

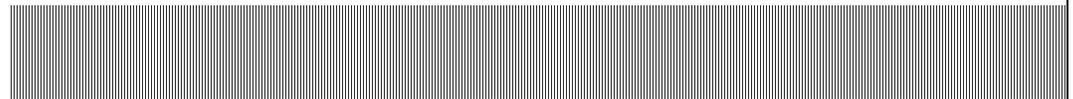


Lake Havasu City

2330 McCulloch Blvd. N • Lake Havasu City, AZ 86403

2008 Water Rate and Fee Study

May 2009



Report Prepared By:



100 Fillmore St.
Suite 200
Denver, CO 80206
303-316-6500

4944014

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- C. Proposed FY 2009-10 Rate Structure and Bill Changes
- D. Water System Assets by Function

1. Executive Summary

1.1. Introduction

Lake Havasu City (City) retained Red Oak Consulting (Red Oak) to complete a Water Rate and Fee Study (Study).

This section summarizes the Study findings and recommendations. The financial plan starts in FY 2008-09 and is projected through FY 2018-19. For accounting and reporting purposes the City uses a FY ending June 30. Water rates developed for FY 2009-10 are anticipated to be effective August 1, 2009 and additional IDD property tax revenue is anticipated to be phased in over a three year period, starting in FY 2009-10.

The City's Water Fund proposed and projected future revenue increases are necessary to fully fund operating and capital expenditures and maintain a financially viable water utility. For this Study, the Water Fund was further "divided" into "subfunds", established to separate and measure the financial performance of the respective water operations (non-growth) subfund and development fee (or growth-related capital) subfund.

1.2. Findings

The balance of this report, including the appendices, contains supporting discussion and schedules regarding the key findings listed below.

In FY 2009-10, a water rate revenue increase of 9% is required in combination with an IDD property tax levy increase of \$56.00 from \$100.74 per acre to \$156.74 per acre to fully fund the operating and capital expenditures of the Water Fund. The projected property taxes from the IDD for future years anticipate phased increases to the IDD property tax levy to \$268.85 by FY 2011-12. Without the anticipated phased increase to the IDD property tax levy, additional rate revenue increases will likely be required. The increases to rate revenues and IDD property tax levy are necessary to fully fund Water Fund operating and capital expenditures while:

1. Maintaining cash balances or reserves greater than 20% (70 days) of annual cash operation and maintenance (O&M) costs. This requirement is a covenant of the 2007 Water Infrastructure Finance Authority (WIFA) loan.
2. Achieving a minimum of 1.20 times annual debt service or debt service coverage (DSC) ratio on existing and projected annual debt service. Attainment of this ratio provides some assurance that current period revenues will be sufficient to repay projected debt and is required by the WIFA and/or other bond holders.

Future rate revenue increases are summarized in Table 1-1. Red Oak recommends the City evaluate the need for rate revenue increases periodically as part of the budget process and based on updated operating and capital expenditure requirements.

User rates for FY 2009-10 will be effective August 1, 2009. Table 1-1 summarizes projected rate revenue increases required in future years.

**Table 1-1.
Projected Water Rate Revenue Increases**

<u>Fiscal Year</u>	<u>Increase (1)</u>	<u>Fiscal Year</u>	<u>Increase (1)</u>
2009-10	9%	2014-15	4%
2010-11	8%	2015-16	4%
2011-12	7%	2016-17	3%
2012-13	6%	2017-18	1%
2013-14	5%	2018-19	0%
(1) Percent assumes rates in effect for entire FY. FY 2009-10 increases effective August 1, 2009. Subsequent increases effective April 1 (e.g., FY 2010-11 increases effective April 1, 2011).			

Table 1-2 summarizes the proposed phased increase to the IDD property levy over the three year period of FY 2009-10 through FY 2011-12.

**Table 1-2.
Phased Increase to IDD Property Tax Levy**

<u>Fiscal Year</u>	<u>Levy Per Acre</u>	<u>Levy per ½ Acre</u>
2008-09	\$100.74	\$50.37
2009-10	156.74	78.37
2010-11	212.75	106.38
2011-12	268.85	134.43

Table 1-3 summarizes the proposed increase to the base charge. The base charge is assessed monthly to all customers based on water meter size. Table 1-4 summarizes the proposed water volume rate structures (water allocations and unit prices) necessary to generate the additional revenue required. Tiered water allocations are specific to each customer classification. Additionally, non-residential and irrigation-only customer classifications have three tiered rate structure where tier 1 (indoor, sanitary purposes) is not available. The proposed base charge and volume rates and structure are anticipated to be effective by August 1, 2009.

Table 1-3.
Existing and Proposed FY 2009-10 Monthly Base Charge By Meter Size

<u>Meter Size (inches)</u>	<u>Current</u>	<u>Proposed</u>	<u>Difference</u>
¾	\$4.50	\$5.16	\$0.66
1	6.50	8.17	1.67
1 ½	9.50	16.69	7.19
2	12.50	28.17	15.67
3	39.50	52.66	13.16
4	50.50	97.09	46.59
6	76.50	198.95	122.45
8	104.50	283.91	179.41

**Table 1-4.
Existing and Proposed FY 2009-10 Volume Rate Structure**

<u>Customer Class</u>	<u>Current</u>		<u>Proposed</u>		<u>Change</u>
	<u>Block</u>	<u>Rate per ccf</u>	<u>Block</u>	<u>Rate per ccf</u>	
Single Family Residential	0-1,500	\$1.48	0-1,300	\$1.35	(\$0.13)
	1,501-3,000	1.62	1,301-2,500	1.76	0.12
	3,001-13,000	1.80	2,501-5,000	2.16	0.36
	> 13,000	1.96	> 5,000	2.70	0.64
Multi-Family Residential	0-1,500	\$1.48	0-2,600	\$1.35	(\$0.13)
	1,501-3,000	1.62	2,601-55,000	1.76	0.12
	3,001-13,000	1.80	55,001-200,000	2.16	0.36
	> 13,000	1.96	> 200,000	2.70	0.64
Commercial/ Industrial	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	0-31,500	1.76	0.12
	3,001-13,000	1.80	31,501-340,000	2.16	0.36
	> 13,000	1.96	> 340,000	2.70	0.64
Irrigation – Single Family Residential	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	0-1,200	1.76	0.12
	3,001-13,000	1.80	1,201-3,700	2.16	0.36
	> 13,000	1.96	> 3,700	2.70	0.64
Irrigation – Non Single Family Residential	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	0-16,000	1.76	0.12
	3,001-13,000	1.80	16,001-89,000	2.16	0.36
	> 13,000	1.96	> 89,000	2.70	0.64
Hydrant	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	N/A	1.76	0.12
	3,001-13,000	1.80	N/A	2.16	0.36
	> 13,000	1.96	All	2.70	0.64
RV Park	0-1,500	\$1.48	0-39,000	\$1.35	(\$0.13)
	1,501-3,000	1.62	39,001-86,000	1.76	0.12
	3,001-13,000	1.80	86,001-150,000	2.16	0.36
	> 13,000	1.96	> 150,000	2.70	0.64

2. Introduction

2.1. Overview and Purpose

Lake Havasu City (City) retained Red Oak Consulting (Red Oak) to complete a Water Rate and Fee Study (Study). The purpose of the Study was to develop a financial plan and rate and fee structure to promote self-sustainability of the City's water operations, and to recommend rates for service consistent with the financial plan requirements and in line with the City's pricing objectives.

As part of the Study, Red Oak assisted the City to:

- Develop an eleven year water enterprise financial plan
 - Evaluate alternative capital improvement and capital funding scenarios
 - Evaluate creation of water system and water resource development fees inside the IDD as an additional revenue source funding growth-related capital improvements.
 - City Council did not adopt water system or water resource development fees inside the IDD.
- Complete a cost-of-service analysis for fiscal year (FY) 2009-10
- Develop three alternative water rate structures to fund water rate revenue requirements.
 - Evaluate two alternative increases to the Irrigation and Drainage District (IDD) property tax revenue to reduce the magnitude of water rate increases.
- Develop and deliver a financial planning, cost-of-service, and rate design model and user manual.

Components of this project include:

- Identify and project costs associated with the operation of the City's water system.
- Analyze the existing rate structure for appropriateness and sufficiency of revenue generated.
- Develop a multi-year financial plan based on information gathered in the course of the study.
- Determine the system's ability to support debt required for planned capital projects.
- Complete a cost-of-service analysis for FY 2009-10 test year.

- Develop alternative rates for the next three fiscal years, 2009-10 through 2011-12 that Council can consider to adopt.

2.2. Report Organization

Our report to the City contains seven sections as follows:

- Section 1 – Executive Summary
- Section 2 – Introduction
- Section 3 – Utility Accounts and Use
- Section 4 – Financial Plan
- Section 5 – Cost-of-Service
- Section 6 – Proposed FY 2009-10 Rates for Service

The report contains four appendices including the complete financial plan and revenue projections (Appendix A), cost-of-service analysis (Appendix B), proposed water rate structure and bill impact illustrations (Appendix C), and water system fixed assets by functional cost (Appendix D).

2.3. Acknowledgements

On behalf of the project team, we would like to acknowledge the commitment and contributions provided by several members of City Finance and Public Works Departments in completing this project. In particular we would like to recognize Ms. Gayle Whittle, Finance Director and Mr. Mark Clark, Public Works Director, for their input and guidance throughout the course of this study.

2.4. Reliance on City Provided Data

During the course of this project, the City (and/or its representatives) provided Red Oak with a variety of technical information, including cost and revenue data. Red Oak did not independently assess or test for the accuracy of such data – historic or projected. We have relied on this data in the formulation of our findings and subsequent recommendations, as well as in the preparation of this report.

As is often the case, there will be differences between actual and projected data, and some of the assumptions used in this report will not be realized, and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the data or results projected in this report and actual results achieved and those differences may be material. As such, we take no responsibility for the accuracy of data or projections provided by or prepared on behalf of the City, nor do we have any responsibility for updating this report for events occurring after the date of this report.

3. Utility Accounts and Use

3.1. Water Accounts and Use

The City currently serves approximately 29,000 water customers inside and outside the IDD and these accounts are divided into the following seven customer classes:

- Single family residential
- Multi family
- Commercial / Industrial
- Single family residential irrigation-only
- Non-single family residential irrigation-only
- RV park
- Hydrant

Table 3-1 summarizes 2008 bills and annual water use for each customer class. While the non-residential customer classes account for a lower percentage of the overall number of accounts, the billed use associated with these classes is much higher in comparison.

**Table 3-1.
2008 Bills and Water Use by Class**

<u>Customer Class</u>	<u>Bills</u>	<u>Percent</u>	<u>Use (CF)</u>	<u>Percent</u>
Single-Family Residential	299,873	87%	3,504,611	65%
Multi-Family Residential	16,029	5%	465,893	9%
Commercial / Industrial	13,099	4%	626,667	12%
Single-Family Residential Irrigation Only	5,029	1%	485,836	9%
Non-Single Family Residential Irrigation Only	11,201	3%	238,307	4%
RV Park	48	0%	25,839	0%
Hydrant	<u>941</u>	<u>0%</u>	<u>75,446</u>	<u>1%</u>
Total	346,220	100%	5,422,600	100%

The rate and financial plan presented in the balance of this report is based on projections derived from the current number of accounts and volumes (billed water use in hundreds of cubic feet). Projections of new development over the eleven year study period were developed working with City staff. Additional assumptions and projections underlying the Study results are detailed in Appendix A.

4. Financial Plan

The multi-year financial plan, revenue projections and assumptions are summarized in Appendix A.

4.1. Financial Plan

The financial plan is comprised of a total Water Fund and operations and water resource development fee subfunds. The water rate revenue requirements of the City's water operations subfund represent the cost of providing service and includes operation and maintenance (O&M) costs, non-growth capital related costs (cash funded project costs and debt service), and transfers to other funds and subfunds. Growth-related capital costs are assigned to the development fee subfund, and are paid for via development fees. Where there are deficiencies in the development fee subfund, transfers from the operations subfund are made to fund growth-related projects and/or the associated debt service.

4.1.1. Cashflow

Cash-on-hand or the beginning of year cash balance for the water operations was provided by the City at \$3,696,867 as of July 1, 2008 or the start of FY 2008-09.

With the rate increase effective August 1, 2009, water charge revenues are estimated at \$11.5 million. Table 4-1 summarizes projected water rate revenue increases over the eleven year study period. The cashflow also anticipates an IDD property tax levy increase of \$168.11 from the existing \$100.74 per acre to \$268.85 per acre phased over three years from FY 2009-10 through FY 2011-12 summarized in Table 4-2.

**Table 4-1.
Projected Water Rate Revenue Increases**

<u>Fiscal Year</u>	<u>Increase (1)</u>	<u>Fiscal Year</u>	<u>Increase (1)</u>
2009-10	9%	2014-15	4%
2010-11	8%	2015-16	4%
2011-12	7%	2016-17	3%
2012-13	6%	2017-18	1%
2013-14	5%	2018-19	0%

(1) Percent assumes rates in effect for entire FY. FY 2009-10 increases effective August 1, 2009. Subsequent increases effective April 1 (e.g., FY 2010-11 increases effective April 1, 2011).

**Table 4-2.
Phased Increase to IDD Property Tax Levy**

<u>Fiscal Year</u>	<u>Levy Per Acre</u>	<u>Levy per ½ Acre</u>
2008-09	\$100.74	\$50.37
2009-10	156.74	78.37
2010-11	212.75	106.38
2011-12	268.85	134.43

The proposed increases are necessary to fully fund operating and capital expenditures (including debt service and transfers) over the next three fiscal years while:

1. Maintaining cash balances or reserves greater than 20% (70 days) of annual cash operation and maintenance (O&M) costs. This requirement is a covenant of the 2007 Water Infrastructure Finance Authority (WIFA) loan.
2. Achieving a minimum of 1.20 times annual debt service or debt service coverage (DSC) ratio on existing and projected annual debt service. Attainment of this ratio provides some assurance that current period revenues will be sufficient to repay projected debt and is required by the WIFA and/or other bond holders.

The first measure, a cash reserve ratio, is determined by dividing the end of year cash balance by annual O&M expenses. The legal requirement is a reserve ratio of 20% and is mandated by the City’s loan agreement with WIFA. Appendix A summarizes the projected end of year cash reserve ratio for the water fund.

The second financial requirement is associated with the annual calculation of the DSC ratio. DSC is a measure of a utility’s ability to repay its debt obligations. The proposed financial plan is designed to achieve a 1.20 times annual DSC ratio. At a ratio of 1.20, the revenues available for debt service would be 20% greater than the annual debt service payment. Appendix A summarizes the projected annual DSC ratio on existing and projected annual debt service.

While revenue increases in the most years of the study period are currently projected, adjustments to the increases projected may also be necessary depending on the level of future CIP expenditures and a variety of other factors, including, but not limited to water use patterns, inflation, regulatory requirements, and availability of raw water. At a minimum, annual reviews should be used to periodically assess the condition of the water fund and necessity of future rate revenue adjustments.

The Water Fund expenditures are funded primarily by water charge revenues. Additional revenue sources include existing and anticipated increases to IDD property tax based

revenues, a variety of miscellaneous charges and fees, interest income and water resource development fee assessed to customers outside the IDD. Pages A – 1 through A – 5 summarize the Water Fund financial plan.

4.1.1.1. Water Charge Revenues

Red Oak projected existing rate revenues based on historical usage patterns and the current water rate structure. These projections are adjusted based on customer growth as well anticipated conservation and developed in a variety of worksheets included in Appendix A. Table 4-1 summarized projected increases to water rate revenues required as previously discussed. In section 6 of this report, a proposed water rate structure is summarized. The proposed structure is projected to generate the same amount of water rate revenue required for FY 2009-10.

4.1.1.2. IDD Property Tax Revenues

The second primary revenue stream is the IDD property assessed per ½ acre. Table 4-2 summarized the phased increases per acre.

4.1.1.3. Development Fees

The Water Fund has an existing water resource development fee assessed to new development outside the IDD. This revenue stream is not sufficient to fully fund growth-related capital cost requirements. A combination of debt and transfers from the operations fund are required to fund the anticipated growth-related capital above the amount funded by projected development fee revenues.

4.1.1.4. Miscellaneous Charges and Other Revenues

The Water Fund has a variety of miscellaneous fee and charge revenues. The financial plan incorporates these revenues based on the FY 2008-09 budgeted revenues increased by 1% per year throughout the study period.

4.1.2. O&M

Page A - 7 summarizes projected water utility O&M expenditures over the eleven year study period. Projected O&M expenditures are based on the preliminary FY 2009-10 budget and adjusted for anticipated inflation. O&M expenses include not only the direct costs associated with the water system, but also an allocation of City administration costs.

In addition to inflation for current O&M costs, as the system grows and new facilities are constructed, additional O&M costs will be required. Red Oak worked with City staff to project the amount and timing and additional employees.

4.1.3. CIP

Water system capital improvement projects (CIP) are based on City staff provided line-item CIP projections in current year dollars and summarized in page A – 13. The detailed project listing includes the dollar amount and timing over the eleven year study

period. The City's CIP is divided into two parts, growth-related and non-growth related projects. The eleven year financial plan and capital funding incorporate the inflated CIP amounts based on the anticipated timing of the projects as summarized in pages A – 14 and A - 15.

4.1.4. Debt and Debt Service

Pages A – 10 through A - 12 summarize existing outstanding and projected Water Fund debt obligations, annual debt service, and projected debt issues. Additional debt is projected to be required to fund a portion of future growth and non-growth related capital expenditures. Projected debt is assumed at a 20-year term and 5% interest rate and includes projected issuance costs as well as a debt service reserve requirement equal to one year annual debt service and they are funded within the debt issues.

4.1.5. Loans and Transfers

The operations subfund is transferring funds to the water resource development fee subfund to fund expenditures not fully funded by projected water resource development fee revenues. Additionally \$2 million is transferred annually to the wastewater fund through FY 2012-13.

5. Cost-of-Service

Red Oak performed a cost-of-service analysis for the FY 2009-10 test year to identify the cost to provide service to each customer class as summarized in Appendix B.

5.1. Revenue Requirements

The total FY 2009-10 revenue requirements consists of \$10.2 million of operating expenses and \$6.4 million of capital costs. These costs are offset by \$5.0 million in IDD property tax revenues, other miscellaneous revenue sources and sources and uses (e.g., projected debt, transfers to other fund) and change in cash balance of operations subfund. Water user charge revenues of \$11.6 million are required to fund the remaining revenue requirements as summarized by page B - 5.

5.2. Allocation to Cost Components

5.2.1. Functional Costs

There are four basic functional water cost components: base, extra capacity, customer and fire protection costs. Base costs vary directly with the quantity of water used under average day load conditions. Extra capacity costs represent those costs incurred due to customer peak daily and hourly demands for water in excess of average day usage. Customer costs include utility billing, meters and services, and a portion of the local distribution line costs.

5.2.2. Allocation Factors

In order to provide adequate water service to its customers at all times, the water utility must be capable of not only of providing the total amount of water used, but also of supplying water at maximum daily and hourly demands.

Since all customers do not exert their maximum demand for water at the same time, capacities of water facilities are designed to meet the coincidental demands of all classes of customers. For every facility on the system, there is an underlying average demand or uniform rate of usage exerted coincidentally by the customers for which the base cost component applies.

Historical system coincidental maximum day and maximum hour 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. Based on system design criteria, a maximum day to average day ratio of 1.60 is used based on demands experienced in the

City's water system. This indicates that 62 percent of the capacity of facilities designed and operated for maximum day demand is needed for average or base use. Accordingly, the remaining 38 percent is for maximum day extra capacity requirements.

Since maximum hour water usage also utilizes facilities designed and operated for average day and maximum day demands, the costs associated with meeting maximum hour demands are allocated to base, maximum day extra capacity, and maximum hour extra capacity. Based on the system design criteria, a ratio of maximum hour to annual average day water use of 2.50 is assumed. This ratio indicates that approximately 40 percent of the capacity of facilities designed and operated for maximum hour demand is needed for average or base use, 24 percent is required to meet maximum day extra capacity demand, and the remaining 36 percent is for maximum hour extra capacity demand.

5.2.3. Allocation to Functional Cost Components

Various functions are involved in providing safe, on demand potable water to customers. Functional costs apply to both operating and capital costs. The City tracks and distributes operating costs to the following functions:

- Treatment
- Distribution
- Production
- Meters & Services
- Administration
- Water Overhead
- Direct Revenue

Red Oak grouped existing assets into similar functions for the cost-of-service analysis.

Once operating and capital facilities are organized by function, the functional costs are allocated among service demand categories based on the service provided (e.g., treatment facilities and costs are sized based to provide treated water under maximum day conditions) and summarized in pages B - 6 through B - 8.

Revenue requirements are generally allocated to the functional cost components and these functional costs are then allocated among service categories that reflect the design parameter of the associated facility. For example, treatment facilities are related to the facilities that provide treated water to the City's customers. These facilities are designed to meet average and maximum day demands. Thus, treatment expenses are allocated to the base and maximum day cost components. In similar manner, production expenses are allocated to base, maximum day, and maximum hour cost components based on the design parameters related to maximum hour demand requirements.

Some of the revenue requirements can be directly assigned to a specific cost component. .

Administration and general expenses are identified with system facilities or activities to the extent possible to simplify the allocation process. Those expenses that are not specifically assigned are allocated in proportion to all other operating expenses. Routine capital and debt service is allocated on the basis of the proportion of directly allocated capital costs.

Net cost-of-service equals total cost-of-service less adjustments for miscellaneous revenue sources and other sources and uses as previously discussed and summarized in page B - 10.

5.2.4. Units of Service

Service requirements for each class are based on the average daily water use projections and estimates of each class' maximum day and maximum hour demands and metering and billing requirements. Page B - 9 summarizes projected FY 2009-10 class units of service.

The base cost responsibility varies with annual class water usage. Average day quantities are based on a detailed analysis of the City's water billing records.

The responsibility for extra capacity costs varies with class extra capacity requirements for maximum day and maximum hour demands. Average day usage and capacity factors, representing the estimated relationship between individual class peak demand and average day usage, are used to develop extra capacity requirements for maximum day and maximum hour demands. The estimated capacity factors are based on an analysis of each class' average and peak bimonthly usage characteristics as derived from a detailed analysis of City's water billing records.

Fire protection costs are either direct or demand related. Indirect costs relate to maintenance of fire hydrants. The City does not currently have data regarding system-wide fire hydrant information to incorporate indirect fire protection costs. In future cost-of-service analyses, the City should consider incorporating fire hydrant information within the cost-of-service analysis. Page B - 2 summarizes fire flow requirements by customer class

Unit cost-of-service forms the basis for rate design and is the quotient of net cost-of-service divided by the applicable units of service. Page B - 10 summarizes the FY 2009-10 unit cost-of-service.

5.3. Allocation of Costs to Customer Classes

The City currently serves water customers inside and outside the IDD and these accounts are divided into the following seven customer classes

- Single family residential
- Multi family
- Commercial / Industrial
- Single family residential irrigation-only
- Non-single family residential irrigation-only
- RV park
- Hydrant

The classes group together customers with similar service requirement characteristics and provide a means for allocating costs to customers. Customers outside the IDD have adjusted unit cost-of-service based on a ratio of 1.25. This ratio incorporates the additional revenue customers inside the IDD contribute through property tax payments as a percent of total system IDD property tax payment and water user charge revenues.

Class cost-of-service is the product of unit cost-of-service and class units of service. Pages B – 11 through B – 13 summarize the calculation of class cost-of-service and summary level comparison to the revenue generated under the existing rates by each customer classification.

As summarized by page B – 15, commercial / industrial, single family residential, multi-family and RV park customers are subsidizing non-single family residential and single family residential irrigation only and hydrant customers based on the FY 2009-10 class cost-of-service analyses.

6. Proposed FY 2009-10 Rates for Service

Appendix C summarizes the detailed water use by customer class, projected water use and projected revenue by customer class for FY 2009-10.

6.1. Current Rates

The City's current water rate structure is comprised of a base charge that varies by meter size and a volume rate applied per 100 cubic feet (ccf) of metered water use. The volume rate is a 4 block inclining block structure which means the rate per ccf increases as consumption moves through the 4 usage blocks.

6.2. Pricing Objectives

Red Oak worked with City staff to evaluate twelve different water rate pricing objectives. The top five objectives and a brief description include:

- Conservation – Effective in promoting the efficient use of resources on a year-round basis.
- Revenue Stability – Effective in providing stable revenue stream to recover revenue requirements in the face of variable external factors such as tourism, part-time residents and weather.
- Cost-of-Service Equity – Developing rates so that each customer's monthly water bills equals the cost borne by the City in providing that service.
- Administrative Ease – Minimize the administrative burdens associated with implementing and sustaining the use of a rate structure.
- Customer Bill Impact – Minimizes the impact among customers in similar classes, in both the short-term and long-term.

6.3. Proposed Base Charge

Table 6-1 summarizes the existing and proposed monthly base charge. The base charge is assessed monthly to all customers based on water meter size and recovers customer costs that include utility billing, meters and services, and a portion of the local distribution line costs.

**Table 6-1.
Existing and Proposed Base Charge**

<u>Meter Size (inches)</u>	<u>Current</u>	<u>Proposed</u>	<u>Difference</u>
¾	\$4.50	\$5.16	\$0.66
1	6.50	8.17	1.67
1 ½	9.50	16.69	7.19
2	12.50	28.17	15.67
3	39.50	52.66	13.16
4	50.50	97.09	46.59
6	76.50	198.95	122.45
8	104.50	283.91	179.41

6.4. Proposed Volume Water Rate Structure

The current four-tiered volume rate structure (water allocations and unit prices) applies equally to all customer classes. Different types of customers and meter sizes use different amounts of water. The proposed rate structure recognizes the variable use of water by customer class and establishes customer class specific water tiers.

6.4.1. Water Allocations by Class

The proposed volume rate structure modifies the existing rate structure and water allocations reflecting different customer class water usage patterns. The water allocations by tier and class apply to all meter sizes within the class. The tiered water allocations were developed based on a detailed analysis of historical water use patterns by class as a whole. Different usage patterns by meter size may result in individual water use by tier different from the customer class as a whole. Additionally, non-residential and irrigation-only customer classifications have three tiered rate structure where tier 1 (indoor, sanitary purposes) is not available.

Table 6-2 summarizes the projected FY 2009-10 water use by class and percent of water use by tier.

**Table 6-2.
Projected FY 2009-10 Water Use and Percent of Use by Tier**

<u>Customer Class</u>	<u>FY 2009-10 Water Use (CF)</u>	<u>Percent of Use by Tier</u>			
		<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>	<u>Tier 4</u>
Single-Family Residential	353,729,286	66.1%	18.8%	9.6%	5.5%
Multi-Family Residential	46,647,466	34.9%	39.8%	20.2%	5.1%
Commercial / Industrial	65,446,127	N/A	65.1%	29.6%	5.3%
Single-Family Residential Irrigation Only	23,860,511	N/A	38.6%	35.9%	25.5%
Non-Single Family Residential Irrigation Only	48,935,509	N/A	39.3%	35.7%	25.0%
RV Park	48,935,509	36.2%	32.0%	27.2%	4.6%
Hydrant	<u>9,063,646</u>	N/A	N/A	N/A	100.0%
Total	550,266,519				

6.4.2. Proposed Volume Rates

Based on the City's pricing objectives, the tiered water rate unit prices were evaluated and revised in order to generate the additional revenue requirements as well as increase the conservation pricing signal that is sent to customers and promote more efficient use of water in the arid Arizona climate.

Table 6-3 summarizes the proposed water volume rate structures (water allocations and unit prices) necessary to generate the additional revenue required. Tiered water allocations are specific to each customer classification. The proposed base and volume rates and structure are anticipated to be effective by August 1, 2009.

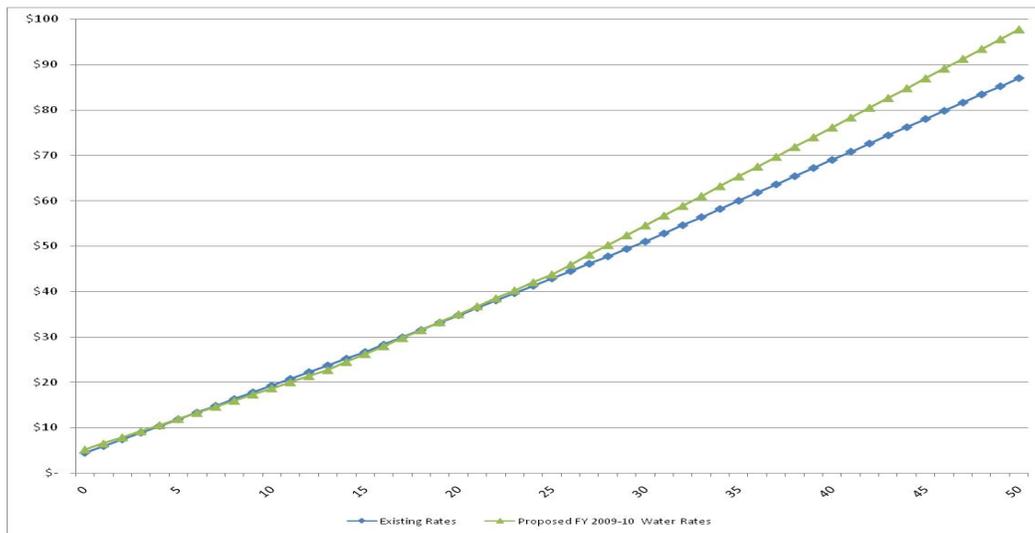
**Table 6-3.
Existing and Proposed FY 2009-10 Volume Rate Structure**

<u>Class</u>	<u>Current</u>		<u>Proposed</u>		<u>Change</u>
	<u>Block</u>	<u>Rate per ccf</u>	<u>Block</u>	<u>Rate per ccf</u>	
Single Family Residential	0-1,500	\$1.48	0-1,300	\$1.35	(\$0.13)
	1,501-3,000	1.62	1,301-2,500	1.76	0.12
	3,001-13,000	1.80	2,501-5,000	2.16	0.36
	> 13,000	1.96	> 5,000	2.70	0.64
Multi-Family Residential	0-1,500	\$1.48	0-2,600	\$1.35	(\$0.13)
	1,501-3,000	1.62	2,601-55,000	1.76	0.12
	3,001-13,000	1.80	55,001-200,000	2.16	0.36
	> 13,000	1.96	> 200,000	2.70	0.64
Commercial/ Industrial	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	0-31,500	1.76	0.12
	3,001-13,000	1.80	31,501-340,000	2.16	0.36
	> 13,000	1.96	> 340,000	2.70	0.64
Irrigation – Single Family Residential	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	0-1,200	1.76	0.12
	3,001-13,000	1.80	1,201-3,700	2.16	0.36
	> 13,000	1.96	> 3,700	2.70	0.64
Irrigation – Non Single Family Residential	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	0-16,000	1.76	0.12
	3,001-13,000	1.80	16,001-89,000	2.16	0.36
	> 13,000	1.96	> 89,000	2.70	0.64
Hydrant	0-1,500	\$1.48	N/A	\$1.35	(\$0.13)
	1,501-3,000	1.62	N/A	1.76	0.12
	3,001-13,000	1.80	N/A	2.16	0.36
	> 13,000	1.96	All	2.70	0.64
RV Park	0-1,500	\$1.48	0-39,000	\$1.35	(\$0.13)
	1,501-3,000	1.62	39,001-86,000	1.76	0.12
	3,001-13,000	1.80	86,001-150,000	2.16	0.36
	> 13,000	1.96	> 150,000	2.70	0.64

6.5. Bill Impact Information

Figure 6-1 summarizes the monthly bill impact for residential water customer bills at varying usage levels from 0 to 50 ccf. The difference in the monthly bill is small for water use at lower levels and increases as water use increases consistent with the City's pricing objectives and the desire to promote conservation.

Figure 6-1: Existing and Proposed Residential Monthly Bill Impact at 0 to 50 CCF Water Use





Lake Havasu City
2008 Water Rate and Fee Study

**Appendix A: Financial Plan and
Revenue Projections**



LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
DECISION CRITERIA

FILE: LHC.xls
SCHEDULE: DECCRITERIA
DATE: 05/04/09
RANGE: DECCRIT1

Line No.	DESCRIPTION	Estimated	Projected									
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
1	Rate Revenue Increase	0.0%	9.0%	8.0%	7.0%	6.0%	5.0%	4.0%	4.0%	3.0%	1.0%	0.0%
2	Effective Month of Rate Increase (effective 1st day of month: 1=Jul 12=Jun)	10	2	10	10	10	10	10	10	10	10	10
3	IDD Property Tax Levy Increase	0%	56%	36%	26%	0%	0%	0%	0%	0%	0%	0%
4	IDD Property Tax Levy Per Acre	\$100.74	\$156.74	\$212.70	\$268.85	\$268.85	\$268.85	\$268.85	\$268.85	\$268.85	\$268.85	\$268.85
5	Typical Residential Bill (based on 13 ccf)	\$23.74	\$22.71	\$24.53	\$26.24	\$27.82	\$29.21	\$30.38	\$31.59	\$32.54	\$32.87	\$32.87
6	Water System Fee per SFE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Water Resource Fee per SFE	660	660	660	660	660	660	660	660	660	660	660
8	Less: Water Tax Credit	0	0	0	0	0	0	0	0	0	0	0
9	Net Development Fee per SFE	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660
Bond/Loan Proceeds												
10	Operations Subfund Revenue Bonds	\$0	\$11,000,000	\$0	\$4,000,000	\$0	\$1,000,000	\$0	\$2,000,000	\$0	\$0	\$0
11	Development Fee Subfund Revenue Bonds	0	3,000,000	0	4,000,000	0	15,000,000	0	15,000,000	0	0	0
12	Total	\$0	\$14,000,000	\$0	\$8,000,000	\$0	\$16,000,000	\$0	\$17,000,000	\$0	\$0	\$0
Transfers												
13	(To) Wastewater Fund	(\$2,000,000)	(\$2,000,000)	(\$2,000,000)	(\$2,000,000)	(\$2,000,000)	\$0	\$0	\$0	\$0	\$0	\$0
Transfers (to) Development Fee Subfund from Operations Subfund												
14	Annual	(\$750,000)	\$0	(\$1,500,000)	\$0	(\$3,250,000)	\$0	(\$6,500,000)	(\$4,000,000)	(\$3,250,000)	(\$2,750,000)	(\$3,000,000)
15	Payments	-	-	-	-	-	-	-	-	-	-	-
16	Cumulative Loan Balance	\$750,000	\$765,000	\$2,280,300	\$2,325,906	\$5,622,424	\$5,734,873	\$12,349,570	\$16,596,561	\$20,178,493	\$23,332,063	\$26,798,704
17	(Principal & Accrued Int)											
Cash Balances - End of Year												
18	Operations Subfund	\$2,750,975	\$9,791,984	\$2,570,200	\$2,852,550	\$2,852,423	\$9,600,123	\$3,907,081	\$3,123,797	\$3,396,247	\$7,002,741	\$7,517,246
19	Development Fee Subfund	40,424	362,229	147,208	1,760,572	87,578	3,573,612	112,136	51,750	243,380	234,944	145,234
20	Total Fund	\$2,791,399	\$10,154,213	\$2,717,407	\$4,613,123	\$2,940,001	\$13,173,735	\$4,019,216	\$3,175,547	\$3,639,627	\$7,237,685	\$7,662,480
21	Debt Service Coverage [1] - Total Fund	7.19	5.28	3.82	3.86	3.46	2.81	2.33	2.01	1.76	1.81	1.78
22	Cash Reserve Ratio [2] - Operations Subfund	27.0%	95.9%	24.2%	25.6%	24.3%	77.5%	29.9%	22.9%	23.6%	46.7%	48.1%
23	Cash Reserve Ratio [2] - Total Fund	27.4%	99.5%	25.6%	41.4%	25.0%	106.3%	30.7%	23.3%	25.3%	48.3%	49.0%
24	Cumulative Debt Issued	\$0	\$14,000,000	\$14,000,000	\$22,000,000	\$22,000,000	\$38,000,000	\$38,000,000	\$55,000,000	\$55,000,000	\$55,000,000	\$55,000,000
25	Cumulative % of CIP Funded by Debt	0.0%	104.5%	60.0%	68.1%	58.6%	80.3%	62.0%	66.9%	64.2%	63.7%	61.2%
Funded CIP - Inflated \$												
26	Operations Subfund	\$4,828,246	\$5,473,022	\$8,374,532	\$7,205,169	\$731,581	\$521,673	\$5,568,463	\$5,260,171	\$3,203,662	\$587,148	\$3,280,500
27	Development Fee Subfund	709,576	2,382,799	1,552,309	1,770,491	4,502,035	9,274,193	8,400,755	15,684,581	292,624	0	334,635
28	Total Annual CIP	5,537,822	7,855,821	9,926,841	8,975,660	5,233,616	9,795,866	13,969,218	20,944,752	3,496,285	587,148	3,615,135
29	Cumulative CIP Amount	\$5,537,822	\$13,393,643	\$23,320,485	\$32,296,144	\$37,529,760	\$47,325,626	\$61,294,844	\$82,239,596	\$85,735,881	\$86,323,029	\$89,938,164
CIP Additions/(Reductions)												
30	Growth	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
31	Non-Growth	0	0	0	0	0	0	0	0	0	0	0

CIP Spending

Avg/Year

[1] Target debt service coverage: 1.2
[2] Target ending cash balance as a percent of O&M expenditures: 20%

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CASH FLOW PROJECTION - TOTAL FUND

FILE: LHC.xls
 SCHEDULE: CASHFLOW
 DATE: 05/04/09
 RANGE: CASHFLOW1

Line No.	DESCRIPTION	Projected										Test Year	
		Estimated FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
Operating Revenues													
1	Water Charges	\$10,651,949	\$11,549,735	\$11,568,958	\$12,212,064	\$13,145,534	\$14,069,369	\$14,915,890	\$15,814,846	\$16,726,006	\$17,474,508	\$17,945,756	11,549,735
2	Interest Income	62,598	159,747	85,058	90,172	125,603	218,175	184,852	103,347	109,109	183,697	193,656	157,595
3	Miscellaneous Water Fees	78,431	78,823	79,217	79,811	80,410	81,214	82,026	83,257	84,505	85,773	87,060	78,823
4	IDD Property Tax	2,101,226	3,269,298	4,436,437	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	3,269,298
5	IDD Debt Service Property Tax	19,250	19,346	19,443	19,589	19,736	19,933	20,132	20,434	20,741	21,052	21,368	19,346
6	Federal Grants	46,076	0	0	0	0	0	0	0	0	0	0	0
7	Meter Fees	235,940	237,120	238,305	240,093	241,893	244,312	246,755	250,457	254,214	258,027	261,897	237,120
8	Turn on Fees	165,000	165,825	166,654	167,904	169,163	170,855	172,563	175,152	177,779	180,446	183,153	165,825
9	Backflow Prevention Permits	12,000	12,060	12,120	12,211	12,303	12,426	12,550	12,738	12,929	13,123	13,320	12,060
10	Horizon Six Fees	4,900	4,925	4,949	4,986	5,024	5,074	5,125	5,201	5,280	5,359	5,439	4,925
11	Total Operating Revenues	13,377,370	15,496,878	16,611,142	18,434,486	19,407,321	20,429,014	21,247,550	22,073,089	22,998,220	23,829,640	24,319,305	15,494,726
Operating Expenditures													
12	Operating	10,203,517	10,208,378	10,624,573	11,131,899	11,742,068	12,388,453	13,073,186	13,623,308	14,382,880	14,994,359	15,634,254	10,208,378
13	Total Operating Expenditures	10,203,517	10,208,378	10,624,573	11,131,899	11,742,068	12,388,453	13,073,186	13,623,308	14,382,880	14,994,359	15,634,254	10,208,378
14	Net Income Available for Debt Service	3,173,853	5,288,500	5,986,569	7,302,587	7,665,253	8,040,562	8,174,364	8,449,781	8,615,339	8,835,282	8,685,051	5,286,348
Debt Service													
15	Debt Service Payments - Existing	441,498	435,075	433,647	432,196	430,733	429,266	427,794	426,317	424,835	423,347	421,853	435,075
16	Debt Service Payments - New	-	567,315	1,134,630	1,458,810	1,782,990	2,431,350	3,079,710	3,768,593	4,457,476	4,457,476	4,457,476	567,315
17	Total Debt Service	\$441,498	\$1,002,390	\$1,568,277	\$1,891,006	\$2,213,724	\$2,860,617	\$3,507,505	\$4,194,910	\$4,882,311	\$4,880,823	\$4,879,329	\$1,002,390
18	DSC Ratio (1)	7.19	5.28	3.82	3.86	3.46	2.81	2.33	2.01	1.76	1.81	1.78	
19	Income Available After Debt Service	\$2,732,355	\$4,286,110	\$4,418,292	\$5,411,581	\$5,451,530	\$5,179,945	\$4,666,859	\$4,254,871	\$3,733,029	\$3,954,459	\$3,805,722	\$4,283,958
Other Cash Inflows/(Outflows)													
20	Development Fees	0	67,155	71,744	108,154	108,965	146,376	147,840	223,977	227,337	230,747	234,208	67,155
21	Bond/Loan Proceeds	-	14,000,000	-	8,000,000	-	16,000,000	-	17,000,000	-	-	-	14,000,000
22	Remaining WIFA Loan Proceeds	3,900,000	-	-	-	-	-	-	-	-	-	-	0
23	Capital Improvements	(5,537,822)	(7,855,821)	(9,926,841)	(8,975,660)	(5,233,616)	(9,795,866)	(13,969,218)	(20,944,752)	(3,496,285)	(587,148)	(3,615,135)	(7,855,821)
24	Repayment of Loan from Devel. Fee Subfund	-	-	-	-	-	-	-	-	-	-	-	0
25	Debt Service Reserve Deposit (New Debt)	-	(1,134,630)	-	(648,360)	-	(1,296,720)	-	(1,377,765)	-	-	-	(1,134,630)
26	Loan (To) Devel. Fee Subfund	-	-	-	-	-	-	-	-	-	-	-	0
27	Transfer (To) / From Wastewater Fund	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	-	-	-	-	-	-	(2,000,000)
28	Total Other Cash Inflows/(Outflows)	(3,637,822)	3,076,703	(11,855,098)	(3,515,866)	(7,124,651)	5,053,790	(13,821,378)	(5,098,540)	(3,268,949)	(356,401)	(3,380,927)	3,076,703
29	Increase /(Decrease) in Cash Balance	(905,467)	7,362,814	(7,436,805)	1,895,715	(1,673,122)	10,233,735	(9,154,519)	(843,669)	464,080	3,598,058	424,795	7,362,814
30	Beginning of Year Cash Balance	3,696,867	2,791,399	10,154,213	2,717,407	4,613,123	2,940,001	13,173,735	4,019,216	3,175,547	3,639,627	7,237,685	2,791,399
31	End of Year Cash Balance	\$2,791,399	\$10,154,213	2,717,407	\$4,613,123	\$2,940,001	\$13,173,735	\$4,019,216	\$3,175,547	\$3,639,627	\$7,237,685	\$7,662,480	\$10,154,213
32	Cash Reserve Ratio (2)	27.4%	99.5%	25.6%	41.4%	25.0%	106.3%	30.7%	23.3%	25.3%	48.3%	49.0%	

(1) Target debt service coverage: 1.2

(2) Target ending cash balance as a percent of O&M expenditures: 20%

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CASH FLOW PROJECTION - OPERATIONS SUBFUND

FILE: LHC.xls
 SCHEDULE: CASHFLOW
 DATE: 05/04/09
 RANGE: CASHFLOW2

Line No.	DESCRIPTION	Projected										Test Year	
		Estimated FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
Operating Revenues													
1	Water Charges	\$10,651,949	\$11,549,735	\$11,568,958	\$12,212,064	\$13,145,534	\$14,069,369	\$14,915,890	\$15,814,846	\$16,726,006	\$17,474,508	\$17,945,756	11,549,735
2	Interest Income	62,598	157,595	76,379	85,065	88,212	213,496	110,423	96,625	103,527	174,214	184,273	157,595
3	Miscellaneous Water Fees	78,431	78,823	79,217	79,811	80,410	81,214	82,026	83,257	84,505	85,773	87,060	78,823
4	IDD Property Tax	2,101,226	3,269,298	4,436,437	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	5,607,656	3,269,298
5	IDD Debt Service Property Tax	19,250	19,346	19,443	19,589	19,736	19,933	20,132	20,434	20,741	21,052	21,368	19,346
6	Federal Grants	46,076	0	0	0	0	0	0	0	0	0	0	0
7	Meter Fees	235,940	237,120	238,305	240,093	241,893	244,312	246,755	250,457	254,214	258,027	261,897	237,120
8	Turn on Fees	165,000	165,825	166,654	167,904	169,163	170,855	172,563	175,152	177,779	180,446	183,153	165,825
9	Backflow Prevention Permits	12,000	12,060	12,120	12,211	12,303	12,426	12,550	12,738	12,929	13,123	13,320	12,060
10	Horizon Six Fees	4,900	4,925	4,949	4,986	5,024	5,074	5,125	5,201	5,280	5,359	5,439	4,925
11	Total Operating Revenues	13,377,370	15,494,726	16,602,463	18,429,379	19,369,930	20,424,335	21,173,121	22,066,367	22,992,638	23,820,157	24,309,922	15,494,726
Operating Expenditures													
12	Operating	10,203,517	10,208,378	10,624,573	11,131,899	11,742,068	12,388,453	13,073,186	13,623,308	14,382,880	14,994,359	15,634,254	10,208,378
13	Total Operating Expenditures	10,203,517	10,208,378	10,624,573	11,131,899	11,742,068	12,388,453	13,073,186	13,623,308	14,382,880	14,994,359	15,634,254	10,208,378
14	Net Operating Income Avail. for Debt Service	3,173,853	5,286,348	5,977,890	7,297,480	7,627,862	8,035,883	8,099,935	8,443,059	8,609,757	8,825,799	8,675,668	5,286,348
Debt Service													
15	Debt Service Payments - Existing	441,498	435,075	433,647	432,196	430,733	429,266	427,794	426,317	424,835	423,347	421,853	435,075
16	Debt Service Payments - New	-	445,748	891,495	1,053,585	1,215,675	1,256,198	1,296,720	1,377,765	1,458,810	1,458,810	1,458,810	445,748
17	Total Debt Service	\$441,498	\$880,822	\$1,325,142	\$1,485,781	\$1,646,409	\$1,685,464	\$1,724,515	\$1,804,083	\$1,883,645	\$1,882,157	\$1,880,664	\$880,822
18	DSC Ratio (1)	7.19	6.00	4.51	4.91	4.63	4.77	4.70	4.68	4.57	4.69	4.61	
19	Income Available After Debt Service	\$2,732,355	\$4,405,526	\$4,652,748	\$5,811,699	\$5,981,454	\$6,350,419	\$6,375,420	\$6,638,977	\$6,726,112	\$6,943,641	\$6,795,005	\$4,405,526
Other Cash Inflows/(Outflows)													
20	Bond / Loan Proceeds - Non Growth	-	11,000,000	-	4,000,000	-	1,000,000	-	2,000,000	-	-	-	11,000,000
21	Remaining WIFA Loan Proceeds	3,900,000	-	-	-	-	-	-	-	-	-	-	0
22	Capital Improvements - Non-Growth	(4,828,246)	(5,473,022)	(8,374,532)	(7,205,169)	(731,581)	(521,673)	(5,568,463)	(5,260,171)	(3,203,662)	(587,148)	(3,280,500)	(5,473,022)
23	Repayment of Loan from Devel. Fee Subfund	-	-	-	-	-	-	-	-	-	-	-	0
24	Debt Service Reserve Deposit (New Debt)	-	(891,495)	-	(324,180)	-	(81,045)	-	(162,090)	-	-	-	(891,495)
25	Loan (To) Devel. Fee Subfund	(750,000)	-	(1,500,000)	-	(3,250,000)	-	(6,500,000)	(4,000,000)	(3,250,000)	(2,750,000)	(3,000,000)	0
26	Transfer From / (To) Wastewater Fund	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	-	-	-	-	-	-	(2,000,000)
27	Total Other Cash Inflows/(Outflows)	(3,678,246)	2,635,483	(11,874,532)	(5,529,349)	(5,981,581)	397,282	(12,068,463)	(7,422,261)	(6,453,662)	(3,337,148)	(6,280,500)	2,635,483
28	Increase/(Decrease) in Cash Balance	(945,891)	7,041,008	(7,221,784)	282,351	(127)	6,747,700	(5,693,043)	(783,284)	272,451	3,606,493	514,505	7,041,008
29	Beginning of Year Cash Balance	3,696,867	2,750,975	9,791,984	2,570,200	2,852,550	2,852,423	9,600,123	3,907,081	3,123,797	3,396,247	7,002,741	7,517,246
30	End of Year Cash Balance	\$2,750,975	\$9,791,984	\$2,570,200	\$2,852,550	\$2,852,423	\$9,600,123	\$3,907,081	\$3,123,797	\$3,396,247	\$7,002,741	\$7,517,246	\$14,558,254
31	Cash Reserve Ratio (2)	27.0%	95.9%	24.2%	25.6%	24.3%	77.5%	29.9%	22.9%	23.6%	46.7%	48.1%	

(1) Target debt service coverage: 1.2

(2) Target ending cash balance as a percent of O&M expenditures: 20%

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CASH FLOW PROJECTION - DEVELOPMENT FEE SUBFUND

FILE: LHC.xls
 SCHEDULE: CASHFLOW
 DATE: 05/04/09
 RANGE: CASHFLOW3

Line No.	DESCRIPTION	Estimated	Projected									Test Year	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
	Operating Revenues												
1	Development Fees	\$0	\$67,155	\$71,744	\$108,154	\$108,965	\$146,376	\$147,840	\$223,977	\$227,337	\$230,747	\$234,208	67,155
2	Interest	0	2,152	8,679	5,107	37,391	4,679	74,429	6,722	5,582	9,483	9,383	
	Total Operating Revenues	-	69,307	80,423	113,261	146,356	151,055	222,269	230,699	232,919	240,230	243,591	67,155
3	Net Operating Income Avail. for Debt Service	-	69,307	80,423	113,261	146,356	151,055	222,269	230,699	232,919	240,230	243,591	67,155
4	Debt Service												
5	Debt Service Payments - Existing	-	-	-	-	-	-	-	-	-	-	-	0
6	Debt Service Payments - New	-	121,568	243,135	405,225	567,315	1,175,153	1,782,990	2,390,828	2,998,665	2,998,665	2,998,665	121,568
7	Total Debt Service	\$0	\$121,568	\$243,135	\$405,225	\$567,315	\$1,175,153	\$1,782,990	\$2,390,828	\$2,998,665	\$2,998,665	\$2,998,665	\$121,568
8	DSC Ratio	<i>N/A</i>	<i>0.57</i>	<i>0.33</i>	<i>0.28</i>	<i>0.26</i>	<i>0.13</i>	<i>0.12</i>	<i>0.10</i>	<i>0.08</i>	<i>0.08</i>	<i>0.08</i>	
9	Income Available After Debt Service	\$0	(\$52,261)	(\$162,712)	(\$291,965)	(\$420,959)	(\$1,024,098)	(\$1,560,722)	(\$2,160,129)	(\$2,765,747)	(\$2,758,436)	(\$2,755,074)	(\$54,413)
10	Other Cash Inflows/(Outflows):												
11	Bond / Loan Proceeds - Growth	-	3,000,000	-	4,000,000	-	15,000,000	-	15,000,000	-	-	-	3,000,000
12	Remaining WIFA Loan Proceeds to Development Subfund	-	-	-	-	-	-	-	-	-	-	-	0
13	Capital Expenditures - Growth	(709,576)	(2,382,799)	(1,552,309)	(1,770,491)	(4,502,035)	(9,274,193)	(8,400,755)	(15,684,581)	(292,624)	-	(334,635)	(2,382,799)
14	Repayment of Loan from Devel. Fee Subfund	-	-	-	-	-	-	-	-	-	-	-	0
15	Debt Service Reserve Deposit	-	(243,135)	-	(324,180)	-	(1,215,675)	-	(1,215,675)	-	-	-	(243,135)
16	Loan From / Repayment (To) Operations Subfund	750,000	-	1,500,000	-	3,250,000	-	6,500,000	4,000,000	3,250,000	2,750,000	3,000,000	0
17	Total Other Cash Inflows/(Outflows)	40,424	374,066	(52,309)	1,905,329	(1,252,035)	4,510,132	(1,900,755)	2,099,743	2,957,376	2,750,000	2,665,365	374,066
18	Increase /(Decrease) in Cash Balance	40,424	321,805	(215,021)	1,613,365	(1,672,995)	3,486,034	(3,461,477)	(60,385)	191,629	(8,436)	(89,710)	321,805
19	Beginning of Year Cash Balance	-	40,424	362,229	147,208	1,760,572	87,578	3,573,612	112,136	51,750	243,380	234,944	40,424
20	End of Year Cash Balance	\$40,424	\$362,229	\$147,208	\$1,760,572	\$87,578	\$3,573,612	\$112,136	\$51,750	\$243,380	\$234,944	\$145,234	\$362,229

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROJECTED REVENUE
 WATER CHARGE

FILE: LHC.xls
 SCHEDULE: CASHFLOW
 DATE: 05/04/09
 RANGE: PROJ REV1

Line No.	DESCRIPTION	Percent Increase	Months Effective (1)	Projected										
				Estimated FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
1	Water Charges Under Existing Rates			\$10,651,949	\$10,669,501	\$10,405,611	\$10,195,403	\$10,282,013	\$10,407,339	\$10,534,128	\$10,739,426	\$10,948,417	\$11,160,598	\$11,376,464
2	FY 2008-09	0%	10	-	-	-	-	-	-	-	-	-	-	-
3	FY 2009-10	9%	2		880,234	936,505	917,586	925,381	936,661	948,072	966,548	985,358	1,004,454	1,023,882
4	FY 2010-11	8%	10			226,842	889,039	896,592	907,520	918,576	936,478	954,702	973,204	992,028
5	FY 2011-12	7%	10				210,035	847,279	857,606	868,054	884,972	902,193	919,678	937,466
6	FY 2012-13	6%	10					194,269	786,548	796,130	811,645	827,440	843,476	859,790
7	FY 2013-14	5%	10						173,696	703,248	716,953	730,906	745,070	759,481
8	FY 2014-15	4%	10							147,682	602,241	613,961	625,859	637,964
9	FY 2015-16	4%	10								156,583	638,519	650,894	663,483
10	FY 2016-17	3%	10									124,511	507,697	517,517
11	FY 2017-18	1%	10										43,577	177,681
12	FY 2018-19	0%	10											-
13	Subtotal Additional Revenue			-	880,234	1,163,347	2,016,661	2,863,521	3,662,030	4,381,762	5,075,420	5,777,589	6,313,910	6,569,292
14	Subtotal Water Revenue			10,651,949	11,549,735	11,568,958	12,212,064	13,145,534	14,069,369	14,915,890	15,814,846	16,726,006	17,474,508	17,945,756
15	Revenue Increase Assuming 12 months of Effectiveness			-	960,255	907,369	840,142	777,076	694,784	590,728	626,331	498,045	174,309	-
16	Revenue Assuming 12 months of Effectiveness			10,651,949	11,629,756	11,312,980	11,035,545	11,059,089	11,102,123	11,124,856	11,365,757	11,446,462	11,334,907	11,376,464

(1) Effective 1st day of month: 1=Jul 12=Jun

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROJECTED DEVELOPMENT FEES

FILE: LHC.xls
 SCHEDULE: CASHFLOW
 DATE: 05/04/09
 RANGE: PROJ REV2

Line No.	DESCRIPTION	Estimated	Projected									Test Year	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
1	Water System Fee	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2	Annual Increase - %	0	0	0	0	0	0	0	0	0	0	0	
3	Revised Water System Fee	0	0	0	0	0	0	0	0	0	0	0	
4	Water Resources Fees	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	
5	Annual Increase - %	0	0	0	0	0	0	0	0	0	0	0	
6	Revised Water Resources Fee	660	660	660	660	660	660	660	660	660	660	660	
7	Revised Development Fee Total	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	
8	Less: Water Tax Credit	0	0	0	0	0	0	0	0	0	0	0	
9	Net Development Fee	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	\$660	
10	Annual Growth - Accounts Outside IDD	0	102	109	164	165	222	224	339	344	350	355	
11	Development Fee Paid Outside IDD	660	660	660	660	660	660	660	660	660	660	660	
12	Development Fee Revenue - Outside IDD	\$0	\$67,155	\$71,744	\$108,154	\$108,965	\$146,376	\$147,840	\$223,977	\$227,337	\$230,747	\$234,208	67,155
13	Annual Growth - Accounts Inside IDD	0	34	36	55	55	74	75	113	115	117	118	
14	Development Fee Paid Inside the IDD	0	0	0	0	0	0	0	0	0	0	0	
15	Development Fee Revenue - Inside IDD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
16	Total Development Fee Revenue	\$0	\$67,155	\$71,744	\$108,154	\$108,965	\$146,376	\$147,840	\$223,977	\$227,337	\$230,747	\$234,208	\$67,155
17	Percentage of New Growth Inside IDD (Per City)												25%

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROJECTED O&M COSTS

FILE: LHC.xls
 SCHEDULE: O&M EXP
 DATE: 5/4/2009
 RANGE: OM1

Line No.	DESCRIPTION	YE Estimate	Budget	Projected								Test	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	Year
1	Salaries and Wages	\$2,175,874	\$2,298,370	\$2,413,289	\$2,533,953	\$2,660,651	\$2,793,683	\$2,933,367	\$3,080,036	\$3,234,037	\$3,395,739	\$3,565,526	2,298,370
2	Benefits	891,131	835,767	877,555	921,433	967,505	1,015,880	1,066,674	1,120,008	1,176,008	1,234,809	1,296,549	835,767
3	Purchased Services	3,657,850	3,435,545	3,607,322	3,787,688	3,977,073	4,175,926	4,384,723	4,603,959	4,834,157	5,075,865	5,329,658	3,435,545
4	Materials and Supplies	1,014,700	1,014,700	1,045,141	1,076,495	1,108,790	1,142,054	1,176,315	1,211,605	1,247,953	1,285,392	1,323,953	1,014,700
5	Other Expenditures	106,200	106,200	109,386	112,668	116,048	119,529	123,115	126,808	130,613	134,531	138,567	106,200
6	Contingency	-	715,000	715,000	715,000	715,000	715,000	715,000	715,000	715,000	715,000	715,000	715,000
7	Interfund Debits	2,357,762	1,802,796	1,856,880	1,912,586	1,969,964	2,029,063	2,089,935	2,152,633	2,217,212	2,283,728	2,352,240	1,802,796
8	Additional Employees	-	-	-	72,076	227,039	397,318	584,057	613,260	827,901	869,296	912,760	0
9	Total O&M	\$10,203,517	\$10,208,378	\$10,624,573	\$11,131,899	\$11,742,068	\$12,388,453	\$13,073,186	\$13,623,308	\$14,382,880	\$14,994,359	\$15,634,254	\$10,208,378
10	Additional Employees (1)												
11	Wages	\$41,538	\$43,615	\$45,796	\$48,085	\$50,490	\$53,014	\$55,665	\$58,448	\$61,371	\$64,439	\$67,661	
12	ASRS	3,718	3,904	4,099	4,304	4,519	4,745	4,982	5,231	5,493	5,767	6,056	
13	ARSR LTD	208	218	229	240	252	265	278	292	307	322	338	
14	Dom Terr & Acc Ins	4	4	5	5	5	5	6	6	6	6	7	
15	Fed Terr Risk Ins	12	13	14	14	15	16	17	18	18	19	20	
16	Life Ins Employee	130	136	143	150	158	165	174	182	191	201	211	
17	Life Ins Family	17	18	19	20	21	22	23	24	25	26	28	
18	Med/Dent Family	6,728	7,064	7,417	7,788	8,178	8,586	9,016	9,467	9,940	10,437	10,959	
19	Med/Dent Single	5,463	5,736	6,023	6,324	6,640	6,972	7,320	7,686	8,071	8,474	8,898	
20	Medicare	602	632	664	697	732	769	807	847	890	934	981	
21	Short Term Disability	67	70	74	77	81	85	89	94	99	104	109	
22	Social Security	2,575	2,704	2,839	2,981	3,130	3,287	3,451	3,624	3,805	3,995	4,195	
23	Workers Comp	1,200	1,260	1,323	1,390	1,459	1,532	1,609	1,689	1,774	1,862	1,955	
24	Total Wages and Benefits (Per Employee)	\$62,262	\$65,375	\$68,644	\$72,076	\$75,680	\$79,464	\$83,437	\$87,609	\$91,989	\$96,588	\$101,418	
25	Cumulative Additional Employees	0	0	0	1	3	5	7	7	9	9	9	
26	Total Cost of Additional Employees	\$0	\$0	\$0	\$72,076	\$227,039	\$397,318	\$584,057	\$613,260	\$827,901	\$869,296	\$912,760	
	(1) Total Number of Additional Employees	0	0	0	1	2	2	2	0	2	0	0	0

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 INTRA-FUND LOANS

FILE: LHC.xls
 SCHEDULE: CASHFLOW
 DATE: 05/04/09
 RANGE: Loan1

	Projected										
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Repayment of loans are assumed to be made at the end of the year											
Interest Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Loans To/(From) Development Fee Subfund (To)/From Operation Subfund											
Beginning of Year Balance	\$0	\$750,000	\$765,000	\$2,280,300	\$2,325,906	\$5,622,424	\$5,734,873	\$12,349,570	\$16,596,561	\$20,178,493	\$23,332,063
Current Year Loans	750,000	0	1,500,000	0	3,250,000	0	6,500,000	4,000,000	3,250,000	2,750,000	3,000,000
Interest	\$0	15,000	15,300	45,606	46,518	112,448	114,697	246,991	331,931	403,570	466,641
Current Year Payments	0	0	0	0	0	0	0	0	0	0	0
End of Year Balance	\$750,000	\$765,000	\$2,280,300	\$2,325,906	\$5,622,424	\$5,734,873	\$12,349,570	\$16,596,561	\$20,178,493	\$23,332,063	\$26,798,704

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 DEBT SERVICE COVERAGE TEST
 TOTAL FUND

FILE: LHC.xls
 SCHEDULE: DEBT
 DATE: 5/4/2009
 RANGE: DEBT7

DESCRIPTION	Estimated	Projected									
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Annual Revenues - Including Development Fees (excluding bond/ loan proceeds)	\$13,377,370	\$15,564,033	\$16,682,886	\$18,542,640	\$19,516,286	\$20,575,390	\$21,395,389	\$22,297,066	\$23,225,556	\$24,060,387	\$24,553,513
Less:											
Operating Expenditures	10,203,517	10,208,378	10,624,573	11,131,899	11,742,068	12,388,453	13,073,186	13,623,308	14,382,880	14,994,359	15,634,254
Revenues Available For Debt Service	\$3,173,853	\$5,355,655	\$6,058,313	\$7,410,741	\$7,774,218	\$8,186,938	\$8,322,204	\$8,673,758	\$8,842,676	\$9,066,029	\$8,919,259
Revenue Bond Debt Service	-	567,315	1,134,630	1,458,810	1,782,990	2,431,350	3,079,710	3,768,593	4,457,476	4,457,476	4,457,476
Debt Service Coverage Ratio	N/A	9.44	5.34	5.08	4.36	3.37	2.70	2.30	1.98	2.03	2.00

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 BOND SIZING - EXISTING DEBT WATER

FILE: LHC.xls
 SCHEDULE: DEBT
 DATE: 5/4/2009
 RANGE: DEBT1

EXISTING DEBT SERVICE PAYMENTS	Estimated	Projected									
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Non-Growth Related											
1999 Series IDD Refunding Bonds (\$800,000)	\$19,250	\$18,600	\$17,950	\$17,288	\$16,625	\$15,963	\$15,300	\$14,638	\$13,975	\$13,313	\$12,650
2007 Series IDD WIFA SR (\$5,700,000)	397,673	397,550	397,422	397,289	397,152	397,010	396,863	396,711	396,554	396,391	396,222
1993 Series Refunding Bonds (\$4,120,000)	19,575	18,925	18,275	17,619	16,956	16,294	15,631	14,969	14,306	13,644	12,981
1964 Series IDD Bearer Bond (\$5,000)	5,000	0	0	0	0	0	0	0	0	0	0
Total	\$441,498	\$435,075	\$433,647	\$432,196	\$430,733	\$429,266	\$427,794	\$426,317	\$424,835	\$423,347	\$421,853

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 BOND SIZING - NON-GROWTH

FILE: LHC.xls
 SCHEDULE: DEBT
 DATE: 5/4/2009
 RANGE: DEBT5

Revenue Bonds

DESCRIPTION	Budget	Base	Projected								
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
BOND SIZING											
Amount to be Funded	\$0	\$11,000,000	\$0	\$4,000,000	\$0	\$1,000,000	\$0	\$2,000,000	\$0	\$0	\$0
Issuance Costs	0	110,000	0	40,000	0	10,000	0	20,000	0	0	0
Rounding Amount	0	0	0	0	0	0	0	0	0	0	0
Total Bond Size	\$0	\$11,110,000	\$0	\$4,040,000	\$0	\$1,010,000	\$0	\$2,020,000	\$0	\$0	\$0

DEBT SERVICE PAYMENT (1)

FY 2008-09	SERIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FY 2009-10	SERIES		445,748	891,495	891,495	891,495	891,495	891,495	891,495	891,495	891,495	891,495
FY 2010-11	SERIES			0	0	0	0	0	0	0	0	0
FY 2011-12	SERIES				162,090	324,180	324,180	324,180	324,180	324,180	324,180	324,180
FY 2012-13	SERIES					0	0	0	0	0	0	0
FY 2013-14	SERIES						40,523	81,045	81,045	81,045	81,045	81,045
FY 2014-15	SERIES							0	0	0	0	0
FY 2015-16	SERIES								81,045	162,090	162,090	162,090
FY 2016-17	SERIES									0	0	0
FY 2017-18	SERIES										0	0
FY 2018-19	SERIES											0
Total Proposed Debt Service		\$0	\$445,748	\$891,495	\$1,053,585	\$1,215,675	\$1,256,198	\$1,296,720	\$1,377,765	\$1,458,810	\$1,458,810	\$1,458,810

(1) 1/2 Principal and Interest payment is due on year issued.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 BOND SIZING GROWTH

FILE: LHC.xls
 SCHEDULE: DEBT
 DATE: 5/4/2009
 RANGE: DEBT3

Revenue Bonds

DESCRIPTION	Estimated	Projected									
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
BOND SIZING											
Amount to be Funded	\$0	\$3,000,000	\$0	\$4,000,000	\$0	\$15,000,000	\$0	\$15,000,000	\$0	\$0	\$0
Issuance Costs	0	30,000	0	40,000	0	150,000	0	150,000	0	0	0
Rounding Amount	0	0	0	0	0	0	0	0	0	0	0
Total Bond Size	\$0	\$3,030,000	\$0	\$4,040,000	\$0	\$15,150,000	\$0	\$15,150,000	\$0	\$0	\$0

DEBT SERVICE PAYMENT (1)

FY 2008-09	SERIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FY 2009-10	SERIES		121,568	243,135	243,135	243,135	243,135	243,135	243,135	243,135	243,135	243,135
FY 2010-11	SERIES			0	0	0	0	0	0	0	0	0
FY 2011-12	SERIES				162,090	324,180	324,180	324,180	324,180	324,180	324,180	324,180
FY 2012-13	SERIES					0	0	0	0	0	0	0
FY 2013-14	SERIES						607,838	1,215,675	1,215,675	1,215,675	1,215,675	1,215,675
FY 2014-15	SERIES							0	0	0	0	0
FY 2015-16	SERIES							607,838	1,215,675	1,215,675	1,215,675	1,215,675
FY 2016-17	SERIES								0	0	0	0
FY 2017-18	SERIES									0	0	0
FY 2018-19	SERIES										0	0
Total Proposed Debt Service		\$0	\$121,568	\$243,135	\$405,225	\$567,315	\$1,175,153	\$1,782,990	\$2,390,828	\$2,998,665	\$2,998,665	\$2,998,665

(1) 1/2 Principal and Interest payment is due on year issued.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CAPITAL IMPROVEMENT PROJECTS
 2008 \$ (1)

FILE: LHC.xls
 SCHEDULE: CIP
 DATE: 05/04/09
 RANGE: CIP1

Line No.	DESCRIPTION	Estimated	Projected									Growth	Total	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19		Percent Allocation
Total CIP														
1	Storage Building/Improvements at City Yard	\$330,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%	\$330,000
2	Treatment Plant Pipe Galley Staircase	47,000	-	-	-	-	-	-	-	-	-	-	0%	47,000
3	SCADA System Upgrade/TP Security	501,630	-	-	-	-	-	-	-	-	-	-	0%	501,630
4	Booster Station 1B Replacement	-	-	-	3,119,000	-	-	-	-	-	-	-	10%	3,119,000
5	Booster Station 1C Replacement	-	-	-	-	-	3,029,000	-	-	-	-	-	10%	3,029,000
6	Booster Station 2 Replacement	-	-	-	-	-	-	-	-	-	2,490,000	-	10%	2,490,000
7	Booster Station 2A Replacement	-	-	2,557,000	-	-	-	-	-	-	-	-	10%	2,557,000
8	Booster Station 2C Replacement	-	-	-	-	-	-	2,580,000	-	-	-	-	10%	2,580,000
9	Booster Station 4 Replacement & Additional Storage	-	-	-	1,995,000	-	-	1,500,000	-	-	-	-	33%	3,495,000
10	Booster Station 4A Replacement	-	-	-	-	-	-	-	2,310,000	-	-	-	10%	2,310,000
11	Booster Station 5A Replacement & Additional Storage	-	1,500,000	-	-	-	-	2,220,000	-	-	-	-	33%	3,720,000
12	Booster Station Demo	253,961	-	-	-	-	-	-	-	-	-	-	0%	253,961
13	Booster Station No. 1	-	-	2,100,000	-	-	-	-	-	-	-	-	10%	2,100,000
14	Booster Station No. 3	559,591	2,431,835	750,000	-	-	-	-	-	-	-	-	33%	3,741,426
15	Corrosion Control Study	46,219	-	-	-	-	-	-	-	-	-	-	0%	46,219
16	Firming Agreement with AWBA for Future Water	474,911	474,911	-	-	-	-	-	-	-	-	-	100%	949,822
17	North Water System Improvements	-	250,000	250,000	-	-	-	-	-	-	-	-	0%	500,000
18	Refurbish & Re-equip Existing Wells	-	-	500,000	-	-	-	500,000	-	-	-	-	0%	1,000,000
19	Water Treatment Plant Capacity Increase	-	250,000	250,000	-	3,000,000	6,000,000	6,000,000	12,000,000	-	-	-	100%	27,500,000
20	Waterline Replacement Improvements	435,849	450,000	450,000	450,000	450,000	250,000	250,000	250,000	250,000	250,000	-	0%	3,485,849
21	WWSE - Water Service Line Replacement	2,838,661	1,800,000	1,800,000	1,800,000	-	-	-	-	-	-	-	0%	8,238,661
22	Well Expansion Program	50,000	300,000	500,000	650,000	1,000,000	2,000,000	-	-	-	-	-	100%	4,500,000
23	Water Tank Rehabilitation & Maintenance Program	-	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	-	0%	2,000,000
24	North Water System Improvements (Growth)	-	-	-	-	-	-	-	-	-	-	-	100%	-
25	Water Main Improvements	-	-	-	-	-	-	-	-	-	-	-	90%	-
26	Water Master Plan Update	-	-	-	-	-	-	-	-	-	-	-	75%	-
27	Water Resource Recharge/Recovery	-	-	-	-	-	-	-	-	-	-	-	100%	-
28	Water Security Upgrades	-	-	-	-	-	-	-	-	-	-	-	25%	-
29	Water Tank Rehabilitation 07-08	-	-	-	-	-	-	-	-	-	-	-	0%	-
30	Well Abandonment	-	-	-	-	-	-	-	-	-	-	-	0%	-
31	Meter Replacement Program	-	-	-	-	-	-	-	-	-	-	-	0%	-
32	Unused	-	-	-	-	-	-	-	-	-	-	-	0%	-
33	CIP Addition/(Reduction) - Growth	-	-	-	-	-	-	-	-	-	-	-	100%	-
34	CIP Addition/(Reduction) - Non Growth	-	-	-	-	-	-	-	-	-	-	-	0%	-
Total CIP		\$5,537,822	\$7,656,746	\$9,357,000	\$8,214,000	\$4,650,000	\$8,450,000	\$11,699,000	\$17,030,000	\$2,760,000	\$450,000	\$2,690,000		\$78,494,568

(1) Excludes capital outlay, e.g., backhoes, trucks, and other rolling stock.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CAPITAL IMPROVEMENT PROJECTS
 (Inflated \$) (1)

FILE: LHC.xls
 SCHEDULE: CIP
 DATE: 05/04/09
 RANGE: CIP2

Line No.	DESCRIPTION	Estimated	Projected									Growth	Total	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19		Percent Allocation
Growth Related CIP														
1	Storage Building/Improvements at City Yard	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%	\$0
2	Treatment Plant Pipe Galley Staircase	-	-	-	-	-	-	-	-	-	-	-	0%	-
3	SCADA System Upgrade/TP Security	-	-	-	-	-	-	-	-	-	-	-	0%	-
4	Booster Station 1B Replacement	-	-	-	340,822	-	-	-	-	-	-	-	10%	340,822
5	Booster Station 1C Replacement	-	-	-	-	-	361,678	-	-	-	-	-	10%	361,678
6	Booster Station 2 Replacement	-	-	-	-	-	-	-	-	-	334,635	-	10%	334,635
7	Booster Station 2A Replacement	-	-	271,272	-	-	-	-	-	-	-	-	10%	271,272
8	Booster Station 2C Replacement	-	-	-	-	-	-	317,307	-	-	-	-	10%	317,307
9	Booster Station 4 Replacement & Additional Storage	-	-	-	719,397	-	-	608,788	-	-	-	-	33%	1,328,184
10	Booster Station 4A Replacement	-	-	-	-	-	-	-	292,624	-	-	-	10%	292,624
11	Booster Station 5A Replacement & Additional Storage	-	507,870	-	-	-	874,763	-	-	-	-	-	33%	1,382,633
12	Booster Station Demo	-	-	-	-	-	-	-	-	-	-	-	0%	-
13	Booster Station No. 1	-	-	222,789	-	-	-	-	-	-	-	-	10%	222,789
14	Booster Station No. 3	184,665	823,371	262,573	-	-	-	-	-	-	-	-	33%	1,270,608
15	Corrosion Control Study	-	-	-	-	-	-	-	-	-	-	-	0%	-
16	Firming Agreement with AWBA for Future Water	474,911	487,259	-	-	-	-	-	-	-	-	-	100%	962,170
17	North Water System Improvements	-	-	-	-	-	-	-	-	-	-	-	0%	-
18	Refurbish & Re-equip Existing Wells	-	-	-	-	-	-	-	-	-	-	-	0%	-
19	Water Treatment Plant Capacity Increase	-	256,500	265,225	-	3,376,526	6,955,644	7,164,314	14,758,486	-	-	-	100%	32,776,696
20	Waterline Replacement Improvements	-	-	-	-	-	-	-	-	-	-	-	0%	-
21	WWSE - Water Service Line Replacement	-	-	-	-	-	-	-	-	-	-	-	0%	-
22	Well Expansion Program	50,000	307,800	530,450	710,273	1,125,509	2,318,548	-	-	-	-	-	100%	5,042,580
23	Water Tank Rehabilitation & Maintenance Program	-	-	-	-	-	-	-	-	-	-	-	0%	-
24	North Water System Improvements (Growth)	-	-	-	-	-	-	-	-	-	-	-	100%	-
25	Water Main Improvements	-	-	-	-	-	-	-	-	-	-	-	90%	-
26	Water Master Plan Update	-	-	-	-	-	-	-	-	-	-	-	75%	-
27	Water Resource Recharge/Recovery	-	-	-	-	-	-	-	-	-	-	-	100%	-
28	Water Security Upgrades	-	-	-	-	-	-	-	-	-	-	-	25%	-
29	Water Tank Rehabilitation 07-08	-	-	-	-	-	-	-	-	-	-	-	0%	-
30	Well Abandonment	-	-	-	-	-	-	-	-	-	-	-	0%	-
31	Meter Replacement Program	-	-	-	-	-	-	-	-	-	-	-	0%	-
32	CIP Addition/(Reduction) - Growth	-	-	-	-	-	-	-	-	-	-	-	100%	0
Total Growth Related CIP		\$709,576	\$2,382,799	\$1,552,309	\$1,770,491	\$4,502,035	\$9,274,193	\$8,400,755	\$15,684,581	\$292,624	\$0	\$334,635		\$44,903,998

(1) Excludes capital outlay, e.g., backhoes, trucks, and other rolling stock.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CAPITAL IMPROVEMENT PROJECTS
 (Inflated \$) (1)

FILE: LHC.xls
 SCHEDULE: CIP
 DATE: 05/04/09
 RANGE: CIP3

Line No.	DESCRIPTION	Estimated	Projected									Growth	Total	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19		Percent Allocation
Non-Growth Related CIP														
1	Storage Building/Improvements at City Yard	\$330,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100%	\$330,000
2	Treatment Plant Pipe Galley Staircase	47,000	-	-	-	-	-	-	-	-	-	-	100%	47,000
3	SCADA System Upgrade/TP Security	501,630	-	-	-	-	-	-	-	-	-	-	100%	501,630
4	Booster Station 1B Replacement	-	-	-	3,067,394	-	-	-	-	-	-	-	90%	3,067,394
5	Booster Station 1C Replacement	-	-	-	-	-	3,255,106	-	-	-	-	-	90%	3,255,106
6	Booster Station 2 Replacement	-	-	-	-	-	-	-	-	-	3,011,717	-	90%	3,011,717
7	Booster Station 2A Replacement	-	-	2,441,449	-	-	-	-	-	-	-	-	90%	2,441,449
8	Booster Station 2C Replacement	-	-	-	-	-	-	2,855,767	-	-	-	-	90%	2,855,767
9	Booster Station 4 Replacement & Additional Storage	-	-	-	1,460,594	-	-	1,236,023	-	-	-	-	67%	2,696,617
10	Booster Station 4A Replacement	-	-	-	-	-	-	-	2,633,615	-	-	-	90%	2,633,615
11	Booster Station 5A Replacement & Additional Storage	-	1,031,130	-	-	-	1,776,033	-	-	-	-	-	67%	2,807,163
12	Booster Station Demo	253,961	-	-	-	-	-	-	-	-	-	-	100%	253,961
13	Booster Station No. 1	-	-	2,005,101	-	-	-	-	-	-	-	-	90%	2,005,101
14	Booster Station No. 3	374,926	1,671,692	533,102	-	-	-	-	-	-	-	-	67%	2,579,720
15	Corrosion Control Study	46,219	-	-	-	-	-	-	-	-	-	-	100%	46,219
16	Firming Agreement with AWBA for Future Water	-	-	-	-	-	-	-	-	-	-	-	0%	-
17	North Water System Improvements	-	256,500	265,225	-	-	-	-	-	-	-	-	100%	521,725
18	Refurbish & Re-equip Existing Wells	-	-	530,450	-	-	-	614,937	-	-	-	-	100%	1,145,387
19	Water Treatment Plant Capacity Increase	-	-	-	-	-	-	-	-	-	-	-	0%	-
20	Waterline Replacement Improvements	435,849	461,700	477,405	491,727	506,479	289,819	298,513	307,468	316,693	326,193	-	100%	3,911,846
21	WWSE - Water Service Line Replacement	2,838,661	1,846,800	1,909,620	1,966,909	-	-	-	-	-	-	-	100%	8,561,990
22	Well Expansion Program	-	-	-	-	-	-	-	-	-	-	-	0%	-
23	Water Tank Rehabilitation & Maintenance Program	-	205,200	212,180	218,545	225,102	231,855	238,810	245,975	253,354	260,955	268,783	100%	2,360,759
24	North Water System Improvements (Growth)	-	-	-	-	-	-	-	-	-	-	-	0%	-
25	Water Main Improvements	-	-	-	-	-	-	-	-	-	-	-	10%	-
26	Water Master Plan Update	-	-	-	-	-	-	-	-	-	-	-	25%	-
27	Water Resource Recharge/Recovery	-	-	-	-	-	-	-	-	-	-	-	0%	-
28	Water Security Upgrades	-	-	-	-	-	-	-	-	-	-	-	75%	-
29	Water Tank Rehabilitation 07-08	-	-	-	-	-	-	-	-	-	-	-	100%	-
30	Well Abandonment	-	-	-	-	-	-	-	-	-	-	-	100%	-
31	Meter Replacement Program	-	-	-	-	-	-	-	-	-	-	-	100%	-
32	CIP Addition/(Reduction) - Non Growth	-	-	-	-	-	-	-	-	-	-	-	100%	-
Total Non-Growth Related CIP		\$4,828,246	\$5,473,022	\$8,374,532	\$7,205,169	\$731,581	\$521,673	\$5,568,463	\$5,260,171	\$3,203,662	\$587,148	\$3,280,500		\$45,034,166

(1) Excludes capital outlay, e.g., backhoes, trucks, and other rolling stock.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 GENERAL INPUT SCHEDULE

FILE: LHC.xls
 SCHEDULE: INPUT
 DATE: 05/04/09
 RANGE: INPUT1

1. **General Model Parameters**

a. Base Year - (July 1) **2008** FY 2008-09

2. **Beginning Fund Balances - July 1, 2008**

a.

Water ⁽¹⁾	
Operations Subfund	\$3,696,867
Development Fee Subfund	0
Total	<u>\$3,696,867</u>

3. **Base Year Revenues**

	Proj YE
	FY 2008-09
Water Charges ⁽²⁾	\$10,761,569
Well / Lake Intake	21,067
Private Fire Standby Charges	17,364
Interest Income	78,000
Miscellaneous Water Fees	40,000
IDD Property Tax	2,101,226
IDD Debt Service Property Tax	19,250
Federal Grants	46,076
Meter Fees	235,940
Turn on Fees	165,000
Backflow Prevention Permits	12,000
Horizon Six Fees	4,900
Total	<u>\$13,502,392</u>
Remaining WIFA Loan Proceeds	3,900,000
Percent transferred to Operating Subfund	100%
Percent Transferred to Development Subfund	0%
Remaining WIFA Loan Proceeds to Operating Subfund	3,900,000
Remaining WIFA Loan Proceeds to Development Subfund	-

(1) Beginning of year cash balance taken from "IDD Draft Snapshot.xls" file per City.
 (2) City estimated total water sales charges of \$10,800,000 for FY 2008-09.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 GENERAL INPUT SCHEDULE Cont.

FILE: LHC.xls
 SCHEDULE: INPUT
 DATE: 05/04/09
 RANGE: INPUT2

4. Escalation / Inflation Factors

	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	
a.	General Inflation Factors											
	Salaries and Wages	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
	Benefits	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
	Purchased Services	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
	Materials and Supplies	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	Other Expenditures	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	Contingency	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	Interfund Debits	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	Capital Outlay	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	Transfers to Other Funds	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	Water Costs	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	General Factor (CPI)	2.60%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	Construction Project Cost Inflation	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
	Development Fee Inflation Factor	2.60%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
b.	Growth Factors											
	Active Accounts	28,852	28,987	29,132	29,351	29,571	29,867	30,165	30,618	31,077	31,543	32,016
	Percent Change From Prior Year (1)	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.50%	1.50%	1.50%	1.50%	
	Connections added each year	136	145	218	220	296	299	452	459	466	473	
c.	Interest Earnings on Cash Balance	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	

(1) Percent growth rate reviewed with City staff.

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
GENERAL INPUT SCHEDULE Cont.**

**FILE: LHC.xls
SCHEDULE: INPUT
DATE: 05/04/09
RANGE: INPUT3**

5. Current Rates/Charges

Service Charge

<u>Meter Size</u>	<u>Rate Per Month</u>
3/4"	\$4.50
1"	6.50
1.5"	9.50
2"	12.50
3"	39.50
4"	50.50
6"	76.50
8"	104.50

Volume Charge

<u>Usage in Cubic Feet</u>	<u>Rate per 100 Cubic Feet (ccf)</u>	
	<u>Inside District</u>	<u>Outside District (1)</u>
All Accounts		
0 - 1,500	\$1.48	\$1.94
1,501 - 3,000	1.62	2.04
3,001 - 13,000	1.80	2.14
> 13,000	1.96	2.26

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 GENERAL INPUT SCHEDULE Cont.

FILE: LHC.xls
 SCHEDULE: INPUT
 DATE: 05/04/09
 RANGE: INPUT4

6. Bond / Loan Parameters

	Estimated	Projected									
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Revenue Bonds											
Length of Term / Repayment Period (years)	20	20	20	20	20	20	20	20	20	20	20
Annual Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Issuance Costs	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Fiscal Year Month of Issue (1=July)	1	1	1	1	1	1	1	1	1	1	1
G.O. Bonds											
Length of Term / Repayment Period (years)	20	20	20	20	20	20	20	20	20	20	20
Annual Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Issuance Costs	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Fiscal Year Month of Issue (1=July)	1	1	1	1	1	1	1	1	1	1	1
WIFA Loans											
Length of Term / Repayment Period (years)	20	20	20	20	20	20	20	20	20	20	20
Annual Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Issuance Costs	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Fiscal Year Month of Issue (1=July)	1	1	1	1	1	1	1	1	1	1	1
General Fund Loans											
Length of Term / Repayment Period (years)	10	10	10	10	10	10	10	10	10	10	10
Annual Interest Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Issuance Costs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fiscal Year Month of Issue (1=July)	1	1	1	1	1	1	1	1	1	1	1

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CALCULATED: PROJECTED WATER SERVICE REVENUE UNDER EXISTING RATES

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: PROJ_REV_EXIST

Line No.	Customer Class	Projected										Test Year	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
Inside District													
1	Non-SFR Irrigation Only	\$935,854	\$937,004	\$892,962	\$851,593	\$853,155	\$855,412	\$857,668	\$860,966	\$864,264	\$867,736	\$871,208	\$937,004
2	Commercial & Industrial	1,234,229	1,235,740	1,237,250	1,239,610	1,241,970	1,245,179	1,248,389	1,253,203	1,258,111	1,263,114	1,268,212	1,235,740
3	Hydrants	186,703	186,912	187,122	187,540	187,958	188,376	188,794	189,630	190,467	191,303	192,139	186,912
4	SFR - Irrigation Only	437,055	437,601	418,801	401,171	401,920	402,954	403,989	405,558	407,162	408,767	410,407	437,601
5	Multifamily Residential	924,340	925,493	926,646	928,376	930,164	932,528	934,950	938,583	942,274	946,022	949,828	925,493
6	RV Park	51,674	51,674	51,674	51,674	51,674	51,674	51,674	51,674	51,674	51,674	51,674	51,674
7	Single-Family Residential	6,842,128	6,798,490	6,534,543	6,287,545	6,274,815	6,266,201	6,257,730	6,257,487	6,257,526	6,257,864	6,258,497	6,798,490
8	Total Inside District	10,611,983	10,572,914	10,248,998	9,947,509	9,941,656	9,942,324	9,943,194	9,957,101	9,971,478	9,986,480	10,001,965	10,572,914
Outside District													
9	Non-SFR Irrigation Only	3,026	9,435	16,244	26,624	37,152	51,316	65,647	87,396	109,482	131,924	154,703	9,435
10	Commercial & Industrial	15,771	49,285	84,770	138,655	193,197	266,796	341,052	454,079	569,077	685,390	803,674	49,285
11	Hydrants	13,297	13,297	13,297	13,297	13,297	13,297	13,297	13,297	13,297	13,297	13,297	13,297
12	SFR - Irrigation Only	0	0	0	0	0	0	0	0	0	0	0	0
13	Multifamily Residential	0	0	0	0	0	0	0	0	0	0	0	0
14	RV Park	0	0	0	0	0	0	0	0	0	0	0	0
15	Single-Family Residential	7,872	24,570	42,302	69,318	96,711	133,606	170,938	227,553	285,083	343,507	402,825	24,570
16	Total Outside District	39,966	96,587	156,613	247,894	340,357	465,015	590,934	782,325	976,939	1,174,118	1,374,499	96,587
17	Total System	\$10,651,949	\$10,669,501	\$10,405,611	\$10,195,403	\$10,282,013	\$10,407,339	\$10,534,128	\$10,739,426	\$10,948,417	\$11,160,598	\$11,376,464	\$10,669,501

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CALCULATED: SERVICE CHARGE REVENUE

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: PROJ_REV_MSC

Line No.	Customer Class	Projected										Test Year	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
Inside District													
1	Non-SFR Irrigation Only	\$34,249	\$34,291	\$34,333	\$34,397	\$34,460	\$34,551	\$34,642	\$34,775	\$34,908	\$35,049	\$35,189	\$34,291
2	Commercial & Industrial	94,253	94,368	94,484	94,664	94,844	95,089	95,334	95,702	96,077	96,459	96,848	94,368
3	Hydrants	28,151	28,182	28,214	28,277	28,340	28,403	28,466	28,592	28,718	28,844	28,970	28,182
4	SFR - Irrigation Only	51,101	51,165	51,229	51,324	51,420	51,553	51,685	51,886	52,091	52,296	52,506	51,165
5	Multifamily Residential	102,075	102,203	102,330	102,521	102,718	102,979	103,247	103,648	104,056	104,470	104,890	102,203
6	RV Park	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368
7	Single-Family Residential	1,353,729	1,355,424	1,357,128	1,359,696	1,362,282	1,365,758	1,369,265	1,374,581	1,379,974	1,385,448	1,391,004	1,355,424
8	Total Inside District	1,664,926	1,667,001	1,669,086	1,672,246	1,675,432	1,679,700	1,684,007	1,690,552	1,697,192	1,703,933	1,710,775	1,667,001
Outside District													
9	Non-SFR Irrigation Only	-	-	-	-	-	-	-	-	-	-	-	0
10	Commercial & Industrial	140	438	753	1,231	1,715	2,368	3,028	4,031	5,052	6,084	7,134	438
11	Hydrants	408	408	408	408	408	408	408	408	408	408	408	408
12	SFR - Irrigation Only	-	-	-	-	-	-	-	-	-	-	-	0
13	Multifamily Residential	-	-	-	-	-	-	-	-	-	-	-	0
14	RV Park	-	-	-	-	-	-	-	-	-	-	-	0
15	Single-Family Residential	-	-	-	-	-	-	-	-	-	-	-	0
16	Total Outside District	548	846	1,161	1,639	2,123	2,776	3,436	4,439	5,460	6,492	7,542	846
17	Total System	\$1,665,474	\$1,667,847	\$1,670,246	\$1,673,885	\$1,677,555	\$1,682,477	\$1,687,443	\$1,694,991	\$1,702,651	\$1,710,426	\$1,718,317	\$1,667,847

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CALCULATED: VOLUME CHARGE REVENUE

Conversion

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: PROJ_REV_VOL

Line No.	Customer Class	Projected										Test Year	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Inside District													
1	Non-SFR Irrigation Only	\$901,605	\$902,712	\$858,629	\$817,196	\$818,696	\$820,861	\$823,026	\$826,191	\$829,356	\$832,687	\$836,019	\$902,712
2	Commercial & Industrial	1,139,976	1,141,371	1,142,766	1,144,946	1,147,126	1,150,090	1,153,054	1,157,501	1,162,035	1,166,656	1,171,364	1,141,371
3	Hydrants	158,553	158,730	158,908	159,263	159,618	159,973	160,328	161,038	161,749	162,459	163,169	158,730
4	SFR - Irrigation Only	385,954	386,436	367,573	349,847	350,500	351,402	352,304	353,672	355,071	356,471	357,901	386,436
5	Multifamily Residential	822,265	823,290	824,316	825,855	827,446	829,549	831,703	834,935	838,218	841,553	844,938	823,290
6	RV Park	50,306	50,306	50,306	50,306	50,306	50,306	50,306	50,306	50,306	50,306	50,306	50,306
7	Single-Family Residential	5,488,399	5,443,066	5,177,414	4,927,849	4,912,534	4,900,444	4,888,465	4,882,906	4,877,552	4,872,416	4,867,494	5,443,066
8	Total Inside District	8,947,057	8,905,913	8,579,912	8,275,263	8,266,225	8,262,625	8,259,187	8,266,550	8,274,287	8,282,547	8,291,191	8,905,913
Outside District													
9	Non-SFR Irrigation Only	3,026	9,435	16,244	26,624	37,152	51,316	65,647	87,396	109,482	131,924	154,703	9,435
10	Commercial & Industrial	15,631	48,847	84,018	137,424	191,482	264,428	338,025	450,048	564,026	679,306	796,540	48,847
11	Hydrants	12,889	12,889	12,889	12,889	12,889	12,889	12,889	12,889	12,889	12,889	12,889	12,889
12	SFR - Irrigation Only	-	-	-	-	-	-	-	-	-	-	-	0
13	Multifamily Residential	-	-	-	-	-	-	-	-	-	-	-	0
14	RV Park	-	-	-	-	-	-	-	-	-	-	-	0
15	Single-Family Residential	7,872	24,570	42,302	69,318	96,711	133,606	170,938	227,553	285,083	343,507	402,825	24,570
16	Total Outside District	39,418	95,742	155,453	246,255	338,234	462,238	587,499	777,887	971,479	1,167,626	1,366,958	95,742
17	Total System	\$8,986,475	\$9,001,655	\$8,735,365	\$8,521,518	\$8,604,459	\$8,724,863	\$8,846,686	\$9,044,437	\$9,245,767	\$9,450,174	\$9,658,149	\$9,001,655

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CALCULATED: PROJECTED WATER VOLUME

LHC.xls
 REV
 05/04/09
 PROJ_VOL

Line No.	Customer Class	Projected										Test Year	
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
		cf											
Inside District													
1	Non-SFR Irrigation Only	48,445,532	48,505,035	46,136,312	43,910,048	43,990,601	44,106,954	44,223,308	44,393,363	44,563,418	44,742,424	44,921,429	48,505,035
2	Commercial & Industrial	63,102,268	63,179,487	63,256,706	63,377,360	63,498,015	63,662,105	63,826,195	64,072,330	64,323,291	64,579,079	64,839,692	63,179,487
3	Hydrants	8,468,041	8,477,523	8,487,006	8,505,971	8,524,937	8,543,902	8,562,867	8,600,798	8,638,729	8,676,660	8,714,590	8,477,523
4	SFR - Irrigation Only	23,830,725	23,860,511	22,695,782	21,601,315	21,641,637	21,697,321	21,753,004	21,837,489	21,923,895	22,010,300	22,098,625	23,860,511
5	Multifamily Residential	46,589,335	46,647,466	46,705,598	46,792,795	46,882,898	47,002,067	47,124,143	47,307,257	47,493,277	47,682,204	47,874,037	46,647,466
6	RV Park	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974	2,583,974
7	Single-Family Residential	355,425,714	352,490,000	335,286,522	319,124,804	318,132,999	317,350,051	316,574,296	316,214,312	315,867,604	315,534,988	315,216,240	352,490,000
8	Total Inside District	548,445,589	545,743,996	525,151,900	505,896,267	505,255,061	504,946,374	504,647,787	505,009,523	505,394,188	505,809,629	506,248,587	545,743,996
Outside District													
9	Non-SFR Irrigation Only	138,059	430,476	741,108	1,214,727	1,695,058	2,341,251	2,995,113	3,987,412	4,995,051	6,018,989	7,058,266	430,476
10	Commercial & Industrial	725,325	2,266,640	3,898,621	6,376,815	8,885,230	12,270,079	15,685,151	20,883,312	26,172,139	31,521,410	36,961,347	2,266,640
11	Hydrants	586,123	586,123	586,123	586,123	586,123	586,123	586,123	586,123	586,123	586,123	586,123	586,123
12	SFR - Irrigation Only	0	0	0	0	0	0	0	0	0	0	0	0
13	Multifamily Residential	0	0	0	0	0	0	0	0	0	0	0	0
14	RV Park	0	0	0	0	0	0	0	0	0	0	0	0
15	Single-Family Residential	397,051	1,239,280	2,133,647	3,496,254	4,877,911	6,738,837	8,621,821	11,477,379	14,379,059	17,325,859	20,317,778	1,239,280
16	Total Outside District	1,846,558	4,522,519	7,359,499	11,673,919	16,044,322	21,936,290	27,888,208	36,934,226	46,132,372	55,452,381	64,923,514	4,522,519
17	Total System	550,292,147	550,266,515	532,511,399	517,570,186	521,299,383	526,882,664	532,535,995	541,943,749	551,526,560	561,262,010	571,172,101	550,266,515
			0.00%	-3.23%	-2.81%	0.72%	1.07%	1.07%	1.77%	1.77%	1.77%	1.77%	

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CALCULATED: 3/4" EQUIVALENT METERS (BASED ON METER COST)

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: PROJ_MTR_CST

Line No.	Customer Class	Actual		Projected									Test Year	
		2008	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18		FY 2018-19
Inside District														
1	Non-SFR Irrigation Only	1,280	1,280	1,282	1,284	1,286	1,288	1,292	1,295	1,300	1,305	1,310	1,316	1,282
2	Commercial & Industrial	3,273	3,273	3,277	3,281	3,287	3,294	3,302	3,311	3,323	3,336	3,350	3,363	3,277
3	Hydrants	1,049	1,049	1,050	1,051	1,053	1,056	1,058	1,061	1,065	1,070	1,075	1,079	1,050
4	SFR - Irrigation Only	945	945	946	947	949	951	953	955	959	963	967	971	946
5	Multifamily Residential	2,850	2,850	2,854	2,857	2,863	2,868	2,875	2,883	2,894	2,906	2,917	2,929	2,854
6	RV Park	55	55	55	55	55	55	55	55	55	55	55	55	55
7	Single-Family Residential	25,042	25,042	25,073	25,105	25,152	25,200	25,264	25,329	25,428	25,527	25,629	25,731	25,073
8	Total Inside District	34,494	34,494	34,537	34,580	34,645	34,712	34,799	34,889	35,024	35,162	35,303	35,444	34,537
Outside District														
9	Non-SFR Irrigation Only	35	35	109	188	309	431	595	761	1,013	1,269	1,529	1,793	109
10	Commercial & Industrial	14	14	42	73	119	166	229	293	390	489	588	690	42
11	Hydrants	63	63	63	63	63	63	63	63	63	63	63	63	63
12	SFR - Irrigation Only	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Multifamily Residential	0	0	0	0	0	0	0	0	0	0	0	0	0
14	RV Park	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Single-Family Residential	33	33	103	177	291	405	560	717	954	1,195	1,440	1,689	103
16	Total Outside District	145	145	317	501	782	1,065	1,447	1,834	2,420	3,016	3,620	4,235	317
17	Total System	34,639	34,639	34,854	35,081	35,427	35,777	36,246	36,723	37,444	38,178	38,923	39,679	34,854
18	Added SFEs		0	215	227	346	350	469	477	721	734	745	756	

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CALCULATED: 3/4" EQUIVALENT METERS (BASED ON METER CAPACITY)

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: PROJ_MTREQ

Line No.	Customer Class	Actual		Projected										Test Year
		2008	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	
Inside District														
1	Non-SFR Irrigation Only	885	885	886	887	889	891	893	895	899	902	906	909	886
2	Commercial & Industrial	2,402	2,402	2,405	2,408	2,412	2,417	2,423	2,429	2,439	2,448	2,458	2,468	2,405
3	Hydrants	776	776	777	778	780	781	783	785	788	792	795	799	777
4	SFR - Irrigation Only	954	954	955	956	958	960	962	965	968	972	976	980	955
5	Multifamily Residential	2,453	2,453	2,456	2,459	2,464	2,468	2,475	2,481	2,491	2,501	2,510	2,521	2,456
6	RV Park	43	43	43	43	43	43	43	43	43	43	43	43	43
7	Single-Family Residential	25,131	25,131	25,162	25,194	25,242	25,290	25,354	25,419	25,518	25,618	25,720	25,823	25,162
8	Total Inside District	32,644	32,644	32,684	32,725	32,788	32,850	32,933	33,017	33,146	33,276	33,408	33,543	32,684
Outside District														
9	Non-SFR Irrigation Only	21	21	64	111	182	254	350	448	597	747	901	1,056	64
10	Commercial & Industrial	6	6	20	34	56	78	107	137	182	228	275	323	20
11	Hydrants	43	43	43	43	43	43	43	43	43	43	43	43	43
12	SFR - Irrigation Only	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Multifamily Residential	0	0	0	0	0	0	0	0	0	0	0	0	0
14	RV Park	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Single-Family Residential	33	33	103	177	291	405	560	717	954	1,195	1,440	1,689	103
16	Total Outside District	103	103	230	365	572	780	1,060	1,345	1,776	2,213	2,659	3,111	230
17	Total System	32,747	32,747	32,914	33,090	33,360	33,630	33,993	34,362	34,922	35,489	36,067	36,654	32,914
18	Added SFEs		0	167	176	270	270	363	369	560	567	578	587	

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 EXISTING VOLUME CHARGES

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: VOL_USE

Customer Class	2007 Rates				% of Bills in Block			
	First \$/ccf	Second \$/ccf	Third \$/ccf	All Over \$/ccf	Service Charge %	Second %	Third %	All Over %
Inside District								
Non-SFR Irrigation Only	\$1.48	\$1.62	\$1.80	\$1.96	10%	6%	20%	64%
Commercial & Industrial	1.48	1.62	1.80	1.96	17%	9%	24%	49%
Hydrants	1.48	1.62	1.80	1.96	7%	5%	22%	66%
SFR - Irrigation Only	1.48	1.62	1.80	1.96	46%	23%	27%	4%
Multifamily Residential	1.48	1.62	1.80	1.96	26%	11%	20%	43%
RV Park	1.48	1.62	1.80	1.96	2%	1%	0%	97%
Single-Family Residential	1.48	1.62	1.80	1.96	71%	17%	10%	2%
Outside District								
Non-SFR Irrigation Only	\$1.94	\$2.04	\$2.14	\$2.26	10%	6%	20%	64%
Commercial & Industrial	1.94	2.04	2.14	2.26	17%	9%	24%	49%
Hydrants	1.94	2.04	2.14	2.26	7%	5%	22%	66%
SFR - Irrigation Only	1.94	2.04	2.14	2.26	46%	23%	27%	4%
Multifamily Residential	1.94	2.04	2.14	2.26	26%	11%	20%	43%
RV Park	1.94	2.04	2.14	2.26	2%	1%	0%	97%
Single-Family Residential	1.94	2.04	2.14	2.26	71%	17%	10%	2%

Customer Class	2008 Rates				% of Bills in Block			
	First \$/ccf	Second \$/ccf	Third \$/ccf	All Over \$/ccf	First %	Second %	Third %	All Over %
Inside District								
Non-SFR Irrigation Only	\$1.48	\$1.62	\$1.80	\$1.96	10%	6%	20%	64%
Commercial & Industrial	1.48	1.62	1.80	1.96	17%	9%	24%	49%
Hydrants	1.48	1.62	1.80	1.96	7%	5%	22%	66%
SFR - Irrigation Only	1.48	1.62	1.80	1.96	46%	23%	27%	4%
Multifamily Residential	1.48	1.62	1.80	1.96	26%	11%	20%	43%
RV Park	1.48	1.62	1.80	1.96	2%	1%	0%	97%
Single-Family Residential	1.48	1.62	1.80	1.96	71%	17%	10%	2%
Outside District								
Non-SFR Irrigation Only	\$1.94	\$2.04	\$2.14	\$2.26	10%	6%	20%	64%
Commercial & Industrial	1.94	2.04	2.14	2.26	17%	9%	24%	49%
Hydrants	1.94	2.04	2.14	2.26	7%	5%	22%	66%
SFR - Irrigation Only	1.94	2.04	2.14	2.26	46%	23%	27%	4%
Multifamily Residential	1.94	2.04	2.14	2.26	26%	11%	20%	43%
RV Park	1.94	2.04	2.14	2.26	2%	1%	0%	97%
Single-Family Residential	1.94	2.04	2.14	2.26	71%	17%	10%	2%

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 EXISTING SERVICE CHARGE BY METER SIZE

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: EXIST_MSC

Customer Class	2007 Rates								
	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"
	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill
Inside District									
Non-SFR Irrigation Only	\$4.50	\$4.50	\$6.50	\$9.50	\$12.50	\$39.50	\$50.50	\$76.50	\$104.50
Commercial & Industrial	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Hydrants	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
SFR - Irrigation Only	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Multifamily Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
RV Park	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Single-Family Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50

Outside District									
Non-SFR Irrigation Only	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Commercial & Industrial	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Hydrants	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
SFR - Irrigation Only	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Multifamily Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
RV Park	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Single-Family Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50

Customer Class	2008 Rates								
	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"
	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill
Inside District									
Non-SFR Irrigation Only	\$4.50	\$4.50	\$6.50	\$9.50	\$12.50	\$39.50	\$50.50	\$76.50	\$104.50
Commercial & Industrial	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Hydrants	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
SFR - Irrigation Only	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Multifamily Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
RV Park	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Single-Family Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Outside District									
Non-SFR Irrigation Only	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Commercial & Industrial	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Hydrants	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
SFR - Irrigation Only	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Multifamily Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
RV Park	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50
Single-Family Residential	4.50	4.50	6.50	9.50	12.50	39.50	50.50	76.50	104.50

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 ACCOUNTS BY METER SIZE - DECEMBER 2007

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: ACCTS_METER

Customer Class	Total	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"
Inside District										
Non-SFR Irrigation Only	495		284	101	45	58	2	3	2	
Commercial & Industrial Hydrants	1,112		497	335	157	108	7	6	1	1
SFR - Irrigation Only	84		16	12			30	26		
Multifamily Residential	756		734	21	1					
RV Park	1,388		864	374	71	61	8	1	8	1
Single-Family Residential	4			2				2		
Total Inside District	25,159		24,914	238	7					
Total Inside District	28,998	0	27,309	1,083	281	227	47	38	11	2
Outside District										
Non-SFR Irrigation Only	12		10			2				
Commercial & Industrial Hydrants	2		1			1				
Single-Family Residential	4						4			
Total Outside District	33		33							
Total Outside District	51	0	44	0	0	3	4	0	0	0
Total System	29,049	0	27,353	1,083	281	230	51	38	11	2

Inside District										
Non-SFR Irrigation Only	100.0%	0.0%	57.4%	20.4%	9.1%	11.7%	0.4%	0.6%	0.4%	0.0%
Commercial & Industrial Hydrants	100.0%	0.0%	44.7%	30.1%	14.1%	9.7%	0.6%	0.5%	0.1%	0.1%
SFR - Irrigation Only	100.0%	0.0%	19.0%	14.3%	0.0%	0.0%	35.7%	31.0%	0.0%	0.0%
Multifamily Residential	100.0%	0.0%	97.1%	2.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
RV Park	100.0%	0.0%	62.2%	26.9%	5.1%	4.4%	0.6%	0.1%	0.6%	0.1%
Single-Family Residential	100.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%
Total	100.0%	0.0%	94.2%	3.7%	1.0%	0.8%	0.2%	0.1%	0.0%	0.0%

Outside District										
Non-SFR Irrigation Only	100.0%	0.0%	83.3%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%
Commercial & Industrial Hydrants	100.0%	0.0%	50.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%
Single-Family Residential	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Total	100.0%	0.0%	86.3%	0.0%	0.0%	5.9%	7.8%	0.0%	0.0%	0.0%

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROJECTED USE PER ACCOUNT

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: PROJ_USE

Customer Class	Historical Average*	Projected										
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
	cf	cf	cf	cf	cf	cf	cf	cf	cf	cf	cf	cf
Inside District												
Non-SFR Irrigation Only	9,917.20	9,917.20	9,917.20	9,421.34	8,950.27	8,950.27	8,950.27	8,950.27	8,950.27	8,950.27	8,950.27	8,950.27
Commercial & Industrial	4,738.40	4,826.18	4,826.18	4,826.18	4,826.18	4,826.18	4,826.18	4,826.18	4,826.18	4,826.18	4,826.18	4,826.18
Hydrants	7,901.71	9,482.69	9,482.69	9,482.69	9,482.69	9,482.69	9,482.69	9,482.69	9,482.69	9,482.69	9,482.69	9,482.69
SFR - Irrigation Only	2,127.55	2,127.55	2,127.55	2,021.18	1,920.12	1,920.12	1,920.12	1,920.12	1,920.12	1,920.12	1,920.12	1,920.12
Multifamily Residential	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57	2,906.57
RV Park	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79	53,832.79
Single-Family Residential	1,168.94	1,186.82	1,175.55	1,116.77	1,060.93	1,055.63	1,050.35	1,045.10	1,039.87	1,034.67	1,029.50	1,024.35
Outside District												
Non-SFR Irrigation Only	958.7	958.74	958.74	958.74	958.74	958.74	958.74	958.74	958.74	958.74	958.74	958.74
Commercial & Industrial	29,672.2	30,221.87	30,221.87	30,221.87	30,221.87	30,221.87	30,221.87	30,221.87	30,221.87	30,221.87	30,221.87	30,221.87
Hydrants	10,175.1	12,210.90	12,210.90	12,210.90	12,210.90	12,210.90	12,210.90	12,210.90	12,210.90	12,210.90	12,210.90	12,210.90
SFR - Irrigation Only	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Multifamily Residential	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RV Park	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Single-Family Residential	987.5	1,002.65	1,002.65	1,002.65	1,002.65	1,002.65	1,002.65	1,002.65	1,002.65	1,002.65	1,002.65	1,002.65

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROJECTED BILLS

FILE: LHC.xls
 SCHEDULE: REV
 DATE: 05/04/09
 RANGE: PROJ_BILLS

Customer Class	Actual	Projected										
	2008	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Inside District												
Non-SFR Irrigation Only	4,885	4,885	4,891	4,897	4,906	4,915	4,928	4,941	4,960	4,979	4,999	5,019
Commercial & Industrial	13,075	13,075	13,091	13,107	13,132	13,157	13,191	13,225	13,276	13,328	13,381	13,435
Hydrants	893	893	894	895	897	899	901	903	907	911	915	919
SFR - Irrigation Only	11,201	11,201	11,215	11,229	11,250	11,271	11,300	11,329	11,373	11,418	11,463	11,509
Multifamily Residential	16,029	16,029	16,049	16,069	16,099	16,130	16,171	16,213	16,276	16,340	16,405	16,471
RV Park	48	48	48	48	48	48	48	48	48	48	48	48
Single-Family Residential	299,477	299,477	299,852	300,229	300,797	301,369	302,138	302,914	304,090	305,283	306,494	307,723
Total Inside District	345,608	345,608	346,040	346,474	347,129	347,789	348,677	349,573	350,930	352,307	353,705	355,124
Outside District												
Non-SFR Irrigation Only	144	144	449	773	1,267	1,768	2,442	3,124	4,159	5,210	6,278	7,362
Commercial & Industrial	24	24	75	129	211	294	406	519	691	866	1,043	1,223
Hydrants	48	48	48	48	48	48	48	48	48	48	48	48
SFR - Irrigation Only	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily Residential	0	0	0	0	0	0	0	0	0	0	0	0
RV Park	0	0	0	0	0	0	0	0	0	0	0	0
Single-Family Residential	396	396	1,236	2,128	3,487	4,865	6,721	8,599	11,447	14,341	17,280	20,264
Total Outside District	612	612	1,808	3,078	5,013	6,975	9,617	12,290	16,345	20,465	24,649	28,897
Total System	346,220	346,220	347,848	349,552	352,142	354,764	358,294	361,863	367,275	372,772	378,354	384,021
Average Annual Growth		0.00%	0.47%	0.49%	0.74%	0.74%	1.00%	1.00%	1.50%	1.50%	1.50%	1.50%



Lake Havasu City
2008 Water Rate and Fee Study

Appendix B: Cost-of-Service



LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 CUSTOMER CLASS FIRE PROTECTION REQUIREMENTS

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: FIRERQMT

Input Fire Protection Data

1. Fire protection requirements are used to develop system fire protection requirements as well as customer class fire protection requirements. Customer class fire protection is presented in the following section.

2. Based on Insurance Services Office (ISO) guidelines, enter recommended maximum fire flow and flow duration for the utility into the HIGHLIGHTED cells below.

Maximum Fire Flow..... 3,500 gpm
 Fire Duration..... 3 hours

3. The input table below documents fire flow requirements and fire duration for each customer class.

a. In Columns 1 and 2, enter the maximum needed fire flow and fire duration for each customer class.

b. In Columns 3 and 4, assign a one (1) for the customer classes that share expenses for direct and indirect fire protection, respectively. Correspondingly, enter a zero (0) for those that do not participate in direct and/or indirect fire protection.

Note: Direct fire protection costs primarily include capital and maintenance expenses related to fire hydrants. Indirect fire protection costs primarily include extra capacity costs related to providing needed fire flows.

<u>Customer Class</u>	(1) <u>Maximum Needed Fire Flow</u> gpm	(2) <u>Duration</u> hrs.	(3) <u>Direct Fire Participation</u> 1=Yes/0=No	(4) <u>Indirect Fire Participation</u> 1=Yes/0=No
Inside District Water Service				
Non-SFR Irrigation Only	0	0	0	0
Commercial & Industrial	3,500	3	0	1
Hydrants	0	0	0	0
SFR - Irrigation Only	0	0	0	0
Multifamily Residential	2,500	2	0	1
RV Park	1,500	2	0	1
Single-Family Residential	1,500	2	0	1
Outside District Water Service				
Non-SFR Irrigation Only	0	0	0	0
Commercial & Industrial	3,500	3	0	1
Hydrants	0	0	0	0
SFR - Irrigation Only	0	0	0	0
Multifamily Residential	2,500	2	0	1
RV Park	1,500	2	0	1
Single-Family Residential	1,500	2	0	1
Unused	3,500	3	0	0

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 DEVELOPMENT OF FIRE PROTECTION COST ALLOCATION FACTORS

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: FIREUNIT

Line No.	Customer Class	(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)		(9)
		Average Active Taps	Maximum Needed Fire Flow gpm	Duration hrs	Participation Direct Fire 1=Yes/0=No	Participation Indirect Fire 1=Yes/0=No	Weighted Fire Protection Units of Service (1 x 2 x 3 x (4 or 5)) * 60		Indirect	Fire Protection Allocation		Indirect
							Direct	Indirect	Direct	Indirect	Direct	Indirect
Inside District												
1	Non-SFR Irrigation Only	4,891	0	0	0	0	0	0	0	0.0%	0.0%	
2	Commercial & Industrial	13,091	3,500	3	0	1	0	137,455,500	0.0%	12.3%		
3	Hydrants	894	0	0	0	0	0	0	0.0%	0.0%		
4	SFR - Irrigation Only	11,215	0	0	0	0	0	0	0.0%	0.0%		
5	Multifamily Residential	16,049	2,500	2	0	1	0	80,245,000	0.0%	7.2%		
6	RV Park	48	1,500	2	0	1	0	144,000	0.0%	0.0%		
7	Single-Family Residential	299,852	1,500	2	0	1	0	899,556,000	0.0%	80.5%		
8	Total Inside District	346,040					0	1,117,400,500	0.0%	100.0%		
Outside District												
9	Non-SFR Irrigation Only	449	0	0	0	0	0	0	0.0%	0.0%		
10	Commercial & Industrial	75	3,500	3	0	1	0	787,500	0.0%	17.5%		
11	Hydrants	48	0	0	0	0	0	0	0.0%	0.0%		
12	SFR - Irrigation Only	0	0	0	0	0	0	0	0.0%	0.0%		
13	Multifamily Residential	0	2,500	2	0	1	0	0	0.0%	0.0%		
14	RV Park	0	1,500	2	0	1	0	0	0.0%	0.0%		
15	Single-Family Residential	1,236	1,500	2	0	1	0	3,708,000	0.0%	82.5%		
16	Total Outside District	1,808					0	4,495,500	100.0%	100.0%		
17	Total System	347,848					-	1,121,896,000				

Input Water Cost of Service Information	
1. If you selected the cash basis, enter the desired Outside to Inside District rate ratio into the HIGHLIGHTED cell below.	
Outside to Inside District Rate Ratio.....	1.25
Fire Protection	
2. Indicate whether you do or do not want to design public or private fire protection rates in the HIGHLIGHTED cells below.	
<u>Description</u>	<u>Design Rates?</u> (Y/N)
Public Fire Protection Rates	N
Private Fire Protection Rates	N

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 TEST YEAR COST OF SERVICE

FILE:
 SCHEDULE:
 DATE:
 RANGE:

LHC.xls
 COS
 05/04/09
 TYCOS

Line No.	Description	FY 2009-10 Test Year \$
Revenue Requirements		
	Operation & Maintenance Expense	
1	Current Operations	\$10,208,378
2	Total Operation & Maintenance Expense	10,208,378
	Debt Service	
3	Existing	435,075
4	Proposed	445,748
	Capital	
5	Non-Growth CIP	5,473,022
6	Total Capital Costs	6,353,844
7	Total Revenue Requirements	16,562,222
Operating Subfund Other Inflows / Outflows		
8	Interest Income	(157,595)
9	Miscellaneous Water Fees	(78,823)
10	IDD Property Tax	(3,269,298)
11	IDD Debt Service Property Tax	(19,346)
12	Federal Grants	0
13	Meter Fees	(237,120)
14	Turn on Fees	(165,825)
15	Backflow Prevention Permits	(12,060)
16	Horizon Six Fees	(4,925)
17	Repayment of Loan from Devel. Fee Subfund	0
18	Loan (To) Devel. Fee Subfund	0
19	Transfer From / (To) Wastewater Fund	2,000,000
20	Rate Revenue for Full-Year Increase	0
21	Non-Growth Bond Proceeds, Issuance Costs, DSR	(10,108,505)
22	Total Operating Subfund Other Inflows / Outflows	(12,053,496)
23	Increase (Decrease) in Operating Reserves	7,041,008
24	Total Adjustments	(5,012,488)
25	Net Cost of Service	\$11,549,735

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 ALLOCATION OF WATER SYSTEM ASSETS (1)

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: PLTALLO

Line No.	Description	(1)	(2)	(3)		(4)	(5)	(6)		(7)	(8)
		Total	Base	Maximum Day	Maximum Hour	Local Distribution Lines	Meters and Services	Billing	Direct Fire Protection		
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Treatment	\$37,746,217	\$23,402,655	\$14,343,563	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Production	4,043,610	1,617,444	970,466	1,455,700	0	0	0	0	0	0
Transmission and Distribution Lines (2)											
3	Constructed Water Lines - Transmission	10,897,116	4,358,847	2,615,308	3,922,962	0	0	0	0	0	0
4	Constructed Water Lines - Distribution	25,426,605	3,559,725	3,051,193	6,102,385	12,713,302	0	0	0	0	0
5	Total Transmission and Distribution Lines	36,323,721	7,918,571	5,666,500	10,025,347	12,713,302	0	0	0	0	0
6	Subtotal of All Above	78,113,548	32,938,670	20,980,529	11,481,047	12,713,302	0	0	0	0	0
General Plant											
7	Miscellaneous / Admin	3,171,749	1,337,453	851,900	466,180	516,215	0	0	0	0	0
8	Total General Plant	3,171,749	1,337,453	851,900	466,180	516,215	0	0	0	0	0
9	Total Water System Assets	\$81,285,297	\$34,276,123	\$21,832,430	\$11,947,227	\$13,229,518	\$0	\$0	\$0	\$0	\$0
10	<i>Percent of Total</i>	<i>100.0%</i>	<i>42.2%</i>	<i>26.9%</i>	<i>14.7%</i>	<i>16.3%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>
11	Annual Capital Costs	\$6,353,844	\$2,679,269	\$1,706,580	\$933,881	\$1,034,114	\$0	\$0	\$0	\$0	\$0
Allocation of Functions to Service Demand Categories											
12	Treatment	100.00%	62.00%	38.00%							
13	Production	100.00%	40.00%	24.00%	36.00%						
Transmission and Distribution Lines											
14	Constructed Water Lines - Transmission	100.00%	40.00%	24.00%	36.00%						
15	Constructed Water Lines - Distribution	100.00%	14.00%	12.00%	24.00%	50.00%					
16	Fire Protection	100.00%	0.00%								100.00%
17	Total Transmission and Distribution Lines										
General Plant											
18	Miscellaneous / Admin	100.00%	42.17%	26.86%	14.70%	16.28%	0.00%	0.00%	0.00%	0.00%	0.00%

(1) Existing water system assets by function original cost.

(2) 70% of the inch-feet of water system lines are distribution, remaining 30% are transmission lines per water system line inventory of linear feet by line diameter size.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 O&M ALLOCATIONS TO FUNCTIONAL COSTS

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: OMFUNC

Line No.	Description	Total	Treatment	Distribution	Production	Meter Services	Administration	Water Overhead	Other	Direct Revenue
1	Salaries and Wages	\$ 2,298,370	\$ 394,587	\$ 1,271,284	\$ 313,348	\$ 174,082	\$ 145,069	\$ -	\$ -	\$ -
2	Benefits	835,767	143,485	462,283	113,944	63,302	52,752	-	-	-
3	Purchased Services	3,435,545	1,487,763	337,759	1,037,422	29,227	3,571	293,532	241,010	5,260
4	Materials and Supplies	1,014,700	163,071	671,498	82,689	15,987	2,417	7,972	-	71,066
5	Other Expenditures	106,200	12,736	-	-	-	-	93,464	-	-
6	Contingency	715,000	204,688	255,003	143,863	26,273	18,948	36,721	22,407	7,096
7	Interfund Debits	1,802,796	516,100	642,962	362,736	66,246	47,776	92,587	56,497	17,892
8	Additional Employees	-	-	-	-	-	-	-	-	-
9	Total O&M	\$ 10,208,378	\$ 2,922,430	\$ 3,640,790	\$ 2,054,003	\$ 375,118	\$ 270,533	\$ 524,276	\$ 319,914	\$ 101,314
Allocations to Functions (1)										
10	Salaries and Wages	100.0%	17.17%	55.31%	13.63%	7.57%	6.31%	0.00%	0.00%	0.00%
11	Benefits	100.0%	17.17%	55.31%	13.63%	7.57%	6.31%	0.00%	0.00%	0.00%
12	Purchased Services	100.0%	43.30%	9.83%	30.20%	0.85%	0.10%	8.54%	7.02%	0.15%
13	Materials and Supplies	100.0%	16.07%	66.18%	8.15%	1.58%	0.24%	0.79%	0.00%	7.00%
14	Other Expenditures	100.0%	11.99%	0.00%	0.00%	0.00%	0.00%	88.01%	0.00%	0.00%
15	Contingency	100.0%	28.63%	35.66%	20.12%	3.67%	2.65%	5.14%	3.13%	0.99%
16	Interfund Debits	100.0%	28.63%	35.66%	20.12%	3.67%	2.65%	5.14%	3.13%	0.99%
17	Additional Employees	100.0%	17.17%	55.31%	13.63%	7.57%	6.31%	0.00%	0.00%	0.00%
18	Weighted Average	100.0%	28.63%	35.66%	20.12%	3.67%	2.65%	5.14%	3.13%	0.99%

(1) Based on City cost analysis and tracking of expenditures to functional cost categories based on budgeted costs.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: OMALLO

Line No.	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
		Total	Base	Extra Capacity		Local Distribution Lines	Customer		Direct Fire Protection	
				Maximum Day	Maximum Hour		Meters and Services	Billing/ Customer Service		
		\$	\$	\$	\$	\$	\$	\$	\$	
1	Treatment	100.00%	62.00%	38.00%						
2	Distribution (1)	100.00%	47.00%	7.20%	10.80%	35.0%				
3	Production	100.00%	40.00%	24.00%	36.00%					
4	Meters & Services	100.00%	0.00%				50.00%	50.00%		
5	Administration	100.00%	48.32%	20.75%	12.60%	14.17%	2.09%	2.09%	0.00%	
6	Water Overhead	100.00%	48.32%	20.75%	12.60%	14.17%	2.09%	2.09%	0.00%	
7	Other	100.00%	48.32%	20.75%	12.60%	14.17%	2.09%	2.09%	0.00%	
8	Direct Revenue	100.00%	48.32%	20.75%	12.60%	14.17%	2.09%	2.09%	0.00%	
13	Treatment	\$2,922,430	\$1,811,906	\$1,110,523	\$0	\$0	\$0	\$0	\$0	
14	Distribution (1)	3,640,790	1,711,171	262,137	393,205	1,274,277	0	0	0	
15	Production	2,054,003	821,601	492,961	739,441	0	0	0	0	
16	Meters & Services	375,118	0	0	0	0	187,559	187,559	0	
17	Administration	270,533	130,709	56,127	34,075	38,336	5,643	5,643	0	
18	Water Overhead	524,276	253,306	108,770	66,036	74,294	10,935	10,935	0	
19	Other	319,914	154,567	66,372	40,295	45,334	6,673	6,673	0	
20	Direct Revenue	101,314	48,950	21,019	12,761	14,357	2,113	2,113	0	
21	Total Operation and Maintenance Expense	\$10,208,378	\$4,932,212	\$2,117,909	\$1,285,815	\$1,446,597	\$212,922	\$212,922	\$0	
22	<i>Percent of Total</i>	<i>100.0%</i>	<i>48.32%</i>	<i>20.75%</i>	<i>12.60%</i>	<i>14.17%</i>	<i>2.09%</i>	<i>2.09%</i>	<i>0.00%</i>	
Total O&M Excluding Administration										
23	<i>Amount</i>	\$8,992,341	\$4,344,679	\$1,865,621	\$1,132,647	\$1,274,277	\$187,559	\$187,559	\$0	
24	<i>Percent</i>	<i>100.00%</i>	<i>48.32%</i>	<i>20.75%</i>	<i>12.60%</i>	<i>14.17%</i>	<i>2.09%</i>	<i>2.09%</i>	<i>0.00%</i>	

(1) 24% allocation to max day * 30% for transmission lines, 36% to max hour * 30% for transmission lines. Half of the distribution system lines or 35% are included in customer costs.

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 ESTIMATED UNITS OF SERVICE

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: SERVUNITS

Line No.	Customer Class	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		Water Use		Maximum Day Demand			Maximum Hour Demand			Bills	Eq. Meters (Meter Cap.)	Eq. Meters (Meter Cost)	Direct Weighted Fire Units	Indirect Weighted Fire Units
		Annual cf	Average Day cf pd	Demand Factor	Total Demand cf pd	Extra Demand cf pd	Demand Factor	Total Demand cf pd	Extra Demand cf pd					
Inside District														
1	Non-SFR Irrigation Only	48,505,035	132,891	200%	266,274	133,383	313%	416,053	149,779	4,891	886	1,282	0	0
2	Commercial & Industrial	63,179,487	173,095	166%	287,337	114,242	259%	448,964	161,627	13,091	2,405	3,277	0	137,455,500
3	Hydrants	8,477,523	23,226	282%	65,573	42,347	441%	102,458	36,885	894	777	1,050	0	0
4	SFR - Irrigation Only	23,860,511	65,371	201%	131,633	66,262	315%	205,676	74,044	11,215	955	946	0	0
5	Multifamily Residential	46,647,466	127,801	173%	221,347	93,546	271%	345,855	124,508	16,049	2,456	2,854	0	80,245,000
6	RV Park	2,583,974	7,079	178%	12,595	5,516	278%	19,680	7,085	48	43	55	0	144,000
7	Single-Family Residential	352,490,000	965,726	157%	1,520,268	554,542	246%	2,375,419	855,151	299,852	25,162	25,073	0	899,556,000
8	Total Inside District	545,743,996	1,495,189		2,505,027	1,009,838		3,914,105	1,409,078	346,040	32,684	34,537	-	1,117,400,500
Outside District														
9	Non-SFR Irrigation Only	430,476	1,179	200%	2,363	1,184	313%	3,693	1,329	449	64	109	0	0
10	Commercial & Industrial	2,266,640	6,210	166%	10,309	4,099	259%	16,107	5,799	75	20	42	0	787,500
11	Hydrants	586,123	1,606	282%	4,534	2,928	441%	7,084	2,550	48	43	63	0	0
12	SFR - Irrigation Only	0	0	201%	0	0	315%	0	0	0	0	0	0	0
13	Multifamily Residential	0	0	173%	0	0	271%	0	0	0	0	0	0	0
14	RV Park	0	0	178%	0	0	278%	0	0	0	0	0	0	0
15	Single-Family Residential	1,239,280	3,395	157%	5,345	1,950	246%	8,352	3,007	1,236	103	103	0	3,708,000
16	Total Outside District	4,522,519	12,391		22,550	10,160		35,235	12,685	1,808	230	317	-	4,495,500
Fire Protection														
17	Inside District				839	839		6,711	5,872					
18	Outside District				3	3		27	24					
19	Total Fire Protection				842	842		6,738	5,895					
20	Total System	550,266,515	1,507,580		2,528,420	1,020,840		3,956,077	1,427,658	347,848	32,914	34,854	0	1,121,896,000

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 DEVELOPMENT OF UNIT COSTS OF SERVICE

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: ULTUNITS

Line No.	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Total	Base	Maximum Day	Maximum Hour	Local Distribution Lines	Customer Meters and Services	Billing/ Customer Service	Direct Fire Protection
		\$	\$	\$	\$	\$	\$	\$	\$
Revenue Requirements - \$									
1	Operating Costs	\$10,208,378	\$4,932,212	\$2,117,909	\$1,285,815	\$1,446,597	\$212,922	\$212,922	\$0
2	Capital Costs	6,353,844	2,679,269	1,706,580	933,881	1,034,114	0	0	0
3	Total Revenue Requirements	16,562,222	7,611,480	3,824,489	2,219,696	2,480,712	212,922	212,922	0
Revenue Requirement Adjustments									
4	Interest Income	(157,595)	(72,426)	(36,391)	(21,121)	(23,605)	(2,026)	(2,026)	0
5	Miscellaneous Water Fees	(78,823)	(36,225)	(18,202)	(10,564)	(11,806)	(1,013)	(1,013)	0
6	IDD Property Tax	(3,269,298)	(1,502,466)	(754,935)	(438,157)	(489,680)	(42,030)	(42,030)	0
7	IDD Debt Service Property Tax	(19,346)	(8,890)	(4,467)	(2,593)	(2,898)	(249)	(249)	0
8	Federal Grants	0	0	0	0	0	0	0	0
9	Meter Fees	(237,120)	(108,974)	(54,755)	(31,779)	(35,516)	(3,048)	(3,048)	0
10	Turn on Fees	(165,825)	(76,208)	(38,292)	(22,224)	(24,837)	(2,132)	(2,132)	0
11	Backflow Prevention Permits	(12,060)	(5,543)	(2,785)	(1,616)	(1,806)	(155)	(155)	0
12	Horizon Six Fees	(4,925)	(2,264)	(1,137)	(660)	(738)	(63)	(63)	0
13	Repayment of Loan from Devel. Fee Subfund	0	0	0	0	0	0	0	0
14	Loan (To) Devel. Fee Subfund	0	0	0	0	0	0	0	0
15	Transfer From / (To) Wastwater Fund	2,000,000	919,137	461,833	268,043	299,563	25,712	25,712	0
16	Rate Revenue for Full-Year Increase	0	0	0	0	0	0	0	0
17	Non-Growth Bond Proceeds, Issuance Costs, DSR	(10,108,505)	(4,645,554)	(2,334,220)	(1,354,758)	(1,514,065)	(129,954)	(129,954)	0
18	Increase (Decrease) in Operating Reserves	7,041,008	3,235,826	1,625,885	943,647	1,054,612	90,519	90,519	0
19	Total Revenue Requirement Adjustments	(5,012,488)	(2,303,586)	(1,157,466)	(671,782)	(750,776)	(64,439)	(64,439)	0
20	Net Cost of Service	\$11,549,735	\$5,307,895	\$2,667,023	\$1,547,914	\$1,729,936	\$148,483	\$148,483	\$0
Units of Service									
21	Units		CF	CFPD	1,000 gpd	Eq. Meters (Meter Cap.)	Eq. Meters (Meter Cost)	# of bills	Direct Weighted Fire Units
22	Inside District		545,743,996	1,010,677	1,414,950	32,684	34,537	346,040	0
23	Outside District		4,522,519	10,163	12,708	230	317	1,808	0
24	Total Units of Service		550,266,515	1,020,840	1,427,658	32,914	34,854	347,848	0
Inside District Unit Costs of Service - \$/unit									
25	Operation and Maintenance Expense		\$0.009	\$2.070	\$0.899	\$43.874	\$6.095	\$0.611	
26	Capital Costs		0.005	1.668	0.653	31.364	0.000	0.000	
27	Adjustments		(0.004)	(1.131)	(0.470)	(22.770)	(1.845)	(0.185)	
28	Total Inside District Unit Costs		0.010	2.606	1.082	52.468	4.250	0.426	0.000
Outside District Unit Costs of Service - \$/unit									
29	Operation and Maintenance Expense		0.011	2.587	1.123	54.843	7.619	0.764	0.000
30	Capital Costs		0.006	2.084	0.816	39.205	0.000	0.000	0.000
31	Adjustments		(0.005)	(1.414)	(0.587)	(28.463)	(2.306)	(0.231)	0.000
32	Total Outside District Unit Costs		\$0.012	\$3.258	\$1.352	\$65.585	\$5.313	\$0.533	\$0.000

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 DISTRIBUTION OF COSTS TO CUSTOMER CLASSES - INSIDE DISTRICT

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: CUST_ALLOC_IS

Line No.	Customer Class	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)
		Total	Base	Extra Capacity		Maximum Hour	Local Distribution Lines	Customer		Direct Fire Protection
				Maximum Day	Maximum Hour			Meters and Services	Billing/ Customer Service	
1	Unit Costs of Service - \$/unit		\$0.010	\$2.606	\$1.082		\$52.468	\$4.250	\$0.426	\$0.000
	Non-SFR Irrigation Only									
2	Units		48,505,035	133,383	149,779		886	1,282	4,891	
3	Cost of Service - \$	\$1,030,586	\$466,922	\$347,609	\$162,035		\$46,486	\$5,449	\$2,085	
	Commercial & Industrial									
4	Units		63,179,487	114,242	161,627		2,405	3,277	13,091	
5	Cost of Service - \$	\$1,226,455	\$608,182	\$297,726	\$174,852		\$126,185	\$13,929	\$5,581	
	Hydrants									
6	Units		8,477,523	42,347	36,885		777	1,050	894	
7	Cost of Service - \$	\$277,482	\$81,607	\$110,361	\$39,903		\$40,767	\$4,463	\$381	
	SFR - Irrigation Only									
8	Units		23,860,511	66,262	74,044		955	946	11,215	
9	Cost of Service - \$	\$541,383	\$229,688	\$172,684	\$80,102		\$50,107	\$4,021	\$4,781	
	Multifamily Residential									
10	Units		46,647,466	93,546	124,508		2,456	2,854	16,049	
11	Cost of Service - \$	\$975,360	\$449,041	\$243,790	\$134,696		\$128,860	\$12,131	\$6,842	
	RV Park									
12	Units		2,583,974	5,516	7,085		43	55	48	
13	Cost of Service - \$	\$49,422	\$24,874	\$14,374	\$7,664		\$2,256	\$234	\$20	
	Single-Family Residential									
14	Units		352,490,000	554,542	855,151		25,162	25,073	299,852	
15	Cost of Service - \$	\$7,318,066	\$3,393,162	\$1,445,187	\$925,124		\$1,320,190	\$106,573	\$127,830	
16	Total Inside District - \$	\$11,418,754	\$5,253,476	\$2,631,731	\$1,524,376		\$1,714,851	\$146,800	\$147,520	\$0

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 DISTRIBUTION OF COSTS TO CUSTOMER CLASSES - OUTSIDE DISTRICT

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: CUST_ALLOC_OS

Line No.	Customer Class	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Total	Base	Extra Capacity		Local Distribution Lines	Customer		Direct Fire Protection
				Maximum Day	Maximum Hour		Meters and Services	Billing/ Customer Service	
1	Unit Costs of Service - \$/unit		\$0.012	\$3.258	\$1.352	\$65.585	\$5.313	\$0.533	\$0.000
	Non-SFR Irrigation Only								
2	Units		430,476	1,184	1,329	64	109	449	
3	Cost of Service - \$	\$15,849	\$5,180	\$3,856	\$1,798	\$4,197	\$579	\$239	
	Commercial & Industrial								
4	Units		2,266,640	4,099	5,799	20	42	75	
5	Cost of Service - \$	\$50,042	\$27,274	\$13,352	\$7,841	\$1,312	\$223	\$40	
	Hydrants								
6	Units		586,123	2,928	2,550	43	63	48	
7	Cost of Service - \$	\$23,220	\$7,053	\$9,538	\$3,448	\$2,820	\$335	\$26	
	SFR - Irrigation Only								
8	Units		0	0	0	0	0	0	
9	Cost of Service - \$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Multifamily Residential								
10	Units		0	0	0	0	0	0	
11	Cost of Service - \$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	RV Park								
12	Units		0	0	0	0	0	0	
13	Cost of Service - \$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Single-Family Residential								
14	Units		1,239,280	1,950	3,007	103	103	1,236	
15	Cost of Service - \$	\$33,290	\$14,912	\$6,351	\$4,066	\$6,755	\$547	\$659	
16	Total Outside District - \$	\$122,401	\$54,419	\$33,097	\$17,153	\$15,084	\$1,684	\$964	\$0

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 DISTRIBUTION OF COSTS TO CUSTOMER CLASSES - SUMMARY

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: CUST_ALLOC_SUM

Line No.	Customer Class	(1)	(2)	Extra Capacity		Local Distribution Lines	Customer		Direct Fire Protection
		Total	Base	Maximum Day	Maximum Hour		Meters and Services	Billing/ Customer Service	
Total Costs									
1	Inside District	\$11,418,754	\$5,253,476	\$2,631,731	\$1,524,376	\$1,714,851	\$146,800	\$147,520	\$0
2	Outside District	122,401	54,419	33,097	17,153	15,084	1,684	964	0
3	Total System	\$11,541,155	\$5,307,895	\$2,664,828	\$1,541,529	\$1,729,935	\$148,484	\$148,484	\$0
Fire Protection									
Inside District									
4	Units			839	5,872				0
5	Cost of Service - \$	\$8,538		\$2,186	\$6,352				\$0
Outside District									
6	Units			3	24				0
7	Cost of Service - \$	\$43		\$11	\$32				\$0
8	Total Fire Protection	\$8,581	\$0	\$2,197	\$6,384	\$0	\$0	\$0	\$0
9	Total Cost of Service	\$11,549,735	\$5,307,895	\$2,667,023	\$1,547,914	\$1,729,936	\$148,483	\$148,483	\$0

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 ADJUSTED COST OF SERVICE

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: ADJCOS

Line No.	Customer Class	(1) Distributed Cost	(2) Direct Fire Protection Adjustment	(3) Indirect Fire Protection Adjustment	(4) Cost of Service
Inside District					
1	Non-SFR Irrigation Only	\$1,030,586	\$0	\$0	\$1,030,586
2	Commercial & Industrial	1,226,455	0	1,050	1,227,505
3	Hydrants	277,482	0	0	277,482
4	SFR - Irrigation Only	541,383	0	0	541,383
5	Multifamily Residential	975,360	0	613	975,973
6	RV Park	49,422	0	1	49,423
7	Single-Family Residential	7,318,066	0	6,873	7,324,939
8	Total Inside District	11,418,754	0	8,538	11,427,292
Outside District					
9	Non-SFR Irrigation Only	15,849	0	0	15,849
10	Commercial & Industrial	50,042	0	8	50,050
11	Hydrants	23,220	0	0	23,220
12	SFR - Irrigation Only	0	0	0	0
13	Multifamily Residential	0	0	0	0
14	RV Park	0	0	0	0
16	Single-Family Residential	33,290	0	35	33,325
17	Total Outside District	122,401	0	43	122,444
18	Total Water System	11,541,155	0	8,581	11,549,736
Fire Protection					
19	In District Public Fire Protection	8,538	0	(8,538)	0
20	Out District Public Fire Protection	43	0	(43)	0
21	Total Fire Protection	8,581	0	(8,581)	0
22	Total System	\$11,549,736	\$0	\$0	\$11,549,736

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 ADJUSTED COST OF SERVICE

FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: COMPCOS

Line No.	Customer Class	(1) Cost of Service	(2) Revenue at Existing Rates	(3) Indicated Revenue Increase %
Inside District				
1	Non-SFR Irrigation Only	\$1,030,586	\$937,004	9.99%
2	Commercial & Industrial	1,227,505	1,235,740	-0.67%
3	Hydrants	277,482	186,912	48.46%
4	SFR - Irrigation Only	541,383	437,601	23.72%
5	Multifamily Residential	975,973	925,493	5.45%
6	RV Park	49,423	51,674	-4.36%
8	Single-Family Residential	7,324,939	6,798,490	7.74%
10	Total Inside District	11,427,292	10,572,914	8.08%
Outside District				
11	Non-SFR Irrigation Only	15,849	9,435	67.98%
12	Commercial & Industrial	50,050	49,285	1.55%
13	Hydrants	23,220	13,297	74.63%
14	SFR - Irrigation Only	0	0	#N/A
15	Multifamily Residential	0	0	#N/A
16	RV Park	0	0	#N/A
18	Single-Family Residential	33,325	24,570	35.63%
20	Total Outside District	122,444	96,587	26.77%
21	Total System	\$11,549,736	\$10,669,501	8.25%



Lake Havasu City
2008 Water Rate and Fee Study

**Appendix C: Proposed FY 2009-10
Rate Structure and Bill Changes**



LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 BASE CHARGE BY METER SIZE

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/04/09
 RANGE: ALT2_MSC_IS

Inside District						
Meter Size	Meter Capacity Ratio	Meter Cost Ratio	Monthly Billing/Cust. Service Cost	Monthly Local Dist. Lines Cost	Monthly Meters & Services Cost	Monthly Service Charge
(in.)			\$/bill	\$/bill	\$/bill	\$/bill
3/4	1.00	1.00	\$0.43	\$4.38	\$0.35	\$5.16
1	1.67	1.25	0.43	7.30	0.44	8.17
1-1/2	3.33	4.82	0.43	14.56	1.70	16.69
2	5.33	12.54	0.43	23.31	4.43	28.17
3	10.67	15.80	0.43	46.65	5.58	52.66
4	20.00	26.11	0.43	87.44	9.22	97.09
6	41.67	46.32	0.43	182.18	16.34	198.95
8	60.00	60.00	0.43	262.31	21.17	283.91

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 CHARGES BY CLASS

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/11/09
 RANGE: ALT2_IRR_IS

Non SFR Irrigation - Inside District

Total Class Cost of Service \$
\$1,030,568

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	2,806	\$5.16	\$14,480	
1"	998	8.17	8,153	
1 1/2"	445	16.69	7,421	
2"	573	28.17	16,144	
3"	20	52.66	1,041	
4"	30	97.09	2,878	
6"	20	198.95	3,932	
8"	0	283.91	0	
Total	<u>4,891</u>		<u>\$54,048</u>	<u>\$54,048</u>

Volume Rate Revenue Required **\$976,520**

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	0	0.0%	0	1.000	\$1.35	\$0
Next	16,000	39.3%	190,541	1.300	1.76	335,352
Next	73,000	35.7%	173,261	1.600	2.16	374,244
All Over	89,000	25.0%	121,248	2.000	2.70	327,370
Total		<u>100.00%</u>	<u>485,050</u>		2.14	<u>\$1,036,966</u>

Total Revenue **\$1,091,014**

Revenue Surplus (Deficiency) \$60,446

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 CHARGES BY CLASS

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/04/09
 RANGE: ALT2_COM_IS

Commercial / Industrial - Inside District

Total Class Cost of Service \$
\$1,227,708

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	5,851	\$5.16	\$30,191	
1"	3,944	8.17	32,221	
1 1/2"	1,848	16.69	30,848	
2"	1,271	28.17	35,816	
3"	82	52.66	4,340	
4"	71	97.09	6,858	
6"	12	198.95	2,342	
8"	12	283.91	3,342	
Total	<u>13,091</u>		<u>\$145,957</u>	<u>\$145,957</u>

Volume Rate Revenue Required **\$1,081,751**

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	0	0.0%	0	1.000	\$1.35	\$0
Next	31,500	65.1%	411,504	1.300	1.76	724,247
Next	308,500	29.6%	187,035	1.600	2.16	403,996
All Over	340,000	5.3%	33,256	2.000	2.70	89,791
Total		<u>100.00%</u>	<u>631,795</u>		1.93	<u>\$1,218,033</u>

Total Revenue **\$1,363,991**

Revenue Surplus (Deficiency) \$136,283

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 Test Year 2009

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/04/09
 RANGE: ALT2_HYD_IS

Hydrants - Inside District

Total Class Cost of Service \$
\$277,467

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	170	\$5.16	\$879	
1"	128	8.17	1,043	
1 1/2"	0	16.69	0	
2"	0	28.17	0	
3"	319	52.66	16,814	
4"	277	97.09	26,866	
6"	0	198.95	0	
8"	0	283.91	0	
Total	894		\$45,602	<u>\$45,602</u>

Volume Rate Revenue Required **\$231,865**

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	0	0.0%	0	1.000	\$1.35	\$0
Next	0	0.0%	0	1.300	1.76	0
Next		0.0%	0	1.600	2.16	0
All Over		100.0%	84,775	2.000	2.70	228,893
Total		100.00%	84,775		2.70	\$228,893

Total Revenue **\$274,495**

Revenue Surplus (Deficiency) (\$2,972)

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
PROPOSED FY 2009-10 RATES
CHARGES BY CLASS**

**FILE: LHC.xls
SCHEDULE: FIXED RATE
DATE: 05/04/09
RANGE: ALT2_IRR_IS**

SFR Irrigation Only - Inside District

Total Class Cost of Service

**\$
\$541,370**

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	10,889	\$5.16	\$56,185	
1"	312	8.17	2,545	
1 1/2"	15	16.69	248	
2"	0	28.17	0	
3"	0	52.66	0	
4"	0	97.09	0	
6"	0	198.95	0	
8"	0	283.91	0	
Total	11,215		\$58,978	\$58,978

Volume Rate Revenue Required

\$482,392

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	0	0.0%	0	1.000	\$1.35	\$0
Next	1,200	38.6%	92,146	1.300	1.76	162,178
Next	2,500	35.9%	85,642	1.600	2.16	184,987
All Over	3,700	25.5%	60,817	2.000	2.70	164,205
Total		100.00%	238,605		2.15	\$511,370

Total Revenue

\$570,348

Revenue Surplus (Deficiency)

\$28,978

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
PROPOSED FY 2009-10 RATES
CHARGES BY CLASS**

**FILE: LHC.xls
SCHEDULE: FIXED RATE
DATE: 05/04/09
RANGE: ALT2_MF_IS**

Multifamily Residential - Inside District

Total Class Cost of Service

**\$
\$976,178**

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	9,990	\$5.16	\$51,549	
1"	4,324	8.17	35,331	
1 1/2"	821	16.69	13,702	
2"	705	28.17	19,869	
3"	93	52.66	4,871	
4"	12	97.09	1,123	
6"	93	198.95	18,403	
8"	12	283.91	3,283	
Total	16,049		\$148,130	\$148,130

Volume Rate Revenue Required

\$828,048

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	2,600	34.9%	162,939	1.000	\$1.35	\$219,968
Next	52,400	39.8%	185,433	1.300	1.76	326,363
Next	145,000	20.2%	94,136	1.600	2.16	203,334
All Over	200,000	5.1%	23,966	2.000	2.70	64,707
Total		100.00%	466,475		1.75	\$814,372

Total Revenue

\$962,503

Revenue Surplus (Deficiency)

(\$13,676)

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
PROPOSED FY 2009-10 RATES
CHARGES BY CLASS**

**FILE: LHC.xls
SCHEDULE: FIXED RATE
DATE: 05/04/09
RANGE: ALT2_SFR_IS**

Single Family Residential - Inside District

Total Class Cost of Service \$
\$7,324,583

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	296,932	\$5.16	\$1,532,169	
1"	2,837	8.17	23,175	
1 1/2"	83	16.69	1,392	
2"	0	28.17	0	
3"	0	52.66	0	
4"	0	97.09	0	
6"	0	198.95	0	
8"	0	283.91	0	
Total	<u>299,852</u>		<u>\$1,556,736</u>	\$1,556,736

Volume Rate Revenue Required \$5,767,847

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	1,300	66.1%	2,331,020	1.000	\$1.35	\$3,146,877
Next	1,200	18.8%	661,280	1.300	1.76	1,163,853
Next	2,500	9.6%	339,264	1.600	2.16	732,810
All Over	5,000	5.5%	193,336	2.000	2.70	522,008
Total		<u>100.00%</u>	<u>3,524,900</u>		1.58	<u>\$5,565,547</u>

Total Revenue \$7,122,284

Revenue Surplus (Deficiency) (\$202,300)

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
PROPOSED FY 2009-10 RATES
CHARGES BY CLASS**

**FILE: LHC.xls
SCHEDULE: FIXED RATE
DATE: 05/04/09
RANGE: ALT2_RV_IS**

RV Park - Inside District \$
 Total Class Cost of Service \$49,422

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	0	\$5.16	\$0	
1"	24	8.17	196	
1 1/2"	0	16.69	0	
2"	0	28.17	0	
3"	0	52.66	0	
4"	24	97.09	2,330	
6"	0	198.95	0	
8"	0	283.91	0	
Total	<u>48</u>		<u>\$2,526</u>	<u>\$2,526</u>

Volume Rate Revenue Required **\$46,896**

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	39,000	36.2%	9,353	1.000	\$1.35	\$12,627
Next	47,000	32.0%	8,270	1.300	1.76	14,555
Next	64,000	27.2%	7,033	1.600	2.16	15,191
All Over	150,000	4.6%	1,184	2.000	2.70	3,196
Total		<u>100.00%</u>	<u>25,840</u>		1.77	<u>\$45,569</u>

Total Revenue **\$48,095**

Revenue Surplus (Deficiency) (\$1,327)

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 BASE CHARGE BY METER SIZE

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/04/09
 RANGE: ALT2_MSC_OS

Meter Size (in.)	Meter Capacity Ratio	Meter Cost Ratio	Monthly Billing/Cust. Service Cost \$/bill	Outside District		
				Monthly Local Dist. Lines Cost \$/bill	Monthly Meters & Services Cost \$/bill	Monthly Service Charge \$/bill
3/4	1.00	1.00	\$0.53	\$5.47	\$0.45	\$6.45
1	1.67	1.25	0.53	9.13	0.55	10.21
1-1/2	3.33	4.82	0.53	18.20	2.13	20.86
2	5.33	12.54	0.53	29.14	5.54	35.21
3	10.67	15.80	0.53	58.33	6.97	65.83
4	20.00	26.11	0.53	109.31	11.52	121.36
6	41.67	46.32	0.53	227.73	20.43	248.69
8	60.00	60.00	0.53	327.90	26.46	354.89

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
PROPOSED FY 2009-10 RATES
CHARGES BY CLASS**

**FILE: LHC.xls
SCHEDULE: FIXED RATE
DATE: 05/04/09
RANGE: ALT2_IRR_OS**

Irrigation - Outside District

Total Class Cost of Service

\$

\$15,847

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	374	\$6.45	\$2,413	
1"	0	10.21	0	
1 1/2"	0	20.86	0	
2"	75	35.21	2,635	
3"	0	65.83	0	
4"	0	121.36	0	
6"	0	248.69	0	
8"	0	354.89		
Total	449		\$5,048	\$5,048

Volume Rate Revenue Required

\$10,799

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	0	0.0%	0	1.000	\$1.69	\$0
Next	16,000	39.3%	1,691	1.300	2.20	3,720
Next	73,000	35.7%	1,538	1.600	2.70	4,152
All Over	89,000	25.0%	1,076	2.000	3.38	3,637
Total		100.00%	4,305		2.67	\$11,509

Total Outside District Revenue

\$16,557

Revenue Surplus (Deficiency)

\$710

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
PROPOSED FY 2009-10 RATES
CHARGES BY CLASS**

**FILE: LHC.xls
SCHEDULE: FIXED RATE
DATE: 05/04/09
RANGE: ALT2_COM_OS**

Commercial - Outside District

Total Class Cost of Service

\$

\$50,049

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$
3/4"	38	\$6.45	\$242
1"	0	10.21	0
1 1/2"	0	20.86	0
2"	38	35.21	1,320
3"	0	65.83	0
4"	0	121.36	0
6"	0	248.69	0
8"	0	354.89	0
Total	75		\$1,562

\$1,562

Volume Rate Revenue Required

\$48,486

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	-	0.0%	0	1.00	\$1.69	\$0
Next	31,500	65.1%	14,763	1.30	2.20	32,479
Next	308,500	29.6%	6,710	1.60	2.70	18,117
All Over	340,000	5.3%	1,193	2.00	3.38	4,033
Total		100.00%	22,666		2.41	\$54,629

Total Revenue

\$56,191

Revenue Surplus (Deficiency)

\$6,143

**LAKE HAVASU CITY, ARIZONA
2008 WATER RATE AND FEE STUDY
PROPOSED FY 2009-10 RATES
CHARGES BY CLASS**

**FILE: LHC.xls
SCHEDULE: FIXED RATE
DATE: 05/04/09
RANGE: ALT2_HYD_OS**

Hydrants - Outside District **\$**
 Total Class Cost of Service **23,219**

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$
3/4"	0	\$6.45	\$0
1"	0	10.21	0
1 1/2"	0	20.86	0
2"	0	35.21	0
3"	48	65.83	3,160
4"	0	121.36	0
6"	0	248.69	0
8"	0	354.89	0
Total	48		\$3,160

Volume Rate Revenue Required **\$20,059**

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	-	0.00%	0	1.00	\$1.69	\$0
Next	-	0.00%	0	1.30	2.20	0
Next		0.00%	0	1.60	2.70	0
All Over		100.00%	5,861	2.00	3.38	19,811
Total		100.00%	5,861		3.38	\$19,811

Total Revenue **\$22,971**

Revenue Surplus (Deficiency) (\$248)

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 CHARGES BY CLASS

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/04/09
 RANGE: ALT2_SFR_OS

Single Family Residential - Outside District

Total Class Cost of Service

\$
\$33,323

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$
3/4"	1,236	\$6.45	\$7,972
1"	0	10.21	0
1 1/2"	0	20.86	0
2"	0	35.21	0
3"	0	65.83	0
4"	0	121.36	0
6"	0	248.69	0
8"	0	354.89	0
Total	<u>1,236</u>		<u>\$7,972</u>

\$7,972

Volume Rate Revenue Required

\$25,351

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	1,300	66.1%	8,195	1.000	\$1.69	\$13,850
Next	1,200	18.8%	2,325	1.300	2.20	5,115
Next	2,500	9.6%	1,193	1.600	2.70	3,221
All Over	5,000	5.5%	680	2.000	3.38	2,297
Total		<u>100.00%</u>	<u>12,393</u>		1.98	<u>\$24,483</u>

Total Revenue

\$32,455

Revenue Surplus (Deficiency)

(\$868)

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 CHARGES BY CLASS

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/04/09
 RANGE: ALT2_RV_OS

RV Park - Outside District

Total Class Cost of Service \$
\$0

Meter Size inches	Bills	Monthly Service Charge \$	Revenue \$	
3/4"	0	\$6.45	\$0	
1"	0	10.21	0	
1 1/2"	0	20.86	0	
2"	0	35.21	0	
3"	0	65.83	0	
4"	0	121.36	0	
6"	0	248.69	0	
8"	0	354.89		
Total	0		0	\$0

Volume Rate Revenue Required **\$0**

Calculated Volume Rate (\$ per CF)

Block	Block Ending CF	Volume in Block %	Billed Volume CCF	Cumulative Factor	Volume Rate \$ per CCF	Rate Revenue \$
First	39,000	36.2%	0	1.000	\$1.69	\$0
Next	47,000	32.0%	0	1.300	2.20	0
Next	64,000	27.2%	0	1.600	2.70	0
All Over	150,000	4.6%	0	2.000	3.38	0
Total		100.00%	0		#DIV/0!	\$0

Total Revenue **\$0**

Revenue Surplus (Deficiency) \$0

LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 PROPOSED FY 2009-10 RATES
 CHARGES BY CLASS

FILE: LHC.xls
 SCHEDULE: FIXED RATE
 DATE: 05/04/09
 RANGE: ALT2_SUM

	(1)	(2)	(3)	(4)	(5)	(6)	
Line No.	Customer Class	Cost of Service	Service Charge	Volume Charge	Total	Difference \$	Difference %
Inside District							
1	Non-SFR Irrigation Only	\$1,030,568	\$54,048	\$1,036,966	\$1,091,014	\$60,446	6%
2	Commercial & Industrial	1,227,708	145,957	1,218,033	1,363,991	136,283	11%
3	Hydrants	277,467	45,602	228,893	274,495	(2,972)	-1%
4	SFR - Irrigation Only	541,370	58,978	511,370	570,348	28,978	5%
5	Multifamily Residential	976,178	148,130	814,372	962,503	(13,676)	-1%
6	RV Park	49,422	2,526	45,569	48,095	(1,327)	-3%
7	Single-Family Residential	7,324,583	1,556,736	5,565,547	7,122,284	(202,300)	-3%
8	Total Inside District	11,427,297	2,011,978	9,420,751	11,432,729	5,432	0%
Outside District							
9	Non-SFR Irrigation Only	15,847	5,048	11,509	16,557	710	4%
10	Commercial & Industrial	50,049	1,562	54,629	56,191	6,143	12%
11	Hydrants	23,219	3,160	19,811	22,971	(248)	-1%
12	SFR - Irrigation Only	0	0	0	0	0	#DIV/0!
13	Multifamily Residential	0	0	0	0	0	#DIV/0!
14	RV Park	0	0	0	0	0	#DIV/0!
15	Single-Family Residential	33,323	7,972	24,483	32,455	(868)	-3%
16	Total Outside District	122,438	17,743	110,432	128,175	5,737	5%
17	Total System	\$11,549,735	\$2,029,721	\$9,531,183	\$11,560,904	\$11,169	0%



Lake Havasu City
2008 Water Rate and Fee Study

**Appendix D: Water System Assets
by Function**



**LAKE HAVASU CITY, ARIZONA
 2008 WATER RATE AND FEE STUDY
 WATER SYSTEM ASSET SUMMARY**

**FILE: LHC.xls
 SCHEDULE: COS
 DATE: 05/04/09
 RANGE: ASSET_SUM**

Function Code	Functional Category	Asset Count	Original Cost	RCN
3	Treatment	6	\$ 23,858,224	\$ 29,616,335
2	Source of Supply	19	13,887,993	21,653,889
1	Storage	20	3,322,595	3,710,221
4	Transmission & Distribution	30	36,323,721	75,799,899
6	Booster Stations	5	721,015	847,945
5	Miscellaneous / Admin	83	3,171,749	3,649,965
	Total		<u>\$ 81,285,297</u>	<u>\$ 135,278,254</u>

LAKE HAVASU CITY, ARIZONA
WATER RATE STUDY
FIXED ASSET

FILE: .HC ASSETS.xls
SCHEDULE: Fixed Assets
DATE: 05/04/09
RANGE: Fixed1

Asset	Year Placed In Service	Original Cost	ENR 22-Cities Index Denver	Replacement Cost (1)	Function Code - Number	Function Code - Descr.
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LAND

TANK & PUMP STA#1	1978	\$13,908	2776	\$13,908	1 Storage	
WELL #6/ABANDONED	1978	33,972	2776	33,972	2 Source of Supply	
TANK & PUMP STA#3	1978	18,240	2776	18,240	1 Storage	
TANK & PUMP STA #1A	1978	29,640	2776	29,640	1 Storage	
TANK & PUMP STA #1B	1978	98,952	2776	98,952	1 Storage	
CHEMEHUEVI WASH	1978	93,480	2776	93,480	5 Miscellaneous / Admin	
TANK & PUMP STA #4A	1978	14,820	2776	14,820	1 Storage	
TANK SITE	1978	116,052	2776	116,052	1 Storage	
TANK SITE	1978	23,940	2776	23,940	1 Storage	
TANK & PUMP STA #2A	1978	120,156	2776	120,156	1 Storage	
TANK & PUMP STA #3A	1978	21,432	2776	21,432	1 Storage	
WELL #8	1978	1,049	2776	1,049	2 Source of Supply	
TANK & PUMP STA 1C	1978	41,496	2776	41,496	1 Storage	
TANK STA#4	1978	184,377	2776	184,377	1 Storage	
WELL #3 & PUMPS	1978	4,834	2776	4,834	2 Source of Supply	
WELL SITE	1978	163,978	2776	163,978	2 Source of Supply	
TANK STA 5A	1978	19,197	2776	19,197	1 Storage	
4180 COLT DRIVE LOT H-1	2006	200,950	7751	200,950	5 Miscellaneous / Admin	
S OF AQUATIC CTR WELLSITE	1994	1	5408	1	5 Miscellaneous / Admin	
Subtotal		<u>\$1,200,474</u>		<u>\$1,200,474</u>		

STRUCTURE AND IMPROVEMENT

GATE OPERATOR/KEY CARD SYS	2005	\$8,985	7446	\$9,785	5 Miscellaneous / Admin	
FENCE WATER STATION 2	2005	6,628	7446	7,218	5 Miscellaneous / Admin	
26 MGD WATER TRTMNT FACILITY	2002	23,451,534	6538	29,086,646	3 Treatment	
Subtotal		<u>\$23,467,147</u>		<u>\$29,103,649</u>		

OTHER IMPROVEMENTS

WATER SYS IMP PRIOR TO 1982	1972	\$7,638,254	1753	35,332,916	4 Transmission & Distribution	
WATER SYS IMP 1982-1992	1982	5,655,014	3825	11,988,630	4 Transmission & Distribution	
WATER SYS IMP FY 89/90	1990	216,224	4732	370,533	4 Transmission & Distribution	
WATER SYS IMP 90/91	1990	33,025	4732	56,593	4 Transmission & Distribution	

LAKE HAVASU CITY, ARIZONA
WATER RATE STUDY
FIXED ASSET

FILE: .HC ASSETS.xls
SCHEDULE: Fixed Assets
DATE: 05/04/09
RANGE: Fixed1

Asset	Year Placed In Service	Original Cost	ENR 22-Cities Index Denver	Replacement Cost (1)	Function Code - Number	Function Code - Descr.
WATER SYS IMP 91/92	1991	389,374	4835	653,037	4	Transmission & Distribution
WATER SUS IMP FY 92/93-FY99/00	1992	648,308	4985	1,054,590	4	Transmission & Distribution
WATER MASTER PLAN FY 92/93	1992	277,328	4985	451,124	5	Miscellaneous / Admin
WATER SOURCE DEV FY 93/94	1993	281,780	5210	438,571	2	Source of Supply
EQUIPMENT WELL #21	1994	101,021	5408	151,475	2	Source of Supply
WATER SOURCE DEV THRU FY 02/03	1995	77,165	5471	114,372	2	Source of Supply
INTERIM WATER TRTMNT PLANT	1995	234,155	5471	347,060	3	Treatment
EASEMENT WATER TRANS LINE	1996	389,479	5620	561,972	4	Transmission & Distribution
WATER LINES-CHENOWETH RD	1996	49,847	5620	71,923	4	Transmission & Distribution
RAISE TANK B BOOSTER	1997	29,296	5826	40,776	6	Booster Stations
WATER SYS-N LAKE HAVASU AVE	1998	3,144,910	5920	4,307,783	4	Transmission & Distribution
RESERVOIR AT STATION 2aA	1999	369,897	6059	495,048	1	Storage
WATER LINE UPSIXING	1999	239,199	6059	320,130	4	Transmission & Distribution
DRIVER & GENERATOR STATION 5A	2001	40,552	6334	51,916	5	Miscellaneous / Admin
WATER LINE UPSIZING 02/03	2002	326,364	6538	404,786	4	Transmission & Distribution
FINISHED 36" WATER TRANS MAIN	2002	3,654,926	6538	4,533,159	4	Transmission & Distribution
BOOSTER STA 3A REPLACEMENT	2002	358,787	6538	444,999	6	Booster Stations
WATER SOURCE DEV THRU 01/02	2002	1,077,912	6538	1,336,921	2	Source of Supply
HORIZONTAL COLLECTOR-RANEY WELL	2002	1,808,387	6538	2,242,920	2	Source of Supply
48" TRANSMISSION MAIN	2002	4,733,093	6538	5,870,396	4	Transmission & Distribution
LONDON BR BEACH PUMP HOUSE	2002	1,655,774	6538	2,053,636	2	Source of Supply
WATER TANK REHAB THRU FY 02/03	2003	171,000	6695	207,116	1	Storage
WATER RATE STUDY	2002	60,520	6538	75,062	5	Miscellaneous / Admin
30" TREATED WATER TRANS MAIN	2003	2,333,788	6695	2,826,690	4	Transmission & Distribution
N AREA GROUNDWTR RECHG EVAL	2003	33,402	6695	40,456	2	Source of Supply
WATERLINE REPLACE IMP FY 03/04	2003	579,839	6695	702,302	4	Transmission & Distribution
WATER TANK REHAB FY 03/04	2004	567,949	7115	647,294	1	Storage
BOOSTER PUMP STA/ADD STORAGE	2004	172,591	7115	196,703	6	Booster Stations
JAMACIA PRESSURE UPGRADE	2004	79,550	7115	90,664	4	Transmission & Distribution
WATER SVC LINE REPLACE FY 04/05	2004	1,155,751	7115	1,317,215	4	Transmission & Distribution
WATER TANK REHAB FY 04/05	2004	492,804	7115	561,652	1	Storage
WATERLINE REPLACE IMP FY 05/06	2005	269,550	7446	293,551	4	Transmission & Distribution
CHLORTAINER STORAGE WTF	2005	91,803	7446	99,977	3	Treatment
WATER SVC LINE REPLACE FY 05/06	2005	1,148,683	7446	1,250,963	4	Transmission & Distribution
WATERLINE REPLACE IMP FY 05/06	2005	237,862	7446	259,042	4	Transmission & Distribution
WATER TANK REHAB FY 05/06	2005	322,247	7446	350,940	1	Storage
BOOSTER STA 2A HEADER	2006	79,997	7751	83,692	6	Booster Stations
WATER SVC LINE REPLACE FY 06/07	2006	1,859,710	7751	1,945,606	4	Transmission & Distribution
WATER TANK REHAB FY 06/07	2006	591,469	7751	618,788	1	Storage

LAKE HAVASU CITY, ARIZONA
WATER RATE STUDY
FIXED ASSET

FILE: .HC ASSETS.xls
SCHEDULE: Fixed Assets
DATE: 05/04/09
RANGE: Fixed1

Asset	Year Placed In Service	Original Cost	ENR 22-Cities Index Denver	Replacement Cost (1)	Function Code - Number	Function Code - Descr.
CENTRAL WELL FILLED IMP	2006	25,000	7751	26,155	2	Source of Supply
WATERLINE REPLACE IMP FY 06/07	2006	345,388	7751	361,340	4	Transmission & Distribution
CHLORTAINER RETROFIT KIT	2006	16,960	7751	17,743	3	Treatment
FOOTHILLS ESTATES WTR SVC LINES	2007	119,303	7967	121,429	4	Transmission & Distribution
PUMP STA, WTR STG, TRMT	2007	60,705	7967	61,787	3	Treatment
TRACT 2368 WATER IMPROVEMENTS	2007	199,090	7967	202,639	4	Transmission & Distribution
TRACT 2367 WATER IMPROVEMENTS	2007	574,545	7967	584,785	4	Transmission & Distribution
TRACT 2369 WATER IMPROVEMENTS	2007	17,791	7967	18,108	4	Transmission & Distribution
TRACT 2370 WATER IMPROVEMENTS	2007	158,333	7967	161,155	4	Transmission & Distribution
Subtotal		<u>\$45,195,703</u>		<u>\$86,818,120</u>		

EQUIPMENT & FIXTURES

1992 FORD 3/4T SVCB	1992	\$15,953	4985	\$25,950	5	Miscellaneous / Admin
1995 FORD 1/2T PU	1995	15,195	5471	22,522	5	Miscellaneous / Admin
1995 FORD 3/4T SVCB	1995	19,208	5471	28,470	5	Miscellaneous / Admin
1995 CHEVY ASTRO VAN	1995	18,856	5471	27,948	5	Miscellaneous / Admin
1996 CHEVY 3/4T SVCB	1996	23,419	5620	33,791	5	Miscellaneous / Admin
PV300 POWER VAC ON TRLR #3145	1997	18,491	5826	25,737	5	Miscellaneous / Admin
1991 TAP MACHINE	1979	6,006	3003	16,218	5	Miscellaneous / Admin
1992 FORD F350 1T SVCB	1992	17,526	4985	28,509	5	Miscellaneous / Admin
VALVE ECERVISE MACH ON #4286	1997	15,121	5826	21,046	5	Miscellaneous / Admin
2000 INTERSTATE UTLY TRLR	1999	5,480	6059	7,334	5	Miscellaneous / Admin
200 TCM FORKLIFT	2000	21,639	6221	28,206	5	Miscellaneous / Admin
2001 STERLING 10YD DUMP TRUCK	2001	86,944	6334	111,308	5	Miscellaneous / Admin
2001 FORD 1/2T PU	2001	17,354	6334	22,217	5	Miscellaneous / Admin
2001 FORD 1/2T PU	2001	21,805	6334	27,916	5	Miscellaneous / Admin
2001 FORD 3.4T PU	2001	21,805	6334	27,916	5	Miscellaneous / Admin
MUELLER CL-12 DRILLING MACH	2002	13,508	6538	16,754	5	Miscellaneous / Admin
2002 POLARIS RANGER 2X4	2003	7,379	6695	8,937	5	Miscellaneous / Admin
2003 CARSON 7x12 DUMPTRLR	2003	5,810	6695	7,038	5	Miscellaneous / Admin
2003 CASE 580M LOADER/BACKHOE	2003	49,277	6695	59,684	5	Miscellaneous / Admin
2003 CASE 580M LOADER/BACKHOE	2003	49,277	6695	59,684	5	Miscellaneous / Admin
2004 FORD SVCB 1.5T	2004	29,661	7115	33,804	5	Miscellaneous / Admin
2004 FORD SVCB 1T	2004	26,844	7115	30,595	5	Miscellaneous / Admin
2004 FORD SVCB 1.5T	2004	29,855	7115	34,025	5	Miscellaneous / Admin
AUTO CRANE MODEL 3203 ON #4286	2005	7,658	7446	8,340	5	Miscellaneous / Admin
2006 CARSON TRAILER	2006	6,601	7751	6,905	5	Miscellaneous / Admin

LAKE HAVASU CITY, ARIZONA
WATER RATE STUDY
FIXED ASSET

FILE: .HC ASSETS.xls
SCHEDULE: Fixed Assets
DATE: 05/04/09
RANGE: Fixed1

Asset	Year Placed In Service	Original Cost	ENR 22-Cities Index Denver	Replacement Cost (1)	Function Code - Number	Function Code - Descr.
SUBMERSIBLE WATER CHAMP	2006	10,052	7751	10,516	5	Miscellaneous / Admin
STANLEY HYD PUMP SYS ON #4289	2006	7,491	7751	7,837	5	Miscellaneous / Admin
STANLEY HYD PUMP SYS ON #4288	2006	7,491	7751	7,837	5	Miscellaneous / Admin
STANLEY HYD PUMP SYS ON #4165	2006	7,491	7751	7,837	5	Miscellaneous / Admin
STANLEY HYD PUMP SYS ON #4237	2006	7,491	7751	7,837	5	Miscellaneous / Admin
SCADA ELECTRONIC PARTS	2007	26,565	7967	27,038	5	Miscellaneous / Admin
STANLEY HYD POWER UNIT W/GEN	2008	5,912	8109	5,912	5	Miscellaneous / Admin
STANLEY HYD POWER UNIT W/GEN	2008	5,912	8109	5,912	5	Miscellaneous / Admin
Subtotal		<u>\$629,073</u>		<u>\$801,580</u>		

CONSTRUCTION IN PROGRESS

WATER MAST PLAN UPDATE	2005	\$303,324	7446	\$330,333	5	Miscellaneous / Admin
WATER SECURITY/SCADA SYSTEM	2005	266,900	7446	290,665	5	Miscellaneous / Admin
05/06 WELL ABAN & REHAB	2006	68,974	7751	72,160	2	Source of Supply
CORROSION CONTROL STUDY	2007	75,757	7967	77,107	5	Miscellaneous / Admin
BOOSTER STATION 1 & 3	2007	80,343	7967	81,775	6	Booster Stations
WATER SVC LINE FY 06/07 S-2	2007	(515,405)	7967	(515,405)	4	Transmission & Distribution
WATER SVC LINE REPLACE FY 07/08	2007	286,938	7967	292,052	4	Transmission & Distribution
TREATMENT PLANT PIPE STAIRCASE	2007	3,067	7967	3,122	3	Treatment
WATER RTANK REHAB FY 07/08	2007	131	7967	133	1	Storage
WATERLINE REPLACE IMP FY 07/08	2007	354,988	7967	361,315	4	Transmission & Distribution
Subtotal		<u>\$925,017</u>		<u>\$993,257</u>		

LEASES

2005 CHEVY 1/.4T PU	2005	\$16,506	7446	\$17,976	5	Miscellaneous / Admin
2004 CASE 580M LOADER/BACKHOE	2005	58,446	7446	63,650	5	Miscellaneous / Admin
2004 CASE 580M LOADER/BACKHOE	2005	58,446	7446	63,650	5	Miscellaneous / Admin
2005 CHEVY 1/.4T PU	2005	16,506	7446	17,976	5	Miscellaneous / Admin
2005 CHEVY 1/.4T PU	2005	16,506	7446	17,976	5	Miscellaneous / Admin
2005 CHEVY 1/.4T PU	2005	16,506	7446	17,976	5	Miscellaneous / Admin
2005 CHEVY 1/.4T PU	2005	16,506	7446	17,976	5	Miscellaneous / Admin
2005 CHEVY 1.5 SVCB	2005	42,040	7446	45,784	5	Miscellaneous / Admin
2005 CHEVY VACUUM TRUCK	2005	78,221	7446	85,186	5	Miscellaneous / Admin
2005 CHEVY 1 SVCB	2005	27,394	7446	29,833	5	Miscellaneous / Admin

LAKE HAVASU CITY, ARIZONA
WATER RATE STUDY
FIXED ASSET

FILE: .HC ASSETS.xls
SCHEDULE: Fixed Assets
DATE: 05/04/09
RANGE: Fixed1

Asset	Year Placed In Service	Original Cost	ENR 22-Cities Index Denver	Replacement Cost (1)	Function Code - Number	Function Code - Descr.
2005 CHEVY 1 SVCB	2005	27,394	7446	29,833	5	Miscellaneous / Admin
2005 POLARIS RANGER 2x4	2005	9,485	7446	10,329	5	Miscellaneous / Admin
2005 POLARIS RANGER 2x4	2005	9,485	7446	10,329	5	Miscellaneous / Admin
2006 POLARIS RANGER 2x4	2006	9,619	7751	10,064	5	Miscellaneous / Admin
2006 POLARIS RANGER 2x4	2006	9,619	7751	10,064	5	Miscellaneous / Admin
2006 POLARIS RANGER 2x4	2006	9,619	7751	10,064	5	Miscellaneous / Admin
2006 POLARIS RANGER 2x4	2006	9,619	7751	10,064	5	Miscellaneous / Admin
CANON IR5020 COPIER	2004	8,528	7115	9,719	5	Miscellaneous / Admin
2007 FRELNR 10 YD DUMP TRUCK	2006	90,762	7751	94,954	5	Miscellaneous / Admin
2007 CASE 580SM LOADER/BACKHOE	2007	76,165	7967	77,522	5	Miscellaneous / Admin
2007 CHEVY 1/2T PU	2007	16,493	7967	16,787	5	Miscellaneous / Admin
2007 CHEVY 1/2T PU	2007	16,493	7967	16,787	5	Miscellaneous / Admin
2007 CHEVY 1/2T PU	2007	16,278	7967	16,568	5	Miscellaneous / Admin
2007 CHEVY 1/2T PU	2007	16,278	7967	16,568	5	Miscellaneous / Admin
2007 CHEVY 1/2T PU	2007	16,278	7967	16,568	5	Miscellaneous / Admin
2007 POLARIS RANGER 2x4	2007	11,099	7967	11,297	5	Miscellaneous / Admin
2007 POLARIS RANGER 2x4	2007	11,068	7967	11,266	5	Miscellaneous / Admin
2007 POLARIS RANGER 2x4	2007	11,068	7967	11,266	5	Miscellaneous / Admin
2007 POLARIS RANGER 2x4	2007	11,068	7967	11,266	5	Miscellaneous / Admin
2007 POLARIS RANGER 2x4	2007	11,068	7967	11,266	5	Miscellaneous / Admin
2007 POLARIS RANGER 2x4	2007	11,068	7967	11,266	5	Miscellaneous / Admin
2007 FORD 18T TRUCK CRANE	2007	131,431	7967	133,773	5	Miscellaneous / Admin
2007 CHEVY 1T SVCB	2007	43,289	7967	44,060	5	Miscellaneous / Admin
2007 CHEVY 1T SVCB	2007	43,289	7967	44,060	5	Miscellaneous / Admin
2007 CHEVY 1T SVCB	2007	43,289	7967	44,060	5	Miscellaneous / Admin
2008 CHEVY 1.5T SVCB CRANE	2007	60,047	7967	61,117	5	Miscellaneous / Admin
2007 CHEVY 1T SVCB	2007	43,289	7967	44,060	5	Miscellaneous / Admin
2008 1T PU EXT CAB DRW	2008	32,843	8109	32,843	5	Miscellaneous / Admin
2008 CHEVY 1T PU LG	2008	36,207	8109	36,207	5	Miscellaneous / Admin
Subtotal		<u>\$1,178,251</u>		<u>\$4,602,131</u>		
WATER RIGHTS						
WATER ALLOCATION	1978	\$3,008,769	2776	8,788,944	2	Source of Supply
CIBOLA WATER RIGHTS	2004	4,151,130	7115	4,731,063	2	Source of Supply
CAWCD L/T WATER STORAGE	2003	104,887	6695	127,040	1	Storage
Subtotal		<u>\$7,264,786</u>		<u>\$13,647,047</u>		

LAKE HAVASU CITY, ARIZONA
WATER RATE STUDY
FIXED ASSET

FILE: .HC ASSETS.xls
SCHEDULE: Fixed Assets
DATE: 05/04/09
RANGE: Fixed1

Asset	Year Placed In Service	Original Cost	ENR 22-Cities Index Denver	Replacement Cost (1)	Function Code - Number	Function Code - Descr.
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CAPITALIZED LEASES

ASLD LEASE	2001	30,000	6334	30,000		5 Miscellaneous / Admin
Subtotal		<u>\$30,000</u>		<u>\$30,000</u>		

IN PROGRESS

Water Source Acquisition	2002	0	6538	0		2 Source of Supply
Water Source Acquisition	2003	0	6695	0		2 Source of Supply
FUTURE WATER W/AWBA	2006	1,187,277	7751	1,242,114		2 Source of Supply
WATER RES RECHARGE/RECOVERY	2007	207,569	7967	211,269		2 Source of Supply
Subtotal		<u>\$1,394,846</u>		<u>\$1,453,383</u>		
Water System Total		<u>\$81,285,297</u>		<u>\$138,649,641</u>		

(1) Based Upon ENR Index March 2008: 8109