

**METROPOLITAN DOMESTIC WATER IMPROVEMENT DISTRICT  
2013 WATER RATES & REVENUE ANALYSIS  
AUGUST 12, 2013**

Last August, an analysis was completed and provided to the Board of Directors that gave a detailed look at the revenue trend, impact of fixed and variable costs, and the effectiveness of the rate structure for Metropolitan Domestic Water Improvement District. Based on that analysis, the Board of Directors made important decisions about the rate structure, revenue enhancement, and then refinancing and restructuring debt. This report updates that analysis by looking at this fiscal year's financial standing compared with last year's and then projecting over the next few years to consider what Metro Water's finances will look like in the future.

The biggest challenge facing the District is the uncertainty surrounding metered water sales. With its continuing decline, the District is projecting a 2.1% decrease, which is more than what was projected last year. With the continued reduction in metered water sales, this analysis concludes that the District must be proactive in a disciplined, careful approach in which both revenue and expenditure needs will be necessary to sustain in future years a solid financial foundation.

Metropolitan Domestic Water Improvement District was formed as a public municipal water provider in 1992. The District is independent of other jurisdictions and is able to focus its resources upon delivering water to its customers. The District operates financially from revenue generated primarily through water sales. This revenue allows for the District to meet its day-to-day operations, pay for debt service for capital improvements and acquisitions, support personnel, and secure and utilize its Central Arizona Project water allocation. Unlike other water providers that are part of a municipality, the District is responsible for its own finances, human resources, fleet, information technology, legal, and risk management services. The District then must ensure that it generates enough revenue to meet its expenses.

**Fiscal Year 2012-13**

At the beginning of the Fiscal Year 2012-13, Metro Water recognized that a large financial challenge was looming with its expenses about to exceed its revenue, which has been dropping due primarily to lower metered water sales. It was projected that the current course would cause a significant deficit for the District within two fiscal years. A major factor is that water consumption in calendar year 2012 was the lowest the District had experienced since the year 2000. Despite an increase in population over the years, overall water consumption has been trending downward, which is positive for greater efficiency in water usage. However, less water usage than anticipated has had a direct impact on metered water sales, in turn providing less revenue. This creates a dilemma since the District has fixed costs that must be paid for no matter the amount of water used by customers.

Making up 69% of the annual fixed costs is debt service for water system improvements by two

Capital Improvement Programs, one \$23 million and the other \$28 million. There was included in all of this the initial acquisitions of Metro Water District, City of Tucson settlement, and construction of the office complex. During its first 20 years, Metro Water has worked hard to improve and upgrade an aging water infrastructure. The District has been proactive in making improvements to make its water systems reliable, to increase storage capacity from 4.5 million gallons to 16.5 million gallons, to install miles of major transmission mains, to install additional hydrants for fire protection, to convert to a gravity system so water can be delivered even during electrical outages and save power costs, and replace older, inefficient wells.

Many water utilities nationwide are struggling with aging infrastructure that will need repair and upgrade at increasingly higher costs. Metro Water has avoided many of these future problems by being proactive and in the long run saving money. However, the debt retirement must be paid, which creates a financial challenge for the District.

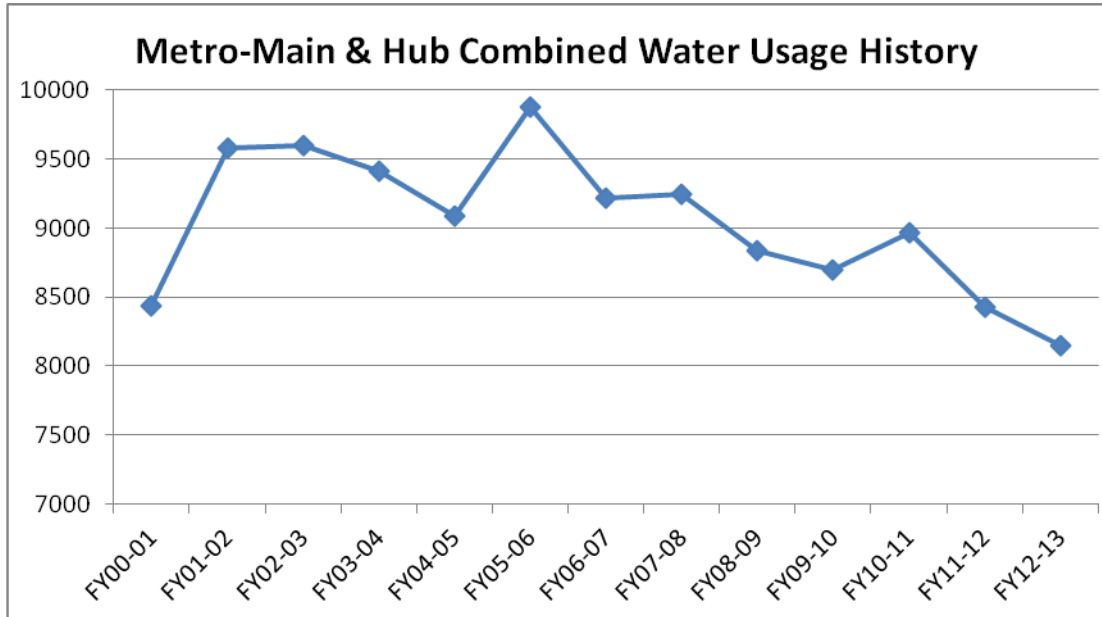
The District was able to strengthen its financial situation through two key actions of the Board of Directors. The Board approved a rate adjustment that included a \$2.50 increase to the water accessibility rate (base rate) to add more reliability to the District's revenues and assist with paying for fixed costs. No increase was added to the 1<sup>st</sup> and 2<sup>nd</sup> tiers of the usage rate; however, the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> tiers of the usage rate were increased each by 4 percent. Overall, the average customer was asked to pay \$2.50 more a month to ensure water reliability.

The second key decision was the Board of Directors approval to refinance and restructure a portion of the District's debt retirement. The District's financial advisor, Steifel, was instrumental in crafting a refinancing package that helped to lower interest rates and restructure some of the debt requirements. This gave the District much needed breathing room regarding its finances.

Although the District's financial status is stronger at the end of Fiscal Year 2012-13 than it was at the beginning of the fiscal year, the District continues to look for ways to reduce operating costs and closely monitor metered water sales to determine its impact on revenue.

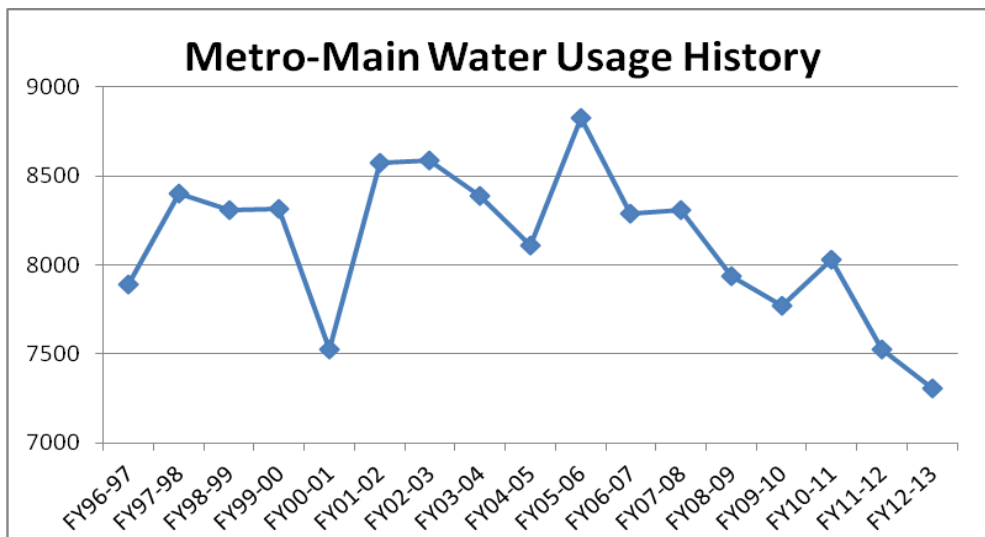
### **Water Use Trends**

The combined water usage of Metro-Main and Metro-Hub continues to experience an overall reduction in water usage over the last 13 years since Hub Water Company was purchased. The chart on the next page illustrates a decline of over 1,700 acre feet between FY 2005-06 to FY 2012-13 in the combined water usage of Metro Main and Metro Hub service areas. FY 2005-06 was the high point in water usage; however, from FY 2001-02 until the last fiscal year, there has been a downward trajectory of 16% in water usage. This downward trend has brought FY 2012-13 to be well below the water usage of FY 2000-01.

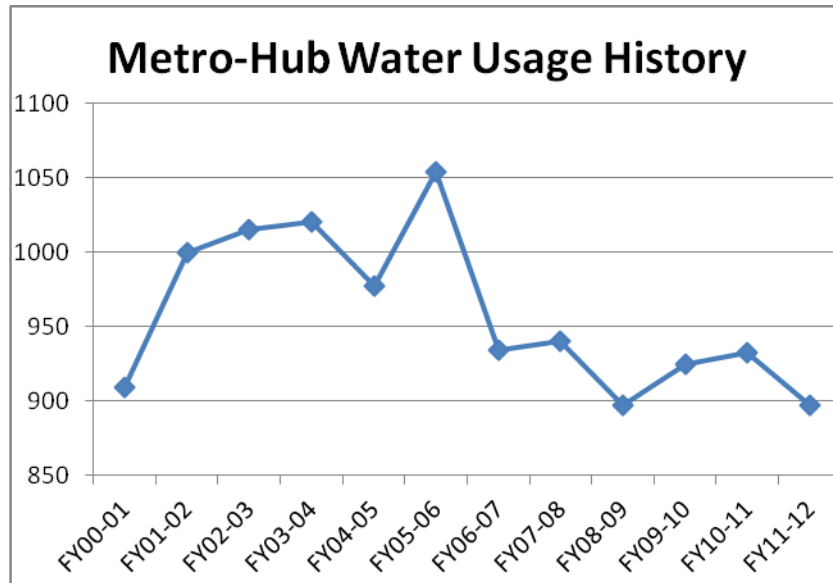


The continued reduction in combined water use during Fiscal Year 2012-13 has been surprising and baffling at the same time. For example, in June 2013, the Tucson area had an entire month of over 100 degree temperature, no rain, and yet water consumption was significantly less than the year before. This is not unique to Metro Water in that other water utilities in the region are seeing similar declines in their water usages.

The decline in water consumption becomes more stark when you look at just Metro-Main's water usage history. Less water was used the last five years than in the final years of the 1990s.



At Metro-Hub, less water was used in FY12-13 than the fiscal year following the District's acquisition of Metro-Hub.



The reduction in water use is most likely a result of a combination of factors. This includes public awareness of the on-going drought, conservation efforts, decline in growth, and the economic downturn. Also, new homes have low water use fixtures and consumers can purchase low water using washing machines, dishwashers, and toilets. It is also assumed that Pima County Regional Wastewater Reclamation Department's consistently significant increases to its sewer fees have an impact on water bills, since the sewer fee is collected as part of the water bill by the District.

The District is participating in a study that is analyzing the various factors impacting water usage in order to determine the causes and effects, whether there is a pattern to the trend, and if the trend will continue. Gary Woodard of Montgomery & Associates is the lead researcher of the study, which is to be completed July 2014.

In the meantime, water sales are being watched closely since it remains unclear if the downward trend will continue or level out. For the FY 2013-14 budget, a 2.1% decline in water usage was factored into the projected revenue.

### **Debt Service Coverage Requirements**

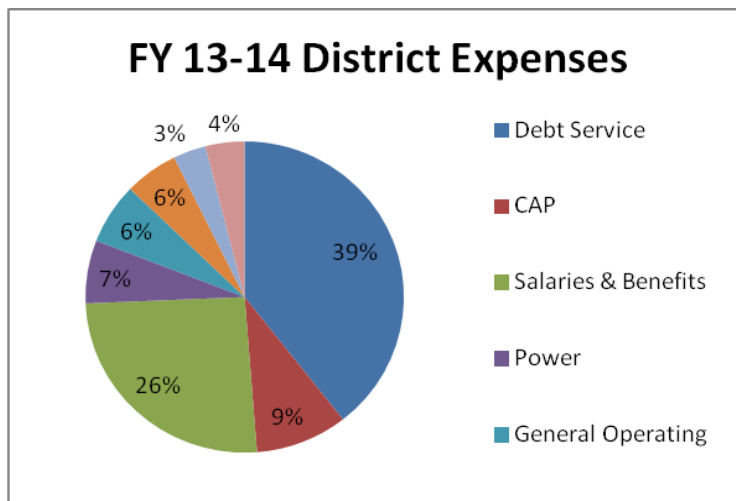
The District is required to maintain a 120% bond debt coverage ratio. The District currently pays debt service on a number of outstanding debt issuances and loans. These include the 2002 refinancing of the office complex, Herb Johnson Reservoir, and Tucson Water Settlement; a 2002 Capital Improvement Program issuance; note payable for acquisition of the Hub Water Company (which is not part of debt coverage); WIFA loan for the acquisition of the Thim Water Utilities; 2007 WIFA loan; 2009 refinancing of the 1999 revenue bonds; 2009 WIFA loan; 2010 revenue bonds for the County/RTA waterline relocation projects; 2013 WIFA loan and refinancing of 2002 revenue bonds. An additional \$100,859 is set aside for a debt service

reserve that became a requirement during FY 2009-10. This accounts for \$6,623,836 in total debt service for the current fiscal year.

The Bond debt ratio is projected to be between 125% and 150% over the next few years.

### Expenses

The District's overall costs consist of the following: Debt Service, CAP Water Purchases, Salaries & Benefits, Purchased Power, General Operating Expenses, Consultant-Contract Services, and Supplies. These overall operating budget for FY 2013-14 totals \$16,812,715. This is a reduction from the previous year, primarily due to the refinancing and restructuring of the debt service.



#### **FY 13-14**

Debt Service	\$6,623,836
CAP	\$1,574,615
Salaries & Benefits	\$4,302,064
Power	\$1,100,000
General Operating	\$1,064,547
Consultant/Contract	\$920,475
Supplies	\$558,399
Other	\$668,779
	<b>\$16,812,715</b>

**Debt Service**, as previously detailed, is the largest expense category and is also a fixed cost, which remains constant no matter how much water is used. This accounts for \$6,623,836 in total debt service for the current fiscal year. The debt service is \$1,094,264 less than budgeted last year because of the refinancing and restructuring that was done; however, it accounts for 39% of the District's expenses.

These expenditures have strengthened the District's independence as a water provider by securing its renewable water supply through a CAP allocation, and constructing and upgrading critical infrastructure to ensure the reliability of the water system. The biggest challenge now and into the future for water utilities is the need to replace aging infrastructure, which is projected to cost billions throughout the United States. Since the District has been proactive through two Capital Improvement Programs, the District has minimized significantly the risk of aging infrastructure. This has potentially reduced overall costs in the future by paying now to make the various improvements.

The District also makes debt retirement for the acquisitions of the Hub Water Company (1999) and the Thim Water Utilities (2009). Both acquisitions were analyzed to be able to sustain themselves but have given the District overall additional revenue and a greater position in regional water issues.

It is critical to recognize that the District's aggregate debt service is not a fixed annual amount such as a home mortgage or a car payment. In FY 2013-14 due to the refinancing, the debt amount decreases by \$1,094,264 and stays at over \$6.1 million until 2019, at which time it drops to \$4.8 million with the 2009 Refunding Bonds paid off and the principal on the 2002 Bonds drastically reduced.

Aggregate Debt Service	
FY 2012-13	\$7,718,467
FY 2013-14	\$6,623,386
FY 2014-15	\$6,438,062
FY 2015-16	\$6,429,521
FY 2016-17	\$6,442,702
FY 2017-18	\$6,423,460
FY 2018-19	\$6,455,279
FY 2019-20	\$5,036,900
FY 2020-21	\$5,035,216

**CAP Water Allocation** is the District's water future that provides a renewable water supply and minimizes reliance on groundwater. The District pays to have the 13,460 acre-feet of CAP water allocation (Capital Cost) and also must pay for using the water (Delivery Cost), which costs are projected to increase faster than had been previously expected. CAP raised its rates significantly in June 2013 at a higher percentage than what the District had budgeted for, which amounts to \$1,574,615 in the FY 2013-14 and makes it difficult for the District to fully utilize its CAP water allocation. CAP costs are anticipated to continue to rise.

The District recharges its CAP water in the Avra Valley Recharge Project, a site acquired in 2010, and at groundwater saving facilities. The long-term plan is to recover the stored CAP water from the Avra Valley Recharge Project and through a pipe bring the water to blend in the District's service area. This large capital undertaking will need a future funding source.

**Salaries & Benefits** cover the cost of the District's 48 employees, who ensure that all functions of the District are met throughout the year. Projected personnel costs include five upgraded positions and filling two positions. The current budget does include a cost of living adjustment of 2% plus the potential of each employee receiving a 2% merit award in January 2014. Huge increases are projected for insurance benefits along with increased Arizona State Retirement System costs have added to higher Salaries and Benefits. For the purpose of this analysis, this

category also includes the contingency for sick/vacation payout and the carryover for employee professional growth.

***Purchased Power*** is a primary cost used to pump groundwater and help move it at the District's booster stations. Tucson Electric Power Company received approval from the ACC for a 15% rate increase but the District has tried to reduce that impact by planning to add at least three more well sites to have interruptible services. The District will continue to take steps to reduce its purchased power cost though it is known that energy prices will continue to rise in the future.

***General Operating Expenses, Consultant/Contract Services, and Supplies*** have slightly increased from the previous year in order to ensure that the day-to-day operation and maintenance of the District remained stable in an effort to keep expenses fairly neutral.

***Other*** includes the contingency fund for unforeseen emergencies and the cost for bond issuance that is a fixed cost related to the debt service.

***Capital Equipment and Capital Projects*** are not included in this portion of the analysis regarding basic expenses; however, the District has traditionally included about a \$1 million in the budget for capital equipment and projects. The FY 2013-14 budget includes \$157,500 for capital equipment and \$832,000 capital improvement projects and \$261,088 for water resource projects using the Water Resources Utilization fee. The total is \$1,250,588.

***County/RTA Waterline Relocations*** are also not incorporated in this analysis since a designated fee is paying for the debt retirement for the revenue bonds issued to finance the construction of the required waterline relocations. For purposes of this analysis, these costs and associated designated fee were viewed as negating each other.

### **Fixed & Variable Costs**

Since water must always be available for customers, capital investment and system capacity is designed for the peak demand of the hottest day of the year. Therefore, the District designed its water system to meet peak forecasted demand and fire flow requirements. "The consequence, however, of designing to meet peak demand is that the majority of costs to serve customers is fixed and needed long before many customers take a single drink from the tap." (McCuckin, Kelly, Harwood, Pricing Water in New Mexico, May 2011.)

Fixed costs can be defined as those expenses that are incurred regardless of the amount of water used. This is primarily associated with the repayment for large capital investments that are made to ensure that a water system will be able to provide water at any time to customers. Variable costs are those more closely tied to the amount of water pumped and delivered. In looking at the District's total costs, fixed costs were identified as those that would be required and do not vary based on the volume of water produced. It should be emphasized that fixed costs and variable costs do not mean good or bad, or necessary or unnecessary. Meeting variable costs can be just

as critical as fixed costs in ensuring the District operates effectively and efficiently. However, in developing a financial plan for the District, we need to be aware that identifying fixed and variable costs are a necessary business management tool for financial planning.

**Overview of Fixed and Variable Costs – FY 2013-14**

	Fixed Costs	Variable Costs	Total
Debt Service	\$5,929,473	\$794,363	\$6,623,836
CAP	\$220,446	\$1,354,169	\$1,574,615
Salaries & Benefits	\$1,452,275	\$2,849,789	\$4,302,064
Power	\$47,700	\$1,052,300	\$1,100,000
General Operating	\$517,238	\$547,309	\$1,064,547
Consultant/Contract	\$168,758	\$751,717	\$920,475
Supplies	\$128,170	\$430,229	\$558,399
Other	\$168,779	\$500,000	\$668,779
Total	\$8,532,839	\$8,279,876	\$16,812,715

The fixed and variable costs were determined as follows –

Debt Service – The District must make its payments whether any water is sold or not; therefore, debt service is calculated as a fixed costs. The \$794,363 debt service cost in the variable column is related to the County/RTA waterline relocations, which has a dedicated fee.

CAP – With its allocation, the District must make the annual capital charge, which is a fixed cost. The remainder is related to delivery of actual water, which the District could forego but would not be advantageous for the viability of a long-term water resource management.

Salaries & Benefits – The fixed costs are for those positions required to minimally operate the District.

Power – The minimal base rate costs were included as fixed costs with the remainder as a variable cost based on how much water is pumped at the District’s wells and booster stations.

General Operating Expenses – Those general operating expenses required no matter the amount of water consumed includes regulatory fees, insurance, postage, bank charges, and a select vehicle leasing, maintenance, and fuel cost.

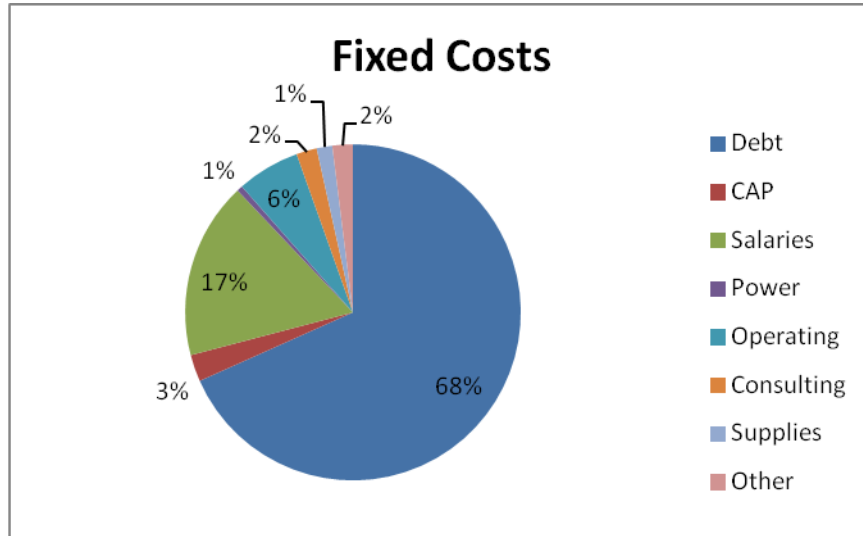
Consultant/Contract Services – Fixed consultant/contract services include a minimal portion of water quality testing services, accounting, legal services, and mailing services.

Supplies – Supplies are the primary variable category with fixed costs mainly for blue staking and minimal forms and supplies for processing bills.

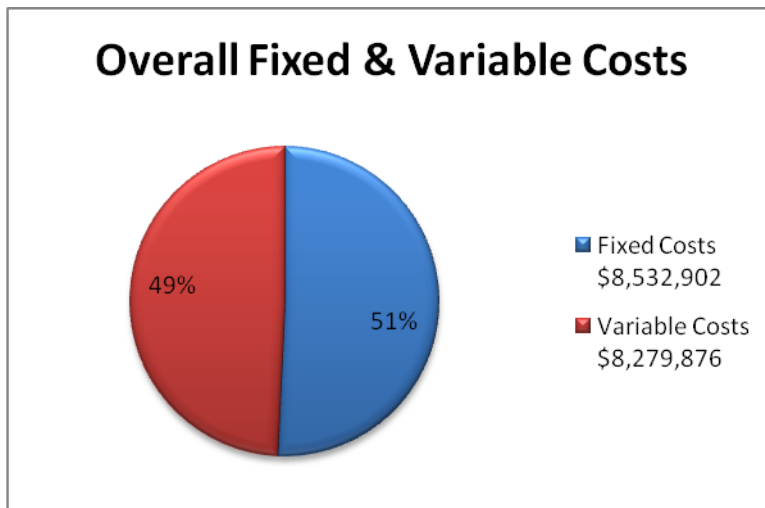
Other – These costs are related to the contingency fund and to bond issuance costs. The bond issuance cost is required to be paid, whereas the contingency fund is variable.



In looking at just fixed costs, 68% of those expenses are tied to debt service associated with capital improvements and acquisitions. Due to the refinancing and restructuring last year, this 68% is less than last year's 75%.

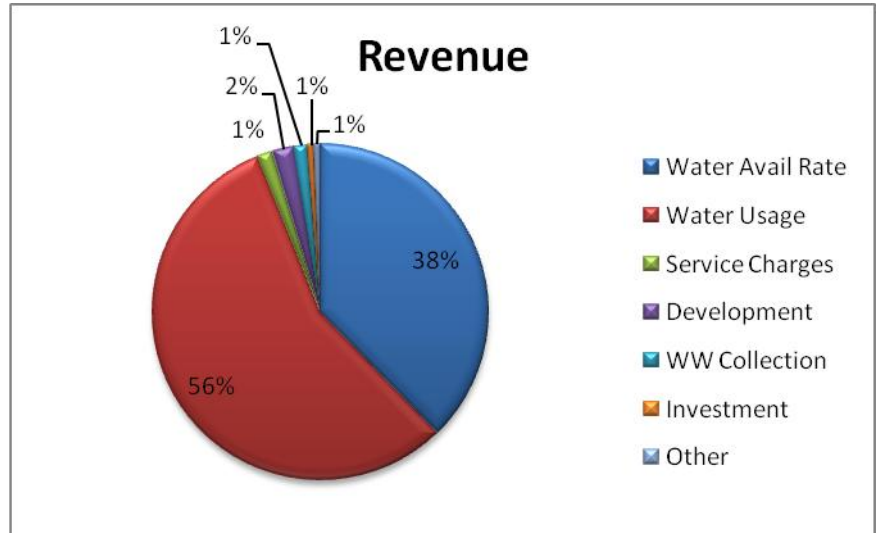


As the table above and the graph below show, the District's fixed costs equate to \$8,532,839 compared to \$8,279,876 in variable expenses.



Looking at fixed and variable costs is a useful financial planning tool to determine the amount of revenue necessary to cover a utility's expenses. With the revenue projected for this year's budget, the District continues to be primarily financed through water sales. Water sales include both the water availability rate and water usage charges. More revenue is generated from the water usage rather than the water availability rate. Yet, 51% of the District's costs are fixed, which is more than the current 38% that the water availability rate or base rate generates.

Revenue for FY 2013-14	
Water Avail. Rate	\$5,968,600
Water Usage	\$8,889,637
Service Charges	\$227,600
Development	\$330,900
WW Collection	\$210,000
Investment	\$92,500
Other	\$97,300
<b>Total</b>	<b>\$15,824,537</b>



This means that the District must rely on the amount of water used through the water usage rate, which has fluctuated and has actually been in decline. If the water availability rate did capture more of the fixed costs, the District would have higher month-to-month revenue stability as well as a higher “guaranteed” revenue to pay off those fixed costs. The District began in 2010 to increase its water availability rate for the purpose of covering more of its fixed costs. With the rate increase in November 2012, the District continued to make the effort to increase the water availability rate to capture more fixed costs, which increased slightly the percentage of revenue generated from the water availability rate.

**Revenue - From Now to FY 2018-19**

To further understand the District’s financial direction and to illustrate the importance of having revenue comparable with expenses, projected annual budgets were drafted out to FY 2018-19. This exercise was done so that the District can be better prepared by understanding the projected financial trends. For the current FY 2013-14 budget, the District is in good financial standing but what does the District need to do to maintain our debt rate coverage and avoid a negative budget?

To develop the projections to FY 2018-19, the expenses were calculated using the numbers from this year with then annual increases as follows: Salaries & Benefits – 5%, CAP – 5%, Power – 5%, General Operating – 2%, Consultant/Contract - \$2%, and Supplies – 1%.

Capital expenditures are included based on what is factored in the current budget and what would be spent according to revenue from System Development Fees (approximately \$180,000) and the Water Resources Utilization Fee (approximately \$270,000), which is shown to have no increase. It is recognized that most likely there would be increases to the Water Resources Utilization Fee, which in turn would allow for more capital projects related to our water resources to be done. However, that would not have an impact on the operating budget and so no

projected changes were made to the Water Resources Utilization Fee under the following two scenarios.

On the revenue side, a 2.1% decrease in water sales is projected annually based on what has been occurring. Other utilities in the region are also forecasting a decline in their water sales into the future. This remains a major unknown that will be discussed further in the analysis. As previously stated, the current FY 2013-14 budget has the District in a good financial standing with an ending operating fund balance at \$1,871,572. However, if no revenue increases occur annually and the 2.1% decline in water sales continues, by the end of FY 2015-16, the ending operating fund balance is down to \$364,399 and the District is no longer meeting the bond debt coverage ratio. The following year the District would be in a deficit. At the end of the FY 2018-19 budget, the District would have a deficit of \$7,252,051. Obviously, the deficit is hypothetical because the bond covenants require the District to maintain the bond debt coverage ratio by whatever means necessary to keep the District financially whole.

<b>Operating Budget Projections with NO Rate Adjustments &amp; 2.1% Annual Decline in Water Usage</b>						
	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
<b>Starting Fund Balance</b>	<b>\$2,527,550</b>	<b>\$1,871,572</b>	<b>\$1,439,395</b>	<b>\$364,399</b>	<b>(\$1,436,587)</b>	<b>(\$3,953,524)</b>
Total Revenue	\$16,907,325	<b>\$16,482,616</b>	<b>\$16,482,616</b>	<b>\$15,885,414</b>	<b>\$15,592,968</b>	<b>\$15,307,063</b>
<b>Total Operating Funds</b>	<b>\$19,434,875</b>	<b>\$18,354,188</b>	<b>\$17,620,017</b>	<b>\$16,249,813</b>	<b>\$14,156,381</b>	<b>\$11,353,540</b>
Debt Service	\$6,623,836	\$6,438,062	\$6,429,521	\$6,442,702	\$6,423,460	\$6,455,279
Operating Expenditures	\$9,511,575	\$9,902,108	\$10,310,859	\$10,738,715	\$11,186,607	\$11,655,511
Contingencies	\$677,304	\$619,018	\$565,000	\$560,000	\$560,000	\$560,000
Capital Expenditures	\$1,250,588	\$455,605	\$450,237	\$444,982	\$439,838	\$434,801
<b>Total Disbursements</b>	<b>\$18,063,303</b>	<b>\$17,414,793</b>	<b>\$17,305,380</b>	<b>\$17,741,417</b>	<b>\$18,609,905</b>	<b>\$19,105,591</b>
Reimbursement	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
<b>Ending Fund Balance</b>	<b>\$1,871,572</b>	<b>\$1,439,395</b>	<b>\$364,399</b>	<b>(\$1,436,587)</b>	<b>(\$3,953,524)</b>	<b>(\$7,252,051)</b>

By looking at this scenario of no revenue adjustments, it becomes clear that more revenue will be needed to ensure the District remains financially sound and/or expenses will need to be significantly reduced despite the positive standing the District is in this year.

Another scenario was developed for illustrative purposes. Under this scenario, a 3% annual increase would be adopted while still seeing a 2.1% decrease in water sales each year. The same increases to expenditures are factored in. The District remains out of a deficit under this scenario but the ending operating fund balance does continue to decrease so that by FY 2018-19, the year end balance is at \$795,051. While avoiding a deficit is obviously positive, it is important to note that capital expenses are almost nil except for using funds collected from development fees and the Water Resources Utilization Fee. Also, in the last two years, the District does fall below the required 120% bond debt ratio requirement.

<b>Operating Budget Projections with 3% Annual Rate Adjustments &amp; 2.1% Decline in Water Usage</b>						
	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
<b>Starting Fund Balance</b>	<b>\$2,527,550</b>	<b>\$2,131,716</b>	<b>\$2,400,882</b>	<b>\$2,460,532</b>	<b>\$2,222,144</b>	<b>\$1,690,553</b>
Total Revenue	\$17,167,469	\$17,183,959	\$17,315,267	\$17,448,012	\$17,578,313	\$17,710,090
<b>Total Operating Funds</b>	<b>\$19,695,019</b>	<b>\$19,315,676</b>	<b>\$19,716,149</b>	<b>\$19,908,544</b>	<b>\$19,800,457</b>	<b>\$19,400,643</b>
Debt Service	\$6,623,836	\$6,438,062	\$6,429,521	\$6,442,702	\$6,423,460	\$6,455,279
Operating Expenditures	\$9,511,575	\$9,902,108	\$10,310,859	\$10,738,715	\$11,186,607	\$11,655,511
Contingencies	\$677,304	\$619,018	\$565,000	\$560,000	\$560,000	\$560,000
Capital Expenditures	\$1,250,588	\$455,605	\$450,237	\$444,982	\$439,838	\$434,801
<b>Total Disbursements</b>	<b>\$18,063,303</b>	<b>\$17,414,793</b>	<b>\$17,305,380</b>	<b>\$18,186,400</b>	<b>\$18,609,905</b>	<b>\$19,105,591</b>
Reimbursement	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
<b>Ending Fund Balance</b>	<b>\$2,131,716</b>	<b>\$2,400,882</b>	<b>\$2,460,532</b>	<b>\$2,222,144</b>	<b>\$1,690,553</b>	<b>\$795,051</b>

The above scenario demonstrates that additional revenue can be generated and that rate increases provide one certain way of achieving that objective the first year. Additional revenue would be more certain if the revenue increase focused on fixed costs and was captured through the water availability (base) rate. To generate a 3% revenue increase through solely the water availability rate would mean a \$1.53 increase to the water availability rate. Additionally revenue would be necessary if capital expenditures are to be pursued. Again, the 3% annual increase was used as only an example to give the Board a sense of how an annual rate increase would impact the budget recognizing that the Board could do something less one year and an higher amount another year. Obviously, a scenario could be shown with even higher rate increases but there would continue to be the downward trend with the year end funding balance due to the continued annual decline in water usage. The unknown factor is if the continued decline of water usage will remain at 2.1% or drop at a steeper descent.

### **Expenditures & Balancing the Budget**

Due to the decline in water usage, rate increases alone will make it harder for the District to keep its year end fund balances from not decreasing more and more each year. Therefore, expenditures also need to be considered as way to have future budgets balanced and to increase, not decrease, year end fund balances. As an example, if you want to have the same outcome under the last scenario of having a year end fund balance of \$795,051 at the end of FY 2018-19 but to do it through expenditures reductions rather than rate increases, all expense categories would need to be sequestered by approximately 5% annually.

The assumptions used for expenditures under these scenarios could also be considered in question. If the 2.1% annual decline in water usage continues, then the District would be delivering less water than it is today. Therefore, the question arises if overall District expenses could be decreased if less water is being used. For example, it is possible that power costs could

be less and not increasing 5% annually as well as supplies, consultant and general operating expenses because less water is pumped. On the other hand, CAP water costs will probably be higher than the assumed 5% annual increase if CAP's power costs continue to rise. For example, the District had projected 5% increase this year but CAP had a 15% increase to its rates. Similar sharp increases are quite possible in the future. A reduction in ordering Central Arizona Project water could provide some savings; however, the District would be weakening its long-term water resources portfolio with stored credits as well as risking moving towards being out of regulatory compliance with its Assured Water Supply Designation. The main category that the District has flexibility is with Salaries & Benefits. If water usage continues to decrease, it could be contended that Salaries & Benefits ought to be less not more annually. As retirements and vacancies occur during the next few years, how those positions are then addressed could help to reduce the overall expenditures.

While acknowledging that expenses could be reduced, the discussion has to be balanced with the recognition that the District will need to continue its maintenance programs, which will continue to increase in cost with age. Also, equipment in the field and office will need to be replaced along with maintenance of the office complex. These expenditures will need to be incorporated in future budgets.

Although inflationary increases are going to occur, the District will most likely over the next few years need to look at possible reductions, more than previously to date, in its overall expenditures. This appears necessary even if there are annual rate increases.

### **Capital Expenditures**

As previously noted, capital expenditures have either not been included or are shown very nominally in this general analysis regarding revenue and expenses; however, capital equipment and projects are critical to the District's future. Projected capital outlay in FY 2013-14 is budgeted at \$989,500 with an additional \$261,088 from the Water Resources Utilization Fee for capital projects related to renewable supplies. In the above scenarios, capital expenditures stay in the \$434,000 and \$455,000 range by assuming no increase to the Water Resources Utilization Fee and Development Revenues generating \$200,000 annually. No factor for increasing these was added since the purpose of the scenarios was to look at the operating budget. However, the District has traditionally tried to include \$1 million in its budget for capital equipment and projects.

The main capital improvement project is the CAP Utilization Program due to its importance to the District's future by utilizing CAP water in the District's service area. In the second half of FY 2012-13, the Board selected HDR Engineering to perform a pipeline route analysis for a CAP Recharge/Recovery System from Avra Valley Recharge Project to the Herb Johnson Reservoir, location citing for pumping station(s) and possible future treatment facility, cost estimates, and most importantly, financing options for the needed improvements. The District needs to

continue moving forward with its CAP Utilization Program because of its long-term importance of using directly a renewable water supply and minimizing future groundwater depletion. In addition, it needs to be accepted that CAP water rates are going to continue to increase, probably often more than the 5% increase projected by the District, due to growing power costs that CAP must deal with. Also, other capital projects are needed to improve and upgrade the District's existing infrastructure.

In FY 2019-20, the District is set to have a sizeable reduction in its debt service payment, which has often been discussed that it could be used to assist with financing the CAP Utilization Program. Under the debt restructuring, debt service will drop by \$1.4 million in FY 2019-20. The \$1.4 million could then be used for debt retirement on a \$14 million capital investment for part of the CAP Utilization Program. This in turn was hoped to keep the rates stable and avoid a need for a large rate increase to fund the CAP Utilization Program. However, if you continue the scenario of a 3% annual rate increase, a continued 2.1% decline in water consumption, and expenditures continue to increase as previously outlined, then the year end balance in FY 2019-20 would increase to \$965,192 because of the reduction in debt service payment but then start the declining pattern again with the year end balance at \$762,581 in FY 2020-21. In other words, the \$1.4 million debt reduction then becomes necessary to keep the operating expenses budget afloat and is not adequate to be used for the debt service for the CAP Utilization Program. Again, it should be noted this scenario did not consider an increase to the Water Resources Utilization Fee. An annual increase to the Water Resources Utilization Fee is most likely necessary to ensure that the District is in the best financial situation for the implementing the CAP Utilization Program.

For illustrative purposes, the following table shows how much revenue would be generated from the Water Resources Utilization Fee if it is increased by 10 cents annually along with the 2.1% decline in water usage. This could provide an important revenue source for capital projects related to utilizing water resources. The purpose for any increases to the Water Resources Utilization Fee needs to be understood by customers since in effect each 10 cent increment would be a \$1.00 rate increase to monthly bills of customers using 10,000 gallons.

<b>Water Resources Utilization Fee - 10¢ annual increase starting November 2013</b>						
	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
<b>Water Resources Fee</b>	<b>\$413,390</b>	<b>\$660,312</b>	<b>\$896,684</b>	<b>\$1,122,836</b>	<b>\$1,339,094</b>	<b>\$1,545,774</b>

**Water Usage & Metered Sales**

In August 2013, the District is in a stable financial position but by projecting only a few years out, the District could easily move to a deficit if additional revenue is not generated. The most critical aspect to the District's future budgets is the most unknown of all the factors – water sales.

As previously stated, the scenarios looking into the future factor a 2.1% decline each year based on what has been occurring with the District the last few years. This was not anticipated five years ago and so it is challenging to predict exactly what will happen five years from now. Unfortunately, the last seven years has seen a steady decrease in water consumption, and this started before the economic downturn. Before that, more decreases occurred than increases in water usage. Not just the District but the whole water industry did not anticipate this trend. Therefore, the safest prediction at this time is that metered water sales will continue to decline and hopefully it will be no more than the current 2.1% decline. However, if the trend becomes steeper, this would require the District to make much more difficult decisions from higher rate increase to significant expenditure cuts.

With projected 2.1% annual decline in water sales, future fiscal years will need to have rate increases to generate additional revenue in order for the District to stay in compliance with debt coverage requirements. However, even with rate increases, year end fund balances will continue to decline unless those rate increases are higher and higher each subsequent year. Therefore, with less water consumption, the District will need to seriously consider reductions in expenditures different from what has traditionally been the case. In other words, the unforeseen continuing decline in water usage may require both revenue increases and expenditure decreases.

### **Keeping Budgets Balanced & Avoiding Deficits**

Metro Water District will need to continue to monitor its metered water sales and expenses very closely for the next few years to ensure that its budgets remain balanced and its financial standing remains solid.

Based on this analysis, the following are observations that the Board of Directors are encouraged to have a full discussion with staff and instruct staff as to the direction the Board would like the District to pursue.

### ***Revenue***

With the compounding impact on the District's revenues, a rate increase has a long-term effect on future years. Therefore, a rate increase should be considered this year based on the knowledge that the District could be in a deficit within three years (FY 2016-17). Based on this analysis and what the District has been recently practicing, any revenue increases ought to continue to be directed towards fixed costs, which means capturing that increase in the water availability (base) rate.

To avoid leaving low water users with the highest percent increase to their water bill, increases to the commodity rate for the third, fourth, and fifth tier should also be considered. This could generate more of an overall revenue increase and avoid having the increase to the water availability rate be too large. However, a possible decrease in water consumption for these

higher tiers should be factored to reflect the possible revenue to be generated more realistically. Also, raising the commodity rate too much for the highest tiers could cause a more significant impact to commercial customers.

Having modest increases annually, as the District has historically enacted its rate increases, can be easier for customers to accept than having a significantly high increase to play catch up. Starting modest also makes a larger increase more viable if water consumption declines more than the current trend or if an unexpected operation maintenance or reimbursement is needed.

### ***Capital Expenses***

A rate increase helps to stabilize the District's operating budget but it does not provide revenue for capital expenditures. A revenue increase should be considered that meets operating concerns as well as fund a portion of the capital needs of the District. An increase to the Water Utilization Resources Fee could generate more funds specifically for water resources related capital projects. This would be particularly important for the costs involved with the development of the CAP Utilization Program or to build funds for reducing future debt service needs related to the CAP Utilization Program.

### ***Expenditures***

Regarding expenditures, the District ought to consider an outside-the-box analysis of its expenditures to determine how savings could be made on expenses over the next few years. This could be done with the development of the FY 2014-15 budget.

### ***Summary***

The Board should direct staff to further develop alternatives for a potential rate adjustment to be considered at a public hearing at the end of October and to be effective November 1, 2013. These alternatives would be done by staff working with the Finance Oversight Committee. The Finance Oversight Committee would make a recommendation on the alternatives that would then be presented to the Board for consideration at the September meeting and at that time, call a public hearing. It would be useful if Board members gave some indication to the Finance Oversight Committee of whether they felt the illustrative 3% increase was too low, too high, or about right. Additionally, it would be helpful for the Finance Oversight Committee to know what Board members thought about the 10 cent increase to the Water Resources Utilization Fee.

In summary, the District is more stable financially than it was a year ago. However, this analysis demonstrates that the District cannot rest regarding its finances but must be proactive in looking at generating more revenue as well as be vigilant with its expenditures. By steadily, constantly working in the coming years on its finances, the District can hopefully avoid being placed in a situation that requires drastic measures. Staff looks forward to having a thorough discussion with the District Board of Directors and the Finance Oversight Committee regarding this analysis.