



## STAFF REPORT

**TO:** Chairman and Board Members  
**FROM:** Mark Foree, General Manager  
Jeff Tissier, Chief Financial Officer  
**DATE:** March 9, 2012  
**SUBJECT:** **Request for Approval of the Tentative Budget for TMWA and the TMWA Post-Retirement Medical Trust for Fiscal Year 2013 and Draft Capital Improvement Plan for Fiscal Year 2013 through 2017**

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### **Recommendation**

TMWA Board reviews the tentative budget report for fiscal year ending June 30, 2013 and provides input and direction to TMWA management in advance of the public hearing on the budget in May.

### **Executive Summary**

TMWA has prepared the tentative budget for the fiscal year ending June 30, 2013 for review by the board. Once input is received, TMWA staff will incorporate board comments that have a fiscal impact, and make those adjustments in the final budget presentation in May. The tentative budget will be filed with the Nevada Department of Taxation by April 15, 2012. The tentative budget will also be presented to the Standing Advisory Committee (SAC) at the next scheduled meeting.

The tentative budget reflects the general water rate increases proposed and approved in January 2012. It is recognized that the second water rate increase requires a financial review prior to implementation, but to make an informed decision the second increase has been incorporated in the budget to make a sound comparison to actual financial performance. Water demands appear to have bottomed after 4 years of water demand decreases. This budget also does not include any increase in total employee compensation for the fiscal year due to the continuing economic malaise being experienced in the region. TMWA does not expect any meaningful increase in development activity in fiscal year 2013 so only a modest amount of developer fee collections have been budgeted. The absence of such development activity will not put TMWA at any operational or financial risk.

### **Operating Revenues**

TMWA expects total operating revenues of approximately \$78.8 million for fiscal year 2013. Please refer to *Attachment A-1*. Water consumption patterns, especially with the commercial and

residential classes, have been very volatile due to the continuation of cooler weather patterns experienced over the past two years. Currently in calendar year 2012 water demands have been slightly above the prior year, but weather will continue to be the primary controlling factor for water sales.

Hydroelectric revenue for fiscal year 2013 is expected to be at lower levels than the previous year. Reservoir storage will be helpful in sustaining river flows in light of a very dry winter in fiscal year 2012.

Other miscellaneous operating revenues are considered to be at minimal levels. Other miscellaneous revenue are made up of late payment fees, turn-on and turn-off fees, remediation district reimbursement for power/chemical consumption, construction water sales, cell phone tower rents, and interruptible water sales.

### **Operating Expenses**

Cash operating expenses (total operating expenses excluding depreciation) are estimated to be at \$36.0 million in fiscal year 2013. TMWA personnel continue to work diligently on controlling operating expenses. Total operating expenses are expected to be slightly higher than the fiscal year 2012 amended budget. This is due to the winter use of the Orr Ditch Pump stations while construction continues on the last major improvements to the Highland Canal. This construction project was carried over from fiscal year 2012 due to delays in permitting.

Total operating wages and salaries are expected to be \$11.8 million for fiscal year 2013. Full time equivalent (FTE) head count is expected to be flat year over year at 155 FTE's. No wage or salary increases have been factored into the budget.

The overall rate of health care premium increase was initially set at 6% year over year. All other benefits are expected to be at last year's levels.

Service and supplies are expected to be \$18.9 million which is very close to fiscal year 2004 spending. Power expenses continue to be reduced due to revised pumping plans for the distribution system. Treatment chemical expenses are being reduced because of more efficient dosing regimens. Most all other expense categories have been actively managed, from negotiating better pricing for various consumables to reduced usage of various services and supplies.

Funding for cloud seeding has been incorporated directly into TMWA's budget with a comparable reduction in the contribution to the Truckee River Fund (TRF).

### **Capital Spending**

At this time, TMWA expects to spend approximately \$22.0 million on capital projects and spending outlays in fiscal year 2013. Construction spending would be significantly less but two major projects were carried over from fiscal year 2012 – the \$3.5 million Plumb Lane main replacement from Ferris Lane to McCarran Blvd. and the remaining improvements to the Highland Canal for \$4.0 million. The main replacement was delayed because of changes in the

Regional Transportation Commission's (RTC) road construction schedule and the Highland Canal improvements were rescheduled because of permitting delays. A limited amount of water meter retrofit cash is expected to be available to advance the water meter retrofit project as far as possible. This program is virtually complete. The most significant construction project in fiscal year 2013 will be the final major improvements to the Highland Canal for \$4.0 million. This project will be funded with a federally subsidized loan from the State of Nevada Revolving Fund (DWSRF). The interest rate on this loan has been set at 3.25%. All other construction activities will essentially be rehabilitation/reconstruction efforts.

Please refer to *Attachment 2* for the draft presentation of the Five-Year Capital Improvement Plan for fiscal years 2013-2017 (CIP). Overall spending has been held relatively constant as in previous CIP's to preserve capital and only focus on system rehabilitation. Water system rehabilitation efforts account for 95% of total capital spending over the next five years while expansion of the water system will consume only 3% of total capital spending.

Of the total \$22.0 million in capital spending in fiscal year 2013, \$20.3 million will be for the purposes of rehabilitation of the water system while \$1.7 million will be for water system expansion to serve future growth in the TMWA service territory. Projects that are for expansion of water system capacity are the construction spending related to a proportionate share of the Highland Canal improvements. TMWA will be a spending \$0.6 million on the continued implementation of the TROA and \$0.1 million for water meter retrofit if TMWA receives adequate funds to perform this task. A major water main replacement project on Plumb Lane accounts for \$3.5 million of the total \$9.0 million planned for water main replacements in fiscal year 2013.

### **Cash Position and Coverage Ratios**

TMWA expects to begin fiscal year 2013 with approximately \$59.5 million in unrestricted cash and investments, and end the fiscal year with \$44.1 million based upon planned spending levels. These financial resources will be necessary to assist with funding future operations and capital spending over the next several years. A large part of the assumed decrease is the pay down of the \$11.4 million in tax-exempt commercial paper that was issued to call a comparable amount of the remaining outstanding 2001-A Bonds.

TMWA's senior lien debt coverage ratio (excluding system development charges), is estimated to be 1.45x to 1.50x by the end of fiscal year 2013. TMWA's senior lien debt covenants require a minimum coverage ratio of 1.25x. TMWA's financial goals adopted in August 2003 established a debt coverage goal of 1.45x to 1.50x (excluding developer fees) to maintain mid-level to higher level investment grade credit ratings. This preserves the ability to access senior lien capital markets under favorable terms. TMWA's credit ratings were instrumental in developing the tax-exempt commercial paper (TECP) program. TMWA is well positioned to take advantage of other refinancing/restructuring opportunities if and when these opportunities are presented.

**Truckee Meadows Water Authority  
Proposed Tentative Budget for Fiscal Year 2013  
Statement of Revenues, Expenses and Changes in Net Assets**

	<u>Proposed Tentative Budget</u>
<b>OPERATING REVENUES</b>	
Charges for water sales	\$ 74,439,538
Hydroelectric sales	2,743,860
Other operating sales	<u>1,611,000</u>
Total Operating Revenues	\$ 78,794,398
<b>OPERATING EXPENSES</b>	
Salaries and wages	11,765,016
Employee benefits	5,320,836
Services and supplies	<u>18,893,901</u>
Total Operating Expenses before Depreciation	35,979,753
Depreciation	<u>23,156,208</u>
Total Operating Expenses	<u>59,135,961</u>
Operating Income	<u>19,658,437</u>
<b>NONOPERATING REVENUES (EXPENSES)</b>	
Investment earnings	2,203,490
Amortization of bond/note issuance costs	(1,013,610)
Interest expense	(21,850,518)
Other non-operating revenue	150,000
Other non-operating expenses	<u>240,000</u>
Total Nonoperating Revenues (Expenses)	<u>(20,270,638)</u>
Income (Loss) before Capital Contributions	<u>(612,201)</u>
<b>CAPITAL CONTRIBUTIONS</b>	
Water meter retrofit program	72,984
Developer infrastructure contributions	132,132
Developer will-serve contributions (net of refunds)	57,348
Developer capital contributions-other	69,108
Developer facility charges (net of refunds)	<u>123,780</u>
Net Capital Contributions	<u>455,352</u>
Change in Net Assets	(156,849)
<b>NET ASSETS , BEGINNING OF YEAR</b>	<b>288,776,924</b>
<b>NET ASSETS , END OF YEAR</b>	<b><u>\$ 288,620,075</u></b>

**Truckee Meadows Water Authority  
Proposed Tentative Budget for Fiscal Year 2013  
Statement of Cash Flows**

	<b>Proposed Tentative Budget</b>
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>	
Cash received from customers	\$ 78,794,398
Cash paid to employees	(17,085,852)
Cash paid to suppliers	(18,893,901)
Net Cash Provided by Operating Activities	42,814,645
<b>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES</b>	
Other Revenues	150,000
Other Expenses	(240,000)
Net Cash Provided (used) by Noncapital Financing Activities	(90,000)
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</b>	
Acquisition and construction of capital assets	(22,026,996)
Interest paid on financing	(20,425,016)
Principal paid on financing	(13,328,012)
Proceeds from capital debt issuance	4,000,000
Contributions for water meter retrofit program	72,984
Contributions from developers-will-serve letters	57,348
Contributions from developers-other	69,108
Contributions from developers-facility charges	123,780
Bond/Note issuance costs	(787,314)
Net Cash (Used) by Capital and Related Financing Activities	(52,244,118)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>	
Interest received	2,448,321
Net Increase (Decrease) in Cash and Cash Equivalents	(7,071,152)
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR</b>	122,795,152
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	\$ 115,724,000

**Attachment A-1b**

## Truckee Meadows Water Authority FY 2013-2017 Capital Improvement Plan

**INTRODUCTION**

The Truckee Meadows Water Authority's (TMWA's) Five-Year Capital Improvement Plan (5-Year CIP), describes all new construction and major life extending maintenance to existing TMWA facilities and infrastructure. Historically TMWA prepared a 10-Year CIP, which closely correlated with TMWA's 20-Year Facility Plan (WFP) and 20-Year Water Resource Plan (WRP). These two plans have been carefully reviewed each year since they were developed, and are informally updated as required. During the most recent fiscal years, it was evident that a combination of declining growth, changes in demand for water and economic distress both nationally and locally has significantly deferred the need to acquire additional water resources as well as construct major facilities to provide additional water system capacity. In developing this 5-Year CIP, TMWA is meeting statutory capital planning requirements while focusing on a shorter planning horizon that has a greater degree of visibility and applicability in light of current economic conditions. The 5-Year CIP represents a significant reduction of previously planned capital spending, especially in those areas where TMWA can control the timing and size of the proposed capital projects with the notable exception of water main replacements that are generally driven by other infrastructure rehabilitation. TMWA is able to amend the 5-Year CIP at any time during the fiscal year by action of its Board of Directors.

TMWA was formed as a legal entity pursuant to the provisions of Chapter 277 of the Nevada Revised Statutes. TMWA is a political subdivision of the State of Nevada and is separate from its Members, pursuant to NRS 277.074 and 277.120. A managing board comprised of seven members, three from the City of Reno, two from the City of Sparks, and two from the County of Washoe governs TMWA.

The 5-Year CIP constitutes an essential component in TMWA's system of planning, monitoring and managing the activities of purveying water and generating hydroelectric power. This introduction will outline the projects proposed for fiscal year 2013, including the explanation of the prioritization of projects, the projects/capital outlays, and the funding of projects/capital outlays. Once approved by the board the current 5-Year CIP will be incorporated into a broader constantly updated Five-Year Funding Plan. This Funding Plan (FP) will determine adequate levels and sources of funding for projects contained in the 5-Year CIP.

Overall direction is established by TMWA's 2010-2030 Water Facility Plan (WFP) and 2010-2030 Water Resource Plan (WRP). Both these plans were reviewed during fiscal year 2009-10 to validate and/or modify planning assumptions. This 5-Year CIP incorporates essential elements of the WFP and focuses primarily on rehabilitation of the water system infrastructure. The actual implementation of TMWA's capital improvements are accomplished through each fiscal year's budget process.

The 5-Year CIP envisions \$90.3 million in spending primarily on the replacement of existing infrastructure and to a far lesser extent construction of new water system

## Truckee Meadows Water Authority FY 2013-2017 Capital Improvement Plan

capacity projects over the next five years. Currently the present funding plan has no provision for any additional water right purchases since TMWA has adequate water resources to serve new and expanded services for the foreseeable future. For fiscal year 2013, TMWA expects to spend \$21.9 million on construction projects in nine broad categories of improvements and spending outlays. These nine categories are: Raw Water Supply Improvements, Groundwater Development-Well Development, Treatment Improvements, Distribution Improvements, Storage Improvements, Hydroelectric Improvements, Customer Service, and Administrative Improvements. The water rights acquisition and water meter retrofit programs are separated from a presentation standpoint because in the case of water right acquisitions, spending is highly variable. With respect to the water meter retrofit project, the completion is expected within three to four years because funding, which is made available from the collection of the water retrofit fee is, at this time, virtually non-existent. Proposed water meter retrofit activities are expected to be funded from restricted cash reserves set up for this purpose.

***PLEASE REFER TO TABLE A-1 FOR CAPITAL SPENDING BY FUNCTION AND TABLE A-4 FOR CAPITAL SPENDING BY PROJECT***

**Comparative Analysis of Fiscal Year 2012 Capital Spending**

TMWA expects to spend \$22 million for fiscal year 2013, the first year of the FY 2013-2017 CIP. This amount is \$9.4 million more than the \$12.6 million in spending projected for fiscal year 2013 that was presented in last year's FY 2012-2016 5-Year CIP. The increase includes the \$4.0 million Highland Canal Upgrade Project which was delayed due to permitting and other issues. This project is necessary to stop slope degradation due to water seepage on the canal. TMWA was able to obtain a low interest loan from the State of Nevada Drinking Water State Revolving Loan Fund (DWSRF) to fund this project. A second project, \$3.5 million for a water main replacement on Plumb Lane was also delayed due to the road work scheduling of other agencies. As TMWA coordinates water main replacements with the City of Reno, City of Sparks and the Regional Transportation Commission, it is necessary to adjust the annual expense in order to accommodate projects planned by these entities. The balance of the increase comes from the prior year carryover of construction expenses related to the Glendale Water Treatment Plant Expansion.

Residential housing growth and commercial construction activity which slowed beginning late in fiscal year 2007, declined to a virtual standstill in fiscal year 2010 through 2012 and the current construction climate is expected to persist further into fiscal year 2013 and beyond. Many experts believe that the local economy may be in this condition for at least the next two years and the local economic recovery may lag the national economic recovery. Accordingly, TMWA has deferred a vast majority of the potential new water system capacity projects until such time there is better visibility on the local economic outlook. TMWA is still committed to spending on system rehabilitation since these endeavors are considered in the best long term interest of the community.

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Also water meter retrofit spending has been reduced to reflect the lessening financial resources available to complete this effort.

In fiscal year 2010, TMWA began capitalizing spending on the implementation of TROA since these activities are directly related to the successful expansion of upstream storage in federal reservoirs. TMWA anticipates spending on average approximately \$0.5 million per year for a number of years. TMWA continues to pursue federal funding support for this work which has yet to materialize.

## **DESCRIPTION OF PROJECTS**

Total construction spending, acquisition spending, and capital outlays are expected to be \$21.9 million for the fiscal year 2012-2013. The Truckee Meadows Water Authority has established the following projects for funding in fiscal year 2013:

### **Category 1 Raw Water Supply Improvements \$5,000,000:**

- Highland Canal Upgrades - Downstream – \$125,000
- Highland Canal Upgrades – US 40 - \$4,000,000
- Donner Dam Improvements - \$250,000
- TROA Drought Storage/Implementation – \$625,000

### **Category 2 Groundwater-Development \$800,000:**

- Well Rehabilitation and Improvements – \$800,000
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### **Category 3 Treatment-Improvements \$2,650,000:**

- Glendale/Chalk Bluff Fix and Finish Projects – \$900,000
- SCADA System Upgrades/Rehabilitations - \$500,000
- Glendale Expansion – Paving and Lab Remodel - \$1,250,000

### **Category 4 Distribution-Improvements \$10,675,000:**

- Pressure Regulator Rehabilitation – \$300,000
- Pump Station Rehabilitations – \$800,000
- Standby Generators – \$75,000
- Street & Highway Main Replacements – \$9,000,000
- Galvanized./Polybutylene Service Replacements – \$500,000

### **Category 5 Storage-Improvements \$500,000:**

- Tank/Reservoir Fix & Finish – \$500,000

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**Category 6 Hydroelectric – Improvements \$565,000:**

- Foot Bridge, Flume Reconstruction – \$500,000
- Plant Equipment Replacement-Rewinds – \$65,000

**Category 7 Customer Service \$550,000:**

- New Business Meters – \$50,000
- Meter Replacements – \$500,000

**Category 8 Administrative \$1,187,000**

- GIS System Mapping Equipment - \$17,000
- Desktop Computers New & Refresh – \$50,000
- Network Server/Storage Upgrades – \$275,000
- Network Security Upgrades – \$150,000
- Engineering Computers & Software – \$25,000
- Computer Network & Licensing – \$400,000
- Light Crew Trucks – \$220,000
- Security-Monitoring Equipment – \$50,000

**Category 9 Special Projects Funded by Development \$100,000:**

- Water Meter Retrofit – \$100,000

**Capital Improvement Program Definitions**

The 5-Year CIP is a planning and budgeting tool, which provides information about TMWA's infrastructure needs for a five-year time frame. Each year, the list of projects is reviewed for need, cost, and priority. New projects may be added and other projects delayed or deleted entirely. Since most projects are mandatory or necessary projects deletion of a project would be rare. However, capital spending plans must remain flexible, and it is often necessary to take amendments to the then current fiscal year's CIP to the Board for adoption. If construction or outlays can be deferred TMWA will defer spending in order to preserve cash reserves during difficult economic times. These decisions are made on a case by case basis.

Generally, capital improvements/outlays are defined as physical assets, constructed or purchased, that have a useful life of one year or longer and a cost of \$5,000 or more.

In addition TMWA includes the capital maintenance needs in the 5-Year CIP plan. Capital maintenance projects are required rehabilitative maintenance projects on TMWA

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facilities to keep such facilities in sound operating condition and/or extend the life of the existing facilities.

**Definition of Capital Outlays**

"Capital Outlays" which are budgeted within TMWA's capital budget include such things as furniture, computer equipment and software, vehicles, and heavy equipment needed to support TMWA's operations. These items are generally found in the Administrative category of projects.

**PRIORITIZATION OF PROJECTS/OUTLAYS**

TMWA may not have sufficient funding to meet all its capital needs each year or may divert funding to meet unexpected capital improvements. If such conditions arise, projects are prioritized based on the effect each project has on TMWA's ability to meet customer demand and maintain water system reliability. TMWA's updated 5-Year Funding Plan is used to analyze overall total spending and identify various funding alternatives, and to help determine whether or not water rate adjustments will be required.

The priority categories represent a relative degree of need for any particular project and are described below.

- \* **CATEGORY 1 MANDATORY:** These are considered absolutely required, and are the highest priority of all capital projects. Mandatory projects include those already under construction, or those required by legislation, regulation or for protecting public health and safety. These projects are generally found in the first fiscal year of the plan. Water demands or infrastructure conditions are such that if the project is not completed TMWA runs the risk of being unable to provide water to its existing customers and/or new and expanded service, or incur extended outages to water services.
- \* **CATEGORY 2 NECESSARY:** A project that is important for providing water service to customers yet timing of construction or spending outlay is not as critical as a mandatory project. These projects are required and are generally found in the next four years of the plan. External factors such as the pace of new development or the condition of existing infrastructure may delay or accelerate the timing of project construction. When return on investment is a determining factor projects in this category will have a payback of less than five years. A rate of return may not be applicable to projects whose benefits cannot be easily quantified.
- \* **CATEGORY 3 CONTINGENCY:** These projects or capital outlays are not immediately critical to the operation of the water system. Expenditures in this category generally require a business case study or specific criteria to be met before spending can occur. Generally paybacks are greater than five years. If such

## Truckee Meadows Water Authority FY 2013-2017 Capital Improvement Plan

criteria are not met then spending cannot be justified. Also some projects are deferrable if spending is required in an area of higher priority. Even though these amounts are in the spending plan, the likelihood spending will occur may be remote and is based upon future conditions that are difficult to predict.

***PLEASE REFER TO TABLE A-3 FOR PRIORITIZATION OF PROJECTS*****FUNDING OF CAPITAL SPENDING****Revenue Sources**

The 5-Year CIP will rely on various funding sources to pay for capital projects/capital outlays. TMWA relies heavily on revenues generated from water sales to fund many projects directly and also through issuance of debt. Developer fees have historically been an important funding source for certain construction projects to expand water system capacity as well as investment income. Collection of developer fees are at historical lows since the inception of TMWA.

At the time of the acquisition of the water assets of Sierra Pacific Resources, TMWA established a \$40.1 million capital improvement project fund resulting from the issuance of Series 2001-A acquisition bonds. Since inception, TMWA has primarily relied upon operating cash flow, some capital reserves and developer fees to fund capital projects. However, during fiscal year 2005, TMWA was able to utilize a low cost Nevada State Revolving Fund loan and to issue additional senior lien bonds to fund various capital improvements. The Series 2005 Revenue bond proceeds (totaling a net \$37.2 million) were fully expended before the end of fiscal year 2008. TMWA inaugurated a tax-exempt commercial paper program in August 2006; initially to fund water right purchases with two issues that totaled \$43 million. Moreover, the program provides another resource to draw upon for additional funding for capital projects and water rights acquisitions. Market conditions were extremely favorable in February 2008, at which time TMWA took the opportunity to issue an additional \$25 million at an initial rate of 1.59% which includes letter of credit fees and remarketing fees. TMWA has taken advantage of federal stimulus funding and obtained a \$2.3 million loan through the DWSRF program to partially fund the Mogul Bypass Siphon Project. In December 2009 TMWA obtained an \$8.5 million DWSRF loan authorization to construct the Glendale Raw Water Diversion and Intake Structure which was completed in fiscal year 2011. In 2010 TMWA obtained loan authorization to construct an upgrade to the Highland Canal to prevent failure of a portion of the slope on Fourth Street due to leakage. TMWA intends to extend its tax-exempt commercial paper program and has completed the process of extending the direct pay liquidity facility with a new bank substituting Lloyds TSB, the originator of the first liquidity facility. This facility provides for a direct pay letter of credit to support TMWA's commercial paper and also supports an A-1/P-1 rating for TMWA's short term debt program which has resulted in very favorable interest rates.

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***PLEASE REFER TO TABLE A-2 SUMMARIZING PROPOSED FUNDING RESPONSIBILITIES FOR PROJECTS*****Developer Contributions**

TMWA looks to the development community for developer contributions in the form of system development charges or direct reimbursements to fund capital expenditures related to new or expanded water service, including pump station construction or expansions and feeder main extension projects. In June 2003, the TMWA Board adopted facility charges to pay for new treatment/supply capacity projects and new storage capacity projects. TMWA began collecting these facility charges in January 2004. TMWA's Rule 5 proceeds are used to support new capacity construction and Rule 7 governs the purchase of water rights and reimbursement by developers for issuance of will-serve letters for water service. However, because of the timing of certain growth driven capital projects, additional financial resources may be called upon as needed. The TMWA Board updated the system development charges in October 2006, and again in February 2008 (effective March 1, 2008). These fees are subject to an annual review for funding adequacy.

**Bonds and Other Financing Tools**

New money revenue bond issuance has been an integral part of funding construction spending in the past. TMWA prefers to not use senior lien debt as much as possible but rather rely on subordinated debt financing obtained through the DWSRF and commercial paper program. Customer water sales and various developer fees may not be immediately sufficient to pay for construction spending and capital outlays so there may be some reliance on new money debt and reliance on tax-exempt commercial paper note sales. At this time the level of capital spending for the next five years will reduce significantly, minimizing the reliance on new money debt issuance to fund construction activities.

As a governmental agency, TMWA may issue additional tax-exempt bonds to finance capital construction. TMWA must rely on revenues from customers and developers to repay bonds. TMWA does not have any taxing authority. The tax-exempt commercial paper program (TECP) relieved pressure on the use of existing TMWA cash reserves to fund water right acquisitions and various construction projects. The TECP has currently been an integral feature of TMWA's financial stability with this expectation well into the future.

TMWA has achieved several important milestones since fiscal year 2006. TMWA's creditworthiness was meaningfully improved with water rate and developer fee actions taken by TMWA. TMWA's commitment to annually review these fees and adjust them when necessary to cover construction costs helps to maintain that creditworthiness. With TMWA's enhanced credit profile, TMWA inaugurated the tax-exempt commercial paper program referred to earlier, which allows TMWA to have even greater flexibility in making funding decisions for capital spending, opportunities to acquire water rights when

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presented, and to refund (refinance) existing debt. TMWA anticipates that purchased water rights will in the future be converted to will-serve letters, consequently providing the financial resource to repay \$43.0 million of the outstanding commercial paper notes used for purposes of acquiring water rights.

### **Rule 5 and Rule 7 Fees**

These fees are derived from the development community. Rule 5 fees are paid by developers to TMWA for the construction of new water feeder mains, new treatment/supply capacity, new storage capacity, and for new or rebuilt pump stations to meet demand resulting from new development. Rule 7 Fees are derived from will-serve sales to new development, except for water meter retrofit fees discussed later. TMWA actively purchases water rights on the open market and reserves these rights for will-serve letters for new development. TMWA also recovers a modest amount of administrative costs with the sale of each will-serve. The title to water rights are retained by and dedicated to TMWA for the service of customers.

### **Water Meter Retrofit Fees**

TMWA has been retrofitting flat rate services with meter boxes, setters and meters. The intent is to meter the entire water system which is now in the final stages. To accomplish this task TMWA collects \$1,830 for each acre-foot of demand when will-serve commitments are issued for new or expanded service. Proceeds from the \$1,830 per acre-foot fee fund the water meter retrofit project. TMWA expects to complete the water meter retrofit program over the course of the next several years, but that expectation is dependent upon the recovery of the home building and new commercial construction activity to generate the remaining funding that is necessary.

### **Capital Contributions from Other Governments**

TMWA is a water wholesaler to other governmental entities namely Washoe County Department of Water Resources and Sun Valley General Improvement District. From time to time new infrastructure needs to be constructed to service these retail water service providers. TMWA requires reimbursement from other governmental water service providers for additional water capacity required by these water purveyors.

### **Other Resources**

One method of generating additional funds for capital improvements is to increase existing fees/charges or to add new fees/charges. However future increases are provisional if TMWA is able to meet revenue requirements and maintain bond coverage ratios that will suffice to maintain strong investment grade credit ratings. TMWA has obtained many benefits of an AA-/AA/A credit rating. The Board ultimately decided up through fiscal year 2009 to forego any potential customer rate increases since the last rate increase that occurred in March 2005. The TMWA Board did approve a 4.5% general

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rate increase for fiscal year 2010 and another 4.4% general rate increase for fiscal year 2011. Most recently, the TMWA Board has authorized a 3.5% general rate increase effective February 1, 2012 and two more increases 3.4% effective February 1, 2013 and 2.1% on February 1, 2014, if necessary. These increases are essential for TMWA to maintain sound credit ratings and to insure that the liquidity facility that supports TMWA's commercial paper program can be successfully extended.

TRUCKEE MEADOWS WATER AUTHORITY  
 CAPITAL IMPROVEMENT PLAN  
 FOR FISCAL YEAR ENDING JUNE 30, 2013 THROUGH JUNE 30, 2017  
 (Amounts in thousands of dollars)

Summary of Capital Expenditures by Function	Five Year Total	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Raw Water Supply-Improvements	\$ 7,000	\$ 5,000	\$ 475	\$ 675	\$ 425	\$ 425
Ground Water-Development	5,000	800	1,000	2,000	600	600
Treatment-Improvements	8,800	2,650	1,500	1,500	1,550	1,600
Distribution-Improvements	46,350	10,675	7,275	7,600	12,725	8,075
Storage-Improvements	6,000	500	400	1,800	2,900	400
Hydroelectric-Improvements	4,801	565	475	2,475	786	500
Customer Service	6,400	550	1,100	1,500	1,600	1,650
Administrative	5,160	1,187	937	1,062	837	1,137
Sub-Total TMWA Construction Spending & Outlays	<u>89,511</u>	<u>21,927</u>	<u>13,162</u>	<u>18,612</u>	<u>21,423</u>	<u>14,387</u>
Water Meter Retrofit	786	100	102	102	190	292
<b>Total Projected Capital Spending</b>	<b>\$ 90,297</b>	<b>\$ 22,027</b>	<b>\$ 13,264</b>	<b>\$ 18,714</b>	<b>\$ 21,613</b>	<b>\$ 14,679</b>

Table A-1

TRUCKEE MEADOWS WATER AUTHORITY  
 CAPITAL IMPROVEMENT PLAN PRELIMINARY FUNDING PLAN  
 FOR FISCAL YEAR ENDING JUNE 30, 2013 THROUGH JUNE 30, 2017  
 (Amounts in thousands of dollars)

Summary of Funding by Customer Class/Bonding	Five Year Total	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Capital Improvements Funded by Customer Rates	\$ 81,231	\$ 16,197	\$ 13,112	\$ 16,512	\$ 21,273	\$ 14,137
Capital Improvements Funded by Development	<u>2,280</u>	<u>1,730</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>250</u>
Sub-Total TMWA Construction Spending & Outlays	<u>\$ 83,511</u>	<u>\$ 17,927</u>	<u>\$ 13,162</u>	<u>\$ 16,612</u>	<u>\$ 21,423</u>	<u>\$ 14,387</u>
Funded from Acquisition/DWSRF Bond Proceeds	6,000	4,000	-	2,000	-	
Water Meter Retrofit	<u>786</u>	<u>100</u>	<u>102</u>	<u>102</u>	<u>190</u>	<u>292</u>
<b>Total Projected Capital Spending</b>	<u><u>\$ 90,297</u></u>	<u><u>\$ 22,027</u></u>	<u><u>\$ 13,264</u></u>	<u><u>\$ 18,714</u></u>	<u><u>\$ 21,613</u></u>	<u><u>\$ 14,679</u></u>

Table A-2

TRUCKEE MEADOWS WATER AUTHORITY  
 CAPITAL IMPROVEMENT PLAN SPENDING PRIORITIZATION  
 FOR FISCAL YEAR ENDING JUNE 30, 2013 THROUGH JUNE 30, 2017  
 (Amounts in thousands of dollars)

Summary of Funding by Priority	Five Year Total	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Priority 1----Mandatory Spending, Projects in Progress, Regulatory	\$ 65,437	19,315	10,652	13,652	11,001	10,817
Priority 2----Necessary Spending	24,010	2,637	2,537	4,562	10,487	3,787
Priority 3----Contingency Spending	<u>850</u>	<u>75</u>	<u>75</u>	<u>500</u>	<u>125</u>	<u>75</u>
	<u>\$ 90,297</u>	<u>22,027</u>	<u>13,264</u>	<u>18,714</u>	<u>21,613</u>	<u>14,679</u>

Table A-3

**CAPITAL IMPROVEMENT PLAN**  
**FOR FISCAL YEAR ENDING JUNE 30, 2013 THROUGH JUNE 30, 2017**  
(Amounts in thousands of dollars)

**SUMMARY OF PROJECTS**

Page #	Priority			Five Year Total	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>Raw Water Supply-Improvements</b>									
1	1	CR	Highland Canal-Upgrades-Downstream	\$ 625	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
2	1	DF & CR	Highland Canal-Upgrades-US 40	4,000	4,000	-	-	-	-
3	1	CR	Donner Dam Improvements	250	250	-	-	-	-
4	1	CR	TROA Drought Storage/Implementation	2,125	625	350	550	300	300
<b>Subtotal -Raw Water Supply</b>				<b>7,000</b>	<b>5,000</b>	<b>475</b>	<b>675</b>	<b>425</b>	<b>425</b>
<b>Ground Water-Development</b>									
5	1	CR	Well Rehabilitation & Improvements	5,000	800	1,000	2,000	600	600
<b>Subtotal-Groundwater Development</b>				<b>5,000</b>	<b>800</b>	<b>1,000</b>	<b>2,000</b>	<b>600</b>	<b>600</b>
<b>Treatment-Improvements</b>									
6	2	CR	Treatment Plants- Fix & Finish	5,050	900	1,000	1,000	1,050	1,100
7	1	CR	SCADA rehab/plant operating software	2,500	500	500	500	500	500
8	1	CR	Glendale Projects-Paving & Lab Remodel	1,250	1,250	-	-	-	-
<b>Subtotal Treatment Improvements</b>				<b>8,800</b>	<b>2,650</b>	<b>1,500</b>	<b>1,500</b>	<b>1,550</b>	<b>1,600</b>
<b>Distribution-Improvements</b>									
<b>Pressure Improvements</b>									
9	1	CR	Pressure Regulators Rehabilitation	1,500	300	300	300	300	300
10	1	CR	Pump Station Rebuilds,Rehabilitations	4,400	800	900	900	900	900
11	3	CR	Standby Generator Replacements	850	75	75	500	125	75
<b>Sub-Total Pressure Improvements</b>				<b>6,750</b>	<b>1,175</b>	<b>1,275</b>	<b>1,700</b>	<b>1,325</b>	<b>1,275</b>
<b>Distribution Improvements-Water Mains/Service lines</b>									
12	1	CR	Street & Highway Main Replacements	31,000	9,000	5,500	5,500	5,500	5,500
13	2	CR	Stead Main Replacement Phase II	5,500	-	-	-	5,500	-
14	2	CR	NE Sparks Feeder Main Relocation	900	-	-	-	-	900
15	2	CR	Galv/Poly Service Line Replacements	2,200	500	500	400	400	400
<b>Subtotal Distribution Improvements</b>				<b>39,600</b>	<b>9,500</b>	<b>6,000</b>	<b>5,900</b>	<b>11,400</b>	<b>6,800</b>
<b>Storage Improvements</b>									
16	1	CR	Highland Reservoir Line/Cover Replacement	1,400	-	-	1,400	-	-
17	2	CR	Peavine Tank Replacement	2,500	-	-	-	2,500	-
18	1	CR	Tank/Reservoir Fix & Finish	2,100	500	400	400	400	400
<b>Subtotal Storage Improvements</b>				<b>6,000</b>	<b>500</b>	<b>400</b>	<b>1,800</b>	<b>2,900</b>	<b>400</b>
<b>Hydroelectric-Improvements</b>									
19	2	CR	Acquisition of Farad Hydro Plant	2,000	-	-	2,000	-	-
20	1	CR	Flume Reconstruction Fleisch, Fliesch Footbridge, Verdi	1,600	500	150	150	400	400
21	1	CR	Hydro Plant Equipment Replacement	1,201	65	325	325	386	100
<b>Subtotal Hydroelectric Improvements</b>				<b>4,801</b>	<b>565</b>	<b>475</b>	<b>2,475</b>	<b>786</b>	<b>500</b>
<b>Customer Service</b>									
22	2	CR	Meter Reading Equipment Data Paks	100	-	50	-	50	-
23	2	DF	New Business Meters	600	50	50	100	150	250
24	1	CR	Meter Replacements	5,700	500	1,000	1,400	1,400	1,400
<b>Subtotal Customer Service</b>				<b>6,400</b>	<b>550</b>	<b>1,100</b>	<b>1,500</b>	<b>1,600</b>	<b>1,650</b>
<b>Administrative</b>									
25	2	CR	GIS System Mapping Equipment	85	17	17	17	17	17
26	2	CR	Desktop Computer Upgrades	250	50	50	50	50	50
27	2	CR	Network Server/Storage upgrades	1,050	275	175	175	175	250
28	2	CR	Network Security Upgrades	825	150	150	150	150	225
29	2	CR	Engineering Operations Computer/Software Upgrades	150	25	25	25	25	50
30	2	CR	Computer/Network Licensing	1,000	400	150	150	150	150
31	2	CR	Heavy Equipment	250	-	-	125	-	125
32	2	CR	Light Crew Trucks	1,100	220	220	220	220	220
33	2	CR	Security-VA/ER Projects	450	50	150	150	50	50
<b>Subtotal Administrative-</b>				<b>5,160</b>	<b>1,187</b>	<b>937</b>	<b>1,062</b>	<b>837</b>	<b>1,137</b>
<b>Sub Total Construction Expenditures and Capital Outlays</b>				<b>\$ 89,511</b>	<b>\$ 21,927</b>	<b>\$ 13,162</b>	<b>\$ 18,612</b>	<b>\$ 21,423</b>	<b>\$ 14,387</b>
<b>Special Projects Funded by Development</b>									
1	DF		Water Meter Retrofits	786	100	102	102	190	292
<b>Sub Total Special Projects Funded by Development</b>				<b>786</b>	<b>100</b>	<b>102</b>	<b>102</b>	<b>190</b>	<b>292</b>
<b>Total Construction Expenditures and Capital Outlays</b>				<b>\$ 90,297</b>	<b>\$ 22,027</b>	<b>\$ 13,264</b>	<b>\$ 18,714</b>	<b>\$ 21,613</b>	<b>\$ 14,679</b>

Table A-4

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Highland Canal – Upgrades - Downstream  
**Category:** Raw Water Supply Improvements  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA has completed most of the major improvements to the Highland Canal which will allow for up to 95 million gallons a day of gravity fed water to be supplied to the Chalk Bluff Water Treatment Plant. The improvements that are reflected in this capital improvement item are for betterments along the canal downstream of the plant between the CBWTP and the Rancho San Rafael Park. These efforts are rehabilitative in nature and also address access and security concerns.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$625,000	Funding FY 12/13    Project Cost    \$125,000
	Funding FY 13/14    Project Cost    \$125,000
	Funding FY 14/15    Project Cost    \$125,000
	Funding FY 15/16    Project Cost    \$125,000
	Funding FY 16/17    Project Cost    \$125,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Highland Canal – Upgrades – US 40  
**Category:** Raw Water Supply Improvements  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

After placing the Highland Canal back into service following the completion of the Mogul Bypass Siphon, significant seepage was observed along the toe of the slope on W. Fourth Street below the section of the Highland Canal at Burks Blvd. The canal was subsequently taken out of service for patching and repairs; however, follow-up geotechnical investigations concluded that there is a high probability that the slope will fail in the future. Failure of the slope would likely result in destruction of the Highland Canal which is located at the top of the slope. This scenario would negatively impact supply to the Chalk Bluff treatment plant and also represents significant public safety concerns and exposure to liability for potential damages to public and personal property. The scope of this project involves an easterly shift of the canal alignment into the hillside along with construction of about 630 lineal feet of 12’x5’ reinforced concrete box; replacement of about 500 lineal feet of trapezoidal channel with the standard rectangular geometry immediately downstream of the RCB to correct leakage and freeboard issues; and drainage improvements in the area between Anselmo Drive and Mesa Parke Road. This project has been approved for funding through a Drinking Water State Revolving Fund loan at an attractive interest rate.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 58%; Development 42%

**Cost:**

**Funding Timetable:**

Project Cost: \$4,000,000

Funding FY 12/13      Project Cost      \$4,000,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Donner Dam Improvements  
**Category:** Raw Water Supply Improvements  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013

**Project Description**

During the annual inspection of the Donner Dam facility the Division of Safety of Dams (DSOD) noted areas of the structure that are suffering from deteriorating concrete. TMWA has scheduled structural inspections and requested recommendations on repair alternatives. Construction of the repairs is anticipated in the fall of 2012.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customer Funding 100%

**Cost:**

Project Cost: \$ 250,000

**Funding Timetable:**

Funding FY 12/13      Project Cost      \$250,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** TROA Drought Storage/Implementation  
**Category:** Raw Water Supply Improvements  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

The Truckee River Operating Agreement (TROA) was signed by the mandatory parties in September 2008. Since then activities have centered on transferring water rights upstream to federally controlled reservoirs to provide for future drought storage and also to implement the operating regime of TROA. Additional expenses for FY 2013 include outlet gate upgrades and telemetry improvements at Donner and Independence Lakes. Future activities include construction of flow measuring/recording facilities and development of computerized flow models. TMWA has in the past obtained and will continue to pursue federal grant funding to offset the costs of these activities. Final date for implementation is still uncertain.

**Cost/Funding Source(s)**

**Funding Source:** Customer Rates if Grant funding is not available

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$ 2,125,000	Funding FY 12/13    Project Cost    \$625,000
	Funding FY 13/14    Project Cost    \$350,000
	Funding FY 14/15    Project Cost    \$550,000
	Funding FY 15/16    Project Cost    \$300,000
	Funding FY 16/17    Project Cost    \$300,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Well Rehabilitation & Improvements  
**Category:** Supply Improvements-Groundwater Development  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

Funds are budgeted to rehabilitate TMWA production wells as required. Typically, four wells are inspected, tested and evaluated every year to determine if rehabilitation is required. Typical rehab activities include but are not limited to, pump and pump column pipe replacements, electrical upgrades, telemetry upgrades, rehabilitation of well casing, disinfection equipment upgrades, air gap improvements, wellhead protection and other enhancements to maintain well quality and capacities. Spending in fiscal years 2013-2017 will include improvements at several wells to provide for air-gaps in discharge piping (NAC 445A compliance issue) and conversion of disinfection treatment from chlorine gas disinfection to sodium hypochlorite. A complete replacement of the Air Guard Well is scheduled for FY 2015. Additional costs in FY 2013 include improvements to comply with NAC regulations. TMWA has thirty-two water production wells operating throughout the water system. TMWA relies on these wells to provide drought and emergency supply and as a supplemental source to meet peak demands on the water system.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

**Cost:**

Project Cost: \$5,000,000

**Funding Timetable:**

Funding FY 12/13	Project Cost	\$ 800,000
Funding FY 13/14	Project Cost	\$1,000,000
Funding FY 14/15	Project Cost	\$2,000,000
Funding FY 15/16	Project Cost	\$ 600,000
Funding FY 16/17	Project Cost	\$ 600,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Treatment Plants Fix and Finish  
**Category:** Treatment Improvements  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA operates surface water treatment plants at Chalk Bluff and Glendale. Improvements are necessary from time to time to keep these facilities in very good condition. The Chalk Bluff Treatment Plant is 20 years old and the Glendale treatment plant is over 30 years old. Each plant requires a certain amount of rehabilitation and improvements now and in the future. The Chalk Bluff plant will require raw water basin improvements, chemical system improvements, chlorine contact chamber curtain replacements, finished water pump replacements, filter media change out, solids handling improvements, filter valve and actuator replacements, instrumentation and control upgrades, roof rehabilitation/replacement, additional standby generation capacity and paving replacement. The Glendale Treatment Plant will require the addition of standby generation, replacement of turbidity meters, instrumentation upgrades, filter valve and actuator replacements, programming improvements for filter operation, replacement of raw water and finished water pumps, filter media change out, building improvements and paving replacement. This spending is classified as contingency since specific projects are not identified until the budget is developed.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

**Cost:**

Project Cost: \$5,050,000

**Funding Timetable:**

Funding FY 12/13	Project Cost	\$ 900,000
Funding FY 13/14	Project Cost	\$1,000,000
Funding FY 14/15	Project Cost	\$1,000,000
Funding FY 15/16	Project Cost	\$1,050,000
Funding FY 16/17	Project Cost	\$1,100,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** SCADA System Upgrades/Rehabilitation  
**Category:** Treatment Improvements  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 - 2017

**Project Description**

SCADA (Supervisory Control and Data Acquisition) is the system by which TMWA monitors, records and controls the water system inputs, outputs, flows and pressures. Data acquired by the SCADA system is primarily monitored at the treatment plants, but the system equipment and technology is spread throughout the water system infrastructure. Some of the technology is approaching obsolescence and needs to be replaced. Therefore, TMWA has settled on a systematic approach to updating the equipment by providing an annual spending level in each year of the plan.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>																				
Project Cost: \$2,500,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$</td> <td>500,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$</td> <td>500,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$</td> <td>500,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$</td> <td>500,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$</td> <td>500,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$	500,000	Funding FY 13/14	Project Cost	\$	500,000	Funding FY 14/15	Project Cost	\$	500,000	Funding FY 15/16	Project Cost	\$	500,000	Funding FY 16/17	Project Cost	\$	500,000
Funding FY 12/13	Project Cost	\$	500,000																		
Funding FY 13/14	Project Cost	\$	500,000																		
Funding FY 14/15	Project Cost	\$	500,000																		
Funding FY 15/16	Project Cost	\$	500,000																		
Funding FY 16/17	Project Cost	\$	500,000																		

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Glendale Projects – Paving and Lab Remodel  
**Category:** Treatment Improvements  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013

**Project Description**

As the treatment plants are aging, certain fix and finish spending is required to maintain them in proper working order and ensure continued water delivery. In conjunction with the plant expansion begun in 2012, certain items will remain to be completed in FY 2013. Specifically, some paving and laboratory equipment upgrades will be completed.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

**Cost:**

**Funding Timetable:**

Project Cost: \$1,250,000

Funding FY 12/13

Project Cost \$1,250,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Pressure Regulator Rehabilitation  
**Category:** Distribution Improvements-Pressure  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

Provision is made in the annual budget for major rehabilitation or complete reconstruction of several pressure regulators in the distribution system. TMWA has evaluated nearly 100 pressure regulator stations currently in service and has identified a number of pressure regulator stations requiring a certain amount of rehabilitation. TMWA is projecting the refurbishment of at least two to three pressure regulator stations a year if required. Some of the rehabilitation projects will also require piping improvements which can improve reliability and/or pressures in certain pressure zones.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$1,500,000	Funding FY 12/13    Project Cost    \$300,000
	Funding FY 13/14    Project Cost    \$300,000
	Funding FY 14/15    Project Cost    \$300,000
	Funding FY 15/16    Project Cost    \$300,000
	Funding FY 16/17    Project Cost    \$300,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Pump Station Rehabilitations, Rebuilds  
**Category:** Distribution Improvements-Pressure  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA has over 100 pump stations in service. An amount is budgeted annually for rehabilitation of TMWA’s older pump stations. Some of the pump stations identified as needing rehab work include Sun Valley #2, Satellite Hills, Sutro #2, Community College, Sun Valley #1, Sun Valley #4, Spanish Springs, Socrates #1, and Robb Drive.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$4,400,000	Funding FY 12/13    Project Cost    \$800,000
	Funding FY 13/14    Project Cost    \$900,000
	Funding FY 14/15    Project Cost    \$900,000
	Funding FY 15/16    Project Cost    \$900,000
	Funding FY 16/17    Project Cost    \$900,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Standby Generator Replacements  
**Category:** Distribution Improvements-Pressure  
**Ranking:** Priority 3-Contingency  
**Fiscal Year:** 2013 through 2017

**Project Description**

A number of TMWA pumps stations have backup generation in case of power failures. TMWA incorporates a contingency for replacement of a generator in case of failure or if the Washoe County Health Department requires additional backup generation at a particular site. No spending will occur unless necessary. This spending does not include backup generation for new pump stations required by and paid for by growth. Future pump station standby power improvements include Chalk Bluff-Northgate in FY 2015 and Sun Valley #1 in FY 2016.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$850,000	Funding FY 12/13    Project Cost    \$ 75,000
	Funding FY 13/14    Project Cost    \$ 75,000
	Funding FY 14/15    Project Cost    \$500,000
	Funding FY 15/16    Project Cost    \$125,000
	Funding FY 16/17    Project Cost    \$ 75,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Street & Highway Main Replacements  
**Category:** Distribution Improvements-Mains  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

Provision is made each year for water main replacements in conjunction with repaving efforts by the City of Reno, City of Sparks, and RTC. In addition to repaving projects, TMWA coordinates water main replacements with sewer main replacements in areas where TMWA also has old water lines. TMWA has planned for about \$9.0 million in fiscal year 2013 in water main replacements in community neighborhoods as a result of increased activity with Regional Transportation Authority RTC initiatives. The remaining four years are reflective of historical activity.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$31,000,000	Funding FY 12/13    Project Cost    \$9,000,000
	Funding FY 13/14    Project Cost    \$5,500,000
	Funding FY 14/15    Project Cost    \$5,500,000
	Funding FY 15/16    Project Cost    \$5,500,000
	Funding FY 16/17    Project Cost    \$5,500,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Stead Main Replacement Phase II  
**Category:** Distribution Improvements-Mains  
**Ranking:** Priority 2 - Necessary  
**Fiscal Year:** 2016

**Project Description**

The Stead Main was originally constructed in the early 1950's to serve the Stead Air Force Base. The nature of the numerous leak repairs that have been required in recent years indicate that a significant amount of finished water has been lost through the pipeline. The pipeline is approaching the end of its useful life and is in need of replacement.

Phase 1 of the Stead Main Replacement project was completed in FY 2009 in conjunction with a rebuild of the North Virginia pumping system. Phase 2 includes replacement of the remaining three miles of the Stead Main between Golden Valley Drive and the Stead Tanks. This section of main is where the majority of the leaks have occurred and significant corrosion issues have been identified.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 75%, New Development 25%

**Cost:**

Project Cost: \$5,500,000

**Funding Timetable:**

Funding FY 15/16      Project Cost      \$5,500,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** NE Sparks Feeder Main Relocation  
**Category:** Distribution Improvements-Mains  
**Ranking:** Priority 2 - Necessary  
**Fiscal Year:** 2017

**Project Description**

The NE Sparks Tank Feeder Main was constructed in 1988 within private easements several years prior to the construction of So. Los Altos Parkway. The final alignment selected for So. Los Altos Parkway does not follow the alignment of the tank feeder main. As a result, the tank feeder main now runs through developed properties next to buildings, under parking areas and at considerable depth in some locations. This situation presents potential problems for access to the pipe for maintenance and repair of the critical pipeline. This project will relocate approximately 3000 feet of the 18-inch tank feeder main out into the public right-of-way in So. Los Altos Parkway.

**Cost/Funding Source(s)**

**Funding Source:** New Development Funding 100%

**Cost:**

Project Cost: \$900,000

**Funding Timetable:**

Funding FY 16/17      Project Cost    \$ 900,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Galv/Poly Service Line Replacements  
**Category:** Distribution Improvements-Service Lines  
**Ranking:** Priority 2 - Necessary  
**Fiscal Year:** 2013 through 2016

**Project Description**

TMWA has shifted from just repairing service lines from the street main to the curb valve or meter box to completely replacing service lines that are galvanized steel or polybutylene. These two materials are responsible for many after-hours call outs which escalate overtime expenses to repair leaks in the street because the galvanized lines are corroded, and polybutylene once thought very durable, becomes brittle and cracks or splits very easily. Just repairing these lines does not prevent them from leaking in the near future, escalating repair costs while further damaging city streets. Complete replacement provides a permanent repair in a cost effective manner and prevents further water system losses.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>															
Project Cost: \$2,200,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$500,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$500,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$400,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$400,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$400,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$500,000	Funding FY 13/14	Project Cost	\$500,000	Funding FY 14/15	Project Cost	\$400,000	Funding FY 15/16	Project Cost	\$400,000	Funding FY 16/17	Project Cost	\$400,000
Funding FY 12/13	Project Cost	\$500,000														
Funding FY 13/14	Project Cost	\$500,000														
Funding FY 14/15	Project Cost	\$400,000														
Funding FY 15/16	Project Cost	\$400,000														
Funding FY 16/17	Project Cost	\$400,000														

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Highland Reservoir Liner/ Cover Replacement  
**Category:** Storage Improvements  
**Ranking:** Priority 1 - Mandatory  
**Fiscal Year:** 2015

**Project Description**

The Highland Reservoir is a 20 million gallon storage facility located near Rancho San Rafael Park. This facility is one of the primary feeds of water into TMWA's gravity distribution system. The original liner put into service in the mid 1990's has a useful life of about 20 years and is expected to be replaced in fiscal year 2015. The existing liner is constructed of high density polyethylene (HDPE) and the cover is constructed of polypropylene. Recent experience has proven that polypropylene and Hypalon perform much better as respective liner and cover materials.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

**Cost:**

Project Cost: \$1,400,000

**Funding Timetable:**

Funding FY 14/15      Project Cost      \$1,400,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Peavine Tank Replacement  
**Category:** Storage Improvements  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2016

**Project Description**

The Peavine Tank is an existing 2.0 MG pre-stressed concrete tank constructed by the Silver Lake Water Company in 1978. A 2008 inspection of the tank interior revealed significant areas of spalled concrete and exposed reinforcing steel in the tank roof. Repairs were attempted in 2009. The repair process required chipping and cleaning of damaged areas which revealed much more extensive deterioration than was initially estimated. Over 1400 square feet of damage to the roof dome structure was actually repaired as compared to the original estimate of 400 square feet. Significant delamination of the roof structure is expected to continue. In addition, closer inspection during the roof repair work indicated moderate cracking of the dome ring and walls. Damage to the pre-stressed dome ring is of special concern since it resists the thrust of the arched roof in tension. For these reasons, it is recommended that the tank be replaced. The replacement tank will be a 2.5 MG above ground steel tank. The additional volume will accommodate future storage needs of the Stead system and eliminate a future storage tank project.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 80%, New Development 20%

**Cost:**

**Funding Timetable:**

Project Cost: \$2,500,000

Funding FY 15/16      Project Cost      \$2,500,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Storage Tank/Reservoir Fix and Finish  
**Category:** Storage Improvements  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA has a very proactive tank reservoir maintenance program whereby 20% of all tanks are inspected annually on a rotating basis. Based upon these inspection observations, a determination is made as to whether interior tank coatings (for steel tanks) or other fix and finish work is required. TMWA has 42 storage tanks in service, with combined storage of nearly 81 million gallons. Interior coating/liners are generally replaced every 15 years resulting in about two tanks per year having this work performed. The budget and plan also includes exterior painting of steel tanks and any replacement of any interior components that may be corroded.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$2,100,000	Funding FY 12/13    Project Cost    \$500,000
	Funding FY 13/14    Project Cost    \$400,000
	Funding FY 14/15    Project Cost    \$400,000
	Funding FY 15/16    Project Cost    \$400,000
	Funding FY 16/17    Project Cost    \$400,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Acquisition of Farad Hydro Plant  
**Category:** Hydroelectric Improvements  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2015

**Project Description**

Pursuant to the Asset Purchase Agreement, TMWA was to purchase the four run of river hydroelectric plants when regulatory approval was secured in California and NV Energy has completed the reconstruction of the Farad dam and flume. TMWA has completed the purchases of three of the four plants. The purchase of the Farad plant will be consummated upon completion of the reconstruction. The timing of final construction is still uncertain.

**Cost/Funding Source(s)**

**Funding Source:** Proceeds from TMWA Series 2001 A and B Bonds

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$2,000,000	Funding FY 15/16    Project Cost    \$2,000,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Flume Reconstruction – Fleisch, Fleish Footbridge, Verdi  
**Category:** Hydroelectric Flume-Improvements  
**Ranking:** Priority 1- Mandatory  
**Fiscal Year:** 2012 through 2016

**Project Description**

Provision is made each year for hydroelectric flume reconstruction from unexpected rock falls, ice expansion damage, and penstock reconstruction. Operation of hydroelectric facilities provides power generation revenue, which significantly offsets the power costs of TMWA. TMWA’s three operating hydroelectric facilities have nearly 12,150 feet of flume and 13,125 feet of canal combined. TMWA average service life for flume structures is 35 years using treated timbers, at an average replacement cost of \$1,000 per lineal foot of flume. The present cost to replace a linear foot of flume depends on the location and height of the flume structure. For the initial years of the five year plan, TMWA will be reducing spending in light of current economic conditions and the extensive amount of work that has been completed since the inception of TMWA. Also included in the fiscal year 2013 is spending on rehabilitation of the Fleisch foot bridge to accommodate Tahoe Pyramid Bikeway (TPB) traffic. TPB is funding the majority of these improvements.

**Cost/Funding Source(s)**

**Funding Source:** Hydroelectric Revenues

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$1,600,000	Funding FY 12/13    Project Cost    \$500,000
	Funding FY 13/14    Project Cost    \$150,000
	Funding FY 14/15    Project Cost    \$150,000
	Funding FY 15/16    Project Cost    \$400,000
	Funding FY 16/17    Project Cost    \$400,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Hydro Plant Equipment Replacement  
**Category:** Hydroelectric Plant  
**Ranking:** Priority-1 Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

Provision is made each year to provide expenditure authority for emergency replacements or betterments to hydroelectric plants and turbines. If no unscheduled replacements are required, spending will not occur. No major rebuilds are planned for FY 2013. It is expected that these investments will provide a suitable return on investment. Spending in FY 14, 15 and 16 centers on rewinds of certain generators which are expected to improve energy output.

**Cost/Funding Source(s)**

**Funding Source:** Hydroelectric Revenues

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$1,201,000	Funding FY 12/13    Project Cost    \$ 65,000
	Funding FY 13/14    Project Cost    \$325,000
	Funding FY 14/15    Project Cost    \$325,000
	Funding FY 15/16    Project Cost    \$386,000
	Funding FY 16/17    Project Cost    \$100,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Meter Reading Equipment Data Units  
**Category:** Customer Service  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2014, 2016

**Project Description**

TMWA utilizes a drive-by meter reading system in which the transmitters attached to the meters send a signal out to be collected by a data collector. These collectors are mounted in the meter reading vehicles. TMWA is anticipating replacing units that have worn or broken down in 2014 and 2016.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

**Cost:**

Project Cost: \$100,000

**Funding Timetable:**

Funding FY 13/14    Project Cost    \$ 50,000

Funding FY 15/16    Project Cost    \$ 50,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** New Business Meters  
**Category:** Customer Service  
**Ranking:** Priority 2 - Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

All new water services are required to be metered. Meters are purchased by TMWA and installed for new development. New business fees pay for these installations.

**Cost/Funding Source(s)**

**Funding Source:** Developers Funding 100% – New Business Fees

**Cost:**

Project Cost: \$600,000

**Funding Timetable:**

Funding FY 12/13	Project Cost	\$ 50,000
Funding FY 13/14	Project Cost	\$ 50,000
Funding FY 14/15	Project Cost	\$100,000
Funding FY 15/16	Project Cost	\$150,000
Funding FY 16/17	Project Cost	\$250,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Meter Replacements  
**Category:** Customer Service  
**Ranking:** Priority 1-Mandatory  
**Fiscal Year:** 2013 through 2017

**Project Description**

Meter replacements are required annually for approximately 7% of TMWA’s metered services. Meters have an expected service life of 15-20 years. To protect TMWA’s revenue stream and to insure that current and future water rate studies are prepared with accurate water usage data, TMWA has budgeted and planned for future meter replacements consistent with the expected service life of the meter. Meters less than 3” in size are primarily for small commercial and residential premises. Also TMWA performs annual demand studies for engineering design and operational purposes, also requiring accurate meter reading. Due to TMWA nearly completing the retrofitting of the water system coupled with a very significant meter change out program the plan has allowed for less than average change outs in the next several years. Beginning in fiscal year 2014 TMWA has targeted for replacement those meters installed in early 1990’s. TMWA risks revenue losses if meters are not replaced in a systematic fashion. TMWA is replacing large meters on a systematic basis based upon expected service lives of the meters.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>															
Project Cost: \$5,700,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$ 500,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$1,000,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$1,400,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$1,400,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$1,400,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$ 500,000	Funding FY 13/14	Project Cost	\$1,000,000	Funding FY 14/15	Project Cost	\$1,400,000	Funding FY 15/16	Project Cost	\$1,400,000	Funding FY 16/17	Project Cost	\$1,400,000
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Funding FY 16/17	Project Cost	\$1,400,000														

**TRUCKEE MEADOWS WATER AUTHORITY  
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**Project Summary**

**Title/Description:** GIS Mapping Equipment  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 - 2017

**Project Description**

TMWA will have to update mapping equipment on a periodic basis to keep up with changes in technology; in addition, the current equipment is reaching obsolescence.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

**Cost:**

Project Cost: \$85,000

**Funding Timetable:**

Funding FY 12/13	Project Cost	\$ 17,000
Funding FY 13/14	Project Cost	\$ 17,000
Funding FY 14/15	Project Cost	\$ 17,000
Funding FY 15/16	Project Cost	\$17,000
Funding FY 16/17	Project Cost	\$17,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Desktop Computer Upgrades  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA utilizes a personal computer (PC) refresh program similar to the local governments. TMWA has over 130 PC's in service with approximately ¼, or 33, to be changed out each year dependent upon warranty arrangements. Spending would be determined on an as needed basis. TMWA annually completes a full inventory of all IT equipment and conditions.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers and Developers Funding (overhead to capital projects)

<b>Cost:</b>	<b>Funding Timetable:</b>															
Project Cost: \$250,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$ 50,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$ 50,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$ 50,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$50,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$50,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$ 50,000	Funding FY 13/14	Project Cost	\$ 50,000	Funding FY 14/15	Project Cost	\$ 50,000	Funding FY 15/16	Project Cost	\$50,000	Funding FY 16/17	Project Cost	\$50,000
Funding FY 12/13	Project Cost	\$ 50,000														
Funding FY 13/14	Project Cost	\$ 50,000														
Funding FY 14/15	Project Cost	\$ 50,000														
Funding FY 15/16	Project Cost	\$50,000														
Funding FY 16/17	Project Cost	\$50,000														

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Network Server/Software/Storage Upgrades  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA currently has 37 network servers hosting a variety of software applications. These servers normally come with three year warranties and would eventually require replacement on a three to four year cycle. TMWA will seek out extended warranties if cost effective, rather than replace servers. Spending is only on an as needed basis.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers and Developers Funding (overhead to capital projects)

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$ 1,050,000	Funding FY 12/13    Project Cost    \$275,000
	Funding FY 13/14    Project Cost    \$175,000
	Funding FY 14/15    Project Cost    \$175,000
	Funding FY 15/16    Project Cost    \$175,000
	Funding FY 16/17    Project Cost    \$250,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Network Security Upgrades  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA is very internet dependent. TMWA’s website hosts a variety of web pages that are user friendly and provide a great detail of information without customers having to call TMWA personnel with routine questions. TMWA also hosts its construction standards for builders. TMWA uses the internet to allow customers access to their account information. By virtue of using productivity enhancements such as the internet, it also creates a variety of security challenges. TMWA is scanned and is attacked by network crippling events and is subject to over 10,000 internet scans a day. TMWA uses various hardware and software applications in a configuration called depth in defense security to protect the network.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers and Developers Funding (overhead to capital projects)

<b>Cost:</b>	<b>Funding Timetable:</b>															
Project Cost: \$ 825,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$150,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$150,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$150,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$150,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$225,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$150,000	Funding FY 13/14	Project Cost	\$150,000	Funding FY 14/15	Project Cost	\$150,000	Funding FY 15/16	Project Cost	\$150,000	Funding FY 16/17	Project Cost	\$225,000
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Funding FY 15/16	Project Cost	\$150,000														
Funding FY 16/17	Project Cost	\$225,000														

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Engineering Computer/Software Upgrades  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA performs a significant amount of design functions for various construction projects whether infrastructure rehabilitation projects or new capacity projects. TMWA uses various hardware and software for engineering design and hydraulic modeling, to serve various customers. Computers that are replaced in engineering are trickled down to other users. GIS activities also require significant computing capacity.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers and Developers Funding (overhead to capital projects)

<b>Cost:</b>	<b>Funding Timetable:</b>															
Project Cost: \$150,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$ 25,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$ 25,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$ 25,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$ 25,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$ 50,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$ 25,000	Funding FY 13/14	Project Cost	\$ 25,000	Funding FY 14/15	Project Cost	\$ 25,000	Funding FY 15/16	Project Cost	\$ 25,000	Funding FY 16/17	Project Cost	\$ 50,000
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Funding FY 13/14	Project Cost	\$ 25,000														
Funding FY 14/15	Project Cost	\$ 25,000														
Funding FY 15/16	Project Cost	\$ 25,000														
Funding FY 16/17	Project Cost	\$ 50,000														

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Computer Network Licensing  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

The local area network connects the Chalk Bluff Treatment Plant to the Glendale Treatment Plant with the Operations Center at Capital Blvd. This network allows backup of any one location with computer resources at the other two locations. Upgrades are planned on an annual basis to maintain this system. Specific upgrades for FY 2013 include replacing the financial package with more modern functionality.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$1,000,000	Funding FY 12/13    Project Cost    \$400,000
	Funding FY 13/14    Project Cost    \$150,000
	Funding FY 14/15    Project Cost    \$150,000
	Funding FY 15/16    Project Cost    \$150,000
	Funding FY 16/17    Project Cost    \$150,000

**TRUCKEE MEADOWS WATER AUTHORITY  
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**Project Summary**

**Title/Description:** Heavy Equipment  
**Category:** Administrative  
**Ranking:** Priority 2 - Necessary  
**Fiscal Year:** 2015; 2017

**Project Description**

TMWA employs dump trucks with backhoe trailers to move backhoes to water main leak sites, meter retrofit sites and other tasks reducing travel wear and tear on backhoes. Dump truck/backhoe equipment configurations are essential for efficient field tasks. TMWA added a new dump truck in fiscal year 2008, and is not planning to purchase another one until 2015. TMWA’s practice is to retain older dump trucks so they may be used at times when significant excavations are in process to maximize debris/spoil removal. It was determined that two dump trucks tied to one backhoe is a far more efficient configuration when excavating major leaks. Any replacement of dump trucks, backhoes, and trailers will be made on an as needed basis and after a cost/benefit analysis which includes consideration of annual maintenance expenses and equipment availability factors.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>
Project Cost: \$250,000	Funding FY 14/15      Project Cost    \$125,000
	Funding FY 16/17      Project Cost    \$125,000

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Light Crew Trucks  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project (Outlay) Description**

TMWA’s service fleet consists of light duty and heavy duty crew trucks. TMWA plans to cycle the light crew fleet over a period of seven to ten years. Spending is determined annually depending on vehicle availabilities and other factors. Spending only occurs if justified. TMWA’s fleet cycles older vehicles to the treatment plants or other less demanding activities prior to disposal at auction. TMWA has scaled back spending on light vehicles for the past two years and a number of vehicles will be in excess of ten years old and greater than 120,000 miles of duty.

**Cost/Funding Sources(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>															
Project Cost: \$1,100,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$220,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$220,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$220,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$220,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$220,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$220,000	Funding FY 13/14	Project Cost	\$220,000	Funding FY 14/15	Project Cost	\$220,000	Funding FY 15/16	Project Cost	\$220,000	Funding FY 16/17	Project Cost	\$220,000
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Funding FY 16/17	Project Cost	\$220,000														

**TRUCKEE MEADOWS WATER AUTHORITY  
FISCAL YEARS 2013-2017 FIVE YEAR CAPITAL IMPROVEMENT PLAN**

**Project Summary**

**Title/Description:** Security Vulnerability Assessment Project  
**Category:** Administrative  
**Ranking:** Priority 2-Necessary  
**Fiscal Year:** 2013 through 2017

**Project Description**

TMWA performed a vulnerability assessment with grant support from the Department of Environmental Protection. This assessment outlined various security improvements that TMWA proceeded with at various TMWA locations. Security improvements at the Highland Reservoir have been completed as well as security improvements at the Hunter Creek Reservoir. Work will continue on the recommended improvements as required and if deemed necessary.

**Cost/Funding Source(s)**

**Funding Source:** Existing Customers Funding 100%

<b>Cost:</b>	<b>Funding Timetable:</b>															
Project Cost: \$450,000	<table border="0"> <tr> <td>Funding FY 12/13</td> <td>Project Cost</td> <td>\$ 50,000</td> </tr> <tr> <td>Funding FY 13/14</td> <td>Project Cost</td> <td>\$150,000</td> </tr> <tr> <td>Funding FY 14/15</td> <td>Project Cost</td> <td>\$150,000</td> </tr> <tr> <td>Funding FY 15/16</td> <td>Project Cost</td> <td>\$ 50,000</td> </tr> <tr> <td>Funding FY 16/17</td> <td>Project Cost</td> <td>\$ 50,000</td> </tr> </table>	Funding FY 12/13	Project Cost	\$ 50,000	Funding FY 13/14	Project Cost	\$150,000	Funding FY 14/15	Project Cost	\$150,000	Funding FY 15/16	Project Cost	\$ 50,000	Funding FY 16/17	Project Cost	\$ 50,000
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