

## 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 three 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 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 2012, 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 \$85.8 million in spending primarily on the replacement of existing infrastructure and to a far lesser extent construction of new water system

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capacity projects over the next five years. This spending continues to be substantially reduced from the FY 2010 5-Year Plan which had a total of \$99.1 million scheduled for the five fiscal years 2010-2014. The primary reason for the significant reduction in spending is a reduction in pump stations and feeder mains to provide capacity for new and expanded service. 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 2012, TMWA expects to spend \$20.3 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 \$20.3 million for fiscal year 2012, the first year of the FY 2012-2016 CIP. This amount is \$7.2 million more than the \$13 million in spending projected for fiscal year 2012 that was presented in last year's FY 2011-2015 5-Year CIP. The primary reasons for the increase are the addition of the Highland Canal Upgrade Project for \$3.5 million. 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. Another significant increase was an additional \$3.5 million for annual Street and Highway Projects because of road improvements on Plumb Lane. As TMWA coordinates water main replacements with the City of Reno, City of Sparks and the RTC, it was necessary to increase the expense in order to accommodate projects planned for 2011 by these entities.

Residential housing growth and commercial construction activity which slowed beginning late in fiscal year 2007, declined to a virtual standstill in fiscal year 2010 and the current construction climate is expected to persist further into fiscal year 2012 and beyond. Many experts believe that the local economy may be in this condition for at least the next two to three 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

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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.

Also water meter retrofit spending is being reduced because there are fewer financial resources available to complete this effort. TMWA will focus on the remaining multi-tenant services which are slower to retrofit than individual residences. These services are more complicated to retrofit than single family residential services because there is some degree of engineering for each service and significant backflow prevention testing must be completed prior to completion of the retrofit.

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 approximately \$0.5 million per year for a number of years. TMWA expects to continue to obtain federal funding support for this work which has yet to materialize. This will be the third year TMWA has capitalized these expenses in its capital improvement plans.

### **DESCRIPTION OF PROJECTS**

Total construction spending, acquisition spending, and capital outlays are expected to be \$20.3 million for the fiscal year 2011-2012. The Truckee Meadows Water Authority has established the following projects for funding in fiscal year 2012:

#### **Category 1 Raw Water Supply Improvements \$4,375,000:**

- Highland Canal Upgrades - Downstream – \$125,000
- Highland Canal Upgrades – US 40 - \$3,500,000
- Donner Dam Improvements - \$250,000
- TROA Drought Storage/Implementation – \$500,000

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

- Well Rehabilitation and Improvements – \$800,000
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#### **Category 3 Treatment-Improvements \$1,100,000:**

- SCADA System Upgrades/Rehabilitations – \$200,000
- Glendale/Chalk Bluff Fix and Finish Projects – \$750,000
- Glendale Diversion Improvements – \$150,000

#### **Category 4 Distribution-Improvements \$10,725,000:**

- Pressure Regulator Rehabilitation – \$300,000
- Pump Station Rehabilitations – \$850,000

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- 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

**Category 6 Hydroelectric – Improvements \$681,000:**

- Foot Bridge, Flume Reconstruction – \$150,000
- Plant Equipment Replacement-Rewinds – \$531,000

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

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

**Category 8 Administrative \$1,117,000**

- 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 – \$330,000
- Light Crew Trucks – \$128,000
- Heavy Crew Trucks - \$92,000
- Security-Monitoring Equipment – \$50,000

**Category 9 Special Projects Funded by Development \$500,000:**

- Water Meter Retrofit – \$500,000

***PLEASE REFER TO TABLE A-5 FOR AN EXCERPT OF ONLY THOSE PROJECTS THAT REPLACE OR REHABILITATE THE EXISTING WATER SYSTEM.***

## **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 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 the water system reliability. As mentioned previously, this 5-Year CIP will be incorporated into a comprehensive funding plan that will be updated and finalized in the summer of calendar year 2011 after the TMWA Board has considered final water rate proposals. TMWA's updated 5-Year Funding Plan will be 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.

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- \* **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 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 D-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 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.

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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 with construction to begin 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 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.

### ***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

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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 and for opportunities to acquire water rights when presented. 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.

TMWA has successfully refunded (refinanced) all but \$28.6 million of the Series 2001-A bonds and the \$40.0 million 2005-A bond issue. An additional refunding opportunity did arise in January 2010 with certain maturities of the 2001-A bond issue. Of the total \$58.1 million in remaining outstanding Series 2001-A maturities \$29.5 million was refinanced with total principal and interest savings of \$2.3 million over the next three years. In the most recent refunding TMWA's credit ratings were reaffirmed by all three credit rating agencies but did receive a negative outlook from Fitch because of a serious deterioration of senior lien coverage and due to a lawsuit with a downstream water user. TMWA management believes it will successfully address this negative outlook. The 2006 and 2007 Refunding activities have allowed TMWA to save over \$1.1 million per year in interest payments.

### **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

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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. The remaining services to have meters installed are the multi-tenant services and party water services which require more extensive planning and backflow integration.

### **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-/A+/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. But over the past year TMWA has proposed and the TMWA Board has approved a 4.5% general rate increase for fiscal year 2010 and another 4.4% general rate increase for fiscal year 2011. These increases were 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.