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STAFF REPORT

BOARD MEETING DATE: May 19, 2009

DATE: April 29, 2009

TO: Board of County Commissioners

FROM: Ben Hutchins, Finance and Customer Services Manager
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THROUGH: Rosemary Menard, Director, Department of Water Resources

SUBJECT: **Acknowledge receipt of the final report of findings and recommendations of the Water Rate Study Working Group and provide direction to staff regarding implementation of the proposed water rates and user charges.**
(All Commission Districts)

SUMMARY

A Water Rate Study Working Group was formed from members of the community to evaluate the financial condition of the operating budget of the Water Utility. The Water Rate Study Working Group was supported by Department of Water Resources (DWR) staff and a financial planning and rate development consultant. After careful review of the financial status and needs of the Water Utility, the Water Rate Study Working Group (Working Group) is recommending to the Board of County Commissioners (Board) that user rates be increased. Specifically, based on projected Water Utility operating revenue requirements, the Working Group is recommending annual increases over the next five years of 6% (years 1-2) and 5% (years 3-5).

This phase of DWR's financial review does not include any proposed revisions of growth or development related fees for the Water Utility. A future phase of DWR's financial planning work will address any proposed changes in water utility capital facility charges.

PREVIOUS ACTION

On May 27, 2008, the Board awarded a contract with FCS Group to evaluate, in part, water user rates.

On April 14, 2009, staff provided the Board with a status update and outlined overall objectives of the water rate study. The Board provided direction to DWR to complete the public outreach effort and evaluation of County water user rates and bring back recommendations from the Water Rate Study Working Group for Board consideration.

BACKGROUND

To evaluate the sufficiency of the County's water rates, the consultants developed a financial rate model and DWR established a Working Group to review revenue requirements and alternative rate scenarios and to provide recommendations to the Board.

AGENDA ITEM # _____

The Working Group was comprised of five residential customers and one representative of commercial customers. The residential participants were selected from customers who have participated in the County's Leadership Academy program and represented various water service areas. The commercial customer representative was selected as a result of a response to a letter of invitation and application sent to all current commercial customers.

The Working Group met five times between January 14, 2009, and April 16, 2009, with four of the five meetings being held in April. Each meeting lasted at least three hours and covered topics including: DWR services; a primer on utility rate setting practices and tools; DWR financial cost drivers; repair and replacement capital needs; fiscal policies; revenue requirement scenarios; consumption profiles; rate design; and the fiscal performance of various rate scenarios.

DWR's financial consultant developed a financial planning model that provides the opportunity to develop and evaluate various approaches to meeting future utility financial needs and provides information about how these scenarios would perform against established and potential financial planning and management criteria. The model has a 20-year planning horizon and allows for consideration of both short-term and long-term rate strategies. Key model outputs for user rate development include rate revenue requirements based on cash flow, debt coverage, and fiscal policy requirements.

For development of user rates and charges, the model focuses on the primary source of revenue for DWR's water operations, which is rate revenue generated by monthly service fees and water consumption charges. The model features certain cost drivers and variables that can be adjusted based on assumptions about increases in the number of customers or changes in customer use resulting from rate adjustments (e.g., price elasticity of demand). Inputs for projections of customer growth were developed using reviews of historical customer data, anticipated trends in each of the Water Utility's service areas, and knowledge of the housing market and current economic conditions in the County.

To project costs for future rate planning, the consultant's analysis includes a budget-line review of expenses and development of escalation rates for each type of expense for future years. These escalation factors are based on historical or expected trends and include specific financial model inputs on a range of factors such as general inflation, labor cost inflation, and power cost inflation.

Development of the revenue requirements took into account three major drivers: operating needs, capital needs, and policy-induced needs.

Operating Needs

Operating needs are expenditures that DWR incurs in the day-to-day operations of its water system – examples include employee salaries, power for pumping water, chemicals for treating water, and water purchases. DWR's operating budget for the Water Utility is the primary source of information about its operating expenses and is expected to exceed \$10.5 million in FY 2009/10, excluding debt service, depreciation and other capital or non-cash expenditures.

There have been several significant changes in some of the key cost variables affecting the Water Utility’s financial performance over the last three fiscal years. For example, over the last three years, the most notable changes in costs include the following increases (see Table 2):

- Increase in the cost of materials and supplies, including chemicals, of 87%;
- Increase in the cost of energy of 63%; and
- Increase in purchased water of 26% (mostly due to increased consumption).

Together, these expenses account for 53% of the “per-customer” FY 2009/10 budget.

Other increases or decreases in costs between FY 2006/07 to FY 2009/10 include:

- Decrease in salaries/wages/benefits of 2%;
- Decrease in professional services of almost 12%; and
- Increase in overhead of 11%.

Table 1 provides more details of financial performance trends between FY 2006/07 and the projected FY 2009/10 budget.

Table 1

EXPENSE CATEGORY	TOTAL COST				2007 - 2010
	FY 2006/07 Actual	FY 2007/08 Actual	FY 2008/09 Budget	FY 2009/10 Budget	% Chg
Wages/Salaries & Benefits	\$2,557,038.56	\$2,795,720.41	\$3,049,312.85	\$2,709,089.84	5.95%
Professional Services	619,276.65	532,827.77	689,466.00	591,771.00	-4.44%
Supplies	750,633.47	920,546.31	1,086,989.38	1,522,059.00	102.77%
Utilities (Power)	977,111.27	1,066,411.14	1,578,300.00	1,728,408.00	76.89%
Purchased Water	1,688,389.95	2,328,366.18	3,016,757.56	2,310,000.00	36.82%
Overhead	1,430,644.74	1,581,514.41	2,114,545.43	1,723,283.40	20.46%
Total Net of Depreciation	\$ 8,023,094.64	\$ 9,225,386.22	\$ 11,535,371.22	\$ 10,584,611.24	31.93%
Depreciation Expense	4,462,159.37	3,969,382.41	6,391,547.55	7,041,202.00	57.80%
Total Including Depreciation	\$ 12,485,254.01	\$ 13,194,768.63	\$ 17,926,918.77	\$ 17,625,813.24	41.17%

Table 2 provides a “per-customer” breakdown of the information presented in Table 1, which, due to an increasing customer base, is actually more representative of the impacts to customers of the cost escalations DWR has been experiencing.

Table 2

EXPENSE CATEGORY	MONTHLY AVERAGE COST PER CUSTOMER				2007 - 2010
	FY 2006/07 Actual	FY 2007/08 Actual	FY 2008/09 Budget	FY 2009/10 Budget	% Chg
Wages/Salaries & Benefits	12.71	13.25	14.07	12.45	-2.09%
Professional Services	3.08	2.53	3.18	2.72	-11.69%
Supplies	3.73	4.36	5.02	6.99	87.39%
Utilities (Power)	4.86	5.05	7.28	7.94	63.48%
Purchased Water	8.39	11.03	13.92	10.61	26.44%
Overhead	7.11	7.49	9.76	7.92	11.32%
Per Customer Cost Net of Depreciation	\$ 39.89	\$ 43.72	\$ 53.23	\$ 48.64	21.92%
Depreciation Expense	22.19	18.81	29.49	32.35	45.83%
Per Customer Cost Including Depreciation	\$ 62.08	\$ 62.53	\$ 82.72	\$ 80.99	30.47%
Customer Months (# Customers X 12)	201,124	211,017	216,713	217,626	8.20%
Increase in Customer Months		4.92%	2.70%	0.42%	
Avg. Cost % Chg. Net of Depreciation		9.59%	21.75%	-8.63%	

RATE INCREASE TRENDS

County Residential Rate Increase – Customer Service Charge	5.0%	5.0%	0.00%	0.00%
County Residential Rate Increase – Usage Charge	Avg. 5.5%	6.0%	0.00%	0.00%
Double Diamond & Other Classes - CPI Rate Increase	3.03%	4.33%	0.00%	0.00%

To further put things in perspective, the total cost (Table 1) of the Water Utility’s operation from FY 2006/07 to FY 2009/10 is projected to increase by 32% without depreciation, or 41% with depreciation expense. On a “per-customer” basis (Table 2), the increase from FY 2006/07 to FY 2009/10 is projected to be 22% without depreciation, or 30% with depreciation expense.

DWR has been able to keep up, to some degree, with these cost increases because in December 2005 modifications to the water rate ordinance authorized annual scheduled rate adjustments for County residential customers through 2008, and rate adjustments for all other customer classes based on the Consumer Price Index (CPI). The last three lines of Table 2 provide details of rate increase trends for March 2007 and 2008. No increase was made in March 2009 because the CPI for 2008 was 0.00%. In addition, the FY 2009/10 budget was developed assuming a 0.00% increase in water rates.

During the last two fiscal years, DWR has been making a concerted effort to more effectively manage costs and, where possible, reduce them. A variety of cost containment measures have been implemented or are planned to be implemented in the coming fiscal year. The following cost reduction measures have been accounted for in the FY 2009/10 budget and financial rate model, which will result in lower rate increases than would have otherwise been required:

- 1) DWR's department wide staffing compliment is 106.5 positions. DWR currently has 18.5 vacant positions, with an additional six positions becoming vacant in FY2009/10, bringing the total number of vacant positions to 24.5 out of 106.5. Many of these unbudgeted positions, if filled, would directly support the Water Utility's operations.
- 2) A time-of-use pumping strategy has been developed which is projected to reduce power costs between \$200,000 and \$300,000 per year.
- 3) Modifying work hours for operating and maintenance staff on water shut-off days, which reduces required overtime and provides better service to customers.
- 4) Implementing use of computers in the field, resulting in improved productivity through wireless communication of work orders and direct input of relevant payroll and system condition information that will eliminate manual processes and support DWR's planned asset management system.
- 5) Installation of GPS systems on field vehicles to improve timeliness of field staff dispatch to emerging problems and provide information for optimizing assignment of work orders and monitoring idle time to evaluate opportunities for better time management.
- 6) Improvements to SCADA to reduce or eliminate weekly visits to some well sites and other facilities
- 7) A 2.5% reduction in wages for all employees for six months.
- 8) A 35% reduction of the travel/training budget.
- 9) Coordinated pumping strategies with Truckee Meadows Water Authority (TMWA) to reduce wholesale water rate increases.
- 10) Organizational restructuring and work process redesign focusing on efficiency, cost-effectiveness and customer service.
- 11) In-sourcing small, light construction jobs to newly-created light construction crews made up of construction inspectors.

Capital Needs

The DWR capital improvement program (CIP) for water system Repair and Replacement (R&R) is the primary source of information regarding the need for capital reinvestment rehabilitation for the Water Utility over the next five years. Unlike growth related projects, R&R projects are typically funded through user rates. In instances where bond funds are used for R&R projects, user rates are the source of funds for debt service and debt reserve funds. DWR's proposed FY 2009/10 to FY 2014/15 water system R&R program includes 18 projects with an estimated cost of more than \$13 million. In order to minimize the rate impact of funding these capital projects, projects have been spread out and planned for construction and completion over the five years.

The FY 2009/10 proposed CIP R&R budget is \$2.8 million, and includes a single \$1.9 million project that is being driven by a Regional Transportation Commission (RTC) project that provides an opportunity to replace an aging and "high risk of failure" transmission line. On the one hand, by coordinating with RTC's street improvements, DWR can reduce its cost of street removal and repair that would be part of the project cost if undertaken independently. On the other hand, DWR has little choice about project timing when working with RTC, and must either come up with the necessary funds to participate or face the significantly higher cost of doing the project in its own timeframe. If the FY 2009/10 R&R capital program is funded with water

utility cash on hand, most of the available water operating cash reserve fund would be required to support this program.

Debt service is another capital-related expense for DWR. The Water Utility's annual debt service payment for its water operations is about \$1.1 million in FY 2009/10. The water operation's debt requirements are the result of four debt issuances, including R&R projects included in the \$65 million bond issued in 2005. In FY 2012/13, the Water Utility will complete payment on one of its debt obligations and annual debt service payments will be reduced from \$1.1 million to about \$884,000.

In addition to the required debt service payments, debt financing typically requires establishing and maintaining reserve accounts. For example, DWR's \$65 million Series 2005 Water and Sewer Bonds require two bond reserve accounts: one reserve account is based on the department's maximum principal and interest payment and the other reserve account is based on a percentage of budgeted annual operating expenses. In total, DWR's water operation is subject to annual payments of about \$127,000 for debt related reserves. Thus, debt service payments and reserve accounts require the Water Utility to generate about \$1.2 million per year in order to meet these utility financial obligations. Further discussion of reserves and reserve requirements is in the following section.

Policy-induced Needs

Water utilities, along with other types of utilities, have high fixed costs and are capital intensive operations. An effectively managed water utility must be prepared to maintain a strong financial condition in the face of changing circumstances such as droughts, increased regulatory requirements, economic downturns and changing customer demands. In addition, access to capital markets at favorable rates requires effective organizational leadership, planning and management with a strong focus on establishing and maintaining the financial integrity necessary to meet anticipated and unanticipated challenges.

A typical mechanism used by well-run water utilities to accomplish these important financial objectives is creating and funding financial reserves. Common types of reserves used by municipal utilities include operating reserves, rate stabilization reserves, capital contingency reserves, and bond reserves. DWR's financial policies (approved by the Board on March 26, 2005) state that it "must maintain sufficient reserves to ensure the Department is in a position to respond to changes in the economy or new service challenges without an undue amount of financial stress." As a part of the current financial review, the consultant recommended that DWR formalize both an operating and a rate stabilization reserve and develop and implement a strategy to adequately fund system repair and replacement costs.

Operating reserves, or working capital, are typically designed to provide the minimum unrestricted fund balance that is needed to accommodate the short-term cycles of revenues and expenses. They provide a "cushion" which can be used to cover cash balance fluctuations. Generally, best practice utilities target a certain number of days of working capital as a beginning cash balance to provide the liquidity needed to allow regular management of payables and payment cycles. Depending on the level of conservatism, this target can range from 45 to 90 days of a utility's annual operating expenses.

Water utilities in arid climates typically generate a very large portion of their annual revenue during the irrigation demand months. For instance, in FY 2007/08, DWR collected about \$8.6 million of its total \$11.9 million in revenue during the summer months (i.e., first and fourth quarters of each fiscal year). When comparing monthly revenue to monthly cash expense during FY 2007/08, this revenue generation pattern resulted in negative cash flows for the second and third quarters, and demonstrates DWR's need for a water utility operating reserve. A review of DWR's water utility financial information suggests that 60 days of operating expenses would be a reasonable target for an operating reserve.

Another type of reserve that has gained broad acceptance and use in the water utility industry is a "rate stabilization reserve." Specifically, the rate stabilization reserve is a designated fund balance intended to provide rate stability by mitigating unplanned variations in revenues and expenses. Conceptually, a rate stabilization reserve account positions a utility to survive the multi-year "ebbs and flows" of demand by accruing a reasonable amount of extra money in good years so that funds are available to offset losses in bad years.

Especially in the arid west, water rate structures are often designed to encourage conservation by keeping base monthly charges low and recovering most of the required revenue through volume charges. In this kind of rate structure larger users pay more, and in situations where inclining block rate structures are used, as is the case for DWR, "the more you use, the more you pay." While such rate structures do the best job of encouraging wise water use by customers, they are inherently more volatile and needed revenue generation is much more sensitive to changes in weather patterns or other circumstances that alter water use. A rate stabilization reserve is perfectly suited to help a utility prepare for and manage rate structures that emphasize volume rather than fixed charges.

DWR does not currently maintain a formalized rate stabilization reserve for the above noted purpose. DWR's current water revenue collection is split between approximately 30% fixed revenue and 70% variable revenue. Ideally, a rate stabilization reserve would be designed and funded to avoid the significant short-term rate increases that might otherwise be required to meet immediate revenue requirements should water use decline in any significant way. Based on the consultant's experience working with similar utilities and a review of customer consumption data, a reserve target of 15% of annual rate revenues was determined to be a reasonable policy objective that would help safeguard against multi-year variability in water sales.

DWR currently holds a \$65 million bond which requires another form of a rate stabilization reserve to be funded over a five year period. The required level of reserves for rate stabilization is based on one-sixth (16.7%) of annual operating expenses (rather than revenues). Proceeds from this bond sale were used to fund projects across all of the various utilities DWR operates. To meet the bond related rate stabilization reserve, cash from other utilities and sources are being reserved to meet this requirement because the Water Utility does not have funds available to contribute the required amount (16.7% of annual operating expenses).

The Working Group and DWR staff do not believe that it is financially responsible for the Water Utility to continue to operate without an adequate level of reserves, which is currently the case, and believe that a prudent course of action would be to implement a phased approach to establish

and build the needed operating reserve and rate stabilization reserves (15% of annual rate revenues), as described above. Phasing in these reserves over five years would provide sufficient working capital and approximately 10% (2/3) of the 15% rate stabilization target which would not only provide a level of reserves that is needed, but currently unavailable, but also fulfill the requirements of the \$65 million Series 2005 Water and Sewer Bonds.

Finally, the Working Group and DWR staff recommend that the Water Utility needs to develop and implement a formalized capital reinvestment mechanism to fund needed R&R projects. Within the water utility industry it is typical to set rates to fully fund an amount equal to annual depreciation and to use this source of revenue to fund R&R projects. Depreciation is calculated based on the cost and expected useful life of system assets.

The Water Utility's annual system depreciation budgeted for FY 2009/10, is about \$7 million, and DWR has a planned CIP of R&R projects for its Water Utility of about \$2.8 million in FY 2009/10. The five year CIP includes \$13.7 million of R&R projects (cost estimates based on 2009/10 anticipated costs).

Based on the funding plan being recommended, R&R projects that would need to be funded over the next five years would be cash funded. In addition, after the five year planning horizon, rate revenues generated annually are projected to provide an ongoing ability to fund future R&R projects up to approximately 50% of annual system depreciation. This level of funding would only accommodate one half of the funding level many in the water utility industry recommend. However, the Working Group, DWR staff and the financial consultant recommend taking this first step now and revisiting this issue in ongoing financial planning efforts.

In order to manage the cumulative rate impacts of establishing and funding the recommended reserves, the Working Group, DWR and the financial consultant developed several scenarios to evaluate phasing in funding for the reserves discussed above.

Revenue Requirement Scenarios

Without an increase in rates, the revenue requirement analysis outlined in Table 3 indicates that the Water Utility is projected to be operating with a cash flow deficit as soon as FY 2011/12 and would only have 22 days of operating reserves in FY 2009/10, and six days of operating reserves in FY 2010/11.

Table 3

Zero Percent Increase	FY 2009 2010	FY 2010 2011	FY 2011 2012	FY 2012 2013	FY 2013 2014
Assumptions:					
Rate Stabilization Reserve - Target (% of rate revenues)	0%	0%	0%	0%	0%
Rate Stabilization Reserve - Target Balance	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Funded System Reinvestment - (% of annual depreciation)	40%	28%	47%	46%	48%
Capital R&R Projects	\$ 2,809,192	\$ 2,003,567	\$ 3,311,447	\$ 3,256,710	\$ 3,376,585
Rate Funded System Reinvestment	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Obligations:					
Existing Debt Service	\$ 1,081,720	\$ 1,082,109	\$ 1,081,886	\$ 844,481	\$ 844,478
New Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Requirement - Repayment	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Requirement - RSR	\$ 70,813	\$ 72,937	\$ 75,125	\$ 77,379	\$ -
Bond Requirement - Long Term Obligation	\$ 56,208	\$ 56,208	\$ -	\$ -	\$ -
Operating Reserve - Beginning Balance	\$ 2,783,289	\$ 1,074,143	\$ 294,464	\$ (1,866,024)	\$ (3,942,655)
Net Cash Flow (Use of Operating Balance)	\$ (1,709,146)	\$ (779,679)	\$ (2,160,488)	\$ (2,076,631)	\$ (2,330,345)
Operating Reserve - Balance	\$ 1,074,143	\$ 294,464	\$ (1,866,024)	\$ (3,942,655)	\$ (6,272,999)
Operating Reserve - # of days of Operating Expenses	22	6	(38)	(78)	(120)
Annual Revenue Increase	0.0%	0.0%	0.0%	0.0%	0.0%

The financial projections developed in conjunction with the consultant indicate that Water Utility rates must be increased to meet its financial obligations and to meet prudent financial management policy objectives.

In reviewing the future revenue requirements and assessing the financial impacts to rate payers, the Working Group, DWR staff, and the financial consultant considered multiple scenarios for increasing revenues. In each scenario, the following basic criteria were met:

- Revenues generated would be adequate to meet the Water Utility’s existing financial obligations, including operation and maintenance expense and debt service.
- The non-debt related rate stabilization reserve, with a target of 15% of rate driven revenue, was funded at 2% per year so that 10% of the total reserve would be funded at the end of the five year period and the remaining 5% would be funded in the following three years.
- The operating reserve target of 60 days of operating expenses would be phased in so that a minimum of 60 days of operating reserve would be accrued by the end of the five year period.
- A strategy to fund ongoing system reinvestment (R&R). The two scenarios discussed in detail, which are presented below, included different approaches for funding R&R projects, one that would use debt to finance these projects and one that would use cash to “pay as you go.”

Numerous scenarios were presented to, and evaluated by, the Working Group that addressed the above noted criteria; and after careful consideration of how each scenario affected the various classes of customers, and the ability to meet sound financial objectives, the Working Group came to a final recommendation.

Two scenarios are presented below. Both fund current water operating and debt service expenses, phase in a rate stabilization reserve (2% per year), and achieve a working capital of approximately 60 days within five years; however, one uses debt to fund R&R projects while the other funds R&R projects on a “pay as you go” basis.

System Reinvestment “Debt Financing” Scenario (Not Recommended)

The debt financing scenario assumes that DWR uses debt in FY 2009/10 to fund all of the R&R projects in the five-year CIP. Under this scenario, DWR would transfer existing unobligated bond proceeds from the 2005 \$65 million bond sale, originally designated for other purposes. It also assumes generating revenues adequate to begin funding additional R&R projects on a “pay as you go” basis. This funding would generate up to 25% of projected annual depreciation at a rate of 5% per year.

The assumed rate revenue increases for the Debt Financing Scenario are shown in Table 4.

Table 4

Debt Financing Scenario	FY 2009/2010	FY 2010/2011	FY 2011/2012	FY 2012/2013	FY 2013/2014
Proposed Rate Revenue Adjustments	5%	5%	4%	4%	4%

Table 5 outlines the expected results of implementing the *System Reinvestment “Debt Financing” Scenario* and proposed increases in revenue requirements for the next five years.

Table 5

Debt Financing Scenario	FY 2009 2010	FY 2010 2011	FY 2011 2012	FY 2012 2013	FY 2013 2014
Assumptions:					
Rate Stabilization Reserve - Target (% of rate revenues)	2%	4%	6%	8%	10%
Rate Stabilization Reserve - Target Balance	\$ 235,546	\$ 520,742	\$ 837,391	\$ 1,184,406	\$ 1,570,523
Rate Funded System Reinvestment - (% of annual depreciation)	5%	10%	15%	20%	25%
Rate Funded System Reinvestment	\$ 352,060	\$ 704,120	\$ 1,056,180	\$ 1,408,240	\$ 1,760,301
Debt Obligations:					
Existing Debt Service	\$ 1,081,720	\$ 1,082,109	\$ 1,081,886	\$ 844,481	\$ 844,478
New Debt Service	\$ 1,216,610	\$ 1,216,610	\$ 1,216,610	\$ 1,216,610	\$ 1,216,610
Bond Requirement - Repayment	\$ 770,112	\$ -	\$ -	\$ -	\$ -
Bond Requirement - RSR	\$ 298,598	\$ 307,556	\$ 316,783	\$ 326,286	\$ -
Bond Requirement - Long Term Obligation	\$ 236,988	\$ 65,382	\$ -	\$ -	\$ -
Operating Reserve - Beginning Balance	\$ 2,783,289	\$ 1,489,306	\$ 1,547,347	\$ 1,768,138	\$ 2,274,332
Net Cash Flow (Use of Operating Balance)	\$ (1,293,983)	\$ 58,041	\$ 220,791	\$ 506,194	\$ 925,076
Operating Reserve - Balance	\$ 1,489,306	\$ 1,547,347	\$ 1,768,138	\$ 2,274,332	\$ 3,199,408
Operating Reserve - # of days of Operating Expenses	31	32	36	45	61
Annual Revenue Increase	5.0%	5.0%	4.0%	4.0%	4.0%

This scenario more than doubles the debt service obligations for water operations by adding a debt payment of about \$1.2 million per year for 17 years. In addition, the bond reserve requirements increase and a bond reserve repayment to other funds would also be necessary.

System Reinvestment “Pay As You Go” Funding Scenario (Recommended)

The pay as you go funding scenario assumes that water rates fund all R&R CIP projects over the course of the five year planning period. By spreading the R&R projects on a somewhat equal basis this scenario produces rate revenue that is adequate to fund 50% of projected annual depreciation. Table 6 shows the assumed rate revenue increases for this scenario.

Table 6

Pay-go Funding Scenario	FY 2009/2010	FY 2010/2011	FY 2011/2012	FY 2012/2013	FY 2013/2014
Proposed Rate Revenue Adjustments	6%	6%	5%	5%	5%

Table 7 outlines the expected results of implementing the *System Reinvestment “Pay As You Go” Funding Scenario* and proposed increases in revenue requirements for the next five years.

Table 7

Pay-go Funding Scenario	FY 2009 2010	FY 2010 2011	FY 2011 2012	FY 2012 2013	FY 2013 2014
Assumptions:					
Rate Stabilization Reserve - Target (% of rate revenues)	2%	4%	6%	8%	10%
Rate Stabilization Reserve - Target Balance	\$ 235,546	\$ 525,701	\$ 853,418	\$ 1,218,680	\$ 1,631,509
Rate Funded System Reinvestment - (% of annual depreciation)	40%	30%	47%	50%	50%
Capital R&R Projects	\$ 2,809,192	\$ 2,003,567	\$ 3,311,447	\$ 3,256,710	\$ 3,376,585
Rate Funded System Reinvestment	\$ -	\$ 108,793	\$ -	\$ 263,891	\$ 144,016
Debt Obligations:					
Existing Debt Service	\$ 1,081,720	\$ 1,082,109	\$ 1,081,886	\$ 844,481	\$ 844,478
New Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Requirement - Repayment	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Requirement - RSR	\$ 70,813	\$ 72,937	\$ 75,125	\$ 77,379	\$ -
Bond Requirement - Long Term Obligation	\$ 56,208	\$ 56,208	\$ -	\$ -	\$ -
Operating Reserve - Beginning Balance	\$ 2,783,289	\$ 1,545,234	\$ 1,913,207	\$ 1,743,723	\$ 2,172,904
Net Cash Flow (Use of Operating Balance)	\$ (1,238,055)	\$ 367,973	\$ (169,484)	\$ 429,181	\$ 1,141,081
Operating Reserve - Balance	\$ 1,545,234	\$ 1,913,207	\$ 1,743,723	\$ 2,172,904	\$ 3,313,985
Operating Reserve - # of days of Operating Expenses	32	39	35	43	64
Annual Revenue Increase	6.0%	6.0%	5.0%	5.0%	5.0%

Unlike the debt financing scenario, funding the capital R&R projects on a pay as you go basis will not affect rate payers beyond the five year horizon for these projects. Further, this scenario takes a major step toward reaching the target of funding water utility depreciation by generating revenues adequate to meet 50% of the utility’s annual depreciation by the end of the five year planning period.

In their deliberations, the Working Group looked at how well each of the scenarios met financial management policy objectives as well as how user rates would be affected.

Under this scenario, over the course of a year (averaging winter and summer usage), the typical residential customer would experience the approximate following adjustment to their water bill during the first year:

- County: **Increase** of \$2.72 (7%) per month.
- Double Diamond: **Decrease** of \$1.53 (3.2%) per month.

These residential classes currently account for approximately 96% of current water accounts and 88% of the total annual consumption.

After evaluating all scenarios, the Water Rate Study Working Group is recommending the proposed revenue requirement increases related to this scenario.

User Rates for the Recommended Proposal

Once an approach to meeting revenue requirements has been selected, costs are allocated among customer classes based on what it costs to serve each class of customer. Cost of service is typically established for both the fixed cost part of the bill (e.g., reading meters, generating bills, customer service), and the variable part of the bill, which covers water consumption. Those customers who peak off the system (e.g. use higher volumes of water) bear higher cost than those who don't because more source capacity and larger pipes, pumps and other system facilities are needed to meet their peaking requirements. Typically, customers who irrigate during the summer demand season, including residential customers, must contribute more to meeting revenue requirements than those customers who don't irrigate. The updated water rates, described below, adjust customer service and consumption charges for residential, commercial, and irrigation customers based on these cost of service principles.

Figure 1 provides information about the percent of DWR's 17,715 accounts that fall into the several categories that have been used to develop proposed user rates.

Figure 1

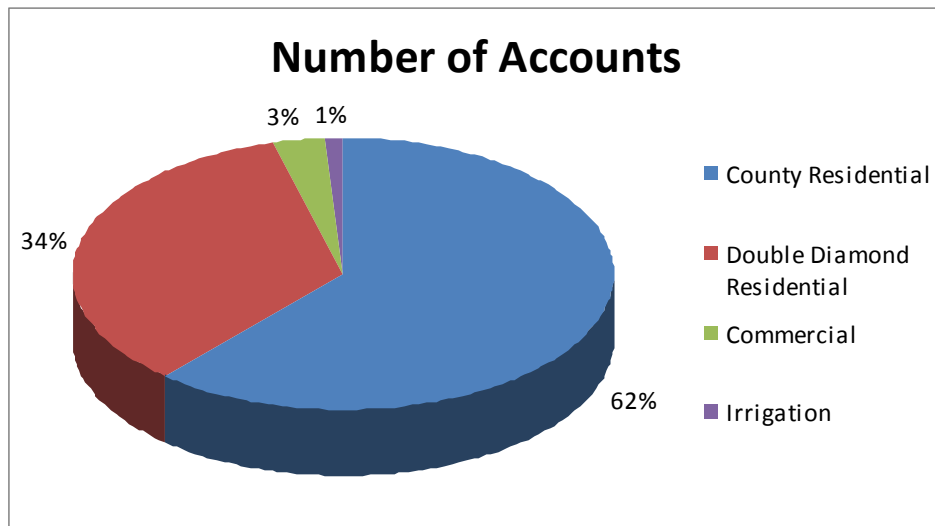
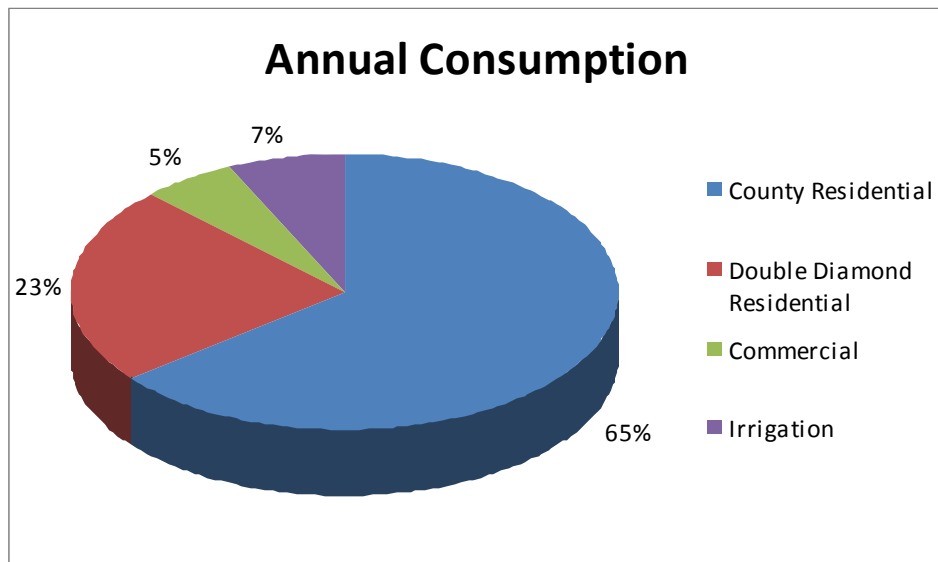


Figure 2 shows how these customer classes used the 3.6 billion gallons of water sold during FY 2007/08.

Figure 2



For a number of years Double Diamond residential customers have been treated as a separate class for rate-making purposes because of a November 1999 agreement between Sierra Pacific Power Company’s water utility (now TMWA) and DWR. The agreement transferred Double Diamond’s residential customers to DWR’s service area and required DWR to charge rates no less than the rates that Double Diamond’s residential customers would have been charged by Sierra Pacific. As of 2009, this requirement is no longer in place, and to ensure equitable treatment among all County-served water customers, rates have been designed to consolidate all customers onto a single rate schedule. The incorporation of the Double Diamond residential class into the County rate schedule would have a noticeable impact on both Double Diamond and County rates due to existing differences in charges. Therefore, the recommended rate schedule phases-in the difference between the Double Diamond and County customer service charges over a two-year period. Tables 8 through 11 compare proposed customer service and volume charge rates for Double Diamond and other DWR water customers during the next two fiscal years.

Table 8

County Monthly Customer Service Charge Residential, Commercial, Industrial, Governmental and Irrigation			
Size	Current	2009	2010
¾"	\$ 12.05	\$ 11.78	\$ 12.79
1"	\$ 13.99	\$ 15.18	\$ 16.72

Table 9

Double Diamond Monthly Customer Service Charge Residential			
Size	Current	2009	2010
¾"	\$ 17.84	\$ 14.67	\$ 12.79
1"	\$ 19.56	\$ 17.96	\$ 16.72

Table 10

County Small Residential Usage Charges				
TIER	Range	Current	Range	2009
Tier 1	0 – 5,999	\$ 1.74	0 – 6,999	\$ 2.02
Tier 2	6 – 12,999	\$ 2.07	7 – 20,999	\$ 2.53
Tier 3	13 – 24,999	\$ 2.52	21 – 40,999	\$ 3.04
Tier 4	25 – 37,999	\$ 3.04	> 41,000	\$ 4.05
Tier 5	38 – 52,999	\$ 3.34		
Tier 6	> 53,000	\$ 3.59		

Table 11

Double Diamond Small Residential Usage Charges				
TIER	Range	Current	Range	2009
Tier 1	0 – 6,000	\$ 1.70	0 – 6,999	\$ 2.02
Tier 2	6 – 28,000	\$ 2.69	7 – 20,999	\$ 2.53
Tier 3	> 28,000	\$ 3.13	21 – 40,999	\$ 3.04
Tier 4			> 41,000	\$ 4.05

Based on a review of customer consumption patterns and trends, the proposed rate schedules have been redesigned to reduce the number of consumption tiers for residential customers from three tiers for Double Diamond customer and six tiers for all other County customers, to four tiers for all residential customers. Changes are also proposed to the consumption allocated to each tier. The recommended changes resulted from a review of natural break-points in customer consumption patterns. Rates for commercial customers are recommended to remain on a seasonal volume-based charge.

Rates for irrigation customers are recommended to be based on a single rate commodity charge. Currently, County irrigation customers pay a single rate commodity charge per 1,000 gallons of water all year, whereas Double Diamond irrigation customers pay a different commodity in the winter than they do in the summer. As with the residential class, the proposed rate schedules incorporate the Double Diamond irrigation class into the County rate schedule. Unlike the residential class, the effect of rate increases for Double Diamond and County irrigation customers would be very similar since the primary change that would occur would be to eliminate the (lower) winter commodity rate for the Double Diamond class (very little irrigation water is consumed during the winter months).

A new schedule of Private Fire Protection charges has also been developed. These charges are based on a cost-of-service analysis that allocates the cost of additional water capacity utilized by private fire protection accounts. Changes to the Private Fire Protection rate would impact a total of 198 customers.

As a part of the rate review process, the Working Group, DWR staff and the financial consultant considered the potential impact on customer bills. The residential class uses water in a very uniform way; therefore, the “median” customer is probably more reflective of the “typical” customer. Since very high-volume residential customers are included in the “average” customer sample bill it is believed to be higher than “typical” sample bill. On the other hand, the commercial class does not use water as uniformly as the residential class due to the variations in business needs. Therefore, it is believed that the “typical” commercial customer is more

accurately reflected in the “average” sample bill. The following provides an overview of typical impacts for each customer class in FY 2009/10, based on FY 2007/08 consumption patterns:

- Approximately 95% of current County residential customers have a ¾” inch meter. Given the proposed rates, for FY 2009-2010 a typical (median) residential customer’s bill would **increase** by 7%, adding \$32.64 per year, an average of \$2.72 per month.
- Approximately 98% of Double Diamond residential customers have a ¾” inch meter. As a result of the 1999 agreement discussed earlier, Double Diamond residents have been paying a higher customer service charge than other Washoe County customers. The phased implementation of a plan to bring their customer service charge into alignment with that of other County customers results in a recommendation to **decrease** a typical (median) residential customer’s bill by 3.2%, or a reduction of \$18.36 per year, an average decrease of \$1.53 per month.
- Approximately 42% of commercial customers have a ¾” meter. A commercial customer with a ¾” meter is often a small storefront or other business using water only for on-site restroom and small kitchen facilities. The typical (average) commercial customer for this meter size would experience a **decrease** in their bill of 1%, or a reduction of \$2.52 per year, an average decrease of \$0.21 per month.
- Large commercial customers with 2” meter account for about 32% of commercial customers. The typical (average) customer within this class would see their water bill **increase** by 3.6% or \$68.16 per year, an average increase of \$5.68 per month.
- Depending on the meter size for an irrigation customer, the typical annual **increase** to a bill would range from 4.9% to 7.5% for a typical (average) customer.

In addition to the typical (median or average) customer, Tables 12 through 16 also provide information about sample bills for FY 2009/10 that include examples of what would be paid by customers using less and more water (25% and 90% percentiles) than the typical (median or average) customer.

Table 12

	Residential (Excludes Double Diamond)								Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
	Usage (kgal)		Sample Bills Under Current Rates			Sample Bills Under Proposed Rates						
	Summer Month	Winter Month	Summer Month Bill	Winter Month Bill	Annual Bill	Summer Month Bill	Winter Month Bill	Annual Bill				
3/4"												
25%	12	2	\$ 35.36	\$ 15.53	\$ 305.34	\$ 39.11	\$ 15.83	\$ 329.60	\$ 2.02	7.9%	10395	95.2%
Median	22	3	\$ 60.56	\$ 17.27	\$ 466.98	\$ 65.42	\$ 17.85	\$ 499.65	\$ 2.72	7.0%		
Average	23	6	\$ 63.08	\$ 22.49	\$ 513.42	\$ 68.46	\$ 23.92	\$ 554.31	\$ 3.41	8.0%		
90%	51	13	\$ 151.06	\$ 37.88	\$ 1,133.64	\$ 164.62	\$ 41.64	\$ 1,237.54	\$ 8.66	9.2%		
1"												
25%	23	3	\$ 65.02	\$ 19.21	\$ 505.38	\$ 71.86	\$ 21.25	\$ 558.61	\$ 4.44	10.5%	465	4.3%
Median	38	5	\$ 109.58	\$ 22.69	\$ 793.62	\$ 117.40	\$ 25.29	\$ 856.19	\$ 5.21	7.9%		
Average	45	8	\$ 132.96	\$ 28.57	\$ 969.18	\$ 143.72	\$ 32.38	\$ 1,056.61	\$ 7.29	9.0%		
90%	93	25	\$ 303.28	\$ 70.06	\$ 2,240.04	\$ 338.06	\$ 77.93	\$ 2,495.96	\$ 21.33	11.4%		
1 1/2"												
25%	43	3	\$ 112.82	\$ 24.37	\$ 823.14	\$ 115.47	\$ 26.90	\$ 854.25	\$ 2.59	3.8%	31	0.3%
Median	76	6	\$ 191.36	\$ 30.70	\$ 1,332.36	\$ 198.98	\$ 32.98	\$ 1,391.73	\$ 4.95	4.5%		
Average	76	23	\$ 191.36	\$ 66.57	\$ 1,547.58	\$ 198.98	\$ 67.39	\$ 1,598.22	\$ 4.22	3.3%		
90%	192	32	\$ 471.64	\$ 86.64	\$ 3,349.68	\$ 513.77	\$ 87.64	\$ 3,608.45	\$ 21.56	7.7%		
2"												
25%	39	9	\$ 108.54	\$ 42.27	\$ 904.86	\$ 112.14	\$ 45.84	\$ 947.88	\$ 3.58	4.8%	15	0.1%
Median	88	68	\$ 225.20	\$ 177.56	\$ 2,416.56	\$ 236.13	\$ 185.52	\$ 2,529.94	\$ 9.45	4.7%		
Average	325	89	\$ 798.74	\$ 227.62	\$ 6,158.16	\$ 924.43	\$ 238.66	\$ 6,978.56	\$ 68.37	13.3%		
90%	784	147	\$ 1,676.97	\$ 367.98	\$12,269.70	\$1,917.40	\$ 385.43	\$13,816.99	\$ 128.94	12.6%		

Table 13

	Double Diamond Residential								Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
	Usage (kgal)		Sample Bills Under Current Rates			Sample Bills Under Proposed Rate						
	Summer Month	Winter Month	Summer Month Bill	Winter Month Bill	Annual Bill	Summer Month Bill	Winter Month Bill	Annual Bill				
3/4"												
25%	12	2	\$ 45.17	\$ 21.24	\$ 398	\$ 44.90	\$ 18.72	\$ 382	\$ (1.40)	-4.2%	6016	98.3%
Median	22	3	\$ 72.07	\$ 22.94	\$ 570	\$ 71.21	\$ 20.75	\$ 552	\$ (1.53)	-3.2%		
Average	23	6	\$ 74.76	\$ 29.03	\$ 623	\$ 74.25	\$ 26.82	\$ 606	\$ (1.36)	-2.6%		
90%	51	13	\$ 160.64	\$ 47.86	\$ 1,251	\$ 170.41	\$ 44.53	\$ 1,290	\$ 3.22	3.1%		
1"												
25%	23	3	\$ 76.48	\$ 24.66	\$ 607	\$ 74.64	\$ 24.03	\$ 592	\$ (1.23)	-2.4%	1	0.0%
Median	38	5	\$ 121.67	\$ 28.06	\$ 898	\$ 120.19	\$ 28.08	\$ 890	\$ (0.73)	-1.0%		
Average	45	8	\$ 143.58	\$ 36.13	\$ 1,078	\$ 146.51	\$ 35.16	\$ 1,090	\$ 0.98	1.1%		
90%	93	25	\$ 293.82	\$ 81.86	\$ 2,254	\$ 340.85	\$ 80.71	\$ 2,529	\$ 22.94	12.2%		

Table 14

	Commercial								Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
	Usage (kgal)		Sample Bills Under Current Rates			Sample Bills Under Proposed Rates						
	Summer Month	Winter Month	Summer Month Bill	Winter Month Bill	Annual Bill	Summer Month Bill	Winter Month Bill	Annual Bill				
3/4"												
25%	1	1	\$ 14.37	\$ 13.91	\$ 169.68	\$ 14.05	\$ 13.73	\$ 166.66	\$ (0.25)	-1.8%	212	42.3%
Median	2	2	\$ 16.69	\$ 15.77	\$ 194.76	\$ 16.32	\$ 15.68	\$ 191.99	\$ (0.23)	-1.4%		
Average	5	4	\$ 23.65	\$ 19.49	\$ 258.84	\$ 23.13	\$ 19.59	\$ 256.27	\$ (0.21)	-1.0%		
90%	20	12	\$ 58.45	\$ 34.37	\$ 556.92	\$ 57.17	\$ 35.20	\$ 554.25	\$ (0.22)	-0.5%		
1"												
25%	3	2	\$ 20.95	\$ 17.71	\$ 231.96	\$ 21.98	\$ 19.08	\$ 246.35	\$ 1.20	6.2%	62	12.3%
Median	11	8	\$ 39.51	\$ 28.87	\$ 410.28	\$ 40.14	\$ 30.79	\$ 425.58	\$ 1.27	3.7%		
Average	20	15	\$ 60.39	\$ 41.89	\$ 613.68	\$ 60.57	\$ 44.45	\$ 630.13	\$ 1.37	2.7%		
90%	62	53	\$ 157.83	\$ 112.57	\$ 1,622.40	\$ 155.90	\$ 118.64	\$ 1,647.20	\$ 2.07	1.5%		
1 1/2"												
25%	5	4	\$ 29.64	\$ 25.48	\$ 330.72	\$ 32.18	\$ 28.64	\$ 364.91	\$ 2.85	10.3%	39	7.8%
Median	15	10	\$ 52.84	\$ 36.64	\$ 536.88	\$ 54.88	\$ 40.35	\$ 571.37	\$ 2.87	6.4%		
Average	27	20	\$ 80.68	\$ 55.24	\$ 815.52	\$ 82.11	\$ 59.87	\$ 851.92	\$ 3.03	4.5%		
90%	79	64	\$ 201.32	\$ 137.08	\$ 2,030.40	\$ 200.14	\$ 145.77	\$ 2,075.45	\$ 3.75	2.2%		
2"												
25%	7	5	\$ 39.52	\$ 36.30	\$ 454.92	\$ 43.51	\$ 41.29	\$ 508.77	\$ 4.49	11.8%	160	31.8%
Median	20	16	\$ 69.68	\$ 60.48	\$ 780.96	\$ 73.02	\$ 66.66	\$ 838.07	\$ 4.76	7.3%		
Average	64	40	\$ 171.76	\$ 142.32	\$ 1,884.48	\$ 172.88	\$ 152.56	\$ 1,952.65	\$ 5.68	3.6%		
90%	158	111	\$ 389.84	\$ 317.16	\$ 4,242.00	\$ 386.24	\$ 336.06	\$ 4,333.80	\$ 7.65	2.2%		

Table 15

	Irrigation									Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
	Usage (kgal)		Sample Bills Under Current Rates			Sample Bills Under Proposed Rates							
	Summer Month	Winter Month	Summer Month Bill	Winter Month Bill	Annual Bill	Summer Month Bill	Winter Month Bill	Annual Bill					
3/4"													
25%	5	3	\$ 27.75	\$ 21.47	\$ 295.32	\$ 28.58	\$ 21.86	\$ 302.61	\$ 0.61	2.5%	72	32.9%	
Median	13	6	\$ 52.87	\$ 30.89	\$ 502.56	\$ 55.45	\$ 31.94	\$ 524.33	\$ 1.81	4.3%			
Average	24	3	\$ 87.41	\$ 21.47	\$ 653.28	\$ 92.40	\$ 21.86	\$ 685.58	\$ 2.69	4.9%			
90%	91	29	\$ 297.79	\$ 103.11	\$ 2,405.40	\$ 317.48	\$ 109.20	\$ 2,560.08	\$ 12.89	6.4%			
1"													
25%	11	5	\$ 48.53	\$ 29.69	\$ 469.32	\$ 52.13	\$ 31.98	\$ 504.65	\$ 2.94	7.5%	39	17.8%	
Median	26	13	\$ 95.63	\$ 54.81	\$ 902.64	\$ 102.52	\$ 58.85	\$ 968.24	\$ 5.47	7.3%			
Average	60	6	\$ 202.39	\$ 32.83	\$ 1,411.32	\$ 216.74	\$ 35.34	\$ 1,512.45	\$ 8.43	7.2%			
90%	166	93	\$ 535.23	\$ 306.01	\$ 5,047.44	\$ 572.83	\$ 327.60	\$ 5,402.55	\$ 29.59	7.0%			
1 1/2"													
25%	52	11	\$ 181.32	\$ 52.58	\$ 1,403.40	\$ 195.53	\$ 57.80	\$ 1,519.96	\$ 9.71	8.3%	40	18.3%	
Median	102	29	\$ 338.32	\$ 109.10	\$ 2,684.52	\$ 363.50	\$ 118.27	\$ 2,890.57	\$ 17.17	7.7%			
Average	185	15	\$ 598.94	\$ 65.14	\$ 3,984.48	\$ 642.32	\$ 71.23	\$ 4,281.33	\$ 24.74	7.5%			
90%	513	162	\$ 1,628.86	\$ 526.72	\$ 12,933.48	\$ 1,744.18	\$ 565.06	\$ 13,855.42	\$ 76.83	7.1%			
2"													
25%	145	11	\$ 478.58	\$ 57.82	\$ 3,218.40	\$ 514.75	\$ 64.60	\$ 3,476.05	\$ 21.47	8.0%	63	28.6%	
Median	295	47	\$ 949.58	\$ 170.86	\$ 6,722.64	\$ 1,018.65	\$ 185.53	\$ 7,225.06	\$ 41.87	7.5%			
Average	373	36	\$ 1,194.50	\$ 136.32	\$ 7,984.92	\$ 1,280.67	\$ 148.58	\$ 8,575.51	\$ 49.22	7.4%			
90%	934	211	\$ 2,029.74	\$ 685.82	\$ 16,293.36	\$ 2,174.26	\$ 736.46	\$ 17,464.30	\$ 97.58	7.2%			

Table 16

	Fire Protection							
	Existing Charge		Proposed Charge		Monthly Bill Increase (Decrease)	Annual Increase (%)	Number of Customers	% of Total
	Monthly Bill	Annual Bill	Monthly Bill	Annual Bill				
3"	\$ 14.72	\$ 176.64	\$ 19.20	\$ 230.38	\$ 4.48	30.4%	20	10.2%
4"	\$ 21.76	\$ 261.12	\$ 29.73	\$ 356.72	\$ 7.97	36.6%	48	24.4%
6"	\$ 47.13	\$ 565.56	\$ 54.29	\$ 651.51	\$ 7.16	15.2%	85	43.1%
8"	\$ 90.94	\$ 1,091.28	\$ 88.11	\$ 1,057.35	\$ (2.83)	-3.1%	30	15.2%
10"	\$ 156.82	\$ 1,881.84	\$ 129.25	\$ 1,551.04	\$ (27.57)	-17.6%	10	5.1%
12"	\$ 181.81	\$ 2,181.72	\$ 186.63	\$ 2,239.58	\$ 4.82	2.7%	4	2.0%

FICAL IMPACT

Based on projected Water Utility operating revenue requirements, the Working Group is recommending annual increases over the next five years of 6% (years 1-2) and 5% (years 3-5) which would be spread over all customer classes.

Over the course of a year (averaging winter and summer usage), the typical residential customer would experience the approximate following adjustment to their water bill during the first year:

- County: **Increase** of \$2.72 (7%) per month.
- Double Diamond: **Decrease** of \$1.53 (3.2%) per month.

These residential classes currently account for approximately 96% of current water accounts and 88% of the total annual consumption (See Figure 1 & Figure 2 above).

The typical customer in other classes would experience an approximate adjustment to their monthly water bill during the first year as follows:

- Small Commercial (3/4" meter): **Decrease** of \$0.21 (1%).
- Large Commercial (2" meter): **Increase** of \$5.68 (3.6%).
- Irrigation: Depending on the meter size, **increase** of \$2.69 to \$49.22 (4.9% to 7.5%).

RECOMMENDATION

Staff recommends that the Board of County Commissioners acknowledge receipt of the final report of findings and recommendations of the Water Rate Study Working Group and direct staff to bring the ordinance to the Board of County Commissioners for introduction and first reading, and to set the date for second reading and public hearing on the amendment.

Tables 17 through 25 provide the specific recommendations for proposed changes to water rates and user charges. All volumetric ranges are on a "gallons" basis, whereas rates are on a "1,000 gallons" basis.

Table 17

County Monthly Customer Service Charge Residential, Commercial, Industrial, Governmental and Irrigation Services						
Size	Current	2009	2010	2011	2012	2013
¾"	\$ 12.05	\$ 11.78	\$ 12.79	\$ 13.43	\$ 14.10	\$ 14.80
1"	\$ 13.99	\$ 15.18	\$ 16.72	\$ 17.56	\$ 18.43	\$ 19.36
1 ½"	\$ 18.04	\$ 20.84	\$ 23.27	\$ 24.44	\$ 25.66	\$ 26.94
2"	\$ 23.28	\$ 27.64	\$ 31.14	\$ 32.70	\$ 34.33	\$ 36.05
3"	\$ 38.80	\$ 45.76	\$ 52.11	\$ 54.72	\$ 57.45	\$ 60.33
4"	\$ 55.23	\$ 66.15	\$ 75.71	\$ 79.49	\$ 83.47	\$ 87.64
6"	\$ 101.09	\$ 122.80	\$ 141.25	\$ 148.31	\$ 155.73	\$ 163.51
8"	\$ 167.22	\$ 190.77	\$ 219.90	\$ 230.89	\$ 242.44	\$ 254.56
10"	\$ 251.45	\$ 270.07	\$ 311.65	\$ 327.24	\$ 343.60	\$ 360.78

Table 18

County Small Residential Usage Charges – Per 1,000 Gal								
TIER	Range	Current	Range	2009	2010	2011	2012	2013
Tier 1	0 – 5,999	\$ 1.74	0 – 6,999	\$ 2.02	\$ 2.23	\$ 2.34	\$ 2.46	\$ 2.58
Tier 2	6 – 12,999	\$ 2.07	7 – 20,999	\$ 2.53	\$ 2.78	\$ 2.92	\$ 3.07	\$ 3.22
Tier 3	13 – 24,999	\$ 2.52	21 – 40,999	\$ 3.04	\$ 3.34	\$ 3.51	\$ 3.68	\$ 3.87
Tier 4	25 – 37,999	\$ 3.04	> 41,000	\$ 4.05	\$ 4.46	\$ 4.68	\$ 4.91	\$ 5.16
Tier 5	38 – 52,999	\$ 3.34						
Tier 6	> 53,000	\$ 3.59						

Table 19

County Large Residential Usage Charges – Per 1,000 Gal								
TIER	Range	Current	Range	2009	2010	2011	2012	2013
Tier 1	0 – 27,999	\$ 2.11	0 – 28,999	\$ 2.02	\$ 2.23	\$ 2.34	\$ 2.46	\$ 2.58
Tier 2	28 – 86,999	\$ 2.38	29 – 150,999	\$ 2.53	\$ 2.78	\$ 2.92	\$ 3.07	\$ 3.22
Tier 3	87 – 375,999	\$ 2.42	151 – 600,999	\$ 3.04	\$ 3.34	\$ 3.51	\$ 3.68	\$ 3.87
Tier 4	376 – 775,999	\$ 2.87	> 601,000	\$ 4.05	\$ 4.46	\$ 4.68	\$ 4.91	\$ 5.16
Tier 5	> 776,000	\$ 3.19						

Table 20

County Commercial Usage Charges – Per 1,000 Gal							
TIER	Period	Current	2009	2010	2011	2012	2013
Winter	November 1 st – May 31 st	\$ 1.86	\$ 1.95	\$ 2.14	\$ 2.25	\$ 2.36	\$ 2.48
Summer	June 1 st – October 31 st	\$ 2.32	\$ 2.27	\$ 2.49	\$ 2.62	\$ 2.75	\$ 2.89

Table 21

County Irrigation Usage Charges – Per 1,000 Gal						
Usage Charge	Current	2009	2010	2011	2012	2013
Cost per 1,000	\$ 3.14	\$ 3.36	\$ 3.69	\$ 3.88	\$ 4.07	\$ 4.28

Table 22

Double Diamond Residential Monthly Customer Service Charge						
Size	Current	2009	2010	2011	2012	2013
¾"	\$ 17.84	\$ 14.67	\$ 12.79	\$ 13.43	\$ 14.10	\$ 14.80
1"	\$ 19.56	\$ 17.96	\$ 16.72	\$ 17.56	\$ 18.43	\$ 19.36
1 ½"	\$ 22.30	\$ 22.97	\$ 23.27	\$ 24.44	\$ 25.66	\$ 26.94
2"	\$ 25.90	\$ 28.95	\$ 31.14	\$ 32.70	\$ 34.33	\$ 36.05
3"	\$ 29.45	\$ 41.09	\$ 52.11	\$ 54.72	\$ 57.45	\$ 60.33
4"	\$ 33.85	\$ 55.47	\$ 75.11	\$ 79.49	\$ 83.47	\$ 87.64
6"	\$ 39.23	\$ 91.86	\$ 141.25	\$ 148.31	\$ 155.73	\$ 163.51

Table 23

Double Diamond Small Residential Usage Charges – Per 1,000 Gal								
TIER	Range	Current	Range	2009	2010	2011	2012	2013
Tier 1	0 – 6,000	\$ 1.70	0 – 6,999	\$ 2.02	\$ 2.23	\$ 2.34	\$ 2.46	\$ 2.58
Tier 2	6 – 28,000	\$ 2.69	7 – 20,999	\$ 2.53	\$ 2.78	\$ 2.92	\$ 3.07	\$ 3.22
Tier 3	> 28,000	\$ 3.13	21 – 40,999	\$ 3.04	\$ 3.34	\$ 3.51	\$ 3.68	\$ 3.87
Tier 4			> 41,000	\$ 4.05	\$ 4.46	\$ 4.68	\$ 4.91	\$ 5.16

Table 24

Double Diamond Irrigation Usage Charges – Per 1,000 Gal							
TIER	Period	Current	2009	2010	2011	2012	2013
Winter	November 1 st – May 31 st	\$ 2.69	\$ 3.36	\$ 3.69	\$ 3.88	\$ 4.07	\$ 4.28
Summer	June 1 st – October 31 st	\$ 3.13	\$ 3.36	\$ 3.69	\$ 3.88	\$ 4.07	\$ 4.28

Table 25

Private Fire Protection Service						
Size	Current	2009	2010	2011	2012	2013
3"	\$ 14.72	\$ 19.20	\$ 21.37	\$ 22.44	\$ 23.56	\$ 24.74
4"	\$ 21.76	\$ 29.73	\$ 33.56	\$ 35.23	\$ 37.00	\$ 38.85
6"	\$ 47.13	\$ 54.29	\$ 61.98	\$ 65.08	\$ 68.34	\$ 71.75
8"	\$ 90.94	\$ 88.11	\$ 101.12	\$ 106.17	\$ 111.48	\$ 117.05
10"	\$ 156.82	\$ 129.25	\$ 148.72	\$ 156.16	\$ 163.96	\$ 172.16
12"	\$ 181.81	\$ 186.63	\$ 215.11	\$ 225.87	\$ 237.16	\$ 249.02

POSSIBLE MOTION

Should the Board wish to implement the recommendations of the Water Rate Study Working Group, DWR staff, and the financial consultant, a possible motion would be “Move to acknowledge receipt of the final report of findings and recommendations of the Water Rate Study Working Group and direct staff to bring the ordinance to the Board of County Commissioners for introduction and first reading, and to set the date for second reading and public hearing on the amendment.”

RM/BH/lr

cc: John Sherman, Finance Director
Anna Heenan, Sr. Fiscal Analyst
Ted Rolfs, Fiscal Compliance Officer