid investments with maturity of three months or less when purchased to be cash equivalents.

e. Inventories

Inventories consist of expendable supplies held for consumption stated at cost, which approximates market, determined by the weighted-average method.

f. Prepaid expenses

Payments made to vendors for services that will benefit periods beyond year-end are recorded as prepaid expenses.

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NOTES TO FINANCIAL STATEMENTS**

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, continued**

g. Restricted assets

Certain proceeds of revenue bonds of the HWEA, as well as certain resources set aside for their repayment, are classified as restricted assets on the Statement of Net Assets because their use is limited by applicable bond covenants. The "Bond and Interest Redemption" account is used to segregate resources accumulated for debt service payments over the next twelve months. The "Depreciation" and "Equipment Replacement" accounts are used to report resources set aside for unusual or extraordinary maintenance, repairs, renewals and/or replacements or extensions, additions and/or improvements. The "Construction" account is used to report bond proceeds restricted for use in the cost of future expansion and rehabilitation. The "Unemployment" account is used to accumulate funds to provide for possible claims. Reservations of equity show amounts that are not appropriate for expenditures or are legally restricted for specific uses.

h. Fixed assets

Property, plant and equipment are recorded at cost and depreciated using the straight-line method over estimated useful lives. Property, plant and equipment donated to the HWEA are recorded at their estimated fair value at the date of donation.

Major outlays for capital assets and improvements are capitalized as projects are constructed. Interest incurred during the construction phase of fixed assets is reflected in the capitalized value of the asset constructed, net of interest earned on the invested proceeds over the same period.

i. Compensated absences

Accumulated unpaid vacation pay and other employee benefits amounts are accrued when incurred if significant at year-end. At June 30, 2004 and 2003, these liabilities included vacation pay of \$94,396 and \$99,556, respectively, to be taken as terminal pay upon retirement.

j. Long-term debt

On bonds issued prior to 2001, bond discounts and issuance costs were deferred and these costs are amortized over the term of the bonds using the straight-line method, which approximates the effective interest method. Bond discounts are presented as a reduction of the face amount of bonds payable whereas issuance costs are recorded as deferred charges. HWEA issued a new bond during 2002, the proceeds of which were used to refund older bonds outstanding. GASBS No. 23 requires that the difference between the reacquisition price and the net carrying amount of the old debt be deferred and amortized as a component of interest expense.

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 NOTES TO FINANCIAL STATEMENTS**

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, continued**

k. Capital Contributions

Contributed capital is recorded for receipt of capital grants or contributions from developers, customers or other sources. Unreserved net assets represent the net assets available for future operations or distribution.

l. Net Assets

Net assets comprise the various net earnings from operating and non-operating revenues, expenses and contributions of capital. Net assets are classified in the following three components: invested in capital assets, net of related liabilities; restricted for capital activity and debt service; and unrestricted net assets.

m. Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**2. RECEIVABLES**

Net receivables included the following:

	2004	2003
Customer accounts receivable	\$546,895	\$452,931

Uncollectible accounts are written off as bad debts in the period in which, in management's opinion, collection is unlikely. Normally, all accounts over 90 days old are written off as bad debts.

Note receivable from the Christian County Board of Education for installation of sewer lines, due in annual installments of \$33,118 including interest at 1.8% and a .2% administrative fee, due June 30, 2019. The balance receivable was \$442,132 and \$442,132 at June 30, 2004 and 2003, respectively.

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NOTES TO FINANCIAL STATEMENTS**

**2. RECEIVABLES, continued**

Net bad debts for the year ended June 30 were as follows:

	<u>2004</u>	<u>2003</u>
Accounts charged off in current period	\$ 45,465	59,853
Recovery of accounts previously charged off	<u>(18,140)</u>	<u>(22,358)</u>
Net bad debts	<u>\$ 27,325</u>	<u>\$ 37,495</u>

**3. INVENTORY**

Inventory as of June 30, 2004 and 2003, consisted of materials and supplies with a cost of \$228,509 and \$239,452, respectively.

**4. PROPERTY, PLANT AND EQUIPMENT**

Listed below are the major classes of property, plant, and equipment as of June 30:

	<u>2004</u>	<u>2003</u>	<u>Life (Years)</u>
Water System	\$ 36,845,915	\$ 36,454,714	10 - 50
Sewer System	49,794,027	49,010,050	20 - 50
General Plant	<u>2,152,524</u>	<u>2,148,175</u>	4 - 10
	88,792,466	87,612,939	
Unclassified Plant	<u>4,717,787</u>	<u>2,026,165</u>	
Total property, plant, and equipment	<u>\$93,510,253</u>	<u>\$89,639,104</u>	

**5. DEFERRED CHARGES**

The selling costs and discounts associated with the issuance of the revenue bonds payable are being amortized on the straight-line method over the term of the bonds. Amortization expense charged to operations during 2004 and 2003 was \$101,704 and \$101,704, respectively.

On August 1, 1988, the HWEA elected to participate in the County Employee Retirement System under the "Alternate Participation Plan" as provided under KRS 78.530. On November 2, 1988, the total cost to adopt the plan retroactive to August 1, 1988, was \$1,519,404 with \$1,369,110 being transferred from the closeout of the existing plan. The remaining amount was paid by the HWEA at that time and is being amortized on a straight line basis over the average remaining service period of employees expected to receive benefits under the plan which was actuarially determined to be fifteen (15) years. The amortization is complete at June 30, 2004. For 2004 and 2003, amortization expense charged to operations was \$1,718 and \$20,618, respectively.

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NOTES TO FINANCIAL STATEMENTS**

**6. LONG-TERM DEBT**

Long-term debt at June 30 is as follows:

Revenue Bonds:	<u>Rate</u>	<u>2004</u>	<u>2003</u>
Series 1964 Maturing 2004	3.625%	\$ -	\$ 10,000
Series 1965 Maturing 2004	3.625%	-	3,000
Series 1980 Maturing 2020	5.0%	-	347,000
Series 1993 Maturing 2007	3.54% to 4.86%	1,368,871	1,641,382
Series 1996 Maturing 2016	5.125% to 5.6%	1,585,000	1,670,000
Series 2002 Maturing 2007	1.50% to 3.40%	<u>3,680,000</u>	<u>4,585,000</u>
 Total Bonded Indebtedness		 <u>6,633,871</u>	 <u>8,256,382</u>
 KIA Loans:			
KIA Fund A Wastewater-Maturing 2015	1.2%	5,873,446	6,347,012
KIA Fund B Water Plant-Maturing 2026	1.9%	3,930,440	4,073,146
KIA Fund A Phase II-Maturing 2018	1.8%	2,353,350	2,497,533
KIA Fund A Wastewater-Maturing 2017	1.2%	162,626	176,713
KIA Fund A -Maturing 2019	0.4%	506,977	538,613
KIA Fund A Phase III-Maturing 2020	3.8%	730,202	761,535
KIA Fund A Phase IV (Maturity not established-loan not closed)	1%	2,950,106	-
KIA Fund F, Drinking Water (Maturity not established-loan not closed)	1%	<u>781,883</u>	<u>-</u>
 Total KIA Loans		 <u>17,289,030</u>	 <u>14,394,552</u>
 City of Hopkinsville-note payable		 116,875	 117,598
City of Crofton-note payable		255,556	299,604
Capital Lease Obligation:			
IBM Credit Corporation		<u>68,479</u>	<u>108,563</u>
 Total debt		 24,363,811	 23,176,699
 Maturities due within one year		 <u>(2,230,895)</u>	 <u>(2,543,817)</u>
 Long-term debt		 <u>\$ 22,132,916</u>	 <u>\$ 20,632,882</u>

The revenue of the water and sewer system and the various special funds established by the bond ordinances collateralizes the Revenue Bonds. The ordinances provide that the revenue of the system is to be used first to pay operating and maintenance expenses of the system and second to establish and maintain the Revenue Bond Funds. Remaining revenues may then be used for any lawful purpose. The ordinances also contain provisions, which, among other items, restrict the issuance of additional Revenue Bonds unless the special funds noted above contain the required amounts and certain financial ratios are met. The HWEA is in compliance with all significant financial requirements as of June 30, 2004 and 2003.



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**6. LONG-TERM DEBT, continued**

The long-term debt obtained from the KIA is for the expansion and upgrade of the Wastewater Treatment System Fund A and a new Water Treatment Facility Fund B. The loans are secured by the revenues of the HWEA but are subordinated to the existing revenue bonds.

On September 20, 1995, the HWEA secured a non-interest loan from the City. The loan is to be repaid quarterly in the amount of two (2) cents for each one thousand (1,000) gallons of water sold by it to any customer in Commerce Park.

Below is a summary of the various restricted asset accounts as of June 30:

	2004	2003
Bond and interest redemption fund	\$ 1,725,326	\$ 1,807,453
Depreciation fund	2,287,863	2,438,184
KIA maintenance and replacement reserve fund	928,416	935,799
Construction fund	205,885	206,066
Unemployment fund	20,272	20,272
Total restricted funds	\$ 5,167,762	\$ 5,407,774

Total interest for 2004 and 2003 was \$662,795 and \$701,210, respectively, of which all was expensed.

The annual requirements to amortize long-term debt as of June 30, 2004, including interest payments are as follows:

2005	\$ 2,689,753
2006	2,684,068
2007	2,648,229
2008	2,643,125
2009-2013	6,245,785
2014-2018	4,630,733
2019-2023	1,297,706
2024-2026	775,137
Undetermined (loans not closed)	3,731,989
Less interest	(2,982,714)
	\$24,363,811

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**6. LONG-TERM DEBT, continued**

Defeased Bonds Outstanding

In prior years, the HWEA issued refunding bonds to defease certain outstanding bonds, for the purpose of consolidation and to achieve debt service savings. The HWEA has placed the proceeds from the refunding issues in irrevocable escrow accounts with a trust agent to insure payment of debt service on the refunded bonds.

Accordingly, the trust account assets and liabilities for the defeased bonds are not included in the HWEA's financial statement. Although defeased, the refunded debt from these earlier issues will not be actually retired until the call dates have come due or until maturity if they are not callable issues. On June 30, 2004 and 2003, the amount of bonds outstanding considered defeased is undeterminable.

**7. DEFINED BENEFIT PENSION PLAN**

The HWEA participates in the statewide local government retirement system, which covers substantially all of the HWEA's employees by their election.

**Plan Description.** The HWEA contributes to the County Employees Retirement System (CERS), a cost-sharing multiple-employer defined benefit plan administered by the Board of Trustees of Kentucky Retirement Systems (KRS). CERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided at the discretion of the State Legislature. Section 61.645 of the Kentucky Revised Statutes assigns the authority to establish and amend benefit provisions to the KRS Board of Trustees. The Kentucky Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for CERS. That report may be obtained by writing to Kentucky Retirement Systems, 1260 Louisville Road, Frankfort, Kentucky 40601 or by calling 1-502-564-4646.

**Funding policy.** Plan members are required to contribute 5% of their annual creditable compensation and the HWEA is required to contribute at an actuarially determined rate. The current rate is 7.34% of annual covered payroll. The contribution requirements of plan members and the HWEA are established and may be amended by the KRS Board of Trustees. The HWEA's contribution to CERS for the three years ended June 30, 2004, 2003, and 2002 was \$161,923, \$136,798, and \$134,311, respectively, is equal to the required contribution for these years.

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
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**8. BUDGET**

Bond ordinances require that the HWEA's funds be budgeted. Actual revenues and expenditures as compared to budgeted amounts for year ended June 30, 2004 are as follows:

	<u>Budget</u>	<u>Actual</u>	Variance Favorable (Unfavorable)
Operating Revenues	\$ 8,199,050	\$ 7,892,465	\$ (306,585)
Operating Expenses	(5,386,810)	(5,068,578)	318,232
Depreciation Expense	<u>(2,243,360)</u>	<u>(2,325,538)</u>	<u>(82,178)</u>
Operating Income	568,880	498,349	(70,531)
Non-Operating Revenues	489,820	424,127	(65,693)
Non-Operating Expenses	<u>(693,705)</u>	<u>(662,795)</u>	<u>30,910</u>
Net Income	<u>\$ 364,995</u>	<u>\$ 259,681</u>	<u>\$ (105,314)</u>

**9. DEPOSITS AND INVESTMENTS**

Deposits

At year-end, the carrying amount of the HWEA's deposits was \$923,434 and the bank balance was \$1,277,586. Of this bank balance, Federal Depository Insurance covered \$253,206 with the balance covered by collateral held by the pledging bank. State law requires all of the HWEA's funds to be fully insured or collateralized.

Investments

The HWEA's investments are categorized as either (1) insured or registered or for which the securities are held by the HWEA's or it's agent in the HWEA's name; (2) uninsured and unregistered for which the securities are held by the counter party's trust department in the HWEA's name; or (3) uninsured and unregistered for which the securities are held by the counter party, or by its trust department or agent but not in the HWEA's name.

	<u>1</u>	Categories <u>2</u>	<u>3</u>	<u>Carrying Amount</u>	<u>Market Value</u>
Cash & cash Equivalents	\$5,181,616	\$ -	\$ -	\$5,181,616	\$5,181,616
Total	<u>\$5,181,616</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$5,181,616</u>	<u>\$5,181,616</u>

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
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**10. CONTINGENCIES**

Under the terms of federal and state grants, periodic audits are required and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to reimbursement of the grant monies to the granting agencies. HWEA management believes that disallowances, if any, will be immaterial.

**11. RISK MANAGEMENT**

The HWEA is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The HWEA carries commercial insurance for these types of risk of loss, including worker's compensation and employee health and accident insurance. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Claim liabilities are calculated considering the effects of inflation, recent claim settlement trends including frequency and amount of payouts and other economic and social factors.

The HWEA's health insurance premiums are composed of a fixed and a variable portion. The variable portion is based on actual claims experienced during the year and fluctuates each month based on claims. Premiums accrued for health insurance are based on the year-to-date claims experience of the HWEA.

**12. RESTATED 2003 FINANCIAL STATEMENTS**

Cash was understated at June 30, 2003 by \$146,824. This is accounted for by a bank account used for processing health insurance claims. Over time, the balance in the account had grown to a material amount and required inclusion on the balance sheet. Consequently, employee benefits expense was reduced by \$19,937, with the difference (\$126,887) shown as an increase to net assets.

Also, a billing error due to equipment malfunction was discovered during 2003. It was estimated that this issue had existed for at least five years. An agreement was reached with the customer to repay five years' overcharge. Consequently, 2003 revenue is overstated by \$36,195, a liability for the repayment established in the amount of \$144,785 with the difference (\$108,590) as a reduction to net assets.

The results of these changes increases net assets by \$2,039 with a decrease in net income for the year ended June 30, 2003 of \$16,258.

HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
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 COMBINING STATEMENT OF NET ASSETS  
 June 30, 2004

ASSETS	Hopkinsville		Pembroke		Crofton		Totals
	Water	Sewer	Water	Sewer	Water	Sewer	
Current assets							
Cash							
Petty cash and change fund	\$ 1,200	\$ 1,200	\$ -	\$ -	\$ -	\$ -	\$ 2,400
Health claims fund	83,158	83,158	-	-	-	-	166,316
Revenue fund	-	33,531	-	-	-	-	33,531
Operation and maintenance fund	213,582	213,582	106,547	106,547	47,392	47,392	735,042
Total cash	297,940	331,471	106,547	106,547	47,392	47,392	937,289
Receivables	288,241	224,458	5,521	5,960	13,096	9,619	546,895
Inventory	228,509	-	-	-	-	-	228,509
Prepaid expense	129,046	129,046	-	-	-	-	258,092
Total current assets	943,736	684,975	112,068	112,507	60,488	57,011	1,970,785
Restricted assets							
Bond and interest redemption fund							
Investments	1,719,789	5,537	-	-	-	-	1,725,326
Subtotal	1,719,789	5,537	-	-	-	-	1,725,326
Depreciation fund							
Investments	1,290,423	990,423	-	-	-	-	2,280,846
Accrued interest	3,525	3,492	-	-	-	-	7,017
Subtotal	1,293,948	993,915	-	-	-	-	2,287,863
Equipment maintenance and replacement reserve							
Investments	-	925,721	-	-	-	-	925,721
Accrued interest	-	2,695	-	-	-	-	2,695
Subtotal	-	928,416	-	-	-	-	928,416
	\$ -	\$ 928,416	\$ -	\$ -	\$ -	\$ -	\$ 928,416

HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
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 COMBINING STATEMENT OF NET ASSETS (continued)  
 June 30, 2004

**ASSETS (continued)**

	Hopkinsville		Pembroke		Crofton		Totals
	Water	Sewer	Water	Sewer	Water	Sewer	
Restricted assets (continued)							
Construction fund							
Checking accounts	\$ -	\$ 200,315	\$ -	\$ -	\$ -	\$ -	\$ 200,315
Retainage fund	5,570	-	-	-	-	-	5,570
Subtotal	5,570	200,315	-	-	-	-	205,885
Unemployment fund							
Investments	10,074	10,074	-	-	-	-	20,148
Accrued interest	62	62	-	-	-	-	124
Subtotal	10,136	10,136	-	-	-	-	20,272
Total restricted assets	3,029,443	2,138,319	-	-	-	-	5,167,762
Property, plant and equipment							
Property and plant							
General plant	36,295,045	48,383,355	136,753	199,233	414,111	1,211,438	86,639,935
Unclassified plant	1,060,869	1,091,862	-	-	-	-	2,152,531
	1,631,996	3,085,791	-	-	-	-	4,717,787
Less accumulated depreciation	38,987,910	52,560,808	136,753	199,233	414,111	1,211,438	93,510,253
	16,174,799	20,930,143	35,761	68,912	55,778	328,894	37,594,287
Net property, plant & equipment	22,813,111	31,630,665	100,992	130,321	358,333	882,544	55,915,966
Receivable - CCBE							
Receivable - Pembroke division	-	442,132	-	-	-	-	442,132
Receivable- Crofton division	29,985	-	-	-	-	-	29,985
	357,709	-	-	-	-	-	357,709
Deferred charges							
Fiscal agency fees - revenue bonds	27,565	-	-	-	-	-	27,565
Unamortized discount revenue bonds	119,094	219,505	-	-	-	-	338,599
Total deferred charges	146,659	219,505	-	-	-	-	366,164
Total assets	\$ 27,320,643	\$ 35,115,596	\$ 213,060	\$ 242,828	\$ 418,821	\$ 939,555	\$ 64,250,503

HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
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 COMBINING STATEMENT OF NET ASSETS (continued)  
 June 30, 2004

LIABILITIES AND EQUITY

	Hopkinsville		Pembroke		Crofton		Totals
	Water	Sewer	Water	Sewer	Water	Sewer	
Current liabilities							
Current portion of long-term debt	\$ 166,697	\$ 682,134	\$ -	\$ 11,631	\$ 15,885	\$ 15,884	\$ 892,231
Customer deposits	75,159	31,534	-	-	-	-	106,693
Accrued interest on KIA loans	6,223	13,303	162	-	127	127	19,942
Accounts payable	137,975	82,233	-	-	-	-	220,208
Accrued salaries and compensated absences	87,262	90,983	-	-	-	-	178,245
Total current liabilities	473,316	900,187	162	11,631	16,012	16,011	1,417,319
Payable from restricted assets							
Accounts payable	284,471	-	-	-	-	-	284,471
Current portion of long term-debt	655,414	637,000	-	-	23,125	23,125	1,338,664
Accrued interest on indebtedness	45,075	21,146	-	-	1,597	1,597	69,415
Construction retainage payable	149,930	231,908	-	-	-	-	381,838
Long-term debt							
Accounts payable-CCWD	192,538	-	-	-	-	-	192,538
Revenue bonds payable (net of current maturities)	3,400,285	1,941,172	-	-	-	-	5,341,457
Capital lease obligation (net of current portion)	12,986	12,986	-	-	-	-	25,972
KIA loan payable (net of current maturities)	4,566,878	11,243,972	-	153,246	237,604	237,604	16,439,304
Hopkinsville division-note payable	-	-	29,985	-	357,709	-	387,694
City of Crofton-note payable (net of current maturities)	-	-	-	-	104,654	104,654	209,308
City of Hopkinsville-note payable	116,875	-	-	-	-	-	116,875
Total liabilities	9,897,768	14,988,371	30,147	164,877	740,701	382,991	26,204,855
Net assets							
Invested in capital assets, net of related debt	13,408,277	16,847,044	100,830	(34,556)	(24,659)	499,553	30,796,489
Net assets, restricted	3,029,443	2,138,319	-	-	-	-	5,167,762
Net assets, unrestricted	985,155	1,141,862	82,083	112,507	(297,221)	57,011	2,081,397
Total net assets	17,422,875	20,127,225	182,913	77,951	(321,880)	556,564	38,045,648
Total liabilities and net assets	\$ 27,320,643	\$ 35,115,596	\$ 213,060	\$ 242,828	\$ 418,821	\$ 939,555	\$ 64,250,503

HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
 WATER AND WASTEWATER DEPARTMENTS  
 A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
 COMBINING STATEMENT OF REVENUES, EXPENSES  
 AND CHANGES IN NET ASSETS  
 For the Year ended June 30, 2004

	Hopkinsville		Pembroke		Crofton		Totals
	Water	Sewer	Water	Sewer	Water	Sewer	
Operating revenues	\$ 3,642,559	\$ 3,846,238	\$ 61,852	\$ 73,107	\$ 155,750	\$ 112,959	\$ 7,892,465
Operating expenses							
Water source of supply	8,501	-	-	-	-	-	8,501
Water purification	979,407	-	407	-	1,416	-	981,230
Water distribution	453,011	-	15,429	-	49,117	-	517,557
Sewerage plant	-	1,121,774	-	13,296	-	13,129	1,148,199
Sewerage mains and laterals	-	161,573	-	26,984	-	22,239	210,796
Administrative and general	1,009,343	1,017,567	4,625	3,893	8,528	6,551	2,050,507
Technical services	72,933	78,855	-	-	-	-	151,788
Depreciation	926,324	1,277,928	7,753	14,851	14,091	84,591	2,325,538
Total operating expenses	<u>3,449,519</u>	<u>3,657,697</u>	<u>28,214</u>	<u>59,024</u>	<u>73,152</u>	<u>126,510</u>	<u>7,394,116</u>
Income from operations	<u>193,040</u>	<u>188,541</u>	<u>33,638</u>	<u>14,083</u>	<u>82,598</u>	<u>(13,551)</u>	<u>498,349</u>
Non-operating revenues (expenses)							
Interest revenue	89,445	70,241	-	-	-	-	159,686
Capital assets provided by developers	112,079	59,215	-	-	-	-	171,294
Miscellaneous	30,058	44,830	-	64	312	-	75,264
Gain (loss) on sale of fixed assets	13,697	4,186	-	-	-	-	17,883
Interest on bonded indebtedness	<u>(319,055)</u>	<u>(324,770)</u>	<u>(2,398)</u>	<u>-</u>	<u>(9,082)</u>	<u>(7,490)</u>	<u>(662,795)</u>
Total non-operating revenues (expenses)	<u>(73,776)</u>	<u>(146,298)</u>	<u>(2,398)</u>	<u>64</u>	<u>(8,770)</u>	<u>(7,490)</u>	<u>(238,668)</u>
Income before operating transfers	119,264	42,243	31,240	14,147	73,828	(21,041)	259,681
Transfer (to) from other funds							
Operating transfers in (out)	<u>(281,410)</u>	<u>253,887</u>	<u>54,856</u>	<u>(45,880)</u>	<u>(145,424)</u>	<u>163,971</u>	<u>-</u>
Net income	(162,146)	296,130	86,096	(31,733)	(71,596)	142,930	259,681
Net assets, beginning of year	<u>17,585,021</u>	<u>19,831,095</u>	<u>96,817</u>	<u>109,684</u>	<u>(250,284)</u>	<u>413,640</u>	<u>37,785,973</u>
Net assets, end of year	<u>\$ 17,422,875</u>	<u>\$ 20,127,225</u>	<u>\$ 182,913</u>	<u>\$ 77,951</u>	<u>\$ (321,880)</u>	<u>\$ 556,570</u>	<u>\$ 38,045,654</u>



HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
 WATER AND WASTEWATER DEPARTMENTS  
 A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
 SUMMARY OF PROPERTY, PLANT AND EQUIPMENT  
 June 30, 2004

Descriptions	ASSETS				ACCUMULATED DEPRECIATION				Depreciated values June 30, 2004
	Balance June 30, 2003	Additions	Retirements	Balance June 30, 2004	Balance June 30, 2003	Additions	Retirements	Balance June 30, 2004	
<b>Water</b>									
Land	\$ 524,248	-	-	\$ 524,248	\$ -	\$ -	\$ -	\$ -	\$ 524,248
Structures	2,732,075	-	-	2,732,075	960,688	57,761	-	1,018,449	1,713,626
Elevated tanks	2,427,004	3,644	-	2,430,648	1,230,897	51,169	-	1,282,066	1,148,582
Transmission mains	196,595	-	-	196,595	174,641	3,409	-	178,050	18,545
Distribution mains	12,617,193	137,035	-	12,754,228	4,857,293	236,452	-	5,093,745	7,660,483
Services	1,931,196	127,650	-	2,058,846	898,483	40,001	-	938,484	1,120,362
Meters and installation	2,036,710	53,986	-	2,090,696	1,685,189	72,138	-	1,757,327	333,369
Hydrants	707,781	19,044	-	726,825	307,088	16,617	-	323,705	403,120
Purification structures	7,494,394	-	-	7,494,394	1,735,743	148,741	-	1,884,484	5,609,910
Purification equipment	4,400,568	47,338	-	4,447,906	2,202,831	194,776	-	2,397,607	2,050,299
Cast iron pipe lines	44,436	-	-	44,436	36,329	772	-	37,101	7,335
Electric pumping equipment	397,893	2,495	-	400,388	196,878	13,238	-	210,116	190,272
Auxiliary power units	128,790	-	-	128,790	128,790	-	-	128,790	-
Quarry - raw water supply	772,853	-	-	772,853	228,022	30,238	-	258,260	514,593
Interest during construction	42,977	-	-	42,977	24,615	860	-	25,475	17,502
<b>Total water plant</b>	<b>36,454,713</b>	<b>391,192</b>	<b>-</b>	<b>36,845,905</b>	<b>14,667,487</b>	<b>866,172</b>	<b>-</b>	<b>15,533,659</b>	<b>21,312,246</b>
<b>General</b>									
Transportation equipment	244,522	48,770	37,491	255,801	178,787	30,860	36,294	173,353	82,448
Tractors & backhoes	107,040	-	35,623	71,417	87,982	7,716	35,623	60,075	11,342
General equipment	259,126	11,693	-	270,819	158,275	8,341	-	166,616	104,203
Office furniture and fixtures	130,490	1,450	-	131,940	115,079	4,885	-	119,964	11,976
Two-way radio equipment	22,464	-	-	22,464	12,566	2,121	-	14,687	-
Computer equipment	295,275	13,153	-	308,428	169,913	28,075	-	197,988	110,440
<b>Total general plant</b>	<b>1,058,917</b>	<b>75,066</b>	<b>73,114</b>	<b>1,060,869</b>	<b>722,602</b>	<b>81,998</b>	<b>71,917</b>	<b>732,683</b>	<b>328,186</b>
<b>Unclassified plant</b>									
Construction in progress	1,305,272	326,724	-	1,631,996	-	-	-	-	1,631,996
<b>Total water plant</b>	<b>\$ 38,818,902</b>	<b>\$ 792,982</b>	<b>\$ 73,114</b>	<b>\$ 39,538,770</b>	<b>\$ 15,390,089</b>	<b>\$ 948,170</b>	<b>\$ 71,917</b>	<b>\$ 16,266,342</b>	<b>\$ 23,272,428</b>

HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
 WATER AND WASTEWATER DEPARTMENTS  
 A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
 SUMMARY OF PROPERTY, PLANT AND EQUIPMENT  
 June 30, 2004

Descriptions	ASSETS				ACCUMULATED DEPRECIATION				Depreciated values June 30, 2004
	Balance June 30, 2003	Additions	Retirements	Balance June 30, 2004	Balance June 30, 2003	Additions	Retirements	Balance June 30, 2004	
<b>SEWERAGE</b>									
Land	\$ 326,412	\$ -	\$ -	\$ 326,412	\$ -	\$ -	\$ -	\$ -	\$ 326,412
Buildings	1,251,158	-	-	1,251,158	494,918	25,038	-	519,956	731,202
Wastewater treatment plants									
Northside	8,776,154	1,490	-	8,777,644	4,306,851	219,507	-	4,526,358	4,251,286
Hammond-Wood	11,513,450	-	-	11,513,450	4,277,378	351,659	-	4,629,037	6,884,413
Machinery and equipment	2,475,577	89,160	-	2,564,737	964,220	120,183	-	1,084,403	1,480,334
Pumping stations	1,787,263	499,400	-	2,286,663	839,517	81,541	-	921,058	1,365,605
Mains and laterals	22,706,897	193,926	-	22,900,823	8,290,211	493,987	-	8,784,198	14,116,625
Interest during construction	173,140	-	-	173,140	28,854	4,329	-	33,183	139,957
<b>Total sewerage plant</b>	<b>49,010,051</b>	<b>783,976</b>	<b>-</b>	<b>49,794,027</b>	<b>19,201,949</b>	<b>1,296,244</b>	<b>-</b>	<b>20,498,193</b>	<b>29,295,834</b>
<b>General</b>									
Transportation equipment	377,419	49,942	62,499	364,862	326,449	22,272	61,302	287,419	77,443
Tractors & backhoes	107,040	-	35,623	71,417	87,983	7,716	35,623	60,076	11,341
General equipment	189,086	4,654	-	193,740	133,444	5,479	-	138,923	54,817
Office furniture & fixtures	125,184	2,323	-	127,507	112,120	4,343	-	116,463	11,044
Two-way radio equipment	24,078	-	-	24,078	14,534	2,121	-	16,655	7,423
Computer equipment	297,536	12,522	-	310,058	166,476	29,695	-	196,171	113,887
<b>Total general plant</b>	<b>1,120,344</b>	<b>69,441</b>	<b>98,122</b>	<b>1,091,663</b>	<b>841,006</b>	<b>71,626</b>	<b>96,925</b>	<b>815,707</b>	<b>275,956</b>
<b>Unclassified plant</b>									
Engineering fees	45,520	98,982	-	144,502	4,552	9,501	-	14,053	130,449
Construction in progress	675,377	2,265,922	-	2,941,299	-	-	-	-	2,941,299
<b>Total sewer plant</b>	<b>\$ 50,851,292</b>	<b>\$ 3,218,321</b>	<b>\$ 98,122</b>	<b>\$ 53,971,491</b>	<b>\$ 20,047,507</b>	<b>\$ 1,377,371</b>	<b>\$ 96,925</b>	<b>\$ 21,327,953</b>	<b>\$ 32,643,538</b>

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY**  
**WATER AND WASTEWATER DEPARTMENTS**  
**A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY**  
**SUMMARY OF SINKING FUND REQUIREMENTS**  
**June 30, 2004**

Bonds Due Fiscal Year	1993	1996	2002	Total Debt Service
2005	\$ 354,107	\$ 169,178	\$ 1,006,305	\$ 1,529,590
2006	356,397	169,628	997,890	1,523,915
2007	378,099	169,817	975,525	1,523,441
2008	418,032	169,747	930,555	1,518,334
2009	-	169,391	-	169,391
2010	-	173,588	-	173,588
2011	-	172,270	-	172,270
2012	-	170,500	-	170,500
2013	-	173,220	-	173,220
2014	-	170,520	-	170,520
2015	-	172,400	-	172,400
2016	-	173,720	-	173,720
2017	-	169,620	-	169,620
	<u>\$ 1,506,635</u>	<u>\$ 2,223,599</u>	<u>\$ 3,910,275</u>	<u>\$ 7,640,509</u>

The sinking fund reserve requirement is the maximum total debt service on bonds due in future years. Therefore, the sinking fund reserve requirement as of June 30, 2004 is \$1,529,590. The HWEA has set aside funds to meet this requirement.

SCHEDULE 5

HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
 WATER AND WASTEWATER DEPARTMENTS  
 A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
 SCHEDULE OF OPERATING EXPENSES  
 For the Years Ended June 30, 2004 and 2003

	2004		2003	
	Amount	% of Net Revenues	Amount	% of Net Revenues
<b>Water Source of Supply</b>				
Labor	\$ 5,039	0.06%	\$ 4,107	0.05%
Supplies	1,638	0.02%	646	0.01%
Grounds and maintenance	1,824	0.02%	2,452	0.03%
Total water source of supply	8,501	0.11%	7,206	0.09%
<b>Water Purification</b>				
Supervision	48,087	0.61%	45,025	0.57%
Labor	226,762	2.87%	238,587	3.04%
Chemicals	340,283	4.31%	268,410	3.42%
Maintenance to structures	1,066	0.01%	155	0.00%
Maintenance to equipment	16,969	0.22%	25,126	0.32%
Supplies	7,726	0.10%	10,292	0.13%
Maintenance to reservoirs and tanks	4,620	0.06%	6,453	0.08%
Utilities	255,121	3.23%	252,204	3.21%
Training and education	1,164	0.01%	3,006	0.04%
Laboratory work	56,938	0.72%	53,989	0.69%
Laboratory supplies and expense	16,927	0.21%	18,496	0.24%
Plant security	-	0.00%	974	0.01%
Grounds and maintenance	2,125	0.03%	-	0.00%
Transportation expense	3,058	0.04%	3,999	0.05%
Miscellaneous	384	0.00%	786	0.01%
Total water purification	981,230	12.43%	927,502	11.82%
<b>Water Distribution</b>				
Supervision	75,433	0.96%	39,502	0.50%
Labor	177,370	2.25%	163,912	2.09%
Supplies	84,730	1.07%	100,744	1.28%
Repairs to distribution mains	60,891	0.77%	63,824	0.81%
Repairs to services	13,350	0.17%	14,698	0.19%
Repair to meters	479	0.01%	53	0.00%
Removing and resetting meters	45,507	0.58%	43,184	0.55%
Repairs to fire hydrants	1,269	0.02%	1,500	0.02%
Transportation expense	19,158	0.24%	20,714	0.26%
Gas, oil, tires, etc-tractor/compressor	22,297	0.28%	19,276	0.25%
Grounds and maintenance	12,257	0.16%	11,478	0.15%
Training, education and licenses	4,137	0.05%	5,499	0.07%
Small tools	678	0.01%	758	0.01%
Miscellaneous	1	0.00%	-	0.00%
Total water distribution	517,557	6.56%	485,142	6.18%
Subtotal carried forward	\$ 1,507,288	19.10%	\$ 1,419,850	18.09%

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
SCHEDULE OF OPERATING EXPENSES  
For the Years Ended June 30, 2004 and 2003**

	<u>2004</u>		<u>2003</u>	
	<u>Amount</u>	<u>% of Net Revenues</u>	<u>Amount</u>	<u>% of Net Revenues</u>
Subtotal carried forward	\$ 1,507,288	19.10%	\$ 1,419,850	19.10%
<b>Water Technical Services</b>				
Labor	67,294	0.85%	68,617	0.87%
Supplies	1,589	0.02%	1,910	0.02%
Training, education and licenses	-	0.00%	1,504	0.02%
Transportation expense	4,050	0.05%	3,026	0.04%
Miscellaneous	-	0.00%	1,059	0.01%
Total water technical services	<u>72,933</u>	<u>0.92%</u>	<u>76,117</u>	<u>0.97%</u>
<b>Water Administrative and General</b>				
Commissioners' fees	3,000	0.04%	3,180	0.04%
Office salaries	273,265	3.46%	268,067	3.41%
Meter reading and collecting salaries	42,399	0.54%	38,318	0.49%
Employee benefits	382,190	4.84%	350,256	4.46%
Amortization of CERS retirement	859	0.01%	10,308	0.13%
Office supplies	34,496	0.44%	27,896	0.36%
Postage	25,503	0.32%	20,710	0.26%
Telephone	17,279	0.22%	20,293	0.26%
Insurance and bonds	100,509	1.27%	116,434	1.48%
Professional services	26,272	0.33%	35,742	0.46%
Safety program	30,133	0.38%	27,649	0.35%
Office building maintenance	27,905	0.35%	26,806	0.34%
Bad debts, net	17,338	0.22%	22,926	0.29%
Training, education and licenses	8,267	0.10%	4,016	0.05%
Transportation expense	7,945	0.10%	9,045	0.12%
Miscellaneous	23,114	0.29%	26,587	0.34%
Total water administrative and general	<u>1,020,474</u>	<u>12.93%</u>	<u>1,008,234</u>	<u>12.84%</u>
Total water operating expense other than depreciation	<u>\$ 2,600,695</u>	<u>32.95%</u>	<u>\$ 2,504,201</u>	<u>32.91%</u>

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
SCHEDULE OF OPERATING EXPENSES  
For the Years Ended June 30, 2004 and 2003**

	<u>2004</u>		<u>2003</u>	
	<u>Amount</u>	<u>% of Net Revenues</u>	<u>Amount</u>	<u>% of Net Revenues</u>
<b>Sewerage Plant</b>				
Supervision	\$ 49,467	0.63%	\$ 45,479	0.58%
Labor	295,253	3.74%	299,410	3.81%
Chemicals and materials	28,952	0.37%	31,827	0.41%
Supplies and tools	12,977	0.16%	13,834	0.18%
Lights, power, water, and fuel oil	366,122	4.64%	366,809	4.67%
Transportation expense	15,346	0.19%	13,155	0.17%
Repairs - machinery and equipment	30,582	0.39%	34,406	0.44%
Repairs - buildings	3,531	0.04%	2,519	0.03%
Maintenance of pump stations	140,306	1.78%	146,100	1.86%
Laboratory work	49,450	0.63%	54,407	0.69%
Laboratory supplies and expense	11,524	0.15%	12,719	0.16%
Permit - pretreatment compliance	38,292	0.49%	35,714	0.45%
Sludge disposal	105,962	1.34%	101,223	1.29%
Training, education and licenses	430	0.01%	671	0.01%
Miscellaneous	7	0.00%	81	0.00%
	<u>1,148,201</u>	<u>14.55%</u>	<u>1,158,353</u>	<u>14.76%</u>
<b>Total sewerage plant</b>				
<b>Sewerage Mains and Laterals</b>				
Supervision	13,697	0.17%	14,672	0.19%
Labor	64,804	0.82%	88,688	1.13%
Supplies and tools	42,140	0.53%	45,712	0.58%
Repairs - mains and laterals	22,229	0.28%	19,969	0.25%
Repairs - truck and sewerage equipment	5,586	0.07%	5,492	0.07%
Gas, oil, and tires	3,180	0.04%	4,574	0.06%
Developer rebates	59,160	0.75%	34,916	0.44%
	<u>210,796</u>	<u>2.67%</u>	<u>214,024</u>	<u>2.73%</u>
<b>Total sewerage mains and laterals</b>				
<b>Sewerage Technical Services</b>				
Labor	72,215	0.91%	74,346	0.95%
Supplies	1,589	0.02%	1,882	0.02%
Training, education and licenses	575	0.01%	1,504	0.02%
Transportation expense	4,050	0.05%	3,027	0.04%
Miscellaneous	425	0.01%	376	0.00%
	<u>78,854</u>	<u>1.00%</u>	<u>81,134</u>	<u>1.03%</u>
<b>Total sewerage technical services</b>				
<b>Subtotal carried forward</b>	<u>\$1,437,851</u>	<u>18.22%</u>	<u>\$1,453,511</u>	<u>18.52%</u>

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
SCHEDULE OF OPERATING EXPENSES  
For the Years Ended June 30, 2004 and 2003**

	<u>2004</u>		<u>2003</u>	
	<u>Amount</u>	<u>% of Net Revenues</u>	<u>Amount</u>	<u>% of Net Revenues</u>
Subtotal carried forward	<u>\$1,437,851</u>	<u>18.22%</u>	<u>\$1,453,511</u>	<u>18.52%</u>
<b>Sewerage Administrative and General</b>				
Commissioners' fees	3,000	0.04%	2,980	0.04%
Office salaries	270,082	3.42%	288,661	3.68%
Meter reading and collecting salaries	42,516	0.54%	36,985	0.47%
Employee benefits	393,740	4.99%	375,840	4.79%
Amortization of CERS retirement	859	0.01%	10,308	0.13%
Office supplies	33,192	0.42%	26,931	0.34%
Postage	25,505	0.32%	18,198	0.23%
Telephone	17,290	0.22%	20,583	0.26%
Insurance and bonds	100,509	1.27%	116,434	1.48%
Professional services	26,272	0.33%	40,128	0.51%
Office building maintenance	27,990	0.35%	26,807	0.34%
Bad debts, net	18,600	0.24%	26,953	0.34%
Training, education and licenses	8,267	0.10%	1,661	0.02%
Safety program	30,048	0.38%	27,649	0.35%
Transportation expense	7,742	0.10%	8,965	0.11%
Miscellaneous	<u>24,421</u>	<u>0.31%</u>	<u>22,641</u>	<u>0.29%</u>
Total sewer administrative and general	<u>1,030,033</u>	<u>13.05%</u>	<u>1,051,725</u>	<u>13.40%</u>
Total sewerage operating expense other than depreciation	<u>\$2,467,884</u>	<u>31.27%</u>	<u>\$2,505,236</u>	<u>31.91%</u>

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENT  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
SCHEDULE OF EXPENDITURE OF FEDERAL AWARDS**

For the year ended June 30, 2004

<u>Federal Grantor/ Pass-through Grantor/ Program Title</u>	<u>Federal CFDA Number</u>	<u>Agency or Pass-through Number</u>	<u>Total Disbursements/ Expenditures</u>	<u>Adjustments</u>	<u>Federal Disbursements/ Expenditures</u>
<u>Loan</u>					
U.S. Environmental Protection Agency:					
DWSRF Pass-through from the State of Kentucky Infrastructure Authority*	66.468	LOAN-F02-04	\$ 489,583	\$ 292,300	\$ 781,883
CWSRF Pass-through from the State of Kentucky Infrastructure Authority*	66.458	LOAN-A03-05	2,532,549	417,557	2,950,106
Pass-through from the State of Kentucky Infrastructure Authority	66.458	LOAN-A04-05	178,741	(178,741)	-
<i>Total Federal Expenditures for the period.</i>					<u>\$ 3,731,989</u>

\*Denotes major program

**NOTE A - BASIS OF PRESENTATION**

This schedule of expenditures of federal awards includes the federal grant activity of Hopkinsville Water Environment Authority, a component unit of the City of Hopkinsville, Kentucky. This schedule is presented on the cash basis of accounting, due to the nature of the federal programs reported upon. The information in this schedule is presented in accordance with the requirements of OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations. Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of, the basic financial statements.





**& CO. – HOPKINSVILLE, LLP**

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LEONARD F. ADCKOCK, CPA  
JOHN M. DeANGELIS, CPA  
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**REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL  
REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN  
ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To the Members of the  
City of Hopkinsville Sewerage and  
Water Works Commission d/b/a  
Hopkinsville Water Environment Authority  
Hopkinsville, Kentucky

We have audited the financial statements of the Hopkinsville Water Environment Authority (HWEA) as of and for the year ended June 30, 2004, and have issued our report thereon dated November 24, 2004. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in **Government Auditing Standards**, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the HWEA's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide an opinion on the internal control over financial reporting. However, we noted certain matters involving the internal control over financial reporting and its operation that we consider to be reportable conditions. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgment, could adversely affect HWEA's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements. Reportable conditions are described in the accompanying schedule of findings and questioned costs as item 04-1.

A material weakness is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements caused by error or fraud in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, we do not believe the reportable condition described above is a material weakness.

## Compliance

As part of obtaining reasonable assurance about whether the HWEA's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under **Government Auditing Standards**.

This report is intended solely for the information and use of the audit committee, management, the members of the HWEA, and federal awarding agencies and pass-through entities, and is not intended to be and should not be used by anyone other than these specified parties.

*York, Neel & Co. - Hopkinsville, LLP*

Hopkinsville, Kentucky  
November 24, 2004



**& CO. – HOPKINSVILLE, LLP**

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**REPORT ON COMPLIANCE WITH REQUIREMENTS APPLICABLE TO EACH MAJOR  
PROGRAM AND INTERNAL CONTROL OVER COMPLIANCE IN ACCORDANCE  
WITH OMB CIRCULAR A-133**

To the Members of the  
City of Hopkinsville Sewerage and  
Water Works Commission d/b/a  
Hopkinsville Water Environment Authority  
Hopkinsville, Kentucky

**Compliance**

We have audited the compliance of the Hopkinsville Water Environment Authority (HWEA) with the types of compliance requirements described in the *U.S. Office of Management and Budget (OMB) Circular A-133 Compliance Supplement* that are applicable to each of its major federal programs for the year ended June 30, 2004. HWEA's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. Compliance with the requirements of laws, regulations, contracts and grants applicable to each of its major federal programs is the responsibility of HWEA's management. Our responsibility is to express an opinion on HWEA's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about HWEA's compliance with those requirements and performing such other procedures, as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination on HWEA's compliance with those requirements.

In our opinion, HWEA complied, in all material respects, with the requirements referred to above that are applicable to each of its major federal programs for the year ended June 30, 2004.

## Internal Control Over Compliance

The management of the Hopkinsville Water Environment Authority (HWEA) is responsible for establishing and maintaining effective internal control over compliance with requirements of laws, regulations, contracts and grants applicable to federal programs. In planning and performing our audit, we considered HWEA's internal control over compliance with requirements that could have a direct and material effect on a major federal program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with OMB Circular A-133.

Our consideration of the internal control over compliance would not necessarily disclose all matters in the internal control that might be material weaknesses. A material weakness is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that noncompliance with applicable requirements of laws, regulations, contracts and grants caused by error or fraud that would be material in relation to a major federal program being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over compliance and its operation that we consider to be material weaknesses.

This report is intended solely for the information of the audit committee, management, the members of the HWEA, and federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

*York, Neel + Co. - Hopkinsville, LLP*

Hopkinsville, Kentucky  
November 24, 2004

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
SCHEDULE OF FINDINGS AND QUESTIONED COSTS  
For the year ended June 30, 2004**

**A. Summary of Audit Results**

1. The auditor's report expresses an unqualified opinion on the financial statements of the Hopkinsville Water Environment Authority (HWEA).
2. One reportable condition was noted during the audit of the financial statements of the Hopkinsville Water Environment Authority (HWEA). This condition is not a material weakness.
3. No instances of noncompliance material to the financial statements of the Hopkinsville Water Environment Authority (HWEA) were disclosed during the audit.
4. No reportable conditions were disclosed during the audit of the major federal award program.
5. The auditor's report on compliance for the major federal award programs for the Hopkinsville Water Environment Authority (HWEA) expressed an unqualified opinion on all major federal programs.
6. The programs tested as major programs included Environmental Protection Agency as Passed Through the Kentucky Infrastructure Authority Drinking Water State Revolving Fund and Clean Water State Revolving Fund.
7. The threshold for distinguishing Types A and B programs was \$300,000.

**B. Findings - Financial Statements Audit**

**REPORTABLE CONDITIONS**

04-1. The internal control structure relating to certain receipts, disbursements and reporting is inadequate due to a lack of segregation, assignment and performance of certain monthly duties. Proper segregation, assignment and performance of duties are essential to an adequate internal control structure, the lack of which may permit errors or irregularities to go undetected.

**CORRECTIVE ACTION PLAN**

The HWEA has hired additional accounting personnel to provide the necessary manpower to perform duties not always completed on a monthly basis.

**C. Findings and Questioned Costs - Major Federal Award Program Audit**

*U.S. ENVIRONMENTAL PROTECTION AGENCY*  
Pass-through from Kentucky Infrastructure Authority  
Drinking Water State Revolving Fund  
Clean Water State Revolving Fund

None

**HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
WATER AND WASTEWATER DEPARTMENTS  
A COMPONENT UNIT OF THE CITY OF HOPKINSVILLE, KENTUCKY  
SCHEDULE OF FINDINGS AND QUESTIONED COSTS  
For the year ended June 30, 2004**

The Hopkinsville Water Environment Authority (HWEA) had no prior audit findings.





**BLACK & VEATCH**  
building a world of difference™

ENERGY WATER INFORMATION GOVERNMENT

June 8, 2005

Mr. Len Hale  
General Manager  
Hopkinsville Water Environment Authority  
401 E. 9<sup>th</sup> Street  
Hopkinsville, KY 42240

Dear Mr. Hale:

We are pleased to present our *Report on Revenue Requirements, Costs of Service and Rates for Water Service* for the Hopkinsville Water Environment Authority (HWEA). A summary of the report's principal findings and recommendations begins on page 3, following the Introduction to the report.

The report includes a review and evaluation of revenue and revenue requirements, and a capital improvements financing plan to meet the financial requirements of the HWEA Water Department through the year 2009. Costs of service studies were performed which indicate the adequacy of water rates to derive revenue from respective classes of customers in an equitable manner. Proposed schedules of water rates were developed to meet the HWEA Water Department's annual revenue requirements based on expected financial condition for the year 2006.

We appreciate the opportunity to be of service to the Hopkinsville Water Environment Authority in this matter.

Very truly yours,

BLACK & VEATCH CORPORATION

A handwritten signature in cursive script that reads "J. Rowe McKinley".

J. Rowe McKinley  
Director

A handwritten signature in cursive script that reads "Anna M. White".

Anna M. White  
Consultant

AMW



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In conducting our analyses and in forming an opinion of the projection of future operations summarized in this report, Black & Veatch has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodology utilized by Black & Veatch in performing the analysis follows generally accepted practices for such projections. Such assumptions and methodologies are summarized in this report and are reasonable and appropriate for the purpose for which they are used. While Black & Veatch believes the assumptions are reasonable and the projection methodology valid, actual results may differ materially from those projected, as influenced by the conditions, events, and circumstances that actually occur.

## Introduction

Revenue generated from the sale of water constitutes the principal source of funds available to the Water Department operations of the Hopkinsville Water Environment Authority (HWEA). Since the present schedule of annual rates became effective, the combined effects of changes in operations, continuing inflation on operating expenses and on costs of capital improvements, plus the need for additional improvements to the water system, have made existing charges inadequate to provide the level of water revenues required by the Water Department.

The driving force behind this rate study is the need to issue revenue bonds in the spring of 2005 in order to finance the planned raw water intake replacement project.

As a basis for making rate adjustments that are equitable to each class of service and that will provide the total level of revenue required, the Board engaged Black & Veatch Corporation to provide a comprehensive cost of service study and rate recommendation for the period fiscal years 2005 through 2009.

The HWEA provides water service to approximately 140,800 customers.

### Purpose

This report examines the projected revenue and rate requirements of the Water Department. The purpose of this report is (1) to project the future revenues of the Water Department under existing level of charges, as well as the operation expenses and capital financing requirements, and to examine the adequacy of projected revenues to meet these requirements through fiscal year 2009; (2) to allocate these revenue requirements, or costs of service, for a representative test year to the various customer classes in accordance with the respective service requirements that each class places on the system; and (3) to develop a suitable schedule of water rates that will produce revenues adequate to meet the financial needs of the Water Department on a basis that recognizes customer costs of service and local policy consideration.

### Scope

This report presents the results of a comprehensive study, conforming to the standards presented in the AWWA Manual M1, of the projected revenue requirements, costs of service allocations, and proposed rates for treated water service. Revenue and revenue requirements are projected for the five fiscal years through 2009, recognizing anticipated growth in number of

customers and water use throughout the service area. The study of revenue requirements recognizes projected operation and maintenance expense, capital improvement requirements met from revenues, principal and interest payments on outstanding and proposed bond issues, and reserve fund requirements. Requirements of existing revenue bond indentures are also recognized.

Costs of treated water service are developed for each group of customers and type of service based on consideration of utility revenue needs and projected customer service requirements. Rate adjustments are designed for retail and wholesale customers in accord with allocated costs of service and local policy considerations.

## Summary of Findings and Recommendations

The principal findings of the report are summarized as follows:

1. Projected water sales revenue under existing rates is insufficient to recover projected revenue requirements throughout the study period. Revenue requirements to be met from water sales revenue consist of operation and maintenance expense, payments to the Christian County Water District (CCWD), debt service on existing and proposed revenue bonds and Kentucky Infrastructure Authority (KIA) loans, and cash financing of capital projects.
2. To meet revenue requirements, increases in water sales revenue under existing rates are indicated as follows:

<u>Effective Date</u>	<u>Revenue Increase</u>
May 1, 2005	32%
July 1, 2006	0%
July 1, 2007	13%
July 1, 2008	13%
July 1, 2009	0%

The above increases will produce sufficient revenue to meet projected revenue requirements and planned major capital improvement projects.

3. Based on a detailed cost of service study for the test year 2006, a schedule of proposed water rates has been developed for retail water service. These and the existing rates are shown in Table A. Rates for CCWD and fire protection services have also been developed and are shown in Table A.



**Table A****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>			
	First 30 Ccf	1.77	2.09
	Next 30 Ccf	1.55	1.83
	Over 60 Ccf	1.12	1.32
<b>Pembroke</b>			
	First 3 Ccf	8.25	9.20
	Next 17 Ccf	1.54	2.05
	Next 20 Ccf	1.80	2.39
	Next 30 Ccf	1.40	1.86
	Next 30 Ccf	1.10	1.46
	Over 100 Ccf	0.99	1.31
<b>Crofton</b>			
	First 3 Ccf	10.18	11.61
	Over 3 Ccf	2.14	2.44
<b>Wholesale</b>			
	First 30 Ccf	2.30	2.72
	Next 30 Ccf	2.02	2.38
	Next 30 Ccf	1.46	1.72
	Over 90 Ccf	1.19	1.93
<b>Private Fire Protection - \$/year</b>			
	2"	85.53	44.40
	3"	123.54	44.40
	4"	199.57	94.62
	6"	361.13	274.85
	8"	522.69	585.71
	10"	798.28	1,053.31
	12"	1,140.40	1,701.39
<b>Public Fire Protection - \$/hydrant/year</b>			
	Hydrants	57.00	350.00

## Water Department Revenue

The principal source of revenue for the Water Department to meet annual costs of water service is from charges for service to customers in the City. Additional revenue is derived from fire protection fees, connection and service fees, interest income on investments of available funds and other miscellaneous sources.

### Customers Growth

Table 1 presents a summary of the historical and projected average number of treated water customers served by class. As indicated by this table, the number of retail customers is projected to increase slightly from 14,577 in 2005 to 14,697 in 2009. This is due primarily to the projected growth by the residential class within the City of Hopkinsville. HWEA also provides water service to one wholesale customer, Christian County Water District (CCWD), which is also shown in Table 1.

### Water Sales

Table 2 presents a summary of historical and projected water sales volume. Projected volumes are based on the recognition of historical usage quantities and trends. Also considered are projections of number of customers and recent trends in water usage per customer class, the latter based on analyses of historical and current rates of use per customer class. As noted in Table 2, projected water sales for 2005 are slightly lower than actual water sales experienced in 2004. Historical usage per customer declined over the past two years and it was projected that this trend would continue in 2005. Future water sales are projected to increase moderately to 2,390,147 hundred cubic feet (Ccf) by 2009 as a result of projected growth in the number of customers services and conservative estimates of future unit water usage by customer class.

### Revenue Under Existing Rates

The existing rate schedule is presented in Table 3. The existing schedule of rates for water service became effective on January 1, 2001. The rates for Hopkinsville residents currently consist of monthly minimum charges, which vary by meter size, and a declining-block system of volume charges. The minimum charges include a monthly volume allowance that varies by meter size. The rates for the community of Pembroke currently consist of a monthly minimum charge that includes a monthly volume allowance of 3 Ccf and a declining-block system of volume charges. The rates for the community of Crofton, currently consist of a

**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
<b>Wholesale</b>										
Wholesale	12	12	12	12	12	12	12	12	12	12
<b>Total</b>	<b>13,724</b>	<b>14,314</b>	<b>14,327</b>	<b>14,348</b>	<b>14,559</b>	<b>14,589</b>	<b>14,619</b>	<b>14,649</b>	<b>14,679</b>	<b>14,709</b>

(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
<b>Wholesale</b>										
	345,858	386,837	387,926	430,273	434,603	432,000	432,000	432,000	432,000	432,000
<b>Total</b>	<u>2,425,509</u>	<u>2,410,901</u>	<u>2,263,527</u>	<u>2,395,346</u>	<u>2,394,932</u>	<u>2,378,597</u>	<u>2,381,484</u>	<u>2,384,372</u>	<u>2,387,259</u>	<u>2,390,147</u>

(a) Excludes Gratis accounts.

Table 3

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

**Hopkinsville**

**Meter Minimum Rate - \$/month**

Meter Size	Rate	Usage Included 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

**Volume Charges - \$/Ccf**

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**

	City	County
First	3 Ccf	10.18
Over	3 Ccf	2.14
		11.83
		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**

Meter Size	Rate
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.

monthly minimum charge that includes a monthly volume allowance of 3 Ccf and a uniform volume charge for all usage over 3 Ccf. The HWEA entered into a contract agreement with CCWD in 1973 to provide wholesale water service. The rates for the CCWD currently consist of a declining-block system of volume charges. The existing wholesale rates became effective December 29, 2003.

A summary of historical and projected treated water sales under existing rates is presented in Table 4 for the period 2000 through 2009. The historical treated water revenues are developed from detailed records provided by the HWEA's staff. Revenue from treated water sales, under present rates, is projected to increase slightly from about \$3,561,100 in 2005 to about \$3,581,000 in 2009.

### **Other Revenue**

Historical and projected other Water Department revenue is presented in Table 5. For purposes of this report, all miscellaneous revenue except for private fire protection and interest income are projected to remain constant through the study period examined. Interest income derived from the investment of available funds is shown in Column 5 of Table 5. Projected interest income is based on average annual interest rates of 2 percent for short-term operation funds and 3 percent for longer-term funds. A more detailed discussion of interest earnings is presented in a subsequent section of this report.

**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





## Water Department Revenue Requirements

The revenue required to adequately provide for the continued operation of the HWEA Water Department must be sufficient to meet the cash requirements for system operation. Revenue requirements include: (1) system operation and maintenance expense; (2) payments to the CCWD; (3) debt service on existing and proposed revenue bonds and Kentucky Infrastructure Authority (KIA) loans; and (4) expenditures for capital improvements met from annual revenues. Projections of the cash requirements to meet these system expenditures for the five-year study period of 2005 through 2009 are developed in this section.

### Operation and Maintenance Expense

The elements of operation and maintenance expense for the Water Department include the annual expenses associated with supply; treatment; storage and distribution; meters and services; billing, collection and accounting; and administrative and general services.

Operation and maintenance expense includes the annual salaries and wages of personnel, costs for materials and supplies, fuel and electrical power costs, chemicals, and other costs such as employee benefits and insurance. Since these costs are an ongoing annual obligation of the utility, they are met from operating revenue as they are incurred. A summary of annual historical and projected operation and maintenance expenses for the period 2000 through 2009 is presented in Table 6.

Operating expense projections for the years 2005 through 2009 are based on budgeted 2005 expense amounts adjusted to recognize allowances for the combined effects of inflation, anticipated system growth, and projected increases to power costs associated with the planned raw water intake replacement project. Future Water Department operation and maintenance expenses are projected to increase from \$2,646,000 in 2005 to \$3,559,200 in 2009.

The Water Department is currently making payments to CCWD as reimbursement for over payment. The total amount of \$192,553.70 is being paid monthly at the rate of 16,044.48 per month beginning in December of 2004 and continues through November of 2005.

### Capital Improvement Program

Table 7 summarizes the proposed capital improvement program expenditures for the period 2005 through 2009. The five-year capital program is based on estimated improvement program scheduling and cost data supplied by the HWEA's staff and is estimated to total \$28,285,000.



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

Line No.	2005	2006	2007	2008	2009	Total
	\$	\$	\$	\$	\$	\$
1 Source of Supply	0	17,666,700	8,833,300	0	0	26,500,000
2 Small Distribution Mains	0	0	0	0	0	0
3 Large Distribution Mains	260,000	220,000	211,000	230,000	145,000	1,066,000
4 Pumping	0	110,000	0	0	0	110,000
5 Storage	130,000	0	165,000	0	0	295,000
6 Treatment Plant	0	0	0	0	0	0
7 Meters & Services	20,000	15,000	25,000	20,000	30,000	110,000
8 Hydrants	0	0	0	0	0	0
9 Administrative & General	15,000	15,000	15,000	15,000	0	60,000
10 Crofton Utility Division Improvements	0	36,000	36,000	36,000	36,000	144,000
11 Total	425,000	18,062,700	9,285,300	301,000	211,000	28,285,000

The program shown consists of supply, distribution, pumping, storage, meter and computer improvements. The planned raw water intake replacement project is estimated to cost \$26,500,000 and represents 94 percent of the total program. Construction is expected to start in the summer of 2005 and last for 18 months.

### **Capital Improvement Program Financing**

Table 8 presents the capital improvement financing plan, which summarizes the projected source and application of funds over the five-year period. This plan anticipates that proposed capital improvements will be financed from a combination of available funds on hand, bond sale proceeds, KIA loan proceeds, and annual operating revenues.

A 2005 beginning of year balance of \$100,000 in unencumbered capital funds is projected to be available to assist in the financing plan as shown on Line 1. A revenue bond issue in the amount of \$25,750,000 in 2005 is projected and shown on Line 2 of Table 8. The Water Department anticipates a KIA loan in 2006 in the amount of \$1,542,400.

Cash financing of capital improvements from annual revenues is expected to total \$1,880,000 for the study period as indicated on Line 4 of the table. Other potential sources of funds available to meet capital improvement expenditures include capital contributions and federal grants. As shown on Line 5, it is not anticipated that the Water Department will receive revenue from these sources during the study period.

The application of funds shows that \$28,285,000 in total capital improvement expenditures are projected over the planning period, as previously summarized in Table 7. Line 8 of Table 8 shows the debt issuance costs associated with projected bond issues. The estimated cost of a surety policy to satisfy assumed 2005 bond debt service reserve funding requirements is reflected on Line 9. Line 10 provides for the expected debt service reserve requirement associated with proposed debt. However, the reserve for the 2005 bond issue will be funded with a surety, and therefore there is no reserve associated with this proposed issue. There is a reserve associated with the Series 1993 Revenue Bonds which is currently being held in the Bond Reserve Sinking Fund that will be available once the last debt service payment is made in 2008. This is reflected on Line 10 of Table 8.

### **Debt Service Requirements**

Existing and proposed debt service payments are shown in Table 9. Existing revenue bond debt service requirements consist of principal and interest on the Water and Sewer Revenue Bonds, Series 1993, the Water and Sewer Revenue Bonds, Series 1996, and the Water and Sewer Refunding Revenue Bonds, Series 2002. The Water Department is responsible for

**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	<u>26,286,000</u>	<u>27,089,400</u>	<u>9,462,700</u>	<u>513,400</u>	<u>866,432</u>
<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	<u>1,175,000</u>	<u>18,062,700</u>	<u>9,285,300</u>	<u>(117,032)</u>	<u>211,000</u>
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**

Year	Existing Revenue Bonds \$	Proposed Revenue Bonds \$	Existing KIA Loans \$	Proposed KIA Loans \$	Total \$
<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

100 percent of the debt service on the Series 1993 Bonds, 100 percent of the Series 1996 Bonds, and approximately 30 percent of the Series 2002 Bonds. The estimated debt service on the proposed revenue bonds for the water supply project is shown in the second column of Table 9. The debt service assumes an average interest rate of 4.0 percent and a 20 year maturity schedule.

The Water Department also has two existing KIA loans for which it is currently paying debt service. Kentucky's Environmental and Public Protection Cabinet's Division of Water and Kentucky Infrastructure Authority, jointly through an interagency agreement, provide communities with funds from the Drinking Water State Revolving Fund (DWSRF) to comply with the requirements of the Safe Drinking Water Act. The DWSRF, also referred to as Fund F, is a 20-year loan program for planning, design and construction of drinking water infrastructure projects. As previously indicated, the issuance of a future revenue bond and KIA loan is anticipated to help finance major capital improvement projects. The proposed Series 2005A bonds are anticipated to be 20 year bonds with a May sale date. Debt repayment schedules on the 2005A bonds, which were provided by the HWEA's financial advisor, reflect deferred principal payments until October of 2006. Total actual existing and proposed debt service payments are expected to increase from \$1,227,900 in 2005 to \$2,354,700 in 2009 as shown in Table 9.

### **Recommended Revenue Adjustments**

Table 10 provides a flow of funds schedule comparing revenue under existing rates with projected revenue requirements. As indicated by the projected revenue increases shown in Lines 3 through 7, annual water sales revenues under existing rates are not sufficient to meet the total revenue requirements of the system. Line 1 of Table 10 shows projected revenue under existing rates, as previously presented in Table 4. Line 2 shows projected fire protection revenue for each year of the study period. Lines 3 through 7 show projected increases in water revenues assumed to be in effect for the number of months indicated for each fiscal year. The magnitude of the increase shown for each year was selected based on consideration of two principal criteria, which include: (1) total revenue necessary to meet cash requirements, and (2) total revenue required to provide a reasonable margin of coverage in excess of anticipated minimum bond coverage requirements.

Other operating and non-operating revenue available for the Water Department is expected to remain stable throughout the study period as indicated on Lines 10 and 11 of Table 10. Interest income available to the operating fund from restricted or reserve funds is shown on Line 12. This includes interest earnings on available balances in the Sinking Fund and

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
9	Total Service Charge Revenue			3,851,200	4,896,000	5,541,400
10	Other Operating Revenue			128,500	128,500	128,500
11	Other Non-Operating Revenue			140,200	140,200	140,200
12	Interest Income - Reserve Funds			79,900	93,400	95,000
13	Interest Income - Operations			1,600	0	0
14	Interest Income - Construction			128,800	366,900	104,300
15	Total Revenue			4,330,200	5,625,000	6,009,400
16	Operation and Maintenance Expense			2,646,000	2,725,800	3,084,400
17	Payments to CCWD			112,300	80,200	0
18	Net Revenue			1,571,900	2,819,000	2,925,000
	Debt Service					
19	Existing Revenue Bonds			756,000	768,100	793,200
20	Proposed Revenue Bonds (a)			256,300	1,437,600	1,564,200
21	Total Parity Debt			1,012,300	2,205,700	2,357,400
22	Existing KIA Loans			227,200	226,900	226,600
23	Proposed KIA Loans			0	89,100	89,100
24	Total Subordinate Debt			227,200	316,000	315,700
25	Total Debt Service			1,239,500	2,521,700	2,673,100
26	Cash Financing of Major Improvements			436,000	436,000	436,000
27	Net Annual Balance			(103,600)	(138,700)	(184,100)
28	Beginning of Year Balance (b)			267,500	163,900	25,200
29	End of Year Balance (b)			163,900	25,200	(158,900)

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

(b) Excludes operating reserve fund balances.



Depreciation Fund. Interest earnings on operating fund balances are shown on Line 13. Interest income is generally estimated based on a 2 percent annual interest rate applied to the average beginning and end of year fund balances. A slightly higher rate of 3 percent is expected to be earned on funds held in the proposed revenue bond reserve fund to reflect the ability to invest these funds for a longer term. Interest income from the construction fund balances is shown on Line 14. For purposes of revenue bond coverage requirements, this revenue is included in the calculation of net revenue. Projected total revenue from system operations is shown on Line 15 of Table 10.

Operation and maintenance expense, previously projected in Table 6, and payments to the CCWD are shown on Lines 16 and 17. Line 18 shows the estimated net revenue remaining after deducting projected operation and maintenance expense and payments to the CCWD from total revenue.

Debt service requirements on existing and projected revenue bonds are shown on Lines 19 through 21. As previously indicated it is projected that revenue bonds will be issued in May 2005 to help finance major capital program expenditures. Debt financing will also provide a mechanism to spread the costs of major capital improvements over a portion of their useful lives to more equitably recover these costs from both current and future users of the improvements. Debt service requirements on existing and proposed KIA loans are shown on Lines 22 through 24. Total projected debt service requirements are shown on Line 25 of Table 10.

Annual revenues used to cash finance a portion of the capital improvement program are shown on Line 26. The net annual balance of annual revenues less expenditures is presented on Line 27.

Lines 28 and 29 show the projected beginning and ending cash balances of the Water Department's operating fund for each year of the study period. Information regarding the unencumbered balance for the beginning of 2005 was provided by utility staff. The balances shown exclude the Sinking Fund and Depreciation Fund.

## **Coverage Requirements**

The covenants of the existing Series 2002 revenue bonds require the HWEA to maintain annual debt service coverage on parity bonds equal to or greater than 115 percent on a combined water and wastewater utility basis. For planning purposes, and to allow for possible fluctuations in revenue and operating expenses, such as may occur periodically due to climatic conditions and possible unexpected increases in costs of system operations, it is suggested that a future coverage level of at least 125 percent should be recognized for rate design purposes. Current year debt service coverage, the ratio of net revenue (adjusted to reflect a full year of revenue under the

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proposed revenue increase) to the maximum annual debt service, for each year of the study period for the Water Department is calculated and shown on Line 5 of Table 11. Under the proposed financing plan, the targeted level of 125 percent will be met for the Water Department beginning in 2007. It is anticipated that on a combined utility basis, the minimum requirement will be met in 2005 and the targeted level will be met in 2006.

In order to issue additional bonds on parity with existing senior lien bonds, HWEA must have sufficient revenues to provide the minimum level of debt service coverage specified in the covenants of the existing Series 2002 revenue bonds based on the operations for 12 consecutive months of the 18 months immediately preceding the issuance of the Proposed Bonds. The ratio of the preceding year actual net revenues (adjusted to reflect a full year of revenue under the proposed water system revenue increase) to the maximum annual debt service, is shown on Line 10 of Table 11 for the Water Department. The projected coverage on a combined basis is shown on Line 15. Under the proposed financing plan, the minimum parity bond debt service coverage requirement of 130 percent and the targeted level of 135 percent will be met on a combined utility basis.

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	Preceding Year Projected Net Revenues	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	Preceding Year Projected Net Revenues	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.

## Water Department Cost Allocations

Cost of service allocations provide a means of determining the proportionate responsibility of each customer class for the service provided. Cost responsibilities are based upon allocations of various elements of costs of service according to the relative service requirements of respective customer classes. Factors considered in determining service requirements include the volume of water used, peak rates of demand, the number and size of services to customers, and other relevant factors.

### Costs of Service to be Allocated

The cost of service to be allocated to the various customer classes consists of the total revenue requirements less income received from other sources. For allocation purposes, this cost of service is expressed as an annual requirement for a specific test year. For purposes of this study, the fiscal year ending June 30, 2006 has been selected as generally typical of conditions anticipated during the study period with annual costs of service to be allocated totaling \$4,896,000.

As shown in Table 12, the test year costs are separated into operating expenses and capital costs. Operating expenses consist of operation and maintenance expenses and payments to the CCWD. Capital costs include debt service on existing and proposed bonds and loans and cash financing of capital improvement projects. Net operating expenses for the test year total \$2,584,800, and net capital costs total \$2,311,200.

### Functional Cost Components

The various cost elements of water service are assigned to functional cost components as the first step in the subsequent distribution of the costs of service to customer classes. The principal functional cost components consist of base costs, extra capacity costs, and customer costs.

Base costs are those which vary directly with the quantity of water used, as well as those costs associated with serving customers under average load conditions without the elements necessary to meet water use variations or peak demands. Base costs include purchased power and treatment chemicals, and other operating and capital costs of the water system associated with serving customers to the extent required for a constant, or average annual rate of use.

Extra capacity costs represent those operating costs incurred due to demands in excess of average, and capital related costs for additional plant and system capacity beyond that required for the average rate of use. Total extra capacity costs are subdivided into costs associated with

Table 12

**HWEA  
Cost of Service  
Test Year 2006**

Line No.	Operating Expense	Capital Cost	Total
	\$	\$	\$
<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	<b>Total</b>	<b>2,806,000</b>	<b>2,957,700</b>
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	460,300
9	Change in Funds Available	67,500	138,700
10	Full Year Rate Adjustment	0	0
11	<b>Total</b>	<b>221,200</b>	<b>867,700</b>
12	Net Costs to be Met from Charges	2,584,800	4,896,000

maximum day and maximum hour demand.

Customer costs are defined as costs which tend to vary in proportion to the number of customers connected to the system. These include meter reading, billing, collection and accounting costs, and maintenance and capital charges associated with meters and services.

The separation of costs of service into these principal categories provides the means of further allocating such costs to the various customer classes based on the respective base, extra capacity, and customer service requirements of each customer class.

Wholesale customers generally do not use smaller water distribution mains as do retail users. Therefore, separate functional cost of service categories are designated for costs which are common to all customer classes and those which are common to retail service classes only.

### **Allocation to Cost Components**

The Water Department is comprised of a variety of service facilities, each designed and operated to fulfill a given function. In order to provide adequate service to its customers at all times, the utility must be capable of not only providing the total amount of water used, but also supplying water at maximum rates of demand.

Since all customers do not exert their maximum demand for water at the same time, capacities of water facilities are designed to meet the peak coincidental demands that all classes of customers, as a whole, place on the system. For every water service facility on the system, there is an underlying average demand, or uniform rate of usage exerted by the customers for which the base cost component applies. For those facilities designed solely to meet average day demand, costs are allocated 100 percent to the base cost component. Extra capacity requirements associated with coincidental demands in excess of average use are further related to maximum daily and maximum hourly demands.

Analysis of historical system maximum day demands to average day demands results in appropriate ratios for the allocation of capital costs and operating expenses to base and extra capacity cost components. A maximum day to average day ratio of 1.3 is used based on experienced demands in the water system. This indicates that approximately 76.9 percent of the capacity of facilities designed and operated to meet maximum day demand is required for average or base use. Accordingly, the remaining 23.1 percent is required for maximum day extra capacity requirements.

The costs associated with facilities required to meet maximum hour demand are allocable to base, maximum day extra capacity, and maximum hour extra capacity. A ratio of maximum hour to annual average day water use of 2.0 is used, based on demands experienced by the system. This ratio indicates that 50.0 percent of the capacity of facilities designed and operated for maximum hour demand is needed for average or base use, while 15.0 percent is utilized for

maximum day extra capacity uses, and the remaining 35.0 percent is required to meet maximum hour extra capacity demand in excess of maximum day needs.

### **Allocation of Annual Capital Costs**

As a portion of total costs of service, annual capital costs include debt service requirements and revenue financed capital improvements. Before customer responsibility can be determined for this cost, investment in plant facilities must be allocated to the functional cost components. Based on these distributions, total annual capital costs are allocated to the functional cost components.

The estimated test year net plant investment in water facilities consists of net plant in service as of June 30, 2004, the 2004 construction work in progress, and the estimated cost of proposed capital improvements expected to be in service by the end of calendar year 2006. Table 13 shows the allocation of the water utility's total estimated plant value less contributions on an original cost less depreciation value basis. Total plant investment is estimated to be \$22,732,800 as indicated by Line 10 of the table.

Plant investment is allocated to cost components on a design basis recognizing the principal function governing the design of the facility. The CCWD is allocated 20 percent of investment associated with source of supply, large distribution mains, pumping, storage, and treatment plant based on their contract capacity of 2 million gallons per day (mgd) and a plant capacity of 10 mgd. The CCWD is not allocated any portion of plant investment associated with small distribution mains since they own and maintain their own water distribution system. Projected test year net capital costs, totaling \$2,311,200, are assigned to the functional cost components on the basis of the allocation of plant investment, and are shown on Line 11 of Table 11. The test year net capital costs include \$36,000 associated with capital improvements directly related to Crofton.

### **Allocation of Operating Expenses**

Table 14 presents the allocation of operation and maintenance expense to functional cost components. Total test year operation and maintenance expense, as shown on Line 14 of this table, amounts to \$2,725,800. However, the addition of the payments to CCWD less the availability of other revenues to meet a portion of these expenditures reduces the level of operation and maintenance expense to be recovered to \$2,584,800 as shown on Line 17. Operating expenses are allocated to functional cost components in generally the same manner as plant investment. The allocation of operating expenses to CCWD was based on their contract and excludes expenses associated with small mains. Source of supply, purification, and large mains were allocated to the CCWD on the basis of projected water usage for the test year.

**Table 13**  
**HWEA**  
**Allocation of Net Plant Investments**  
**To Functional Cost Components**  
**Test Year 2006**

Line No.	Description	Net Plant Investment \$	Retail				Direct Fire Protection			Wholesale			
			Base \$	Extra Capacity Maximum Day \$	Meter Reading & Billing \$	Meters & Services \$	Public \$	Private \$	Crofton Direct \$	Base \$	Maximum Day \$	Extra Capacity Maximum Hour \$	
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				843,100	252,900	590,200		
3	Large Distribution Mains	8,431,100	3,372,500	1,011,800	2,360,600				43,700	13,100	106,200		
4	Pumping	284,000	174,700	52,500					151,700	45,500			
5	Storage	1,516,900	606,800	182,000	424,700				1,379,800	414,500			
6	Treatment Plant	8,971,300	5,519,100	1,657,900									
7	Meters & Services	1,466,600			1,466,600								
8	Hydrants	386,200				386,200							
9	Administrative & General	879,900	397,900	113,700	0	57,600	0	0	111,400	33,500	31,100		
10	Total	22,732,800	10,525,100	3,160,100	3,008,500	1,524,200	401,400	0	2,604,100	781,900	727,500		
11	Capital Costs from Rates	2,311,200	1,053,400	316,300	301,100	152,500	40,200	0	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	357,300	287,500							69,800							
2	Chemicals	216,600	139,400	29,000						33,900					14,300		
3	Power	483,100	298,900	74,600						72,600					37,000		
4	All Other																
	Distribution	2,200	1,100	300	800					5,900					3,000		2,600
5	Small Mains	60,100	24,200	6,000	18,400												
6	Large Mains	4,100									4,100						
7	Hydrants	58,400															
8	Meters and Services	351,600	120,000	36,000	84,000	0	58,400			42,600					8,700		20,200
9	All Other (a)																
10	Technical Services (b)	98,700	36,700	9,600	11,200	5,300	19,100			1,900					4,000		2,100
	Admin. & General	44,900					44,900										
11	Meter Reading & Collection	29,600					29,600										
12	Postage	1,011,500	375,100	98,100	115,200		54,100			19,700					41,200		21,600
13	All Other (b)	2,725,800	1,289,100	253,600	229,600		133,900			36,900					108,200		46,500
14	Total Operating Expenses	80,200	37,800	7,500	6,800	0	3,900			1,100					3,200		1,400
15	Payments to CCWD	221,200	104,600	20,600	18,600		10,900			3,000					8,800		3,800
16	Less Expenses Met from Other Sources	2,584,800	1,222,300	240,500	217,800		126,900			35,000					102,600		44,100
17	Total Operating Expenses																

(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.

## Distribution of Costs to Customer Classes

As a basis for determining the cost of water service to each customer class, the elements of cost of service previously allocated to functional cost components are distributed among the classes in proportion to their respective service requirements. Estimates of these requirements, or units of service, reflect the average number of accounts with recognition to relative meter sizes serving each account, annual water sales, and estimated peak water demands placed on the system by each customer class. Analysis of resulting costs of service to each class and comparison of allocated costs with revenues under existing rates provide a basis for future water rate adjustments.

## Customer Classification

Customer classes consist of Hopkinsville, Crofton, Pembroke, Wholesale, Public Fire Protection, and Private Fire Protection. The wholesale customer is Christian County Water District which owns and maintains its own water distribution system and does not rely on HWEA's distribution system.

## Units of Service

The cost of service responsibility for base costs varies with the volume of water requirements and may be distributed to customer classes on that basis. Extra capacity costs are those costs associated with meeting peak rates of water use, and are distributed to customer classes on the basis of their respective system capacity requirements in excess of average requirement rates. Customer costs, which consist of meter related costs, billing, collection and accounting costs, are allocated on the basis of the number of equivalent meters and monthly bills.

The estimated units of service for the various customer classifications are shown in Table 15. Estimates of test year annual water requirements, shown in Column 1, are based on the projections of total water sales previously developed in this report. Average daily use of all water sales is presented in Column 2. Columns 3 through 8 of Table 15 show the estimated maximum day and maximum hour capacity factors for each customer class, the resulting demands, and extra capacity requirements, respectively.

Customer related meter and service costs are allocated on the basis of the number of equivalent 5/8-inch meters serving each customer class. The number of equivalent meters in each customer class (Column 9) is estimated by relating typical costs for meters and services larger than 5/8-inch in size to the typical cost of a 5/8-inch meter and its related service line. Customer meter reading and billing costs are distributed to classes on the basis of the number of

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

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

bills for each customer class in Column 10.

Extra capacity requirements for fire protection service recognize, in part, peak fire flow requirements, and system capabilities established by the Insurance Service Office. Fire protection costs are allocated to public and private fire protection classifications based on the number and relative capacities of hydrants and private fire protection connections connected to the water system. In Table 15, the units of service for public and private fire protection are expressed as equivalent 6-inch hydrants and are shown in Columns 11 and 12.

### **Customer Class Costs of Service**

Unit costs of service are developed by dividing the total cost allocated to each functional cost component by the total applicable units of service. The customer class responsibility for service is obtained by applying unit costs of service to the number of units for which the customer class is responsible.

Table 16 shows the development of the unit costs of service applicable to each cost function. Lines 1 through 8 summarize the units of service developed in Table 15. Total allocated costs or investment shown on Lines 9 and 11 were previously developed in Tables 14 and 13, respectively. Unit costs of service for each component are determined simply by dividing the allocated cost or investment by the total units of service.

The unit costs of service are applied to customer class units of service to develop the class responsibility for each component and for total costs of service.

The costs of service allocated to customer classes are summarized in Table 17. Total costs of service for each class are based on unit costs of service from Table 16 and units of service from Table 15.

Table 18 shows allocated cost of service by customer class, revenue under existing rates, and the additional revenue required from each class. Indicated retail revenue adjustments range from an approximate 13.4 percent increase for Crofton to an approximate 22.5 percent increase for Pembroke, with an indicated overall system revenue increase of 32 percent.

**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	Maximum Day	Maximum Hour	Meter Reading & Billing	Meters & Services	Public Hydrants	Private Hydrants	Crofton Direct	Base	Maximum Day	Maximum Hour	Wholesale	Maximum Day	Maximum Hour	Crofton Direct	Base	Maximum Day	Maximum Hour	Wholesale	Maximum Day
		\$	Ccf	Ccf/day	Bills	Equiv. Meters	Hydrants	Hydrants	Ccf	Ccf	Ccf/day	Ccf/day	Ccf	Ccf	Ccf/day	Ccf/day	Ccf	Ccf	Ccf/day	Ccf/day	Ccf/day	Ccf/day	Ccf/day
<b>Units of Service</b>																							
1	Hopkinsville		1,706,200	2,338	164,724	14,454																	
2	Crofton		44,000	109	6,912	576			44,000														
3	Pembroke		28,800	71	3,348	279	1,061																
4	Public Fire Protection			304	3,346			338															
5	Private Fire Protection			97	1,066			338															
6	Total Retail		1,779,000	7,397	174,984	15,309	1,061	338	44,000	432,000	432,000	1,480	432,000	1,480	1,066								
7	Wholesale		1,779,000	2,989	174,984	15,309	1,061	338	44,000	432,000	432,000	1,480	432,000	1,480	1,066								
8	Total																						
<b>Costs of Service</b>																							
9	Net Operating Expense		2,584,800	240,500	126,900	299,700	35,000	0															
10	Total Cost - \$		1,222,300	217,800	0.72521	19,57659	32,98775	0.00000															
	Unit Cost - \$/unit		0.68707	80.46169	0.72521	0.00000	0.00000	0.00000															
<b>Capital Costs</b>																							
11	Total Cost - \$		2,311,200	316,300	0	152,500	40,200	0															
12	Unit Cost - \$/unit		0.59213	105.82134	0.00000	9.96140	37.88878	0.00000															
13	Total Unit Cost of Service		1.27920	186.28304	0.72521	29.53799	70.87653	0.00000	0.81818	1.28819	122.22973	109.66229	0.81818	1.28819	122.22973	109.66229	0.81818	1.28819	122.22973	109.66229	0.81818	1.28819	122.22973
<b>Total Cost of Service</b>																							
14	Retail - \$		4,041,700	556,800	126,900	452,200	75,200	0	36,000	556,500	556,500	180,900	556,500	180,900	116,900								
15	Wholesale - \$		854,300	0	0	0	0	0	0	0	0	0	0	0	0								
16	Total		4,896,000	556,800	126,900	452,200	75,200	0	36,000	556,500	556,500	180,900	556,500	180,900	116,900								



**Table 18**

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

Line No.	(1)	(2)	(3)
	Allocated Cost of Service	Revenue Under Existing Rates	Indicated Revenue Adjustment
	\$	\$	
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	92,900	87,000	6.8%
7 Total	4,896,000	3,709,100	32.0%

## Water Department Rate Adjustment

The principal consideration in establishing water rate schedules is to establish rates to customers reasonably commensurate with the cost of providing water service. Theoretically, the only method of assessing entirely equitable rates for water service would be the determination of each customer's bill based upon his particular service requirements. Since this is impractical, schedules of rates are normally designed to meet average conditions for groups of customers having similar service requirements. Rates should be reasonably simple in application and subject to as few misinterpretations as possible.

The revenue requirements and cost of service allocations described in this report provide the basis for adjusting water rates. The revenue requirements section shows the need for adjustment and the level of revenue required. The allocations section provides the unit costs of service used in the rate design process and gives a basis for determining whether resultant rates will develop revenues which recover costs of service from customer classes in proportion to service required and provide the total level of revenue required.

### Existing Water Rate Structure

The existing schedule of rates for water service, shown in Table 3, became effective on January 1, 2001. The rates for Hopkinsville residents currently consist of monthly minimum charges, which vary by meter size, and a declining-block system of volume charges. The minimum charges include a monthly volume allowance that varies by meter size. The rates for the community of Pembroke currently consist of a monthly minimum charge that includes a monthly volume allowance of 3 Ccf and a declining-block system of volume charges. The rates for the community of Crofton, currently consist of a monthly minimum charge that includes a monthly volume allowance of 3 Ccf and a uniform volume charge for all usage over 3 Ccf. The HWEA entered into a contract agreement with CCWD in 1973 to provide wholesale water service. The rates for the CCWD currently consist of a declining-block system of volume charges. The existing wholesale rates became effective December 29, 2003.

### Proposed Water Rate Structure

The cost of service studies described in preceding sections of this report provide a basis for the design of a schedule of water rates to meet those costs. In order to recognize the significantly different characteristics of typical requirements for retail, wholesale, and fire protection, separate forms of charge are appropriate for each of these respective types of services.

As previously indicated in Table 10, increased water sales revenues shown for test year



2006 are projected to be recovered under an adjusted rate schedule assumed to be fully effective by May 1, 2005. Total water sales revenues projected under these rates would exceed revenues recoverable under existing rates by 32 percent.

In developing proposed schedules of water rates, it must be recognized that the cost of service studies are the result of engineering estimates, based to some extent upon judgment and experience, and detailed results should not be used as literal and exact answers but as guides to the necessity for and nature of rate adjustments. Judgment must enter into the final choice of rates, and factors such as previous rate levels, economic impact on customers, public reaction to the magnitude of changes, and local practice in the past are commonly recognized in making rate adjustments. It is emphasized that all factors beyond cost of service considerations are strictly a matter of local policy.

Considerations recognized in the derivation of the proposed schedules of water rates subsequently presented herein, were developed based on discussions with HWEA staff. These considerations include the indicated desire to: (1) develop rate modifications so that the total revenues recovered from water charges will be adequate to recover the total test year revenue requirements; (2) recover revenues from each class of water customer approximately equal to the allocated costs of providing service; and (3) adhere as closely as possible to cost of service rates for all inside and outside City water service customers, including fire protection. In attempting to meet these policy criteria, proposed schedules of rates for water services are presented and discussed in the following paragraphs.

### **General Service**

The existing schedule of rates for general water service for Hopkinsville, Pembroke, and Crofton generally include charges based on the quantity of water used, with a minimum charge. This form of rate is common among water utilities and can be designed to recover revenue from system customers reasonably commensurate with the cost of service. For the development of the proposed rates it is assumed that the format of the existing retail water rate structure will be retained.

Schedules of proposed retail water rates, designed to recover test year 2006 revenue requirements generally in accordance with the preceding cost allocation and other practical considerations, are shown in Table 19, compared with the schedule of existing rates. These rates were unanimously approved by the City Council on May 3, 2005.

### **Wholesale**

As part of the cost of service study, rates were developed for CCWD. In determining

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>			
First 30 Ccf		1.77	2.09
Next 30 Ccf		1.55	1.83
Over 60 Ccf		1.12	1.32
<b>Pembroke</b>			
First 3 Ccf		8.25	9.20
Next 17 Ccf		1.54	2.05
Next 20 Ccf		1.80	2.39
Next 30 Ccf		1.40	1.86
Next 30 Ccf		1.10	1.46
Over 100 Ccf		0.99	1.31
<b>Crofton</b>			
First 3 Ccf		10.18	11.61
Over 3 Ccf		2.14	2.44
<b>Wholesale</b>			
First 30 Ccf		2.30	2.72
Next 30 Ccf		2.02	2.38
Next 30 Ccf		1.46	1.72
Over 90 Ccf		1.19	1.93
<b>Private Fire Protection - \$/year</b>			
2"		85.53	44.40
3"		123.54	44.40
4"		199.57	94.62
6"		361.13	274.85
8"		522.69	585.71
10"		798.28	1,053.31
12"		1,140.40	1,701.39
<b>Public Fire Protection - \$/hydrant/year</b>			
Hydrants		57.00	350.00

these rates, the existing service agreement was utilized as guidance as well as the projected average annual consumption, peak day demand and customer data for the CCWD. The resulting rate schedule recognizes the existing contract modification agreement dated June 19, 1996 which specifies that the rates charged by HWEA to the County for the first three consumption blocks will be based upon an index of 1.3 times the applicable City rates. An additional rate block for the County currently exists, which is not tied to the City rates. This block is used to recover the remaining cost of service not recovered under the first three blocks. Table 19 presents the cost of service based volume charge rates applicable to CCWD for test year 2006 which were approved by the City Council on May 3, 2005.

### **Fire Protection Service**

Recovery of public fire protection costs are currently provided by an annual charge per hydrant to the City of Hopkinsville. Recovery of private fire protection costs are currently provided by an annual charge related to the size of the service. For the development of the proposed rates it is assumed that the format of the existing fire protection service rate structure will be retained. The schedule of proposed fire protection service charges for test year 2006, as approved by City Council on May 3, 2005, are shown in Table 19.

### **Adequacy of Proposed Rates**

A comparison of estimated test year revenue under the proposed rates with allocated costs of service for each of the customer classes is shown in Table 20. This comparison indicates the proposed rates will recover revenues from customer groups reasonably commensurate with the cost of service and practical considerations previously noted.

### **Typical Bills**

Table 21 presents a comparison of typical water service bills under existing and proposed rates for various volumes of usage and meter sizes. As indicated by Table 21, the water bill for a typical Hopkinsville customer, using 5 Ccf per month through a 5/8-inch water meter, would increase about 18 percent under the proposed rates, significantly less than the overall average revenue increase for the water system.

Table 20

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

Line No.		Revenue Under Proposed Rates	Allocated Cost of Service	Revenue As A Percent of Cost of Service
		\$	\$	
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	92,800	92,900	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 Ccf	Existing Rates \$	Proposed Rates \$	Increase \$	Percent Increase %
<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