

**TOWN OF ORO VALLEY  
WATER UTILITY COMMISSION  
WATER RATES ANALYSIS REPORT  
NOVEMBER 7, 2012**

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# TABLE OF CONTENTS

<b>SECTION TITLE</b>	<b>PAGE</b>
Index of Appendices	i
List of Acronyms	ii
Executive Summary	1
Introduction	3
Water Use Trends	4
Growth Trends	5
Vacant Homes and/or Disconnected Meters	6
Debt Service Coverage Requirements	6
Operating Fund	7
Alternative Water Resources Development Impact Fee Fund	11
Potable Water System Development Impact Fee Fund	13
Preferred Financial Scenario	15
Recommendation on Water Rates, Fees & Charges	16
Other Service Fees & Charges	18
Cost of Service Study	18
Conclusion	18
Appendices	

# INDEX OF APPENDICES

## APPENDIX

- A. Assumptions for Preferred Financial Scenario
  - A-1 Operating Fund
  - A-4 Alternative Water Resources Development Impact Fee Fund
  - A-5 Potable Water System Development Impact Fee Fund
  
- B. Preferred Financial Scenario
  - B-1 Operating Fund
  - B-3 Alternative Water Resources Development Impact Fee Fund
  - B-4 Potable Water System Development Impact Fee Fund
  - B-5 Summary of all Funds
  
- C. Rate Schedules & Tables for Bill Comparisons for Preferred Financial Scenario
  - C-1 Potable & Reclaimed Water Rates
  - C-2 Tables for Bill Comparisons by Meter Size

# LIST OF ACRONYMS

## LIST OF ACRONYMS USED IN THIS REPORT

AF	Acre Feet
AWRDIF	Alternative Water Resources Development Impact Fee
AWWA	American Water Works Association
CAGR	Central Arizona Groundwater Replenishment District
CAP	Central Arizona Project
COLA	Cost Of Living Allowance
EDU	Equivalent Dwelling Unit
FY	Fiscal Year
GPF	Groundwater Preservation Fee
LTS	Long Term Storage
O&M	Operating and Maintenance
PWSDIF	Potable Water System Development Impact Fee
WIFA	Water Infrastructure Finance Authority

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**EXECUTIVE SUMMARY**

The functions and duties of the Oro Valley Water Utility Commission include reviewing and developing recommendations for water revenue requirements, water rates and fee structures. The Commission annually evaluates staff recommendations based on a rates analysis to assure the recommendations meet Town policies and bond covenants. Water rates and charges shall be reviewed annually under Mayor and Town Council Water Policies – II.A.2.b(4).

The Utility has based its financial analysis on the American Water Works Association (AWWA) Cash Needs Approach. The AWWA is the largest national organization that develops water and wastewater policies, specifications and rate setting guidelines accepted by both government-owned and private water and wastewater utilities worldwide.

This Water Rates Analysis Report contains detailed information on the three funds that comprise the Oro Valley Water Utility:

- Operating Fund
- Alternative Water Resources Development Impact Fee Fund
- Potable Water System Development Impact Fee Fund

Each fund is individually analyzed with regard to revenue and revenue requirements. The Utility is an enterprise of the Town and receives its revenues predominately from rates, fees and charges and does not receive revenues from any taxes or payments from the General Fund.

The assumptions used to prepare this report are similar to prior years and include water use trends, vacant homes and/or disconnected meters, growth trends and debt service coverage requirements. All of these will be addressed within this report.

The Water Utility Commission has made a recommendation for a Preferred Financial Scenario. The Preferred Financial Scenario generates the revenue needed to maintain an adequate cash balance of \$4.8 million for the Operating Fund over the projected five year period. The Preferred Financial Scenario includes future financing for capital projects.

The Preferred Financial Scenario also builds the cash balance of the Alternative Water Resources Development Impact Fee Fund over the five year period while continuing to pay off current debt on the reclaimed water delivery system. Building this cash balance will be important as the Town moves forward with the delivery of Central Arizona Project (CAP) water.

The Preferred Financial Scenario includes five year projections for each fund. This allows the Utility to evaluate the impact of future costs and the revenue sources that will be required to meet those costs. Based on the data contained within the Preferred Financial

Scenario, the Water Utility Commission has made recommendations on water rates for FY 2012-13.

Those recommendations are as follows:

- No increase in the monthly base rates for potable and reclaimed water use.
- No increase in the tiered commodity rates for potable and reclaimed water use.
- No change in the water use contained within the 4 tiers for all meter sizes
- No increase in the potable or reclaimed Groundwater Preservation Fee.
- No increase in potable or reclaimed construction water rates

Due to sound fiscal and water resource management, it is projected that the Utility will meet revenue requirements with no proposed water rate increases for the base and commodity rates in FY 2012-13.

In May 2012 the Utility refunded the majority of the Series 2003 Senior Lien Bonds. Funds from the Potable Water System Development Impact Fee Fund were used to pay down the debt in the amount of \$3 million. Reduction of the Utility's outstanding debt continues to improve the debt service coverage ratio which is a key factor in the water rates analysis. Debt balance and the debt service coverage ratio have been a main driver for water rate increases in the past.

Additionally, management of water resources as it relates to delivery of CAP and reclaimed water, recovery wells, long term storage credits and groundwater extinguishment credits has reduced the Utility's obligation to the Central Arizona Groundwater Replenishment District. The substantial savings realized from these actions contribute to the recommendation for no proposed increases for the base and commodity rates for FY 2012-13. It is important to understand that each year the water rates analysis is prepared based on the most up-to-date information available for a 5-year projection period. Operational needs and capital improvement requirements change annually and are carefully evaluated when they are included in the analysis. It is important that the Utility perform the required water rates analysis every year because increases in debt, operating or capital cost could result in the need for a rate increase.

Included in the Utility's budget for FY 2012-13 are funds to perform a Cost-of-Service Study. This study will evaluate the different user classifications with regard to rate structure. The study will begin in January and should be completed by June 2013. The results of the study will aid the Utility in rate design for FY 2013-14 and beyond.

The Commission presents this Water Rates Analysis Report for the review and consideration of the Mayor and Council. The Commission and Water Utility Staff are available to discuss this report in greater detail at the Council's request.

The Oro Valley Water Utility Commission is proud to serve the Town of Oro Valley, its citizens and the customers of its water utility. The Commission extends their appreciation to the Mayor and Council for their consideration and guidance and looks forward to their continued direction.

**TOWN OF ORO VALLEY  
WATER UTILITY COMMISSION  
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NOVEMBER 7, 2012**

**INTRODUCTION**

The Oro Valley Water Utility was established in 1996 as a self-supporting enterprise of the Town. The Utility is comprised of three separate funds that have been established for specific purposes. The Funds are as follows:

- Operating Fund
- Alternative Water Resources Development Impact Fee Fund
- Potable Water System Development Impact Fee Fund

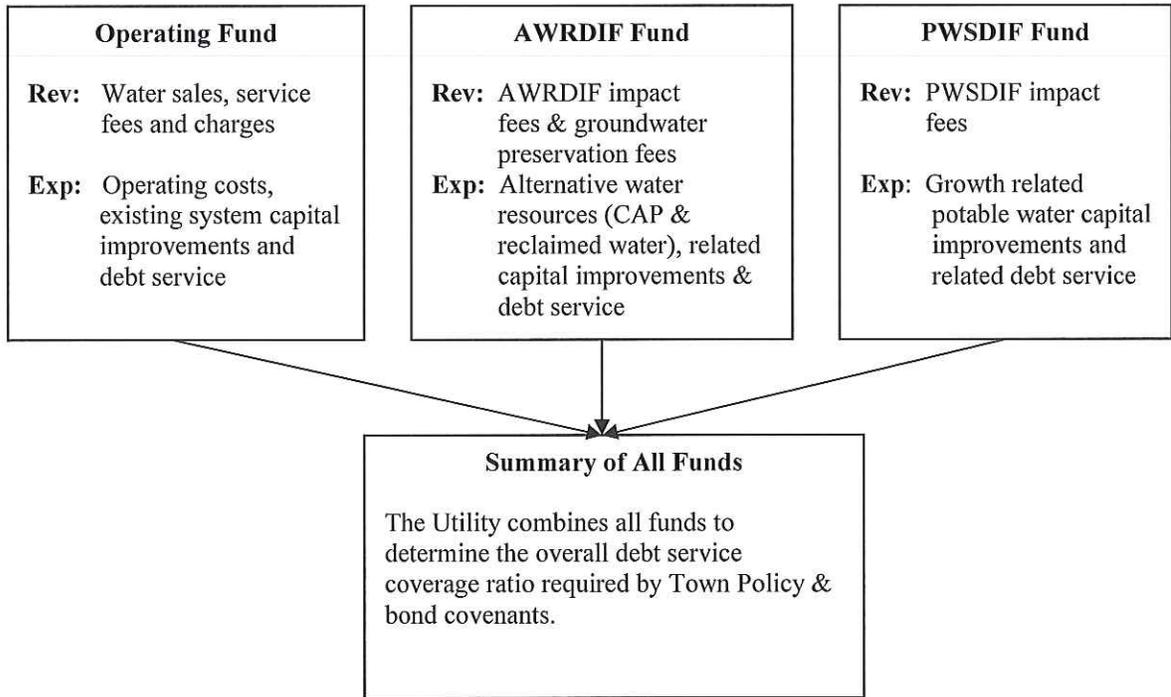
The Operating Fund is the primary fund for the Utility. The expenditures managed from this fund include personnel, operations and maintenance for both potable and reclaimed water systems, capital costs for existing potable water system improvements and related debt service. Revenue for this fund includes water sales, service fees and miscellaneous charges and interest income. The Utility does not receive any revenues from taxes or money from the Town General Fund. The Utility does pay the General Fund for services including finance, human resources, fleet services, information technology, legal, insurance and rental of office space.

The Alternative Water Resources Development Impact Fee Fund was established in 1996 to manage capital expenditures related to alternative water resources including reclaimed water and Central Arizona Project (CAP) water. Expenditures include acquisition of water rights required for growth and capital costs, including debt service, to deliver reclaimed water and CAP water to the Town. Revenue for this fund is received from impact fees collected at the time water meters are purchased and from interest income. Additionally, the Groundwater Preservation Fees, which are collected through the Operating Fund, are transferred to the Alternative Water Resources Development Impact Fee Fund to pay for capital costs and debt service.

The Potable Water System Development Impact Fee Fund was established in 1996 to manage capital expenditures related to expansion or growth-related potable water capital projects and related debt service. These projects include wells, pump stations, reservoirs and mains for the potable water system. Revenue for this fund is received from impact fees collected at the time water meters are purchased and from interest income.

The revenue and expenditures of all three funds are combined primarily to determine if the Utility meets the debt service coverage requirement established in the Mayor and Town Council Water Policies and the 2003 Bond Covenants. Otherwise, each fund is independent with regard to revenue and expenses. The revenue from the individual impact fee funds may not be consolidated nor used for any purpose other than for which they were originally established. Each fund is addressed in more detail in the report. Figure 1 illustrates the relationship between the three funds.

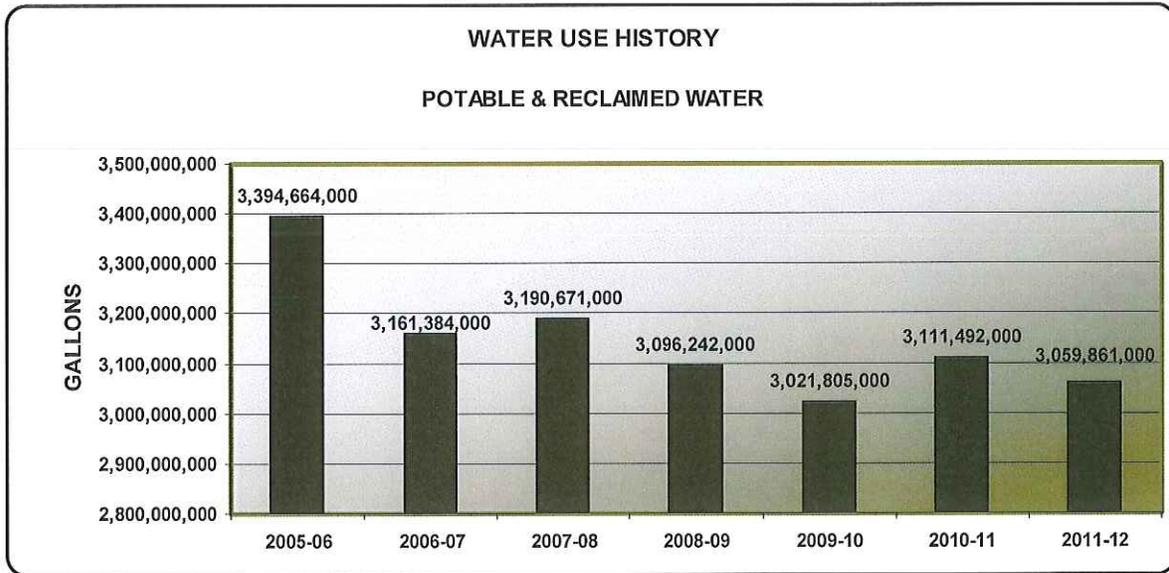
**Figure 1**



The assumptions used to prepare this report are similar to prior years and include water use trends, vacant homes and/or disconnected meters, growth trends and debt service coverage requirements. All of these are addressed within this report.

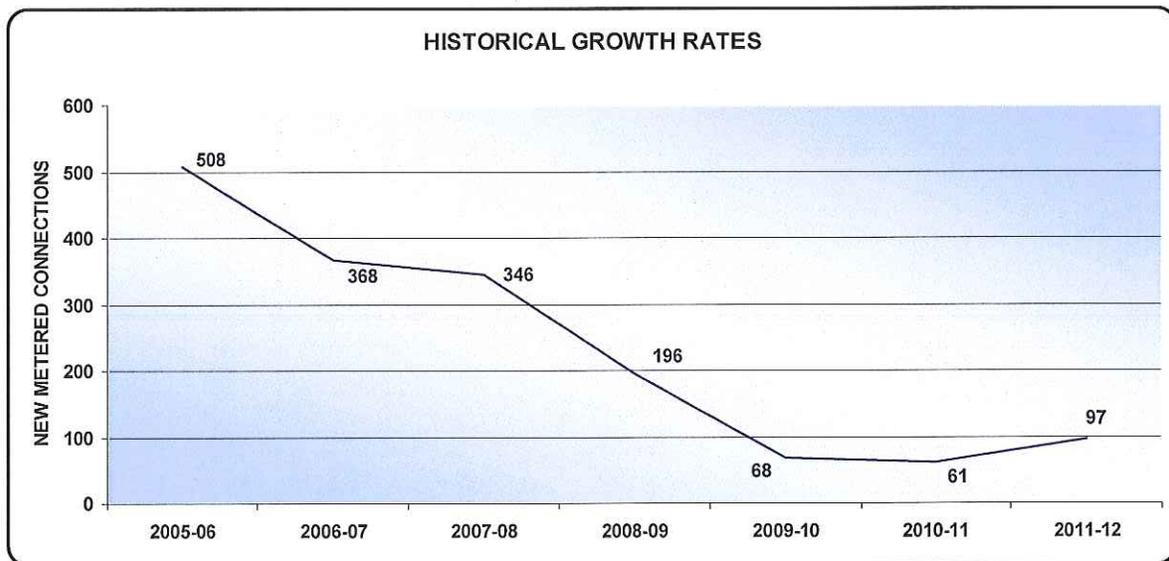
## **WATER USE TRENDS**

The Utility has experienced an overall reduction in water use, both potable and reclaimed, over the last seven years. The chart below illustrates a 9.2% reduction in total water use from FY 2005-06 through FY 2011-12. The reduction in water use may be a result of a combination of occurrences including conservation, reduction in growth, vacant homes and/or disconnected meters and under registering meters. There was a 1.3% decrease in water use during FY 2011-12 from the previous year. The average single family residential customer with a 5/8 x 3/4 inch water meter decreased their monthly water use to 8,200 gallons, down from 8,400 gallons last year. For the analysis in this report, the average monthly water use for a single family residential customer with a 5/8 x 3/4 inch water meter will be calculated at 8,000 gallons per month. This amount was used for revenue projections in this analysis.



### GROWTH TRENDS

The Utility's growth rates have decreased significantly over the past several years. The growth projections used for this report are based on recent trends. The chart below illustrates the Utility's growth rate based on new metered connections over the last 7 years. Seventy (70) new metered connections are projected annually from FY 2012-13 through FY 2016-17.



## VACANT HOMES AND/OR DISCONNECTED METERS

To better understand declining water use, the Utility's customer base was analyzed. The analysis revealed that 255 meters were disconnected or had the water service turned off and locked as of June 30, 2012. The following is the classification of those meters:

➤ Residential	137
➤ Commercial	10
➤ Irrigation	95
➤ Construction	10

Each account was categorized by user classification and meter size and then analyzed to project if and when the water service would be restored. For this analysis it was assumed that 5% of all residential meters would be re-activated annually beginning in FY 2012-13. After review, it was determined that all construction meters were homes that were under construction when the water service was disconnected thus it was assumed that 5% of these meters would also be re-activated annually. Analysis of the commercial accounts revealed that it was highly unlikely that any of these meters would be re-activated. Likewise, the majority of irrigation meters were for common areas which are not likely to be re-activated in the near future.

These meters are not being billed; therefore, there has been a corresponding reduction in water sales revenue and the Groundwater Preservation Fees (GPF) revenue factored into the 5 year projections.. The total revenue reduction for FY 2012-13 is projected to be \$305,267. As the meters are projected to be re-activated, the reduction in revenue is adjusted proportionately based on the number of meters, meter size, average water use and projected water rates on an annual basis.

## DEBT SERVICE COVERAGE REQUIREMENTS

During this water rates analysis process, staff applied the method for calculating the debt service coverage ratio pursuant to Town Financial and Budgetary Policies adopted by the Town Council in 2008. Section C.1 – Debt Capacity, Issuance & Management states the following with respect to debt service coverage ratios:

“When utility revenues are pledged as debt service payments, the Town will strive to maintain a 1.3 debt service coverage ratio or the required ratio in the bond indenture (whichever is greater) to ensure debt coverage in times of revenue fluctuation.”

The Water Utility currently pays debt service on a number of outstanding debt issuances and loans. For the Series 2003 Senior Lien Water Revenue Bonds, the 2007 and 2009 Water Infrastructure Finance Authority (WIFA) Loans, water utility revenues are specifically pledged as the repayment source for these obligations at 1.3 times coverage per the Town's adopted financial policy.

The remaining outstanding debt obligations of the Water Utility are excise tax pledged obligations meaning that the Town's unrestricted sources of sales taxes, fines, permit fees and state shared revenues are pledged as the repayment sources for these bonds in the

bond indentures. Even though the bond indentures pledge these excise taxes as the repayment source, the Water Utility will continue to be responsible for and budget for these debt service payments at a calculated debt service coverage ratio of 1.0 rather than the 1.3 times coverage. This is to avoid double coverage when calculating the debt service coverage ratio for the water rates analysis.

It is important to note that the bond indentures for the excise tax-backed bonds require that the Town's excise tax collections each fiscal year total at least 2.5 times the annual debt service requirements in order to avoid having to fund a debt service reserve fund. These conditions have been met annually in the past and are expected to continue in the future. For FY 2011-12 the debt service coverage ratio was 6.98 for the General Fund.

This methodology of segregating the water utility revenue-pledged debt from the excise tax-pledged debt in the rates analysis process is an accepted practice in the industry and has been reviewed by the Town's Finance Director and the Town's financial advisors with Stone and Youngberg.

The debt service coverage ratio is determined by dividing the annual net operating revenue by the annual debt service payments. Using the methodology described above is in accordance with the 2008 policy and reduces the amount of the debt service coverage requirement amount.

**OPERATING FUND**

**REVENUE**

The Operating Fund had a cash balance of \$10 million at the beginning of FY 2012-13. Operating funds may be used for operating costs including personnel, operations and maintenance, capital improvements for the existing potable water system and debt service.

The following table provides the Utility's **budgeted** revenue compared to the **actual** revenue for FY 2011-12:

Revenue Source	FY 2011-12 Budgeted	FY 2011-12 Actual	Difference Over (Under)
Water Sales	\$ 11,682,799	\$ 11,885,133	\$ 202,334
Service Fees/Charges	\$ 445,200	\$ 549,815	\$ 104,615
Other Income	\$ 100,000	\$ 242,211	\$ 142,211
Interest Income	\$ 16,300	\$ 125,912	\$ 109,612
<b>Total</b>	<b>\$ 12,244,299</b>	<b>\$ 12,803,071</b>	<b>\$ 558,772</b>

The increase in other income represents funds received from an insurance claim. The increase in interest income is a result of higher interest rates on funds invested with PFM Asset Management rather than the Local Government Investment Pool. The majority of the Town's money, including Water Utility cash, is investing with PFM Asset Management.

Revenues projected for FY 2012-13 were based on anticipated annual growth in the customer base of 70 single family residential customers and water consumption patterns similar to FY 2011-12. Analysis of the water use trends for FY 2011-12 indicated the average monthly use for a single family residence with a 5/8 x 3/4 inch water meter decreased from 8,400 gallons to 8,200 gallons per month. For this analysis, 8,000 gallons per month was used to project water sales revenue. The vacant and/or disconnected metered accounts were taken into consideration when projecting future water sales revenue. The following table indicates the amount of water sales revenue that would be realized with the **existing** rate structure and **no water rate increase**:

FY 2011-12 Actual Water Sales Revenue	FY 2012-13 Projected Water Sales Revenue	Difference Increase (Decrease)
\$ 11,885,133	\$ 11,793,297	( \$ 91,836 )

The projected revenue decrease may be a result of the need to account for vacant and/or disconnect homes which increased slightly from last year. For this analysis, it is projected that only 5% of the residential accounts will have service restored on an annual basis.

#### REVENUE REQUIREMENTS

The following table is a comparative summary of operating expenses for the Water Utility Operating Fund. Actual expenses (excluding depreciation and amortization) for FY 2011-12 are compared to the projected expenses for FY 2012-13 used in the financial analysis:

Utility Expenditures	FY 2011-12 Actual	FY 2012-13 Projected	Difference Increase(Decrease)
Personnel	\$ 2,445,315	\$ 2,547,472	\$ 102,157
O & M	\$ 2,998,852	\$ 3,955,156	\$ 956,304
CAP Recharge & Wheeling Costs	\$ 759,183	\$ 1,492,945	\$ 733,762
Groundwater Extinguishment Credits	\$ 0	\$ 405,000	\$ 405,000
CAGR D	\$ 251,771	\$ 289,164	\$ 37,393
Debt Service	\$ 2,805,717	\$ 2,825,953	\$ 20,236
Subtotal Expenditures	\$ 9,260,838	\$ 11,515,690	\$ 2,254,852
Capital Outlay	\$ 3,628,815	\$ 3,184,500	( \$ 444,315 )
Total Expenditures	\$12,889,653	\$ 14,700,190	\$ 1,810,537

Projected personnel costs do not include any new personnel; however, a 2.5% Cost of Living Allowances (COLA) was approved by the Town Council for FY 2012-13. The projected increase of \$102,157 is due to the COLA and an increase in retirement benefits for existing personnel.

The projected operations and maintenance (O&M) costs include the O&M costs for both the potable water system and the reclaimed water system. The projected increase of \$956,304 includes the addition of \$100,000 for the cost of service study; an increase of \$58,000 for Town services received by the Utility; an increase of \$40,000 for fleet services; and \$40,000 for an impact fee analysis

The increase of \$733,762 for CAP recharge and wheeling costs reflects one full year of wheeling costs whereas in FY 11-12 there were less than 6 months of charges. CAP deliveries began late in January of 2012. The timing for CAP water deliveries to recharge is scheduled on a calendar year basis and occasionally the costs related to the deliveries cross into two different fiscal years. The Utility recharged 5,000 AF in CY 2011 and will recharge 5,000 AF in CY 2012. In CY 2013 the Utility is proposing to recharge 7,000 AF of CAP water.

Included in the budget for FY 2012-13 is \$405,000 for the purchase of groundwater extinguishment credits. The Utility uses groundwater extinguishment credits to offset groundwater pumping. It is anticipated that the Utility will purchase approximately 3,000 acre feet of extinguishment credits in FY 2012-13.

Although Central Arizona Groundwater Replenishment District (CAGR) costs are included in the O&M budget for the Operating Fund, they are itemized in the table above because of the significant cost of the line item. The Utility is limited in the amount of control it has over these specific costs. The rates are set by the CAGR and are assessed on the volume of excess groundwater pumped and the minimum payment requirements pursuant to our agreement with CAGR. The Utility will use Long Term Storage (LTS) credits to offset a portion of the costs charged by the CAGR through permitted recovery wells. In addition, the Utility will transfer LTS credits directly to the CAGR to further reduce the financial obligations. Reducing payments to CAGR is a critical component of both our financial and water resource management.

There are a number of other annual O&M expenses that the Utility has the least control over and therefore is unable to reduce anticipated expenditures. In addition to the CAP and CAGR costs, some of the other expenses that the Utility has the least control over include: electrical power for pumping, water quality testing, chemicals for disinfection, CAP wheeling costs and reclaimed water purchased from other providers. These specific costs are determined by the volume of water pumped to meet customer demands. Other costs over which the Utility has least control include software maintenance on existing software, regulatory permits, insurance, office lease, services provided by other Town departments and costs directly related to billing. The billing costs include printing of the billing forms, envelopes, postage, outsource vendor for bill insertion and delivery to post office, lockbox and other bank charges for processing payments. Where applicable, the materials and/or services have been bid or quotes have been received to assure the lowest price.

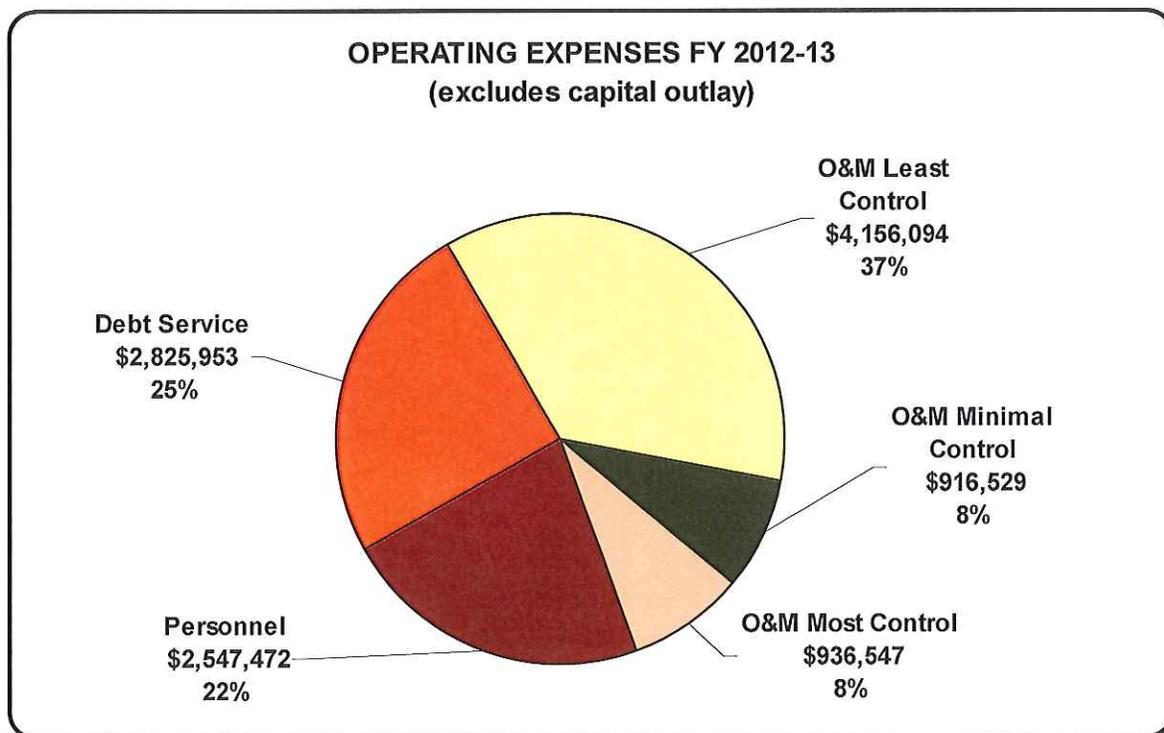
In addition to CAP water recharge costs, the O&M expenses that the Utility has minimal control over include maintenance on production and distribution facilities such as wells, boosters, reservoirs, and water mains. The Utility includes known preventative maintenance

costs in the budget as well as contingency funds for unknown repairs and maintenance. The majority of these facilities are underground which allows for unforeseen malfunctions. Additionally, water mains develop leaks that must be repaired immediately. The Utility budgets for these specific items based on historical data; however, it is difficult to predict the exact amount that may be spent in any given year.

The O&M expenses that the Utility has the most control over include the purchase of groundwater extinguishment credits, office supplies, field supplies, memberships and subscriptions, printing, telecommunications, uniforms, rentals, training, conservation education and outside professional services.

Debt service payments are established by debt amortization schedules prepared by the Town's Bond Underwriters for all past bond issues. Likewise, WIFA also provides debt amortization schedules that the Utility must adhere to. All debt service payments are pre-defined for any given fiscal year unless funds are available to pay off the debt as the Utility has done in the past.

The chart below illustrates the O&M costs with regard to the level of control the Utility has over these costs.



Projected capital outlay for existing system improvements in FY 2012-13 in the amount of \$3,184,500 includes the replacement of 2900 water meters and installation of AMI equipment in the Oro Valley water service area; replacement of well meters, water main replacements; and the construction of a chlorine storage facility. Capital outlay also includes the purchase of vehicles, SCADA and security equipment.

Projected expenditures in the Operating Fund are proposed to be funded with revenue generated from water rates, fees, charges, and cash reserves.

## ALTERNATIVE WATER RESOURCES DEVELOPMENT IMPACT FEE FUND

### REVENUE

The Alternative Water Resources Development Impact Fee Fund (AWRDIF) had a cash balance of \$1.6 million at the beginning of FY 2012-13. AWRDIF funds may be used for capital expenditures related to alternative water resources including reclaimed water and CAP water. The revenue sources for the AWRDIF Fund are from impact fees collected when a water meter is purchased and from interest earned on cash balances. The Groundwater Preservation Fees (GPF) collected through the Operating Fund are transferred to the AWRDIF Fund to help repay outstanding debt for the reclaimed water delivery system and for future debt on the CAP water delivery system. The following table provides the **budgeted** revenue for FY 2011-12 compared to the **actual** revenue for FY 2011-12:

Revenue Source	FY 2011-12 Budgeted	FY 2011-12 Actual	Difference Over (Under)
Impact Fees	\$ 219,200	\$ 759,958	\$ 540,758
GPF	\$ 2,423,500	\$ 2,365,968	( \$ 57,532 )
Interest Income	\$ 2,684	\$ 1,229	( \$ 1,455 )
Total Revenue	\$ 2,645,384	\$ 3,127,155	\$ 481,771

The increase in impact fee revenue occurred as a result of an increase in the number of meters that were purchased over what was projected.

The decrease in GPF revenue was a result of delaying the implementation of the approved increase until October 2011.

Revenues projected for FY 2012-13 were based on anticipated annual growth in the customer base of 70 new connections or 88 Equivalent Dwelling Units (EDUs). An EDU is equivalent to one single family residence with a 5/8 x 3/4 inch meter. For impact fee projections, the Utility converts the estimated new connections to EDUs at a ratio of 1.25 EDUs to 1 new connection based on historical trends and to take into consideration larger commercial and irrigation meters. In FY 2011-12 the actual growth rate was 154 EDUs as compared to the projected 44 EDUs.

The following table indicates the amount of impact fee and GPF revenue that would be realized with the current impact fees and **no increase to the GPF**:

Revenue Source	FY 2012-13 Revenue Projection Existing Impact Fees & GPF
Impact Fees	\$ 438,416
GPF	\$ 2,404,608
Total Revenue	\$ 2,843,024

## REVENUE REQUIREMENTS

The following table is a comparative summary of expenditures for the AWRDIF Fund. The following table provides the **budgeted** expenditures for FY 2011-12 compared to the **actual** expenditures for FY 2011-12:

Expenditures	FY 2011-12 Budget	FY 2011-12 Actual	Difference Over (Under)
Professional Services	\$ 60,200	\$ 8,558	( \$ 51,642 )
CAP Capital Costs	\$ 154,575	\$ 154,575	\$ 0
Repay Operating Fund	\$ 100,000	\$ 100,000	\$ 0
Capital Improvements	\$ 515,000	\$ 547,920	\$ 32,920
Debt Service	\$ 1,789,978	\$ 1,789,978	\$ 0
<b>Total</b>	<b>\$ 2,619,753</b>	<b>\$ 2,601,031</b>	<b>( \$ 18,722 )</b>

The professional services are expenses incurred for renewable water planning studies including the CAP water pilot study for treatment techniques. The CAP water pilot project was completed and dismantled in FY 2011-12.

Repayment of funds borrowed from the Operating Fund will be completed over a period of 5 years at \$100,000 per year. Funds were borrowed from the Operating Fund to help pay debt service prior to the increase in the impact fees.

The capital improvements in FY 2011-12 represent costs for the facilities constructed to deliver CAP water.

The debt service includes repayment of the portion of the Series 2003 Bonds used to finance phase 1 of the reclaimed water delivery system and the 2007 WIFA loan used to finance phase 2 of the reclaimed water delivery system.

Projected expenditures in the AWRDIF Fund are proposed to be funded with revenue generated from impact fees, groundwater preservation fees and interest income. In the table below, **actual** expenses for FY 2011-12 are compared to the **projected** expenses for FY 2012-13 used in the financial analysis.

Expenditures	FY 2011-12 Actual	FY 2012-13 Projected	Difference Increase (Decrease)
Professional Services	\$ 8,558	\$ 70,300	\$ 61,742
CAP Capital Costs	\$ 154,575	\$ 154,575	\$ 0
Capital Improvements	\$ 547,920	\$ 100,000	( \$ 447,920 )
Repay Operating Fund	\$ 100,000	\$ 100,000	\$ 0
Debt Service	\$ 1,789,978	\$ 1,765,869	( \$ 24,109 )
<b>Total</b>	<b>\$ 2,601,031</b>	<b>\$ 2,190,744</b>	<b>( \$ 410,287 )</b>

The professional services are projected to increase as the Utility begins planning studies on blending of CAP water and water quality related to recharging in Red Rock and the Lower Santa Cruz recharge facilities.

The CAP capital costs are projected to remain the same based on established CAP rates.

The \$100,000 in capital improvements identified above represent the funds needed to begin engineering design for a booster pump station that would be used to blend CAP water within the potable water distribution system.

As stated above, the repayment of funds to the Operating Fund will continue for the next five years.

The decrease in debt service is a result of the refunding of the Series 2003 Senior Lien Bonds.

**POTABLE WATER SYSTEM DEVELOPMENT IMPACT FEE FUND**

**REVENUE**

The Potable Water System Development Impact Fee Fund (PWSDIF) had a cash balance of \$3.4 million at the beginning of FY 2012-13. The revenue sources for the PWSDIF Fund are from impact fees collected when a water meter is purchased and from interest earned on cash balances. The Town Council adopted new impact fees in 2007. These new fees became effective in September 2007. The following table provides the **budgeted** revenue compared to the **actual** revenue for FY 2011-12:

Revenue Source	FY 2011-12 Budgeted	FY 2011-12 Actual	Difference Over (Under)
Impact Fees	\$ 114,255	\$ 462,762	\$ 348,507
Interest Income	\$ 13,323	\$ 5,467	( \$ 7,856 )
Total	\$ 127,578	\$ 468,229	( \$ 340,651 )

Revenues were projected for FY 2012-13 based on anticipated annual growth in the customer base of 70 new connections or 88 EDUs. An EDU is equivalent to one single family residence with a 5/8 x 3/4 inch meter. For impact fee projections, the Utility converts the estimated new connections to EDUs at a ratio of 1.25 EDUs to 1 new connection based on historical trends and to take into consideration larger commercial and irrigation meters. The following table indicates the amount of impact fee revenue that is **projected** for FY 2012-13 compared to **actual** revenue received in FY 2011-12:

FY 2011-12 Actual Revenue	FY 2012-13 Projected Revenue	Difference Increase (Decrease)
\$ 462,762	\$ 225,896	( \$ 236,866 )

In FY 2011-12 the actual growth rate was 154 EDUs. As stated above, the projected EDUs for FY 2012-13 are 88 which is lower than what was actually realized in FY 2011-12.

## REVENUE REQUIREMENTS

Growth-related potable water system improvements are managed through the PWSDIF Fund. These improvements include new potable water reservoirs, pump stations, water mains and wells that are required to meet the demands of new customers. The following table is a comparative summary of expenditures for the PWSDIF Fund and provides the **budgeted** expenditures compared to the **actual** expenditures for FY 2011-12:

Expenditures	FY 2011-12 Budgeted	FY 2011-12 Actual	Difference Over (Under)
Capital Improvements	\$ 740,000	\$ 505,946	( \$ 234,054 )
Debt Service	\$ 639,920	\$ 3,639,920	\$ 3,000,000
<b>Total</b>	<b>\$ 1,379,920</b>	<b>\$ 4,145,866</b>	<b>\$ 2,765,946</b>

The capital improvements for FY 2011-12 include the completion of a 3-million gallon reservoir and related piping that began in FY 2010-11. The \$3,000,000 difference above is a result of the recent bond refunding to reduce debt balance in this fund.

In the table below, **actual** expenses for FY 2011-12 are compared to the **projected** expenses for FY 2012-13 used in the financial analysis.

Expenditures	FY 2011-12 Actual	FY 2012-13 Projected	Difference Increase(Decrease)
Capital Improvements	\$ 505,946	\$ 0	( \$ 505,946 )
Debt Service	\$ 3,639,920	\$ 632,645	( \$ 3,007,275 )
<b>Total</b>	<b>\$ 4,145,866</b>	<b>\$ 632,645</b>	<b>( \$ 3,513,221 )</b>

No additional capital improvements planned for this fund during the 5-year projection period. All improvements identified in the *2006 Master Plan* have been constructed relative to the anticipated growth for the next 5 years.

Included with the refunding of the Series 2003 Senior Lien Bonds, the principal balance of the bonds attributable to the PWSDIF was paid down in the amount of \$3 million. With lower growth, the revenue stream for this fund is diminished. By paying down the principal coupled with lower interest rates, the debt service in this fund will be reduced by almost 50 percent.

## PREFERRED FINANCIAL SCENARIO

Prior to developing financial forecasts, financial considerations were evaluated relating to proposed future operating costs, significant short and long term capital expenditures, the Utility's existing cash reserves, existing outstanding debt, proposed future debt and the related debt service payments. To arrive at a Preferred Financial Scenario, the goals of the Commission were to ensure that all existing rate setting policies were met, cash reserves were utilized to minimize future debt and if there were to be proposed rate increases, those increases would not result in rate shock. In prior years, a key component in the rate setting process was the calculation of the debt service coverage ratio. A 1.3 debt service coverage ratio was established by Council policy with the adoption of Resolution No. (R)05-09.

The Water Utility Commission has made a recommendation for a Preferred Financial Scenario. The Preferred Financial Scenario generates the revenue needed to maintain an adequate cash balance in all funds over the projected five year period. Additionally, the Preferred Financial Scenario reduces the amount of future financing by using available cash for capital projects. The Preferred Financial Scenario meets the debt service coverage requirements in all five years of the projection period.

The Preferred Financial Scenario also builds the cash balance of the Alternative Water Resources Development Impact Fee Fund over the five year period while continuing to pay off the current debt on the reclaimed water delivery system. Building this cash balance will be important as the Town moves forward with increased deliveries of CAP water.

The following are key assumptions used to develop the financial projections contained in the Preferred Financial Scenario. The entire set of assumptions may be found in **Appendix A**.

- Annual growth is estimated at 70 new connections annually which equates to 88 EDUs annually.
- Water use patterns remain constant throughout the 5 year period and are based on actual water use for FY 2011-12.
- Vacant homes and/or disconnected residential meters will be re-activated at 5% per year beginning in FY 2012-13.
- All 18-hole golf courses will be delivered reclaimed water throughout the 5 year projection period.
- Projected operating costs in FY 2012-13 are similar to the Utility's budget. Future years include 2% annual inflation factors after one time expenditures have been deducted.
- Delivery of 1500 AF of CAP water annually throughout the projection period.
- The Potable Water System Development Impact Fees are projected to remain the same within the 5 year projection period.
- The Alternative Water Resources Development Impact Fees are projected to remain the same within the 5 year projection period.

Analysis of the Preferred Financial Scenario indicates that the Operating Fund can utilize cash reserves to finance the existing system capital improvements for FY 2012-13. With the exception of the AMI and meter replacement project, the Preferred Financial Scenario proposes using cash to finance existing system capital improvements for the following three years of the projection period. It has been assumed that the Utility finance \$1,290,000

through WIFA for capital projects in FY 2016-17. The projections also include financing the AMI meter replacement project in FY 2013-14 with a loan from WIFA.

These financing assumptions result in a slow decline of the Utility's projected cash balance. The projected ending cash balance of the Operating Fund at the end of the five year analysis period is \$4.8 million.

The O&M portion of the wheeling costs for delivery of CAP water will be paid through water rates; however, the capital component of the wheeling costs will be funded with revenue derived from Groundwater Preservation Fees and Alternative Water Resources Development Impact Fees.

The financial projections detailed in the Preferred Financial Scenario for the PWSDIF Fund assume no new capital growth-related projects throughout the projection period. This will be reviewed annually for changes, but until the growth rate changes, it is unlikely that the Utility will need to construct growth-related facilities. Debt service for previously constructed growth-related facilities will be paid from revenues collected from impact fees and use of the fund balance. The Potable Water System Development Impact Fees are not projected to increase or decrease during the five year period.

The projections for the Operating Fund, AWRDIF Fund and the PWSDIF Fund were combined to evaluate the overall debt service coverage at the end of each fiscal year. Analysis indicates that, under the Preferred Financial Scenario, the Utility will meet the debt service coverage requirement established by the Mayor and Council Water Polices and Bond Covenants for all five years. Proformas for the Preferred Financial Scenario may be found in **Appendix B**.

## **RECOMMENDATION ON WATER RATES, FEES & CHARGES**

After reviewing the analysis of the three funds and their respective revenue requirements contained in the Preferred Financial Scenario, the Water Utility Commission is recommending:

- No increase in the monthly base rates for potable or reclaimed water use.
- No increase the commodity rates for potable or reclaimed water use.
- No change in the water use contained within the 4 tiers for all meter sizes.
- No increase in the potable or reclaimed construction water rate.
- No increase in the Groundwater Preservation Fee for potable water use.
- No increase in the Groundwater Preservation Fee for reclaimed water use.

The detailed schedule of the existing water rates may be found in **Appendix C**.

The following table illustrates the proposed water rates for a **single family residential customer with a 5/8 x 3/4 inch water meter**. Approximately 87% of the customers fall into this category. Other water providers in the region are included for comparison. Tucson Water's commodity rates are assessed on the use of 100 cubic feet which is equivalent to 748 gallons. To simplify the comparison, the rates for Tucson Water have been converted to represent the charge for 1,000 gallons.

Water Provider	Monthly Base Rate	Tier 1 Cost Per 1,000 Gals.	Tier 2 Cost Per 1,000 Gals.	Tier 3 Cost Per 1,000 Gals.	Tier 4 Cost Per 1,000 Gals.
Oro Valley <b>Current</b>	14.19	2.20	2.99	4.03	5.38
Oro Valley <b>Proposed</b>	<b>14.19</b>	<b>2.20</b>	<b>2.99</b>	<b>4.03</b>	<b>5.38</b>
Metro Water	17.50	2.00	2.70	4.05	5.40
Marana Water	15.12	2.46	3.43	4.46	5.50
Tucson Water	8.27	1.69	3.28	8.64	14.00

A table providing proposed rates for all Oro Valley Water Utility meter sizes may be found in **Appendix C**. Tables that calculate monthly bills under the existing rates may also be found in **Appendix C**. Monthly bill amounts are calculated in 1,000 gallon increments for the 5/8 x 3/4 inch meters and a variety of increments for larger meter sizes.

Oro Valley, Metro and Marana all assess their rates on usage of 1,000 gallons whereas Tucson Water assesses their rates on cubic feet. Additionally, the tiered rate structures for all the utilities vary with regard to the number of tiers and the volume of water included in each tier.

For comparison purposes, the following table provides a calculation of a **monthly bill** amount for a **single family residential customer with a 5/8 x 3/4 inch meter** for the water utilities surrounding the Oro Valley Water Utility service area. Direct comparison of raw base rates and commodity rates is less effective because of the varying rate structures of each utility. A better comparison is to calculate the cost for specific consumption levels for one month. Please note that these charges only reflect water use fees and specifically **exclude** taxes, Groundwater Preservation Fees and similar renewable water resource fees charged by other water providers.

Water Utility	Cost for 8,000 Gallons	Cost for 15,000 Gallons	Cost for 25,000 Gallons	Cost for 40,000 Gallons
Oro Valley - <b>Current</b>	32.58	53.51	92.77	164.02
Oro Valley - <b>Proposed</b>	<b>32.58</b>	<b>53.51</b>	<b>92.77</b>	<b>164.02</b>
Metro Water	36.30	64.65	114.60	215.85
Marana Water	34.80	56.87	96.32	173.62
Tucson Water	23.38	67.78	170.26	380.26

This report does not contain an alternate financial scenario. Due to sound fiscal and water resource management, it is projected that the Utility will meet revenue requirements with no

proposed water rate increases in FY 12-13. It is projected that nominal rate increases will be required annually over the following 4 years of the projection period.

Reduction of the Utility's outstanding debt has improved the debt service coverage ratio which has been a key factor in the water rates analysis. This has been a main driver for water rate increases in the past. Additionally, management of water resources as it relates to the use of CAP and reclaimed water, recovery wells, long term storage credits and groundwater extinguishment credits has reduced the Utility's financial obligation to the CAGRDR.

It is important to understand that each year the water rates analysis is prepared based on the most up-to-date information available. Operational needs and capital improvement requirements change annually and are carefully evaluated when they are included in the analysis. It is important that the Utility perform a water rates analysis every year because any increases in debt service, operating or capital cost could result in the need for a rate increase.

#### **OTHER SERVICE FEES & CHARGES**

The Preferred Financial Scenarios does not include increases in other service fees and charges. These fees and charges are evaluated annually to determine if any adjustments are needed.

#### **COST OF SERVICE STUDY**

Funds were approved in the FY 2012-13 budget to conduct a comprehensive cost of service study. The purpose of the study is to evaluate the design of the rate structure to determine if the existing rate design is providing cost recovery equitably across all user classifications. Additionally, it may be beneficial to further evaluate the rate design specific to commercial accounts. Within the industry, it is common to design water rates for commercial accounts based on a flat rate rather than a tiered rate structure. The cost of service study would be instrumental in creating an equitable rate design for all customer classifications. It is anticipated that the study will be completed by June 2013.

#### **CONCLUSION**

The Commission presents this Water Rates Analysis Report for the review and consideration of the Mayor and Council. The Commission and Water Utility Staff are available to discuss this report in greater detail at Council's request. Utility Staff will be requesting Council's acceptance of the Water Rates Analysis Report on November 7, 2011.

The Oro Valley Water Utility Commission is proud to serve the Town of Oro Valley, its citizens and the customers of its water utility. The Commission extends their appreciation to the Mayor and Council for their consideration and guidance and looks forward to their continued direction.

# **APPENDIX A**

## **Assumptions for Preferred Financial Scenario**

**A-1 Enterprise Fund**

**A-4 Alternative Water Resources Development Impact Fee Fund**

**A-5 Potable Water System Development Impact Fee Fund**

**PREFERRED FINANCIAL SCENARIO**  
**ASSUMPTIONS FOR OPERATING FUND**

**Growth**

70 new metered connections for water rates each year for 5 years  
 Growth rates are based on historic trends for past 3 years.

**Water Rate Structure**

4 Tiers for each meter size – all usage in each tier to remain the same.

**Water Rate Increases**

The overall increase and monthly impact are representative of a residential customer with a 5/8 x 3/4 inch water meter averaging 8,000 gallons of water use per month.

	Base Rate	Tier 1	Tier 2	Tier 3	Tier 4	Overall Increase	Monthly Impact
FY 12-13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY 13-14	1%	1%	2%	4%	6%	0.8%	\$0.34
FY 14-15	1%	1%	2%	4%	6%	0.9%	\$0.35
FY 15-16	1%	1%	2%	4%	6%	1.0%	\$0.41
FY 16-17	1%	1%	2%	4%	6%	0.9%	\$0.36

**Construction Water Rate**

The construction water rate is \$1.00 more than the Tier 4 rate in each year. There are no tiers for construction water.

**Potable GPF Rates (cost per 1,000 gallons)**

No increase in potable GPF in all 5 years of the projection period.

**Reclaimed GPF Rates (cost per 1,000 gallons)**

No increase in reclaimed GPF in all 5 years of the projection period.

**Water Use Trends**

Projections include similar water use trends as those in FY 11-12. The average monthly water use for a residential customer with a 5/8 x 3/4 inch water meter decreased to 8,200 gallons per month in FY 11-12 from 8,400 gallons in FY 10-11. For this analysis 8,000 gallons was used as the average monthly water use.

**Vacant Homes and/or Disconnected Meters**

There were 255 known vacant home and/or disconnected meters at 6/30/12. The residential & construction (147) are projected to be re-activated at 5% per year beginning in FY 2012-13. The remaining commercial & irrigation (105) are projected to remain disconnected.

**Other Revenue**

Other revenue is based on FY 11-12 proposed budget except for sewer billing fees. It is anticipated that the Utility will get an increase in the per account billed rate. Did not project increases in other misc. charges as they fluctuate annually. (NSF fees, reconnect fees, new service establishment fees, stormwater billing, plan review)

**PREFERRED FINANCIAL SCENARIO**  
**ASSUMPTIONS FOR OPERATING FUND**

(continued)

**Beginning Cash Balance**

Taken from 6/30/12 Balance Sheet of respective funds (MUNIS reports dated 7/31/12)

**Interest Income**

The interest rate for all 5 years in the analysis period is projected to be 0.60%. Information provided by S. Lemos, Finance Director, on 8/08/12.

**Personnel Costs**

No new employees were added over the 5 year projection period.  
FY 12-13 includes a 2.5% COLA plus a 1% increase for retirement benefits.  
FY 13-14 includes a 3.5% pay increase plus .5% increase for retirement benefits.  
FY 14-15 includes a 3.5% pay increase plus .5% increase for retirement benefits.  
FY 15-16 includes a 4.0% pay increase plus .5% increase for retirement benefits.  
FY 16-17 includes a 4.0% pay increase plus .5% increase for retirement benefits.  
These costs were provided by S. Lemos, Finance Director and is consistent with overall Town planning.

**Potable O&M**

Based on Utility's proposed budget for FY 12-13 updated with the most recent information; 2.0% inflation annually for all remaining years. Projected a 15% increase in power costs based on Tucson Electric's rate application filed in April of 2012.

**Reclaimed O&M**

Based on Utility's proposed budget for FY 12-13; 2.0% inflation annually for all remaining years. Projected a 15% increase in power costs based on Tucson Electric's rate application filed in April of 2012.

**Water Resource Management Costs**

Costs are for the purchase of groundwater extinguishment credits. These credits will be pledged to the Groundwater Allowance Account to help maintain a balance that will facilitate growth in the water service area. FY 12-13 costs are based on purchasing 3,000 AF at \$135/AF. Costs for the remaining years are based on the purchase of 2,000 AF at \$150/AF.

**CAP Wheeling Costs**

Costs include the CAP water delivery costs – rates adopted by CAP on 6/7/12. Costs also include the O&M portion (\$428.71 / AF) of the fees charged by Tucson Water to wheel the CAP water through their recharge and recovery system.

**CAP Recharge Costs**

Based on the rate schedule adopted by CAP 6//712. Recharge 6,000 AF in FY 12-13. Assumed recharge of 7,000 AF annually for remaining years:  
2,500 AF with Kai Farms and 2,000 AF with Tucson Water and  
2,500 AF with CAWCD at and additional \$15/AF

**PREFERRED FINANCIAL SCENARIO**  
**ASSUMPTIONS FOR OPERATING FUND**

(continued)

**CAGR Costs**

Based on S. Seng worksheet and rate schedule adopted by CAP 6/7/12.

**CAGR Savings**

Savings for CAGR costs are based on what costs to CAGR would be if we were not taking direct delivery of CAP less what the CAGR costs are when we do take direct delivery of CAP water.

**Power Savings**

Savings are based on power costs not incurred directly by the Utility by not pumping groundwater equal to the volume of CAP water that is delivered. Savings for power costs estimated at \$88.73 per AF.

**Debt Service**

P&I debt service for 2003 Excise Tax Bonds taken from amortization schedules provided by Stone & Youngberg (S&Y).

P&I debt service for 2003 Sr. Lien Bonds taken from amortization schedules provided by S&Y.

P&I debt service for 2005 Excise Tax Bonds taken from amortization schedules provided by S&Y.

P&I debt savings for 2007 Excise Tax Bonds taken from schedules provided by S&Y.

P&I debt service for 2009 WIFA loan taken amortization schedule provided by WIFA on 8/7/12.

P&I debt service for 2012 Sr. Lien Bonds taken from amortization schedules provided by S&Y with pro-rated debt service by S. Seng.

P&I debt service for proposed 2013 WIFA loan was estimated by S. Seng – \$4,500,000 at 3.25% interest for 20 years.

P&I debt service for proposed 2016 WIFA loan was estimated by S. Seng – \$1,290,000 at 3.25% interest for 20 years.

**Debt Service Coverage**

1.30 debt service coverage ratio for 2003 & 2012 Sr. Lien Bonds & WIFA Loans

1.00 debt service coverage ratio for all Excise Tax Pledged Bonds

**Capital Improvements**

Projects are identified in 5-Year CIP dated 9/01/12. The projects have been updated with current information. As included in the budget for FY 12-13, the capital projects for this fiscal year will be funded with cash. In FY 13-14 it is assumed the Utility will finance \$4.5 million for meter replacement & AMI installation that will be completed over 4 years. For the remaining capital projects in FY 13-14, FY 14-15 and FY 15-16 it is assumed the Utility will finance the projects with cash. In FY 16-17 the Utility will finance the projects through a loan from WIFA.

**PREFERRED FINANCIAL SCENARIO**  
**ASSUMPTIONS FOR AWRDIF FUND**

**Growth**

70 new connections for water rates for all years, 88 EDUs for impact fees (70 x 1.25 = 88)  
Growth rates are based on historic trends for past 3 years.

**AWRD Impact Fees**

Increased to \$4,982 per EDU, Ordinance No. (O) 08-14, effective 12/2/08  
Not projected to increase in the 5 year projection period.

**Revenue**

Revenue for all years derived from 88 EDUs at \$4,982.

**Potable GPF Rates (cost per 1,000 gallons)**

No increase in the Potable GPF for the 5 year projection period.

**Reclaimed GPF Rates (cost per 1,000 gallons)**

No increase in the Reclaimed GPF for the 5 year projection period.

**Beginning Cash Balance**

Taken from 6/30/12 Balance Sheet of respective funds (MUNIS reports dated 7/31/12).

**Interest Income**

The interest rate for all 5 years in the analysis period is projected to be 0.60%. Information provided by S. Lemos, Finance Director, on 8/08/12.

**CAP Capital Costs**

Based on 10,305 AF at rate schedule adopted by CAP 6/7/12.

**Debt Service**

P&I debt service for 2003 Sr. Lien Bonds (reclaimed phase 1) taken from amortization schedules provided by Stone & Youngberg.

P&I debt service for 2007 WIFA Loan (reclaimed phase 2) provided by WIFA.

P&I debt service for 2012 Sr. Lien Bonds (refunding of 2003 bonds) taken from amortization schedule provided by Stone & Youngberg & pro-rated by S. Seng.

**Debt Service Coverage**

1.30 debt service coverage ratio for 2003 & 2012 Sr. Lien Bonds and the WIFA Loan

**Capital Improvements**

Capital improvements in FY 12-13 include design engineering costs for a booster station that would facilitate blending of CAP water in the potable water distribution system.

Capital improvements in FY 15-16 and 16-17 include funds for expansion of the CAP distribution system.

## PREFERRED FINANCIAL SCENARIO

### ASSUMPTIONS FOR PWSDIF FUND

#### **Growth**

70 new connections for water rates for all years, 88 EDUs for impact fees (70 x 1.25 = 88)  
Growth rates are based on historic trends for past 3 years.

#### **PWSD Impact Fees**

Increased impact fees to \$2,567 per EDU effective 10/01/07, Ordinance No. (O) 07-31.  
Not projected to increase in the five year projection period.

#### **Revenue**

Revenue derived from 88 EDUs at \$2,567 for all years in the projection period.

#### **Beginning Cash Balance**

Taken from 6/30/12 Balance Sheet of respective funds. (MUNIS reports dated 7/31/12).

#### **Interest Income**

The interest rate for all 5 years in the analysis period is projected to be 0.60%. Information provided by S. Lemos, Finance Director, on 8/08/12.

#### **Debt Service**

P&I debt service for 2003 Sr. Lien Bonds (expansion related projects) taken from amortization schedules provided by Stone & Youngberg.

P&I debt service for 2012 Sr. Lien Bonds (expansion related projects) taken from amortization schedule provided by Stone & Youngberg and pro-rated by S. Seng.

#### **Debt Service Coverage**

1.30 debt service coverage ratio for 2003 and 2012 Sr. Lien Bonds

#### **Capital Improvements**

No capital projects were identified in the 5-year CIP dated 9/01/12.

# **APPENDIX B**

## **Preferred Financial Scenario**

**B-1 Operating Fund**

**B-3 Alternative Water Resources Development Impact Fee Fund**

**B-4 Potable Water System Development Impact Fee Fund**

**B-5 Summary of All Funds**

**PREFERRED FINANCIAL SCENARIO**

	Operating Fund				
	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<b>REVENUES</b>					
<b>Water Service</b>					
Potable Water Sales (exclude golf courses)	\$ 10,245,856	\$ 10,425,174	\$ 10,612,274	\$ 10,804,935	\$ 11,003,396
Potable Water Sales from Growth	11,605	36,570	61,775	87,246	112,989
Potable Water Sales reduction from vacancies	(246,028)	(245,824)	(249,706)	(246,442)	(248,179)
Potable Water Sales - Golf Courses	125,477	126,732	127,914	129,279	130,572
<b>Total Potable Water Sales</b>	<b>10,136,910</b>	<b>10,342,652</b>	<b>10,552,257</b>	<b>10,775,018</b>	<b>10,998,778</b>
Reclaimed Water Sales	1,656,387	1,672,951	1,689,680	1,706,577	1,723,643
<b>Total Water Service</b>	<b>11,793,297</b>	<b>12,015,603</b>	<b>12,241,937</b>	<b>12,481,595</b>	<b>12,722,421</b>
<b>Other Operating Revenue</b>					
Groundwater Preservation Fee - Potable	2,220,595	2,220,595	2,220,595	2,220,595	2,220,595
Groundwater Preservation Fee - Reclaimed	361,174	361,174	361,174	361,174	361,174
Groundwater Preservation Fee - Growth	2,899	5,799	8,698	11,598	14,497
GPF - reduction from vacancies - Potable	(59,239)	(59,319)	(56,143)	(52,967)	(50,292)
Reimbursement from AWRDIF	100,000	100,000	100,000	100,000	100,000
Other Revenue	503,200	503,200	503,200	503,200	503,200
Interest Income	54,734	47,274	41,309	32,233	28,425
<b>Total Other Operating Revenue</b>	<b>3,183,363</b>	<b>3,178,723</b>	<b>3,178,833</b>	<b>3,175,833</b>	<b>3,177,599</b>
<b>Total Operating Revenue</b>	<b>\$ 14,976,659</b>	<b>\$ 15,194,326</b>	<b>\$ 15,420,770</b>	<b>\$ 15,657,428</b>	<b>\$ 15,900,019</b>
<b>OPERATING EXPENSES</b>					
<b>Potable Operating Expenses</b>					
Personnel	2,547,472	2,649,371	2,755,346	2,879,336	3,008,906
Operations & Maintenance	3,156,485	3,489,675	3,559,468	3,630,658	3,703,271
Water Resource Management Costs	405,000	300,000	300,000	300,000	-
CAP Wheeling Costs (includes TW + CAP water costs)	840,445	853,945	870,445	914,363	920,363
CAP Water Recharge Costs	652,500	850,500	916,500	952,500	976,500
CAGRD Costs	289,164	379,196	480,077	606,249	-
Interim Wheeling Savings (power & CAGRD)	(133,095)	(414,531)	(473,322)	(543,487)	(153,059)
Contributions to AWRD Fund - GPF	2,525,429	2,528,249	2,534,324	2,540,400	2,545,974
<b>Total Potable Operating Expenses</b>	<b>\$ 10,283,400</b>	<b>\$ 10,636,404</b>	<b>\$ 10,942,837</b>	<b>\$ 11,280,019</b>	<b>\$ 11,001,955</b>
<b>Reclaimed Operating Expenses</b>					
Operating & Maintenance	798,671	824,562	842,702	861,242	880,189
<b>Total Reclaimed Operating Expenses</b>	<b>\$ 798,671</b>	<b>\$ 824,562</b>	<b>\$ 842,702</b>	<b>\$ 861,242</b>	<b>\$ 880,189</b>
<b>Total Operating Expenses</b>	<b>\$ 11,082,071</b>	<b>\$ 11,460,966</b>	<b>\$ 11,785,539</b>	<b>\$ 12,141,260</b>	<b>\$ 11,882,144</b>
<b>Net Operating Revenue</b>	<b>\$ 3,894,589</b>	<b>\$ 3,733,360</b>	<b>\$ 3,635,230</b>	<b>\$ 3,516,167</b>	<b>\$ 4,017,875</b>

**PREFERRED FINANCIAL SCENARIO**

Operating Fund

	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<b>DEBT SERVICE - POTABLE</b>					
P&I - Sr. Lien Bonds - Existing System (2003)	483,610	359,330	-	-	-
P&I - Tax Excise Bonds - Refunding (2003)	1,216,652	1,219,496	1,538,626	1,210,778	1,207,918
P&I - Excise Tax Bonds - Land for MOC (2005)	150,022	149,430	150,890	150,721	150,309
P&I - Excise Tax Bonds - Refinance 1996 (2007)	788,852	788,662	788,275	1,243,409	1,245,403
P&I - WIFA Loan - Exist. System CIP (2009)	186,817	150,471	149,368	149,322	149,275
P&I - Sr. Lien Bonds - Existing System (2012)	-	282,704	581,458	582,285	589,493
P&I - WIFA Loan - Meter Replacement (2013)	-	-	307,753	307,753	307,753
P&I - WIFA Loan - Exist. System CIP (2016)	-	-	-	-	88,222
<b>Total Potable System Debt Service</b>	<b>\$ 2,825,953</b>	<b>\$ 2,950,092</b>	<b>\$ 3,516,370</b>	<b>\$ 3,644,268</b>	<b>\$ 3,738,372</b>
<b>Other Obligations</b>					
Meter Replacement Project & AMI Installation	\$ 908,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Machinery & Equipment	62,000	50,000	50,000	50,000	50,000
Vehicles	104,500	85,000	60,000	60,000	60,000
Capital Improvements: Existing System	1,960,000	1,015,000	1,685,000	1,025,000	-
<b>Total Other Obligations</b>	<b>\$ 3,034,500</b>	<b>\$ 1,180,000</b>	<b>\$ 1,825,000</b>	<b>\$ 1,165,000</b>	<b>\$ 140,000</b>
<b>Net Balance From Operations</b>	<b>\$ (1,965,864)</b>	<b>\$ (396,732)</b>	<b>\$ (1,706,140)</b>	<b>\$ (1,293,100)</b>	<b>\$ 139,503</b>
<b>Beginning Cash Balance</b>	<b>\$ 10,048,370</b>	<b>\$ 8,082,505</b>	<b>\$ 7,685,773</b>	<b>\$ 5,979,633</b>	<b>\$ 4,686,533</b>
<b>Net Balance From Operations</b>	<b>(1,965,864)</b>	<b>(396,732)</b>	<b>(1,706,140)</b>	<b>(1,293,100)</b>	<b>139,503</b>
<b>Ending Cash Balance</b>	<b>\$ 8,082,505</b>	<b>\$ 7,685,773</b>	<b>\$ 5,979,633</b>	<b>\$ 4,686,533</b>	<b>\$ 4,826,036</b>

**PREFERRED FINANCIAL SCENARIO**

Alternative Water Resources Development Impact Fee Fund

	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<b>REVENUES</b>					
AWRD Impact Fee Revenue	\$ 438,416	\$ 438,416	\$ 438,416	\$ 438,416	\$ 438,416
<b>Subtotal Revenue</b>	<b>438,416</b>	<b>438,416</b>	<b>438,416</b>	<b>438,416</b>	<b>438,416</b>
Other Operating Revenue					
Contributions from Operating Fund - GPF	2,525,429	2,528,249	2,534,324	2,540,400	2,545,974
Interest Income	11,285	16,213	22,471	27,433	30,986
<b>Subtotal Other Operating Revenue</b>	<b>2,536,714</b>	<b>2,544,462</b>	<b>2,556,795</b>	<b>2,567,833</b>	<b>2,576,960</b>
<b>Total Operating Revenue</b>	<b>\$ 2,975,130</b>	<b>\$ 2,982,878</b>	<b>\$ 2,995,211</b>	<b>\$ 3,006,249</b>	<b>\$ 3,015,376</b>
<b>OPERATING EXPENSES</b>					
O&M Related to capital improvement projects	70,300	80,000	80,000	80,000	80,000
Capital Charge related to TW Wheeling Costs	106,770	106,770	106,770	106,770	106,770
CAP Capital Charges 10,305 acre feet	154,575	164,880	175,185	185,490	185,490
Repayment of Contributions from Operating Fund	100,000	100,000	100,000	100,000	100,000
<b>Total Operating Expenses</b>	<b>\$ 431,645</b>	<b>\$ 451,650</b>	<b>\$ 461,955</b>	<b>\$ 472,260</b>	<b>\$ 472,260</b>
<b>Net Operating Revenue</b>	<b>\$ 2,543,485</b>	<b>\$ 2,531,228</b>	<b>\$ 2,533,256</b>	<b>\$ 2,533,989</b>	<b>\$ 2,543,116</b>
<b>DEBT SERVICE</b>					
P&I - Sr. Lien Bonds - Reclaimed Ph.1 (2003)	875,193	650,653	-	-	-
P&I - Sr. Lien Bonds - Tucson Refinance (2003)	521,475	-	-	-	-
P&I - Sr. Lien - WIFA -Reclaimed Ph.2 (2007)	369,202	369,050	368,892	368,730	368,561
P&I - Sr. Lien Bonds - Reclaimed Ph.1 (2012)	-	515,304	1,059,864	1,061,372	1,074,511
P&I - CAP Water Delivery System	-	-	-	-	-
<b>Total Debt Service</b>	<b>\$ 1,765,869</b>	<b>\$ 1,535,006</b>	<b>\$ 1,428,757</b>	<b>\$ 1,430,102</b>	<b>\$ 1,443,072</b>
<b>OTHER OBLIGATIONS</b>					
Capital Improvements:					
CAP Facilities Engineering & Construction	100,000	-	-	600,000	400,000
<b>Total Other Obligations</b>	<b>\$ 100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 600,000</b>	<b>\$ 400,000</b>
<b>Net Balance From Operations</b>	<b>\$ 677,615</b>	<b>\$ 996,221</b>	<b>\$ 1,104,499</b>	<b>\$ 503,887</b>	<b>\$ 700,044</b>
<b>Beginning Cash Balance</b>	<b>\$ 1,575,396</b>	<b>\$ 2,253,011</b>	<b>\$ 3,249,232</b>	<b>\$ 4,353,731</b>	<b>\$ 4,857,618</b>
<b>Net Balance From Operations</b>	<b>\$ 677,615</b>	<b>\$ 996,221</b>	<b>\$ 1,104,499</b>	<b>\$ 503,887</b>	<b>\$ 700,044</b>
<b>Ending Cash Balance</b>	<b>\$ 2,253,011</b>	<b>\$ 3,249,232</b>	<b>\$ 4,353,731</b>	<b>\$ 4,857,618</b>	<b>\$ 5,557,661</b>

**PREFERRED FINANCIAL SCENARIO**

**Potable Water System Development Impact Fee Fund**

	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<b>REVENUES</b>					
Development Impact Fees	\$ 225,896	\$ 225,896	\$ 225,896	\$ 225,896	\$ 225,896
Subtotal Revenue	\$ 225,896	\$ 225,896	\$ 225,896	\$ 225,896	\$ 225,896
Other Operating Revenue					
Interest Income	18,332	15,813	15,237	14,721	14,189
Subtotal Other Operating Revenue	18,332	15,813	15,237	14,721	14,189
Total Operating Revenue	\$ 244,228	\$ 241,709	\$ 241,133	\$ 240,617	\$ 240,085
<b>OPERATING EXPENSES</b>					
N/A					
Total Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Net Operating Revenue</b>	<b>\$ 244,228</b>	<b>\$ 241,709</b>	<b>\$ 241,133</b>	<b>\$ 240,617</b>	<b>\$ 240,085</b>
<b>DEBT SERVICE</b>					
P&I - Sr. Lien Bonds - Expansion Related (2003)	632,645	487,723	-	-	-
P&I - Sr. Lien Bonds - Expansion Related (2012)	-	158,967	326,959	327,424	331,477
<b>Total Water System Debt Service</b>	<b>\$ 632,645</b>	<b>\$ 646,689</b>	<b>\$ 326,959</b>	<b>\$ 327,424</b>	<b>\$ 331,477</b>
<b>OTHER OBLIGATIONS</b>					
Capital Improvements:					
Expansion Related Projects	-	-	-	-	-
Total Other Obligations	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Net Balance From Operations</b>	<b>\$ (388,417)</b>	<b>\$ (404,980)</b>	<b>\$ (85,826)</b>	<b>\$ (86,807)</b>	<b>\$ (91,392)</b>
<b>Beginning Cash Balance</b>	<b>\$ 3,379,205</b>	<b>\$ 2,990,788</b>	<b>\$ 2,585,808</b>	<b>\$ 2,499,982</b>	<b>\$ 2,413,175</b>
<b>Net Balance From Operations</b>	<b>\$ (388,417)</b>	<b>\$ (404,980)</b>	<b>\$ (85,826)</b>	<b>\$ (86,807)</b>	<b>\$ (91,392)</b>
<b>Ending Cash Balance</b>	<b>\$ 2,990,788</b>	<b>\$ 2,585,808</b>	<b>\$ 2,499,982</b>	<b>\$ 2,413,175</b>	<b>\$ 2,321,782</b>

Oro Valley Water Utility  
 Potable & Reclaimed Water Systems  
 Prepared: September 4, 2012

**PREFERRED FINANCIAL SCENARIO**  
 Summary of all Funds

	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<b>REVENUES</b>					
<b>Water Service</b>					
Potable Water Sales (exclude golf courses)	\$ 10,245,856	\$ 10,425,174	\$ 10,612,274	\$ 10,804,935	\$ 11,003,396
Potable Water Sales from Growth	11,605	36,570	61,775	87,246	112,989
Potable Water Sales reduction from vacancies	(246,028)	(245,824)	(249,706)	(246,442)	(248,179)
Potable Water Sales - Golf Courses	125,477	126,732	127,914	129,279	130,572
Groundwater Preservation Fee	2,161,356	2,161,276	2,164,452	2,167,628	2,170,303
GW Preservation Fee from Growth	2,899	5,799	8,698	11,598	14,497
<b>Total Potable Water Sales</b>	<b>12,301,165</b>	<b>12,509,727</b>	<b>12,725,407</b>	<b>12,954,244</b>	<b>13,183,578</b>
GW Preservation Fee from Reclaimed Customers	361,174	361,174	361,174	361,174	361,174
Reclaimed Water Sales	1,656,387	1,672,951	1,689,680	1,706,577	1,723,643
<b>Total Water Service</b>	<b>14,318,725</b>	<b>14,543,852</b>	<b>14,776,261</b>	<b>15,021,995</b>	<b>15,268,394</b>
<b>Other Operating Revenue</b>					
Potable Water Impact Fees	225,896	225,896	225,896	225,896	225,896
Alternative Water Impact Fees	438,416	438,416	438,416	438,416	438,416
Other Revenue	503,200	503,200	503,200	503,200	503,200
Interest Income	84,351	79,300	79,017	74,387	73,600
<b>Total Other Operating Revenue</b>	<b>1,251,863</b>	<b>1,246,812</b>	<b>1,246,529</b>	<b>1,241,899</b>	<b>1,241,112</b>
<b>Total Operating Revenue</b>	<b>\$ 15,570,588</b>	<b>\$ 15,790,664</b>	<b>\$ 16,022,790</b>	<b>\$ 16,263,894</b>	<b>\$ 16,509,506</b>
<b>OPERATING EXPENSES</b>					
<b>Potable Operating Expenses</b>					
Personnel	2,547,472	2,649,371	2,755,346	2,879,336	3,008,906
Operations & Maintenance	3,226,785	3,569,675	3,639,468	3,710,658	3,783,271
Water Resource Management Costs	405,000	300,000	300,000	300,000	-
CAP Wheeling Costs (includes TW + CAP water costs)	947,215	960,715	977,215	1,021,133	1,027,133
CAP Capital Costs	154,575	164,880	175,185	185,490	185,490
CAP Recharge Costs	652,500	850,500	916,500	952,500	976,500
CAGR Costs	289,164	379,196	480,077	606,249	-
Interim Wheeling Savings (power & CAGR)	(133,095)	(414,531)	(473,322)	(543,487)	(153,059)
<b>Total Potable Operating Expenses</b>	<b>\$ 8,089,616</b>	<b>\$ 8,459,805</b>	<b>\$ 8,770,469</b>	<b>\$ 9,111,879</b>	<b>\$ 8,828,241</b>
<b>Reclaimed Operating Expenses</b>					
Operating & Maintenance	798,671	824,562	842,702	861,242	880,189
<b>Total Reclaimed Operating Expenses</b>	<b>\$ 798,671</b>	<b>\$ 824,562</b>	<b>\$ 842,702</b>	<b>\$ 861,242</b>	<b>\$ 880,189</b>
<b>Total Operating Expenses</b>	<b>\$ 8,888,287</b>	<b>\$ 9,284,367</b>	<b>\$ 9,613,171</b>	<b>\$ 9,973,121</b>	<b>\$ 9,708,430</b>
<b>Net Operating Revenue</b>	<b>\$ 6,682,301</b>	<b>\$ 6,506,297</b>	<b>\$ 6,409,619</b>	<b>\$ 6,290,773</b>	<b>\$ 6,801,076</b>

**PREFERRED FINANCIAL SCENARIO**  
 Summary of all Funds

	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<b>Debt Service</b>					
Debt Service - Potable- Existing System					
P&I - Sr. Lien Bonds - Existing System (2003)	483,610	359,330	-	-	-
P&I - Excise Tax Bonds - Refunding (2003)	1,216,652	1,219,496	1,538,626	1,210,778	1,207,918
P&I - Excise Tax Bonds - Land for MOC (2005)	150,022	149,430	150,890	150,721	150,309
P&I - Excise Tax Bonds - Refinance 1996 (2007)	788,852	788,662	788,275	1,243,409	1,245,403
P&I - WIFA Loan - Exist. System CIP (2009)	186,817	150,471	149,368	149,322	149,275
P&I - Sr. Lien Bonds - Existing System (2012)	-	282,704	581,458	582,285	589,493
P&I - WIFA Loan - Meter Replacement (2013)	-	-	307,753	307,753	307,753
P&I - WIFA Loan - Exist. System CIP (2016)	-	-	-	-	88,222
<b>Total Potable Existing System Debt Service</b>	<b>\$ 2,825,953</b>	<b>\$ 2,950,092</b>	<b>\$ 3,516,370</b>	<b>\$ 3,644,268</b>	<b>\$ 3,738,372</b>
<b>Debt Service - Potable - Expansion Related</b>					
P&I - Sr. Lien Bonds - Expansion Related (2003)	632,645	487,723	-	-	-
P&I - Sr. Lien Bonds - Expansion Related (2012)	-	158,967	326,959	327,424	331,477
<b>Total Potable Expansion Related Debt Service</b>	<b>\$ 632,645</b>	<b>\$ 646,689</b>	<b>\$ 326,959</b>	<b>\$ 327,424</b>	<b>\$ 331,477</b>
<b>Debt Service - Non-Potable</b>					
P&I - Sr. Lien Bonds - Reclaimed Ph.1 (2003)	875,193	650,653	-	-	-
P&I - Sr. Lien Bonds - Tucson Refinance (2003)	521,475	-	-	-	-
P&I - Sr. Lien - WIFA -Reclaimed Ph.2 (2007)	369,202	369,050	368,892	368,730	368,561
P&I - Sr. Lien Bonds - Reclaimed Ph.1 (2012)	-	515,304	1,059,864	1,061,372	1,074,511
P&I - CAP Water Delivery System	-	-	-	-	-
<b>Total Non-Potable System Debt Service</b>	<b>\$ 1,765,869</b>	<b>\$ 1,535,006</b>	<b>\$ 1,428,757</b>	<b>\$ 1,430,102</b>	<b>\$ 1,443,072</b>
<b>Total Water System Debt Service</b>	<b>\$ 5,224,467</b>	<b>\$ 5,131,788</b>	<b>\$ 5,272,086</b>	<b>\$ 5,401,794</b>	<b>\$ 5,512,922</b>
<b>Other Obligations</b>					
Meter Replacement Project & AMI Installation	908,000	30,000	30,000	30,000	30,000
Machinery & Equipment	62,000	50,000	50,000	50,000	50,000
Vehicles	104,500	85,000	60,000	60,000	60,000
Capital Improvements:					
Existing System	1,960,000	1,015,000	1,685,000	1,025,000	-
Expansion Related	-	-	-	-	-
CAP Facilities Engineering & Construction	100,000	-	-	600,000	400,000
<b>Total Other Obligations</b>	<b>\$ 3,134,500</b>	<b>\$ 1,180,000</b>	<b>\$ 1,825,000</b>	<b>\$ 1,765,000</b>	<b>\$ 540,000</b>
<b>Net Balance From Operations</b>	<b>\$ (1,676,666)</b>	<b>\$ 194,509</b>	<b>\$ (687,467)</b>	<b>\$ (876,021)</b>	<b>\$ 748,154</b>

**PREFERRED FINANCIAL SCENARIO**  
 Summary of all Funds

	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Growth - New Connections (EDUs = 1.2 x New Connects)	70	70	70	70	70
Increase from Water Rates	0.0%	0.8%	0.9%	1.0%	0.9%
Increase from Groundwater Preservation Fees	0.0%	0.0%	0.0%	0.0%	0.0%
Total Increase to Residential Customer using 8K gals.	0.0%	0.8%	0.9%	1.0%	0.9%
	\$0.00	\$0.34	\$0.35	\$0.41	\$0.36
					monthly increase
<b>Required Cash Reserves (5% of budget)</b> (does not include depreciation/amortization)	\$ 862,363	\$ 779,808	\$ 835,513	\$ 856,996	\$ 788,068
<b>Debt Service Coverage Requirement Amount</b>	\$ 6,145,150	\$ 6,024,048	\$ 6,110,374	\$ 6,240,860	\$ 6,385,709
<b>DS Coverage Ratio: Revenue Bonds/WIFA</b>	1.48	1.46	1.41	1.32	1.44
<b>Beginning Cash Balance</b>	\$ 15,002,970	\$ 13,326,304	\$ 13,520,813	\$ 12,833,346	\$ 11,957,325
<b>Net Balance From Operations</b>	(1,676,666)	194,509	(687,467)	(876,021)	748,154
<b>Ending Cash Balance</b>	\$ 13,326,304	\$ 13,520,813	\$ 12,833,346	\$ 11,957,325	\$ 12,705,479
Operating Fund	\$ 8,082,505	\$ 7,685,773	\$ 5,979,633	\$ 4,686,533	\$ 4,826,036
AWRD Impact Fee Fund	2,253,011	3,249,232	4,353,731	4,857,618	5,557,661
PWSD Impact Fee Fund	2,990,788	2,585,808	2,499,982	2,413,175	2,321,782
<b>Total Ending Cash Balance</b>	\$ 13,326,304	\$ 13,520,813	\$ 12,833,346	\$ 11,957,325	\$ 12,705,479
<b>Contingent Reserve Fund:</b>	255%	263%	243%	221%	230%
Contingent Reserve Requirement = 130%					

# **APPENDIX C**

## **Preferred Financial Scenario Rate Schedules & Tables for Bill Comparisons**

**C-1 Potable Water & Reclaimed Rates**

**C-2 Tables for Bill Comparisons by Meter Size**

**ORO VALLEY WATER UTILITY**

**EXISTING RATE SCHEDULE - NO PROPOSED CHANGES**

**POTABLE WATER RATES**

**MONTHLY BASE RATES & COMMODITY CHARGES**

METER SIZE	CURRENT BASE RATE (includes 0 gallons)	COMMODITY TIER 1 \$2.20 PER 1000 GALS.	COMMODITY TIER 2 \$2.99 PER 1000 GALS.	COMMODITY TIER 3 \$4.03 PER 1000 GALS.	COMMODITY TIER 4 \$5.38 PER 1000 GALS.
5/8 x 3/4	\$ 14.19	0 - 7,000	7,001 - 16,000	16,001 - 32,000	over 32,000
3/4 x 3/4	\$ 21.29	0 - 10,000	10,001 - 24,000	24,001 - 48,000	over 48,000
1	\$ 35.48	0 - 17,000	17,001 - 40,000	40,001 - 80,000	over 80,000
1.5	\$ 70.95	0 - 35,000	35,001 - 80,000	80,001 - 160,000	over 160,000
2	\$ 113.53	0 - 56,000	56,001 - 128,000	128,001 - 256,000	over 256,000
3	\$ 227.05	0 - 112,000	112,001 - 256,000	256,001 - 512,000	over 512,000
4	\$ 354.77	0 - 175,000	175,001 - 400,000	400,001 - 800,000	over 800,000
6	\$ 709.54	0 - 860,000	860,001 - 2,000,000	2,000,001 - 3,500,000	over 3,500,000
8	\$ 1,135.26	0 - 860,000	860,001 - 2,000,000	2,000,001 - 3,500,000	over 3,500,000

**RECLAIMED WATER RATES**

**MONTHLY BASE RATES & COMMODITY CHARGES**

METER SIZE	CURRENT BASE RATE (includes 0 gallons)	COMMODITY TIER 1 \$2.20 PER 1000 GALS.	COMMODITY TIER 2 \$2.99 PER 1000 GALS.	COMMODITY TIER 3 \$4.03 PER 1000 GALS.	COMMODITY TIER 4 \$5.38 PER 1000 GALS.
5/8 x 3/4	\$ 14.19	All Usage	N/A	N/A	N/A
3/4 x 3/4	\$ 21.29	All Usage	N/A	N/A	N/A
1	\$ 35.48	All Usage	N/A	N/A	N/A
1.5	\$ 70.95	All Usage	N/A	N/A	N/A
2	\$ 113.53	All Usage	N/A	N/A	N/A
3	\$ 227.05	All Usage	N/A	N/A	N/A
4	\$ 354.77	All Usage	N/A	N/A	N/A
6	\$ 709.54	All Usage	N/A	N/A	N/A
8	\$ 1,135.26	All Usage	N/A	N/A	N/A

Groundwater Preservation Fees - **Potable** \$ 0.95 per 1,000 gallons

Groundwater Preservation Fees - **Reclaimed** \$ 0.50 per 1,000 gallons

Construction Water Rate - **Potable** \$ 6.38 per 1,000 gallons

Construction Water Rate - **Reclaimed** \$ 2.20 per 1,000 gallons

TABLE FOR MONTHLY CHARGES & PERCENT INCREASE COMPARISON  
 CUSTOMERS WITH A 5/8 X 3/4" METER

GALLONS USED	CURRENT WATER RATE	PROPOSED WATER RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	14.19	14.19	0.00	0.0%	0.00	0.00	0.00	0.00	14.19	0.0%
1,000	16.39	16.39	0.00	0.0%	0.95	0.95	0.00	0.00	17.34	0.0%
2,000	18.59	18.59	0.00	0.0%	1.90	1.90	0.00	0.00	20.49	0.0%
3,000	20.79	20.79	0.00	0.0%	2.85	2.85	0.00	0.00	23.64	0.0%
4,000	22.99	22.99	0.00	0.0%	3.80	3.80	0.00	0.00	26.79	0.0%
5,000	25.19	25.19	0.00	0.0%	4.75	4.75	0.00	0.00	29.94	0.0%
6,000	27.39	27.39	0.00	0.0%	5.70	5.70	0.00	0.00	33.09	0.0%
7,000	29.59	29.59	0.00	0.0%	6.65	6.65	0.00	0.00	36.24	0.0%
8,000	32.58	32.58	0.00	0.0%	7.60	7.60	0.00	0.00	40.18	0.0%
9,000	35.57	35.57	0.00	0.0%	8.55	8.55	0.00	0.00	44.12	0.0%
10,000	38.56	38.56	0.00	0.0%	9.50	9.50	0.00	0.00	48.06	0.0%
11,000	41.55	41.55	0.00	0.0%	10.45	10.45	0.00	0.00	52.00	0.0%
12,000	44.54	44.54	0.00	0.0%	11.40	11.40	0.00	0.00	55.94	0.0%
13,000	47.53	47.53	0.00	0.0%	12.35	12.35	0.00	0.00	59.88	0.0%
14,000	50.52	50.52	0.00	0.0%	13.30	13.30	0.00	0.00	63.82	0.0%
15,000	53.51	53.51	0.00	0.0%	14.25	14.25	0.00	0.00	67.76	0.0%
16,000	56.50	56.50	0.00	0.0%	15.20	15.20	0.00	0.00	71.70	0.0%
17,000	60.53	60.53	0.00	0.0%	16.15	16.15	0.00	0.00	76.68	0.0%
18,000	64.56	64.56	0.00	0.0%	17.10	17.10	0.00	0.00	81.66	0.0%
19,000	68.59	68.59	0.00	0.0%	18.05	18.05	0.00	0.00	86.64	0.0%
20,000	72.62	72.62	0.00	0.0%	19.00	19.00	0.00	0.00	91.62	0.0%
21,000	76.65	76.65	0.00	0.0%	19.95	19.95	0.00	0.00	96.60	0.0%
22,000	80.68	80.68	0.00	0.0%	20.90	20.90	0.00	0.00	101.58	0.0%
23,000	84.71	84.71	0.00	0.0%	21.85	21.85	0.00	0.00	106.56	0.0%
24,000	88.74	88.74	0.00	0.0%	22.80	22.80	0.00	0.00	111.54	0.0%
25,000	92.77	92.77	0.00	0.0%	23.75	23.75	0.00	0.00	116.52	0.0%
26,000	96.80	96.80	0.00	0.0%	24.70	24.70	0.00	0.00	121.50	0.0%
27,000	100.83	100.83	0.00	0.0%	25.65	25.65	0.00	0.00	126.48	0.0%
28,000	104.86	104.86	0.00	0.0%	26.60	26.60	0.00	0.00	131.46	0.0%
29,000	108.89	108.89	0.00	0.0%	27.55	27.55	0.00	0.00	136.44	0.0%
30,000	112.92	112.92	0.00	0.0%	28.50	28.50	0.00	0.00	141.42	0.0%
31,000	116.95	116.95	0.00	0.0%	29.45	29.45	0.00	0.00	146.40	0.0%
32,000	120.98	120.98	0.00	0.0%	30.40	30.40	0.00	0.00	151.38	0.0%
33,000	126.36	126.36	0.00	0.0%	31.35	31.35	0.00	0.00	157.71	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
**FOR CUSTOMERS WITH A 3/4" x 3/4" METER**

BASE RATE \$ 21.29  
 COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 10,000 GALLONS  
 TIER 2 = \$ 2.99 FOR 10,001 - 24,000 GALLONS  
 TIER 3 = \$ 4.03 FOR 24,001 - 48,000 GALLONS  
 TIER 4 = \$ 5.38 FOR ALL USAGE OVER 48,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	21.29	21.29	-	0.0%	0.00	0.00	0.00	0.00	21.29	0.0%
7,000	36.69	36.69	-	0.0%	6.65	6.65	0.00	0.00	43.34	0.0%
11,000	46.28	46.28	-	0.0%	10.45	10.45	0.00	0.00	56.73	0.0%
28,000	101.27	101.27	-	0.0%	26.60	26.60	0.00	0.00	127.87	0.0%
50,000	192.63	192.63	-	0.0%	47.50	47.50	0.00	0.00	240.13	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
**FOR CUSTOMERS WITH A 1" METER**

BASE RATE \$ 35.48  
 COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 17,000 GALLONS  
 TIER 2 = \$ 2.99 FOR 17,001 - 40,000 GALLONS  
 TIER 3 = \$ 4.03 FOR 40,001 - 80,000 GALLONS  
 TIER 4 = \$ 5.38 FOR ALL USAGE OVER 80,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	35.48	35.48	-	0.0%	0.00	0.00	0.00	0.00	35.48	0.0%
16,000	70.68	70.68	-	0.0%	15.20	15.20	0.00	0.00	85.88	0.0%
27,000	102.78	102.78	-	0.0%	25.65	25.65	0.00	0.00	128.43	0.0%
38,000	135.67	135.67	-	0.0%	36.10	36.10	0.00	0.00	171.77	0.0%
50,000	181.95	181.95	-	0.0%	47.50	47.50	0.00	0.00	229.45	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
**FOR CUSTOMERS WITH A 1 1/2" METER**

BASE RATE \$ 70.95

COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 35,000 GALLONS  
 TIER 2 = \$ 2.99 FOR 35,001 - 80,000 GALLONS  
 TIER 3 = \$ 4.03 FOR 80,001 - 160,000 GALLONS  
 TIER 4 = \$ 5.38 FOR ALL USAGE OVER 160,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	70.95	70.95	-	0.0%	0.00	0.00	0.00	0.00	70.95	0.0%
38,000	156.92	156.92	-	0.0%	36.10	36.10	0.00	0.00	193.02	0.0%
64,000	234.66	234.66	-	0.0%	60.80	60.80	0.00	0.00	295.46	0.0%
90,000	322.80	322.80	-	0.0%	85.50	85.50	0.00	0.00	408.30	0.0%
125,000	463.85	463.85	-	0.0%	118.75	118.75	0.00	0.00	582.60	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
**FOR CUSTOMERS WITH A 2" METER**

BASE RATE \$ 113.53

COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 56,000 GALLONS  
 TIER 2 = \$ 2.99 FOR 56,001 - 128,000 GALLONS  
 TIER 3 = \$ 4.03 FOR 128,001 - 256,000 GALLONS  
 TIER 4 = \$ 5.38 FOR ALL USAGE OVER 256,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	113.53	113.53	-	0.0%	0.00	0.00	0.00	0.00	113.53	0.0%
57,000	239.72	239.72	-	0.0%	54.15	54.15	0.00	0.00	293.87	0.0%
128,000	452.01	452.01	-	0.0%	121.60	121.60	0.00	0.00	573.61	0.0%
250,000	943.67	943.67	-	0.0%	237.50	237.50	0.00	0.00	1,181.17	0.0%
325,000	1,339.07	1,339.07	-	0.0%	308.75	308.75	0.00	0.00	1,647.82	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
**FOR CUSTOMERS WITH A 3" METER**

BASE RATE \$ 227.05  
 COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 112,000 GALLONS  
 TIER 2 = \$ 2.99 FOR 112,001 - 256,000 GALLONS  
 TIER 3 = \$ 4.03 FOR 256,001 - 512,000 GALLONS  
 TIER 4 = \$ 5.38 FOR ALL USAGE OVER 512,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	227.05	227.05	-	0.0%	0.00	0.00	0.00	0.00	227.05	0.0%
50,000	337.05	337.05	-	0.0%	47.50	47.50	0.00	0.00	384.55	0.0%
150,000	587.07	587.07	-	0.0%	142.50	142.50	0.00	0.00	729.57	0.0%
300,000	1,081.33	1,081.33	-	0.0%	285.00	285.00	0.00	0.00	1,366.33	0.0%
500,000	1,887.33	1,887.33	-	0.0%	475.00	475.00	0.00	0.00	2,362.33	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
**FOR CUSTOMERS WITH A 4" METER**

BASE RATE \$ 354.77  
 COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 175,000 GALLONS  
 TIER 2 = \$ 2.99 FOR 175,001 - 400,000 GALLONS  
 TIER 3 = \$ 4.03 FOR 400,001 - 800,000 GALLONS  
 TIER 4 = \$ 5.38 FOR ALL USAGE OVER 800,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	354.77	354.77	-	0.0%	0.00	0.00	0.00	0.00	354.77	0.0%
300,000	1,113.52	1,113.52	-	0.0%	285.00	285.00	0.00	0.00	1,398.52	0.0%
550,000	2,017.02	2,017.02	-	0.0%	522.50	522.50	0.00	0.00	2,539.52	0.0%
700,000	2,621.52	2,621.52	-	0.0%	665.00	665.00	0.00	0.00	3,286.52	0.0%
850,000	3,293.52	3,293.52	-	0.0%	807.50	807.50	0.00	0.00	4,101.02	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
FOR CUSTOMERS WITH A 6" METER

BASE RATE \$ 709.54  
COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 860,000 GALLONS  
TIER 2 = \$ 2.99 FOR 860,001 - 2,000,000 GALLONS  
TIER 3 = \$ 4.03 FOR 2,000,001 - 3,500,000 GALLONS  
TIER 4 = \$ 5.38 FOR ALL USAGE OVER 3,500,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	709.54	709.54	-	0.0%	0.00	0.00	0.00	0.00	709.54	0.0%
425,000	1,644.54	1,644.54	-	0.0%	403.75	403.75	0.00	0.00	2,048.29	0.0%
1,000,000	3,020.14	3,020.14	-	0.0%	950.00	950.00	0.00	0.00	3,970.14	0.0%
1,500,000	4,515.14	4,515.14	-	0.0%	1,425.00	1,425.00	0.00	0.00	5,940.14	0.0%
2,000,000	6,010.14	6,010.14	-	0.0%	1,900.00	1,900.00	0.00	0.00	7,910.14	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
FOR CUSTOMERS WITH A 8" METER

BASE RATE \$ 1,135.26  
COMMODITY RATE:

TIER 1 = \$ 2.20 FOR 0 - 860,000 GALLONS  
TIER 2 = \$ 2.99 FOR 860,001 - 2,000,000 GALLONS  
TIER 3 = \$ 4.03 FOR 2,000,001 - 3,500,000 GALLONS  
TIER 4 = \$ 5.38 FOR ALL USAGE OVER 3,500,000 GALLONS

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	1,135.26	1,135.26	-	0.0%	0.00	0.00	0.00	0.00	1,135.26	0.0%
425,000	2,070.26	2,070.26	-	0.0%	403.75	403.75	0.00	0.00	2,474.01	0.0%
1,000,000	3,445.86	3,445.86	-	0.0%	950.00	950.00	0.00	0.00	4,395.86	0.0%
1,500,000	4,940.86	4,940.86	-	0.0%	1,425.00	1,425.00	0.00	0.00	6,365.86	0.0%
2,000,000	6,435.86	6,435.86	-	0.0%	1,900.00	1,900.00	0.00	0.00	8,335.86	0.0%

TABLE FOR MONTHLY CHARGES AND PERCENT INCREASE COMPARISON  
 FOR CUSTOMERS WITH A 6" METER - **RECLAIMED WATER USE**

BASE RATE \$ 709.54

COMMODITY RATE:

TIER 1 = \$ 2.20 FOR ALL WATER USAGE

TIER 2 = N/A

TIER 3 = N/A

TIER 4 = N/A

GALLONS USED IN 1 MONTH	BILL AT THE CURRENT RATE	BILL AT THE PROPOSED RATE	AMOUNT OF INCREASE Water Rate	PERCENT INCREASED Water Rate	CURRENT GROUNDWATER PRESERVATION FEE	PROPOSED GROUNDWATER PRESERVATION FEE	AMOUNT OF INCREASE GPF	TOTAL MONTHLY INCREASE	TOTAL AMOUNT OF MONTHLY BILL	TOTAL PERCENT INCREASED
0	709.54	709.54	-	0.0%	0.00	0.00	0.00	-	709.54	0.0%
5,000,000	11,709.54	11,709.54	-	0.0%	2,500.00	2,500.00	-	-	14,209.54	0.0%
10,000,000	22,709.54	22,709.54	-	0.0%	5,000.00	5,000.00	-	-	27,709.54	0.0%
15,000,000	33,709.54	33,709.54	-	0.0%	7,500.00	7,500.00	-	-	41,209.54	0.0%
20,000,000	44,709.54	44,709.54	-	0.0%	10,000.00	10,000.00	-	-	54,709.54	0.0%