



PIMA COUNTY

Regional Wastewater Reclamation Department Financial Plan Fiscal Year 2009-10

January 2010 - DRAFT

Table of Contents

Executive Summary	ES-1
Summary of Findings and Recommendations	ES-1
Introduction	1
Financial Plan	2
Expenses	2
Operations and Maintenance Expenses	2
Personnel Services	3
Supplies	4
Services and Other Charges	4
Capital Outlays (Less than \$5,000)	4
W6 Wastewater System Development Funds	4
Capital Expenses	5
Capital Outlay (More than \$5,000)	5
Capital Projects (CIP)	5
Regional Optimization Master Plan (ROMP) Projects	6
Treatment	7
Conveyance	7
Debt Service	8
Capital Funding Plan	9
SDF Funding and the Expenditure Limitations	10
Future Funding	11
Debt Service Coverage	11
Reserve Funds	13
Emergency Reserve Fund	13
Operating Reserve Fund	13
Debt Service Reserve Fund	14
Revenue	15
Review of Prior Fiscal Year Financial Plan Expectations	16
User Charges	17
Standard Service Fee	17
User Fee Volume Rate	17
Connection Fees	18
Miscellaneous Charges	18
Rate Recommendation	18
Conclusions and Summary of Recommendations	22
Regional Wastewater Reclamation Advisory Committee	24
Schedules	25
Attachments – Draft Amendments to the Pima County Code	35
Appendix	36

Executive Summary

The County is currently serving approximately 260,000 individual wastewater customer accounts within its service area. Pima County continues to face an extraordinary challenge of investing more than \$812 million in its sanitary sewer system by Fiscal Year 2013-14 and approximately a billion dollars over the next ten years to meet regulatory requirements, provide needed system rehabilitation, system capacity needs and ensure efficient, high quality service to customers. Failure to make this investment within this period will place the County in jeopardy of violating permit requirements and could result in the County being subject to significant fines and penalties for non-compliance with new effluent quality standards. The County is the last utility in the State to comply with these regulatory requirements and has been unsuccessful in efforts to extend the deadline for compliance.

The primary goal of this financial plan is to develop a plan to finance the ongoing operating and maintenance ("O&M") expenses of the County's sewer system and the anticipated debt service related to capital improvements needed primarily to meet the regulatory requirements of operating the system. This report provides recommendations for wastewater rates for Fiscal Year 2010-11 through Fiscal Year 2013-14.

Summary of Findings and Recommendations

The principal points of the Financial Plan are summarized in this section and are as follows:

1. CIP for Sewer Improvements Total \$974 Million: The County has developed a proposed wastewater Capital Improvement Program (CIP) to comply with regulatory requirements and to maintain and expand the wastewater system as needed. The CIP is approximately \$812 million through Fiscal Year 2013-14 and an additional \$162 million through Fiscal Year 2017-18, for a total of \$974 million. Prior financial plans had originally anticipated a 2008 bond election for \$565 million, a 2012 bond election for \$310 million and the use of \$99 million of excess system cash to fund the \$974 million.
2. Use of Available Funding Sources: By the end of Fiscal Year 2009-2010, the County will have exhausted all available funding sources from revenue bonds, Water Infrastructure Finance Authority (WIFA) loans and Certificates of Participation (COPs). As explained in the body of the report, the County is limited in its ability to use cash balances in the System Development Fund (SDF) except for use in the payment of debt service from outside financing.

3. Size of Debt Issues: In order to finance the \$812 million of required capital improvements within the next five years, after applying the balances of the funds described above, the County will issue debt on an annual basis in the form of sewer revenue obligations, similar in nature to bonds, to finance the remaining CIP. The sizes of the debt issues are anticipated to be \$165 million in Fiscal Year 2010, \$165 million in Fiscal Year 2011, \$200 million in Fiscal Year 2012, \$200 million in Fiscal Year 2013, and \$67 million in Fiscal Year 2014, for a total of \$797 million. The County currently has approximately \$242 million of outstanding sewer revenue debt. By the end of Fiscal Year 2013-14, the County will have paid down \$81 million of the current debt and issued approximately \$797 million of new debt.
4. Need to Maintain Adequate Debt Service Coverage: The County needs to establish sufficient revenues to pay for ongoing O&M expenses, for required debt service payments, and to establish a debt service coverage ratio that will meet industry standards and rating agency recommendations. The current debt service ratio is the ratio of system revenues less total O&M expenses (net system revenues) and divided by debt service payments. The County has historically operated the sewer system with relatively low debt levels and relatively high debt service coverage. In recent years, however the debt service coverage has declined from 466% in 2005 to a low of 151% in 2008. For 2009, the debt service coverage was 274%. This year's Financial Plan is based on debt service coverage of approximately 200%.
5. Addition of User Fee Tied to Debt Service: The County's sewer revenue has historically been derived principally from a User Fee Volume Rate that is assessed based on the volume of water used, a monthly flat Standard Service Fee for all customers and Connection Fees assessed to new customers. The User Fee Volume Rate varies by customer class and utilizes a high strength factor that the County has developed for each customer class which recognizes that some customers discharge wastewater that is of higher strength than domestic wastewater and therefore costs more to treat.
6. Connection Fees Which Surged During Housing Boom Are Not Expected To Increase: The County experienced a surge in connections to the system beginning in Fiscal Year 2003-04 and peaking in Fiscal Year 2005-06 at \$42.2 million. Connections to the system have significantly decreased as a result of the downturn in the residential and commercial market for new construction, and were only \$18.3 million in Fiscal Year 2008-09. As one time revenues, connection fees should not be relied upon to fund long term debt or O&M expenditures. Revenues from connection fees are not expected to increase significantly for the foreseeable future.

7. Strengthening of Cash Reserves Recommended: To improve its financial position to enable borrowing the needed funds to finance the \$812 million of capital improvements within the next 5 years, staff recommends that the County increase the existing Emergency Reserve Fund, used to cover costs associated with the repair of system damage due to any unforeseen circumstance, from \$10 million to \$20 million over two years. The County is currently required by existing bond covenants to maintain an Operating Reserve Fund with sufficient cash to cover at least 30 days of O&M expenses. In order to reach the level of cash reserves which rating agencies expect for utilities for liquidity purposes, staff recommends that cash set aside in the Operating Reserve Fund be increased to cover 90 days O&M expenses. The County will also fund the Debt Service Reserve Fund in the amount of 10 percent of the outstanding balance of debt.

8. Recommended Rates: In order to meet the County's sewer related capital improvement needs and to be able to finance construction for the next five fiscal years, the County will need to commit to increase sewer rates over a period of years to meet debt service requirements and to meet the desired debt ratios in the range of 200%. Based on the analysis of projected O&M expenses and construction costs, the following rates are proposed:

Recommended Rate Increases Effective July 1 st of each year				
	2010-11	2011-12	2012-13	2013-14
Standard Service Fee	6.50%	6.50%	6.50%	6.50%
User Fee Volume Rate	10.00%	10.00%	10.00%	10.00%
Connection Fee	6.50%	6.50%	6.50%	6.50%

In the past, the County has typically adopted rates for only a 12 month or 18 month period. Because of the need to borrow an additional \$797 million within the next 5 years, the County needs to commit to rates for a four year period to provide investors assurances of the County's ability to pay the debt service payments associated with borrowings needed to complete the CIP projects that will be under construction during this period. Schedule ES-1 shows the proposed long-term Financial Plan in an abridged format. The significant capital expenditures the County is required to make in the next few years will require significant rate increases.

**FISCAL YEAR 2009-10
FINANCIAL PLAN**

Schedule ES-1: Financial Plan

	Fiscal Year Ended June 30				
	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
System Revenues:					
Sewer Utility Service	\$ 108,045,632	\$ 125,673,394	\$ 137,806,733	\$ 153,358,557	\$ 170,763,385
Sewer Connection Revenue	19,000,000	20,235,000	21,550,275	23,382,048	25,369,522
Engineering Review & Inspection Fees	91,822	91,822	91,822	91,822	91,822
Other Income	2,752,517	3,213,492	4,285,656	4,436,781	4,601,959
Total Revenues	129,889,971	149,213,708	163,734,486	181,269,208	200,826,688
Operations and Maintenance Costs:					
Employees Compensation	35,992,372	36,620,059	37,297,962	38,593,022	39,957,912
Other Operation and Maintenance Costs	40,037,416	41,928,263	43,444,841	45,023,534	47,789,532
Capital Expenses	4,219,228	4,356,353	4,497,934	4,644,117	4,795,051
Operations and Maintenance Costs:	80,249,016	82,904,675	85,240,738	88,260,673	92,542,495
Net Revenues	49,640,955	66,309,033	78,493,748	93,008,535	108,284,193
Plus Cash Balances Remaining After Reserves	3,363,067	24,813,700	32,949,778	44,426,143	53,968,900
Net Revenues Including Remaining Cash Balances	53,004,022	91,122,733	111,443,527	137,434,678	162,253,094
Debt Service Payments:					
Principal	14,186,650	16,951,949	16,774,555	16,201,296	16,918,880
Interest	9,701,350	9,473,470	8,807,605	8,144,384	7,466,127
Total Existing Debt Service Payments	23,888,000	26,425,419	25,582,160	24,345,680	24,385,007
Proposed Debt (Principal & Interest)	-	13,043,250	23,791,500	36,031,500	66,493,235
Total Debt Service Payments	23,888,000	39,468,669	49,373,660	60,377,180	90,878,242
Debt Service Coverage for Existing Debt	2.08	2.51	3.07	3.82	4.44
Debt Service Coverage for Revenue Obligations	2.22	2.31	2.26	2.28	1.79

**PIMA COUNTY REGIONAL WASTEWATER RECLAMATION COUNTY
FISCAL YEAR 2009-10 FINANCIAL PLAN**

Introduction

The County is the primary provider of wastewater service throughout eastern Pima County. The County operates the wastewater system as an enterprise fund with revenue and costs accounted for separately. As an enterprise fund of the County, the accounting for the sewer system revenue and expenses is similar to that of a private entity rather than as a governmental entity.

In providing wastewater services, the County incurs expenses related to its ongoing operating and capital needs. The County reviews the financial condition of the wastewater fund each year to assure that the rates generate sufficient revenue to pay the costs of operation, maintenance, repair, and replacement and debt service of the system and to assure that the fees are distributed proportionately among users.

This Financial Plan addresses a five-year period through Fiscal Year 2013-14. During this period the County will incur annual O&M expenses and capital costs associated with repairing, replacing, expanding and improving its wastewater facilities. The County is required to comply with more stringent effluent quality standards imposed by State and Federal regulators. Those standards are the key drivers of the Financial Plan. The projects necessary to comply with these regulatory requirements are included in the County's Regional Optimization Master Plan (ROMP), dated November 2007 (http://www.pima.gov/wwm/pubs/romp_chapters.htm). By the end of Fiscal Year 2013-14, the County will need to expend \$812 million toward ROMP and non-ROMP projects. The non-ROMP projects are for other treatment and conveyance projects to repair, replace, improve and expand wastewater facilities.

Financial Plan

Schedule ES-1 shows a Financial Plan that projects revenue and expenses for the wastewater system within a five-year forecast period from Fiscal Year 2009-10 through Fiscal Year 2013-14. This Financial Plan will discuss the anticipated O&M expenses and capital expenses and then address the revenue requirements to pay for the O&M expenses and to arrange for long term financing for the capital expenditures.

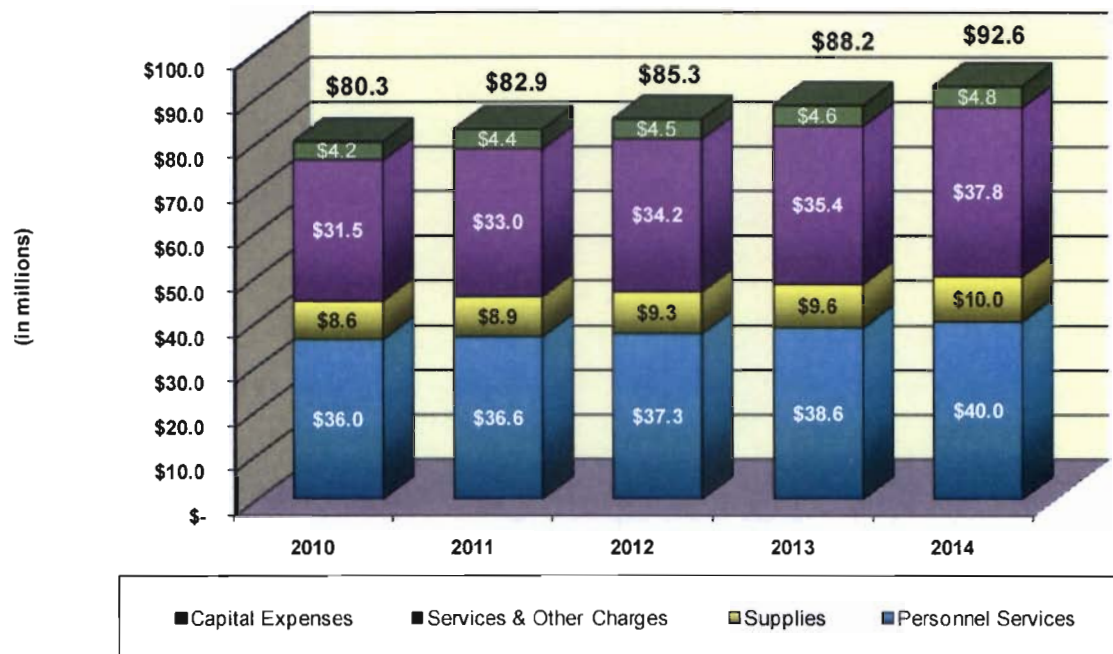
Expenses

The expenses that the County needs to recover through its rates and charges are categorized as either O&M expenses or capital expenses. Both types of expenses are listed in detail in the County's Recommended Budget and Adopted Budget for Fiscal Year 2009-10, both of which can be found at <http://www.pima.gov/finance/HTML/Reports.html>.

Operations and Maintenance Expenses

The County separates the O&M expenses in its budget into five major categories: (1) Personnel Services, (2) Supplies, (3) Services and Other Charges less depreciation expense, (4) capital outlays (less than \$5,000), and (5) W6 wastewater system funds (primarily for researching and analyzing possible future capital projects). O&M expenditures for Fiscal Year 2008-09 were \$73.2 million. The budget for Fiscal Year 2009-10 is \$80.3 million (excluding \$1.1 million of budgeted retirement insurance benefits accrual which have since been eliminated). This budget represents a 9.6% increase over Fiscal Year 2008-09 expenditures. Historic O&M expenditures since 2002 for the wastewater system shown on Schedule 2 show that the Regional Wastewater Reclamation Department has been having operational costs increase by an average of 11% each year until Fiscal Year 2008-09 when the Department reduced its expenditures in response to actual revenues lower than budgeted revenues. For Fiscal Year 2010-11 and the remaining fiscal years in the forecast period, the budget is projected to increase by approximately 3.4% per year. Figure 1 below summarizes the County's budgeted O&M expenses over the forecast period.

Figure 1: Operations and Maintenance Expenses (millions)



For illustration purposes, capital outlays and W6 wastewater system funds are included under Services and Other Charges.

Personnel Services

The Personnel Services category addresses personnel costs for the County related to staff salaries, wages, and benefits totaling \$36.0 million for Fiscal Year 2009-10. Salaries and all related line items are projected to remain flat for two years, and then escalated 2% annually over the forecast period. Benefits costs are projected to increase at a rate of 8% per year during the entire period to reflect the steep increase in healthcare costs.

As part of its continuing efforts to reduce the overall cost of providing service, the Department is pursuing several initiatives focused on maximizing staffing efficiency, including the Multi-Skill Program which should reduce the number of FTEs. As of December 22, 2009, the Department had 55 budgeted but vacant positions, or 9.5% of the total 580 FTEs budgeted. The County is also planning to operate the new Water Reclamation Campus, which will replace the existing Roger Road wastewater treatment facility with a private contractor using a Design-Build-Operate (DBO) contract rather than with County staff.

Supplies

The Supplies category includes those items and supplies necessary for the County to operate in a safe, reliable, and efficient manner on a daily basis. The costs of all of these line items are projected to escalate by 4% annually over the forecast period. Chemical supplies and repair and maintenance supplies comprise approximately 50% and 35%, respectively, of the budgeted Supplies expenses for Fiscal Year 2009-10.

Services and Other Charges

The Services and Other Charges category is divided into two subcategories: services procured from other entities and charges between County departments. The services procured from other entities include such cost as professional engineering, utilities and the repair and maintenance costs for machinery, equipment and other fixed assets. These costs are projected to total approximately \$25.3 million for Fiscal Year 2009-10. These expenses are escalated 3% annually over the forecast period with the exception of utility services, primarily consisting of electrical services, which are escalated 5% annually. In 2014 and again in 2015, the County anticipates significant increases in electricity expenses for the ROMP projects as they are commissioned.

This category of expenses also includes costs related to services that are performed by other County departments and is comprised mostly of administrative expenses. These expenses are escalated 3% annually over the forecast period.

The County's plan to operate the new Water Reclamation Campus at Roger Road by use of a Design-Build-Operate contract with a private contractor staffing will shift personnel related expenses into the Services and Other Charges category of expenses beginning in Fiscal Year 2014-15.

Capital Outlays (Less than \$5,000)

The County's expenses for small items of furniture, software, and equipment are expensed because they cost less than \$5,000. State law requires, for stewardship purposes of public funds, that the County track the use and location of assets which cost between \$1,000 and \$5,000 even if they are expensed for accounting purposes. These expenses are approximately \$0.9 million in Fiscal Year 2009-10 and are escalated by 3.25% annually over the forecast period.

W6 Wastewater System Development Funds

The County categorizes specific expenditures related to planning, modeling, and feasibility studies that may result in future capital projects upon completion as W6 Wastewater System Funds. These studies typically take more than one year to complete, do not immediately result in the construction of a tangible asset, and are therefore expensed. The County's W6 Projects

total approximately \$1.95 million in Fiscal Year 2009-10. These costs are not escalated over the forecast period.

Capital Expenses

The County's capital expenses are divided into CIP projects, having a value of \$100,000 or more, and non-CIP capital expenditures having a cost between \$5,000 and \$100,000. Schedule 3 shows the portion of the budget attributed to capital expenses projected for the forecast period.

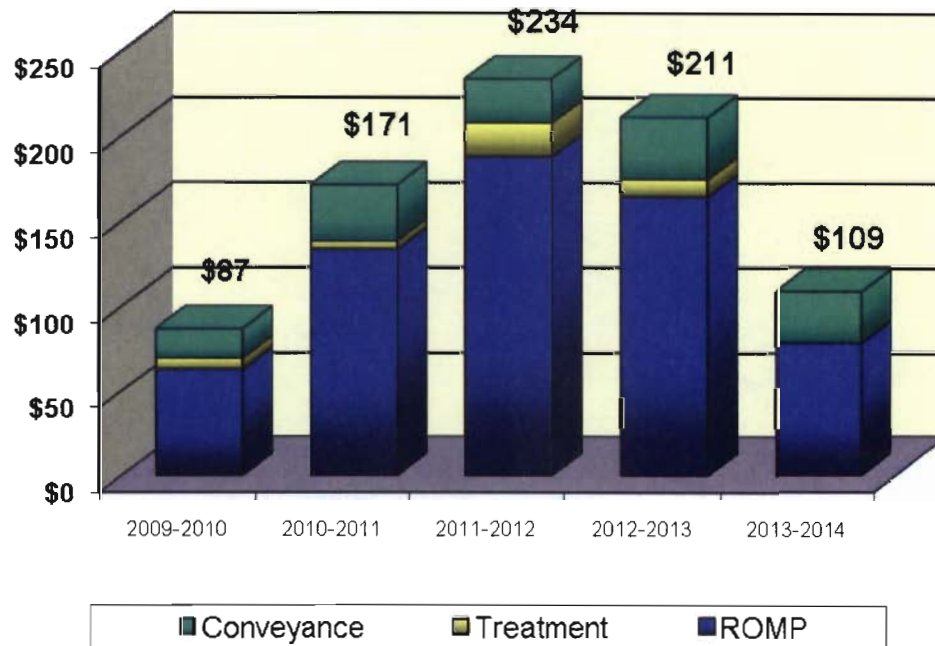
Capital Outlay (More than \$5,000)

The County's capital outlays address equipment related to maintenance, construction, fleet, and office and are often capitalized for accounting purposes. These expenditures total approximately \$4.0 million in Fiscal Year 2009-10 and are escalated 3.25% annually over the forecast period.

Capital Projects (CIP)

The County has developed a Capital Improvement Program that spans the period from Fiscal Year 2009-10 through Fiscal Year 2018-19. The projects have been separated into three categories: ROMP, Conveyance, and Treatment. ROMP projects include required environmental upgrade, rehabilitation and expansion improvements at the Ina Road Wastewater Reclamation Facility, the new Water Reclamation Campus that will replace the existing Roger Road wastewater treatment facility and the Plant Interconnect Sewer between the two facilities. Conveyance projects include all planned wastewater conveyance related projects that are not included in ROMP. Treatment projects include additional treatment capacity and improvements to existing subregional treatment facilities that are not included in ROMP. A summary of total project costs is provided in Figure 2.

Figure 2: Summary of Capital Project Costs by Fiscal Year (millions)



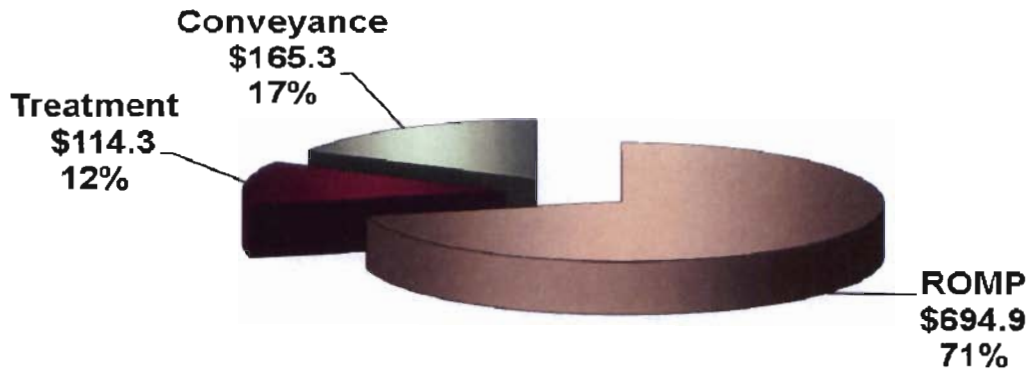
The following sections provide a more detailed summary of the components of the CIP.

Regional Optimization Master Plan (ROMP) Projects

The ROMP projects are those projects that address the environmental needs and requirements of the County in order to meet new State and Federal effluent regulations and upgrade, rehabilitation and capacity needs at the Ina Road and Water Reclamation Campus facilities to the year 2030. The ROMP projects are listed on Schedule 4 for the period from FY 2009-10 through FY 2018-19. A more detailed description of these projects and an implementation plan can be found in the previously referenced ROMP report.

Figure 3 below shows the components of the \$974 million CIP program planned through Fiscal Year 2018-19 and detailed in Schedules 4, 5, and 6.

Figure 3: Summary of Costs by Project Type-ROMP (in millions)



Timely implementation of ROMP projects is critical. The schedule of ROMP projects that drives the costs shown in Schedule 4 was developed during the ROMP study so that the County could meet the regulatory deadlines imposed by the Arizona Department of Environmental Quality. Failure to meet these deadlines could result in significant fines against the County and, potentially, in lawsuits, in moratoriums on sewer connections, and in federal or state regulators imposing a severe construction schedule of the facilities at County expense. Such events would have a significant adverse effect on development within the service area. It is critical, from both a regulatory and a financial perspective, that sources of funding for these projects are obtained timely.

Treatment

The projects listed in Schedule 5 address the repair, replacement, improvement and expansion of the County's non-ROMP wastewater treatment facilities, as well as other ancillary projects not related to ROMP that are projected to occur at both the Ina Road Wastewater Reclamation Facility and the new Water Reclamation Campus. In some respects, these projects, coupled with the Conveyance projects discussed below, represent the "baseline" CIP in that most of these projects would be required even if the regulatory requirements that are being addressed by the ROMP projects were not being imposed. These projects will allow the County to continue to provide high quality, reliable service to its existing customers and meet the wastewater treatment needs of a growing community.

Conveyance

The \$165 million of projects listed in Schedule 6 address the repair, replacement, improvement and expansion needs of the wastewater conveyance system. These projects have been identified as being necessary to ensure the safe and reliable transport of wastewater from individual customers to the treatment facilities. Similar to the treatment projects discussed earlier, these projects represent the "baseline" capital needs. Failure to fund the appropriate investment in

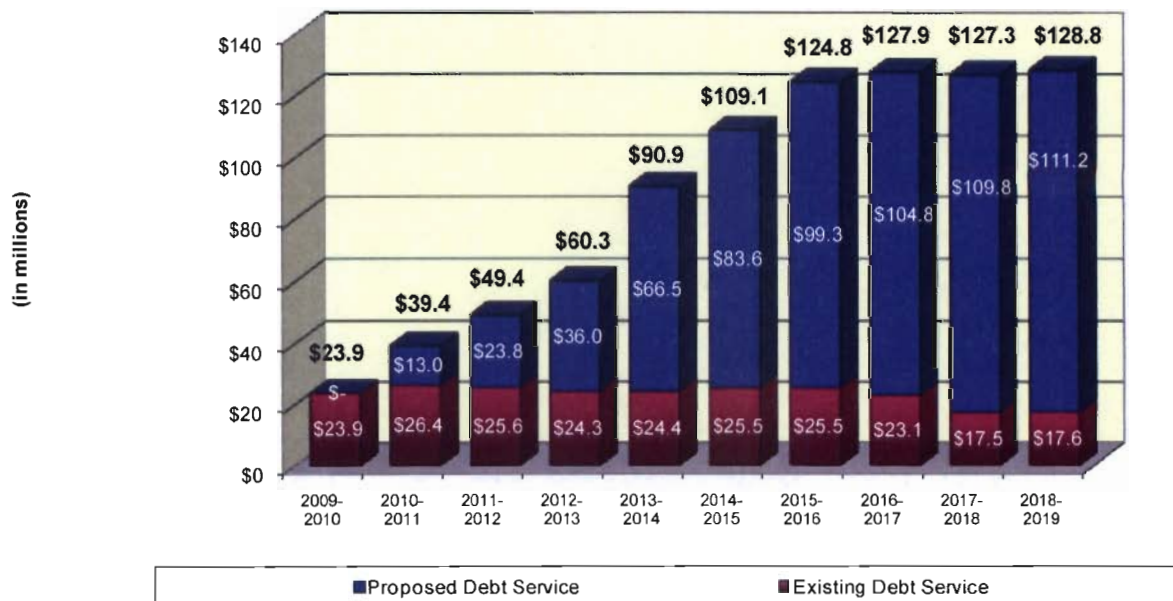
the repair, replacement, improvement and expansion of the series of sewers and pumping facilities that comprise the conveyance system can result in an increased number of sanitary sewer overflows, main breaks and releases of untreated wastewater into the environment, all of which could lead to community health issues as well as significant fines and penalties imposed by the regulatory agencies.

Debt Service

Debt service is the principal and interest payments that the County makes to the holders of the bonds, loans and other forms of debt issued to fund a portion of the County's capital program. The County's budgeted debt service for existing sewer obligations ranges from \$23 million to \$26 million per year through 2017, after which the debt service is approximately \$17 million per year. The existing debt service in Fiscal Year 2009-10 is approximately \$23.9 million.

As discussed in the following section of this report, the County will be required to borrow significantly more long-term debt to fund the CIP. As a result, the debt service will increase significantly over the next ten years and be in excess of \$124 million by Fiscal Year 2015-16. Projected annual debt service is shown in Figure 4.

Figure 4: Annual Debt Service



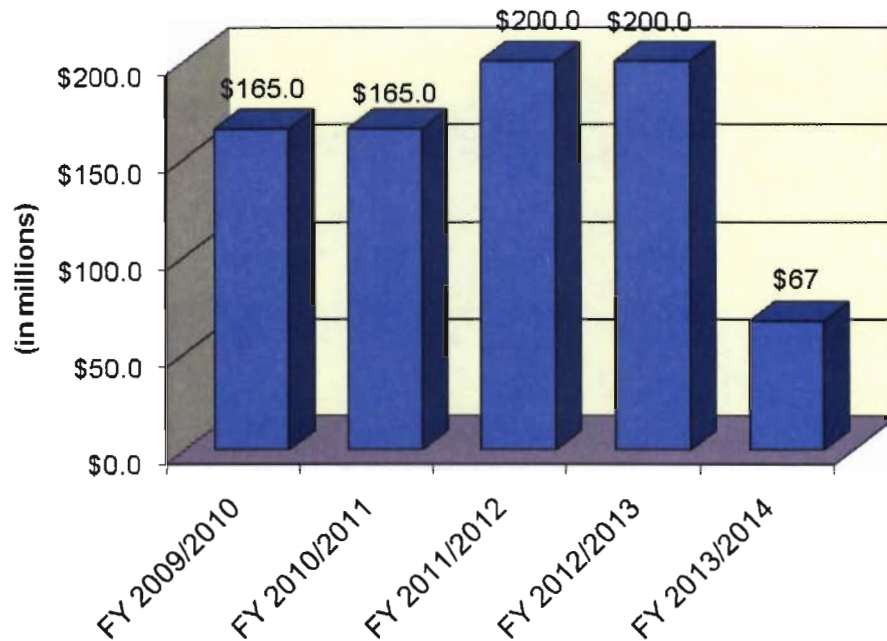
Future debt service will consist of annual principal and interest payments on the sewer system revenue obligation issuances, which will be subordinate to the County's existing debt. Calculation of projected debt service on proposed obligations assumes 3 years of interest only payments, followed by 12 annual principal and interest payments of equal amount *for the first 4* issuances. The subsequent issuances assume equal annual payments for all 15 years. The assumed interest rates for the sewer system revenue obligations are 5.0% for Fiscal Year 2009-10, 5.5% for Fiscal Year 2010-11, and 6.0% for all future issuances. It is likely that the actual interest rate on the obligations will vary from this assumption depending on market conditions at the time the debt is issued and the way in which the individual repayment schedules are structured.

Capital Funding Plan

Historically, the County has used sewer revenue bonds, Water Infrastructure Financing Agency (WIFA) loans, System Development Funds (SDF) cash funding, and Certificates of Participation to fund the wastewater CIP. The County has issued all of the authorized bonds and cannot currently issue new bonds or borrow additional funding from WIFA (except in very limited situations involving federal Stimulus funds). Additionally, use of WIFA funding at any time during the next three fiscal years would require a greater increase in the proposed rates in order to meet the debt service requirements of WIFA. The County intends to issue sewer revenue obligations with interest-only payments for the first three year and deferral of principal payments until the fourth year for each of the first three years of debt issues, totaling \$530 million. This reduces the debt service requirements in the next 5 years of payments. WIFA debt, on the other hand, requires relatively level debt service payments over the term of the loans and would require the payment of approximately \$60 million of additional debt service during the period covered by this financial plan. For this reason, WIFA financing is not being recommended.

The County has an immediate need to obtain financing sufficient to handle the \$974 million of CIP projects. Because of the timing deadlines for completions of the ROMP projects, the constitutional limits affecting the SDF funds, and the uncertainty that the two anticipated bond elections would be held, the County began to analyze a variety of options for funding the wastewater CIP. As discussed below, the County intends to issue sewer obligations structured similar to COPs in order to meet the pending financing deadlines. Figure 5 shows the proposed timing of funding for the wastewater CIP. Funding after Fiscal Year 2013-14 are estimates and are likely to increase for conveyance and treatment projects not yet planned.

Figure 5: Proposed CIP Funding Plan



SDF Funding and the Expenditure Limitations

Due to the constitutional expenditure limitations restrictions in Article 9, Section 20, of the Arizona Constitution, the County will not be able to use SDF funding to fund capital improvements but will need to borrow all funds needed for the wastewater CIP rather than use SDF funding. SDF funds will instead be used to pay down existing debt, to increase the balance in the Emergency Reserve and Operating Reserve funds, and to fund the Debt Service Reserve account. The expenditure limitation section of the constitution restricts the use of "local revenues." Local revenues consist of primary property taxes, impact and connection fees, and all other fees charged for services, including, among other service fees charged by the County, and fees charged by the Regional Wastewater Reclamation Department for sewer services. The expenditures limit is established annually by the State's Economic Estimates Commission in accordance with the formula contained in the Constitution, currently \$506 million for Pima County. The County may not exceed the expenditure limit even if the County has cash available to spend. County expenditures, especially expenditures related to the wastewater system, have increased at a rate greater than the rate of increases in the expenditure limitation, and the County's expenditures are now essentially at the Constitutional limit. Without a statutory change, the County can use the SDF funds to pay for debt service but not to fund projects.

Future Funding

In Fiscal Year 2009-10, the County issued the last of the remaining bonds authorized in the 1997 and 2004 bond elections. The County expects to have all such funds fully expended by the end of Fiscal Year 2009-10. Previous Financial Plans anticipated two future bond elections, one originally anticipated for 2008 asking for authorization in the amount of \$565 million and one in 2012 for \$310 million. The County has not set a date for any future election. In order to raise funds for the pending CIP projects, the County will need to issue sewer obligations that are similar to bonds in that they are paid solely from the revenues generated by the system. Other jurisdictions use a similar method to fund capital improvements. In June 2009, the City of Tucson borrowed \$38.5 million using water system revenue obligations rather than bonds.

Debt Service Coverage

With both the existing bond debt and the existing WIFA loans, the County has entered into covenants requiring debt service coverage of 120%, referred to as the rate covenant. This rate covenant requires the County to adopt rates for the wastewater system that will at a minimum not only generate revenue sufficient to cover O&M expenses and debt service on outstanding debt, but that will also generate enough additional revenue so that net revenues in each fiscal year are at least 120% of the debt service for that year. The 2009 Financial Plan recommended rates that would yield debt service coverage of 125%.

Both lenders and rating agencies place a great deal of emphasis on a borrower's debt service coverage ratio when they are negotiating the terms of an issuance, and government revenue bonds (including existing Pima County sewer revenue bonds) typically include covenants that require the issuer to maintain debt service coverage ranging between 110% and 150%.

Although the County's existing debt issues have rate covenants calling for debt service coverage of 120%, these levels of coverage would not be adequate to obtain the size of financing the County must achieve to meet the required CIP needs. The County has historically operated the sewer system with relatively low debt levels and relatively high debt service coverage. However, as shown in the County's annual bond disclosures, Schedule 7, in recent years, as the County has increased its borrowing for sewer projects, the County's debt service coverage for these sewer debt obligations has declined from 466% in 2005 to a low of 151% in 2008. For 2009, the debt service coverage was 274%. The increase in the debt service coverage for 2009 was due to a change in the date debt payments were made, shifting certain June 30, 2009 payments to July 1, 2009, thus shifting the debt service into the next fiscal year. Without that accounting shift, the debt service ratio for 2009 would have been 140%. The proposed rate increases would produce debt service coverage at levels greater than 175%.

The Appendix contains the two most recent rating letters received on the County's sewer revenue bond sales and excerpts from rating guidelines from Fitch Ratings and Standards & Poor's. On April 14, 2009, Moody's Investors Service downgraded its rating on Pima County's 2009 sewer revenue bonds from "A1" to "A2." The report states that one of the primary reasons for the downgrade was due to the "rapid deterioration in debt service coverage." The Moody's report also notes that the County has historically adopted modest rate increases and that, "since 2006, rate increases have been larger...but not sufficient to match the rate of growth in expenditures." The proposed rate increases are needed to address the declining debt service coverage and prevent further downgrading by the rating agencies and the resulting increase in interest rates.

After exploring numerous capital funding options, the County believes that the issuance of sewer system revenue obligations will be the most efficient means of funding the wastewater CIP projects. These obligations will be subordinate to existing revenue bonds and WIFA loans. As security for its payment obligations, the County would pledge the net revenues from the sewer system in a fashion similar to the way it pledges assets for the issuance of Certificates of Participation, with investors acquiring undivided interests in the County's agreement to a lending trustee bank to repay the obligations.

The utility system revenue obligation financing structure is common in the tax-exempt bond market and, consequently, the obligations would be expected to be sold at interest rates that are substantially similar to the rates the County would pay if it sold voter authorized sewer revenue bonds.

In this Financial Plan, the County has changed some assumptions regarding the method for calculating debt service coverage. As mentioned above, traditionally, the coverage ratio is the ratio of annual net revenue (gross revenue minus operating expenses) to annual debt service requirements. This method is used for existing debt, but reliance upon connection fee revenues in this calculation is viewed as risky by rating agencies because of the volatile nature of such revenue. In determining the recommended rates in this Financial Plan, connection fee revenue is excluded from the calculation of net revenue. As an offset to this exclusion, the rates have been determined assuming that future rate covenants will allow surpluses in the Operating Reserve Fund (i.e., unrestricted cash balances) to be applied toward meeting the coverage requirements. Based on the projected revenues, beginning in Fiscal Year 2013-14, the County should be able to use a portion of the unrestricted cash balances to prepay exiting bond debt and WIFA loans, thus reducing the overall sewer debt and debt service.

Reserve Funds

Although the County operates the sewer operations from one fund, the Regional Wastewater Reclamation Enterprise Fund, the County identifies several reserve funds within the enterprise fund for specific use.

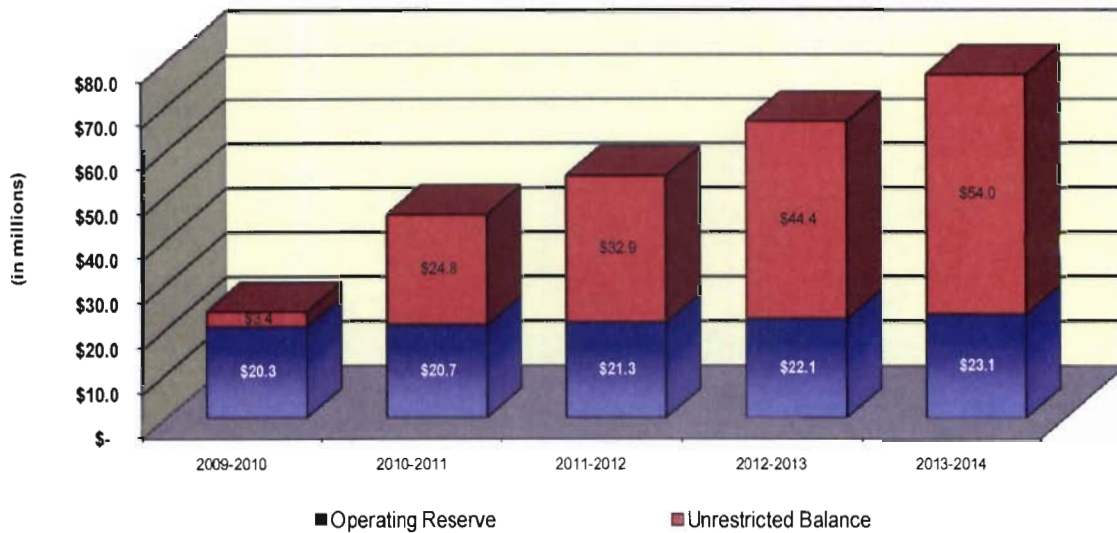
Emergency Reserve Fund

The Emergency Reserve Fund is in place to cover the construction and labor costs of unplanned projects. For example, the service area may experience a major sewer main break necessitating work on the system that was not scheduled and included in the CIP. Cash from the Emergency Reserve would be used to fund the repair of the system. Currently, the County maintains an Emergency Reserve Fund with a balance of \$10 million. The County would like to raise the amount to \$20 million over two fiscal years to more accurately reflect the cost of potential emergency projects that the reserve would be used to fund. At the close of both Fiscal Year 2009-10 and Fiscal Year 2010-11, \$5 million will be allocated to the Emergency Reserve Fund. Beginning in Fiscal Year 2011-12, the Emergency Reserve Fund would have a balance of \$20 million, and no additional funds will be contributed unless a shortfall arises due to withdrawal of funds to be used for correction of an emergency event.

Operating Reserve Fund

The main purpose of instituting an Operating Reserve Fund is to ensure that funds will be available to pay expenses in situations when wastewater User Fee Volume Rate revenue is down due to decreased customer flows. Typically, utilities set this reserve target at a percentage, or number of days, of the annual Operating Budget. The County has existing operating reserve covenants calling for one month of reserves. In previous financial plans, the County was targeting 45 days, or 12.5%, of the annual budget. The County has decided to implement a more aggressive reserve target of 90 days, or 25%, of the budget. This increase will assist the County to operate without being excessively affected by the volatility of customer demand. Rating agencies reviewing the liquidity of utilities look for 60 to 120 days of liquidity. The County would use any available excess cash in this fund to prepay existing debt and thus reduce the overall outstanding debt over time.

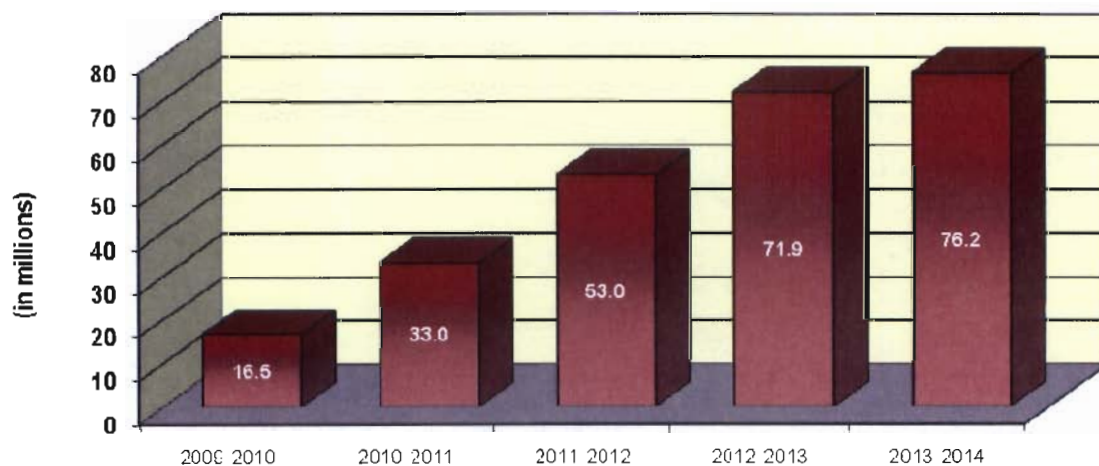
Figure 6: Annual Operating Reserve Fund Balance



Debt Service Reserve Fund

For future debt service, the County will fund the Debt Service Reserve Fund with an amount equal to 10% of the value of outstanding obligations each fiscal year. For the first two issuances, the respective amounts will be funded with proceeds from the obligation. Beginning in Fiscal Year 2011-12, the Debt Service Reserve Fund will be funded from rate revenue. The funds in the Debt Service Reserve Fund are used to pay the final payments on the debt obligations as they mature. Figure 7 presents the annual balance of the Debt Service Reserve Fund during the forecast period.

Figure 7: Annual Debt Service Reserve Fund Balance

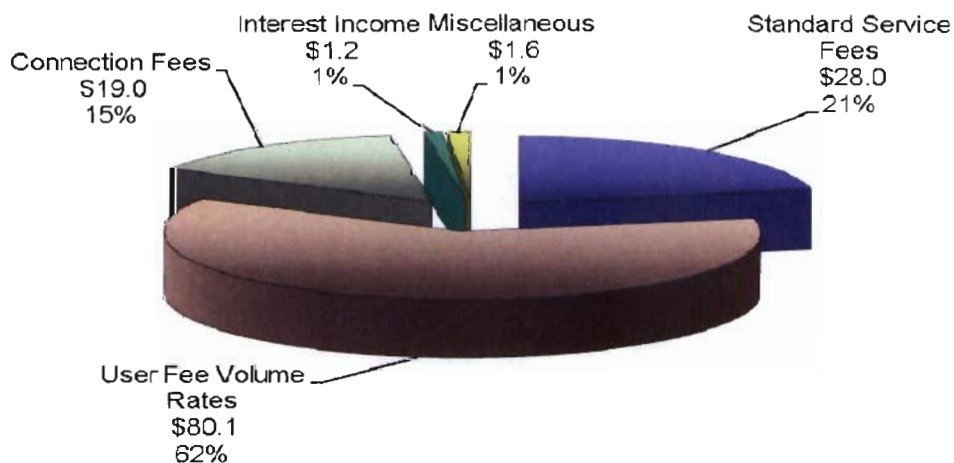


Revenue

In order to remain financially sound and meet debt service obligation requirements, a utility's revenue must, over the course of time, be greater than its expenses. Therefore, as a utility's costs increase, so must its revenue. Consequently, the utility must increase the rates and charges that generate its revenue. Failure to do so results in a utility being unable to provide safe, reliable service to its existing customers and also unable to support the economic development of the community it serves. In recent years, the revenues received have been sufficient to cover only the immediate cash needs of the sewer enterprise. Schedule 2 shows how the increases in user fee revenues have been matched by similar increases in operating expenditures excluding depreciation. As operating expenditures continue to increase at the same rate as rate increases, the debt service coverage discussed above becomes more difficult to meet. The proposed rate increases address this and raise revenues to meet the increasing operating expenditures and debt service of operating the wastewater system.

The revenue for the wastewater system is generated primarily by User Fees and Connection Fees. User Fees include the Standard Service Fee and the User Fee Volume Rate and are derived from monthly charges to customers for sewer services. Connection Fees are a one-time, upfront charge to new customers of the system or to existing customers who have increased their demand on the system by new construction. In addition to User Fees and Connection Fees, the County also has other, relatively insignificant, sources of revenue such as miscellaneous fees, interest on reserves, grants and contributions. Figure 8 below shows the current breakdown of revenue by source.

Figure 8: Current Revenue by Source (in millions)



The following sections of the report address each of the County's primary sources of revenue and provide recommendations pertaining to adjustments to the drivers of these revenue sources.

Review of Prior Fiscal Year Financial Plan Expectations

Actual Revenues Were Less than Projected in the 2009 Financial Plan

Actual revenue collected in Fiscal Year 2008-09 was approximately \$14.6 million lower than what was budgeted in the 2009 Financial Plan. User Fees and Standard Service Fee revenues were \$9.8 million less than expected. Connection Fee revenue was \$2.6 million less than expected. The assumptions made in the prior Plan caused an overly optimistic expectation of revenues. The shortfall in actual revenues will need to be recouped in future years.

Demand Projections

The 2009 Financial Plan relied upon data received from the various water companies that collect the sewer fees for the County as a part of their utility billings. Service area conservation initiatives such as inclining block pricing for water service, low-flow fixtures and other green building solutions may reduce consumption. This 2010 Financial Plan forecasts no change in demand for Fiscal Year 2009-10 through Fiscal Year 2011-12. Beginning in 2012-13, billable flows are projected to increase at a rate of 2% per year.

Connection Fee Revenue Projections

Connection fees have historically been between \$17 million and \$20 million until the residential housing boom beginning in Fiscal Year 2003-04. By Fiscal Year 2005-06, connection fees had surged to \$42.2 million. Since then, connection fees have dropped to \$18.3 million last year and are expected to be approximately \$19 million this fiscal year. The \$18.3 million was \$14.5 million less than budgeted revenue of approximately \$32.8 million. Even with proposed rate increases, the County does not anticipate significant increase in connection fee revenues for the next three or four years.

Certificates of Participation

The County issued Certificates of Participation in 2008 and 2009 to meet capital needs in Fiscal Year 2008-09 and Fiscal Year 2009-10. During the current fiscal year, the County will transfer approximately \$22 million of SDF funding into the General Fund to repay the portion of these COPs borrowing associated with sewer improvement projects. All outstanding COPs will be paid in full by Fiscal Year 2011-12.

Additional Cash Needs

The 2009 Financial Plan projected that \$46.8 million of SDF funds would be used to fund CIP projects. As explained above, the SDF funds will repay a portion of the County's COPs funding that was used for wastewater CIP projects. The County delayed some projects during the last fiscal year due to lower than expected revenues and ultimately spent only \$24.3 million of SDF funds for capital projects, significantly reducing the revenue requirements and essentially offsetting all reduction in revenue collected.

User Charges

It is essential that the County generates revenue sufficient to meet revenue requirements on an ongoing basis. As such, the primary focus of the analysis of user charges is to ensure revenue sufficiency, although specific attention is also given to rate equity and adherence to cost of service principles. The County's User Fees are currently comprised of two components: the Standard Service Fee and the User Fee Volume Rate.

Standard Service Fee

The Standard Service Fee is comprised of a flat monthly fee that applies to all customers served by the County. Currently, the Standard Service Fee is \$9.82 per month, regardless of the volume or strength of the wastewater discharged. The Standard Service Fee is designed to recover a portion of the County's costs that do not fluctuate based on the volume or strength of wastewater discharged to and treated by the system. These include costs associated with measuring and billing for service and some of the costs associated with providing the facilities necessary to deliver service. The costs associated with the Standard Service Fee, including measuring and billing for service, are projected to increase as a result of both inflationary pressures and increase in demand. This Financial Plan recommends supplemental rate increases in the future to cover additional costs.

The anticipated level of revenue to be generated by the Standard Service Fee over the forecast period is shown on Schedule 8. The County is projecting no increase in the forecast of new customers connecting to the system in both Fiscal Year 2009-10 and Fiscal Year 2010-11. But beginning in Fiscal Year 2011-12, the number of bills per month is escalated at a rate of 2% annually for all customer classes.

User Fee Volume Rate

The User Fee Volume Rate is designed to recover those costs that vary depending upon either the volume or the strength of wastewater discharged as well as portions of the County's fixed costs such as labor and debt service. The User Fee Volume Rate is comprised of a volume component and two strength components: chemical oxygen demand ("COD") and total suspended solids ("TSS"). A high strength factor has been calculated by the rate and financial

planning model for each customer class and is applied based on assumed wastewater characteristics to the User Fee Volume Rate assessed to different customer types in order to appropriately recover costs from high strength users. The existing high strength factors are applied to the calculated User Fee Volume Rate in order to determine the User Fee Volume Rate for each customer class.

Connection Fees

Connection Fees are charges assessed upfront to new customers or to existing customers who have increased their demand on the system through new construction. Connection Fee revenue is used to offset costs that would otherwise need to be recovered from User Charges. Over the past ten years, the County has invested significantly in infrastructure to meet the needs of its growing service area. However, market events over the past two years have demonstrated the risks inherent in depending on a revenue stream that is associated with growth. As shown on Schedule 2, Connection Fee revenues surged in the middle of the last decade, peaking in Fiscal Year 2005-06 at \$42.2 million, and then sharply decreasing to current levels near \$20 million. Current economic conditions are unlikely to improve significantly over the next year and new construction will continue to remain at low levels. This Financial Plan therefore assumes that growth in building starts will decrease by another 5% for one year, remain flat for the following two years, and then increase at 2% per year. Since the Connection Fee revenue is actually a combination of revenue from new connections and revenue from renovations, the actual revenue projection for Fiscal Year 2009-10 is projected to be \$19 million.

Miscellaneous Charges

Miscellaneous charges account for approximately \$1.5 million of annual revenue to the County and include charges for ancillary services provided by the County. Such charges include general government fees, business licenses and permits, sanitation fees, and fines. The County does not anticipate that the revenue generated from these charges will fluctuate during the forecast period with the exception of revenue generated by sanitation fees which is correlated with the projection of building starts.

Rate Recommendations

As discussed previously, inflationary pressures and the need to fund the County's \$974 million CIP result in significant increases in the County's annual costs. These increases in costs, coupled with the assumed decline in billable flows discussed previously, dictate that rates and charges must be increased in order to ensure that revenue is sufficient to cover system costs. The Financial Plan provides a recommended schedule of rate increases that focuses on

generating sufficient revenue to meet immediate needs over the next five years. The rate recommendations are for increases in the Standard Service Fee, User Fee Volume Rate, and Connection Fee. In order to secure adequate funding for the wastewater CIP Program, the County staff is seeking Board approval for increases for the next four fiscal years, Fiscal Year 2010-11 through Fiscal Year 2013-14.

Beginning in FY 2010-11, new rate increases are proposed. Figure 9 below shows the schedule of rate increases for the Standard Service Fee, User Fee Volume Rate, and Connection Fee for the next 4 years in the forecast.

Figure 9: Schedule of Rate Increases

Recommended Rate Increases Effective July 1 st of each year				
	2010-11	2011-12	2012-13	2013-14
Standard Service Fee	6.50%	6.50%	6.50%	6.50%
User Fee Volume Rate	10.00%	10.00%	10.00%	10.00%
Connection Fee	6.50%	6.50%	6.50%	6.50%

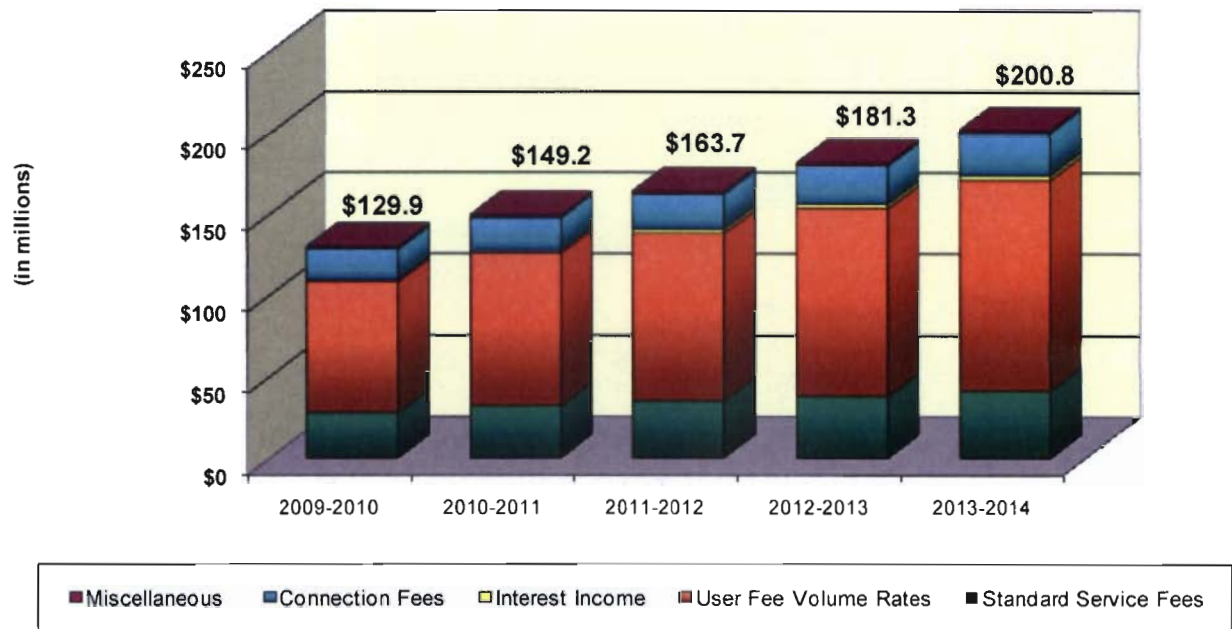
The impacts of the recommended increases over this period of time on a residential customer under varying levels of wastewater flow are shown on Figure 10. For comparison purposes, a typical residential customer in Pima County is billed for approximately 8 ccf of wastewater flow.

Figure 10: Rate Recommendation – Customer Impacts



Figure 11, below, shows the breakdown of projected revenue between the various sources using the recommended rate adjustments that will be required over the planning period.

Figure 11: Summary of Projected Revenue



It should be noted that the revenue projections shown in Figure 11 are based on rates and charges that are higher than those that are in effect today. As a result, if the rates and charges on which these revenue projections are based are not implemented, actual revenue will be different from projected. To the extent that the rates and charges that are put into effect are lower than those recommended in this Financial Plan, revenue would be less than projected expenses, and it would be difficult for the County to obtain financing for the mandated CIP projects.

Conclusions and Summary of Recommendations

Pima County is faced with the unprecedented challenge of being required to invest approximately \$1 billion dollars in its wastewater system over the next ten years. The County is facing this challenge during a time of tremendous economic uncertainty. The Financial Plan incorporates the County's costs, both capital and O&M, and its revenue sources, and presents a plan that should provide the revenue to cover the expenses and provide adequate reserves to address unforeseen circumstances as they arise, thereby placing the County on sound financial footing such that it can continue to provide high quality, reliable service to its customers.

The Financial Plan anticipates that, although the cost of providing service will increase over time as a result of inflationary pressures, the principal driver of rates is the result of more stringent environmental regulations requiring the County to implement approximately \$695 million dollars in ROMP projects, in addition to ongoing capital projects of \$165 million in conveyance projects and \$114 million in treatment projects shown in Schedules 4, 5, and 6, respectively. The ROMP projects, in conjunction with the capital projects necessary to sustain the existing system and to provide capacity to serve a growing customer base, comprise the County's \$974 million dollar CIP. To fund these mandated projects in the County's CIP, the County will need to issue \$797 million of sewer system revenue obligations in the next 5 years. In subsequent years, the County will need to issue approximately \$162 million. This significant increase in the County's debt for the wastewater system will require the implementation of higher rates to support the debt service payments and the related debt service coverage requirements. Without obtaining such financing over this period, the County will be unable to complete the mandated projects and will be in non-compliance with its existing permits to operate its treatment facilities.

In order to address revenue shortfalls and rising costs of operating the wastewater system, the County must adjust the fees it charges its customers. As such, the Financial Plan includes recommendations for rate adjustments over the next four years of the forecast period. Any actions the County can take to reduce costs will ease the severity of future rate adjustments, and the Regional Wastewater Reclamation Department has consequently made significant reductions, where possible, to its capital program, and has met target reductions in its operating budget. Each component of the O&M budget and CIP is evaluated regularly in an effort to identify any additional cost saving opportunities. The Department has also engaged in preliminary discussions for funding opportunities that may result from the federal stimulus package focused on infrastructure reinvestment. Although there are a number of external events that may provide relief to the County, these events do not materially impact the recommended rate adjustments required to meet the County's upcoming cash needs.

The Financial Plan incorporates the following recommendations:

- Recommendation to seek Board approval for the following rate increases:
 1. 6.5% increases in the Standard Service Fee assessed to all customers to become effective July 1 of 2011, 2012, 2013 and 2014.
 2. 10.0% increases in the User Fee Volume Rate effective July 1 of 2011, 2012, 2013 and 2014.
 3. 6.5% increase in Connection Fees to become effective in July 1 of 2010, 2011, 2012 and 2013.

Failure to implement the recommended rate increases will place the County in a precarious position with respect to meeting regulatory deadlines imposed by the Arizona Department of Environmental Quality as part of the County's permits to operate the wastewater system. If these regulatory deadlines are not met, the County could be subject to fines or possibly a moratorium on sewer connections. Such action is needed to put the County on sound financial footing to enable the County to be able to borrow funds required to meet the increasing O&M costs and a \$974 million CIP.

Regional Wastewater Reclamation Advisory Committee

To be completed upon conclusion of RWRAC meetings.

Schedules

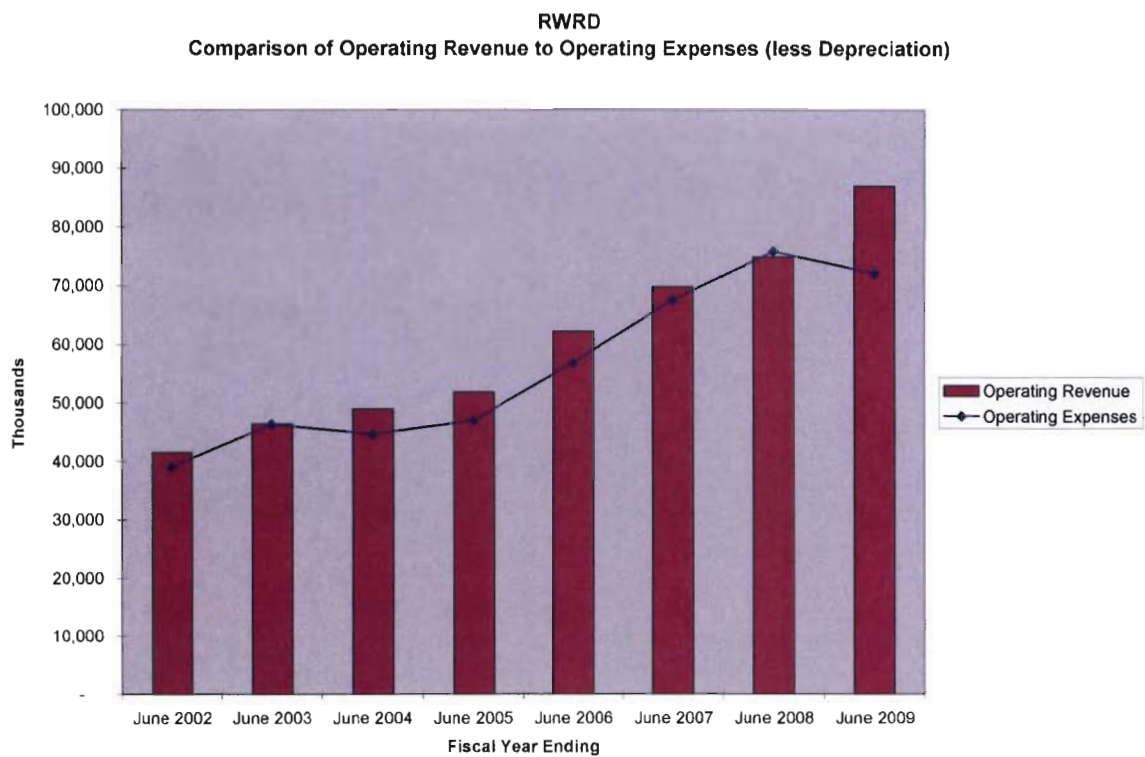
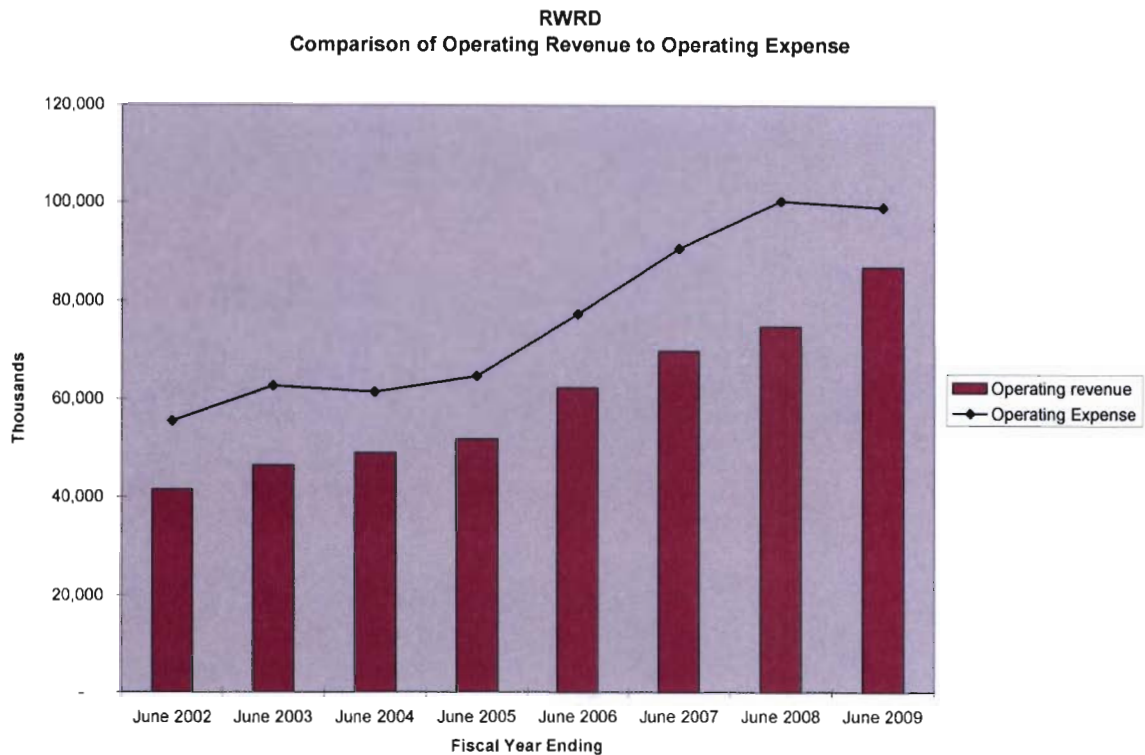
Schedule 1: County Financial Plan.....	page 26
Schedule 2: Historic Revenues and Expenditures	page 27
Schedule 3: Capital and Non-Operating Expenses.....	page 29
Schedule 4: ROMP Projects	page 30
Schedule 5: Treatment Projects.....	page 31
Schedule 6: Conveyance Projects	page 32
Schedule 7: Continuing Disclosures FY 2004-05 Through FY 2008-09.....	page 33
Schedule 8: Revenue from Proposed Service Fee	page 34

**FISCAL YEAR 2009-10
FINANCIAL PLAN**

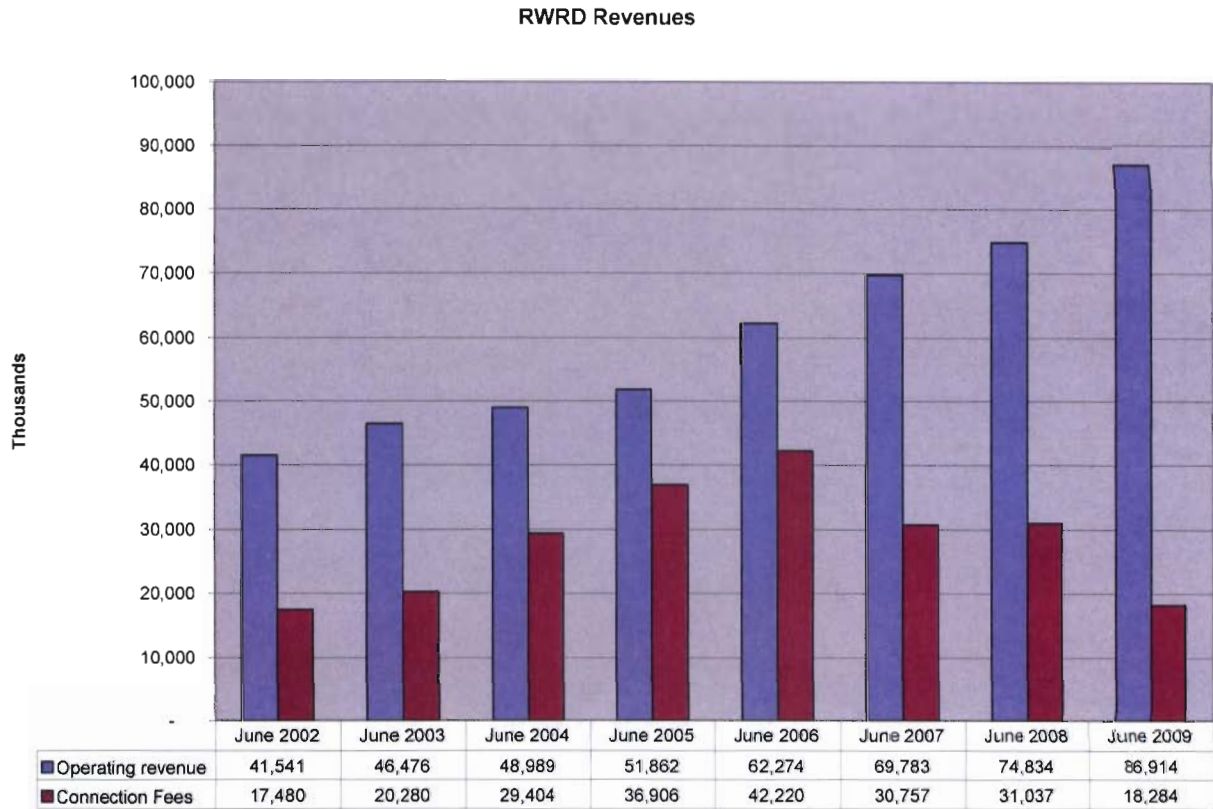
Schedule 1: County Financial Plan (FY 2009-10 – FY 2013-14)

	Fiscal Year Ended June 30				
	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
System Revenues:					
Sewer Utility Service	\$ 108,045,632	\$ 125,673,394	\$ 137,806,733	\$ 153,358,557	\$ 170,763,385
Sewer Connection Revenue	19,000,000	20,235,000	21,550,275	23,382,048	25,369,522
Engineering Review & Inspection Fees	91,822	91,822	91,822	91,822	91,822
Other Income	2,752,517	3,213,492	4,285,656	4,436,781	4,601,959
Total Revenues	129,889,971	149,213,708	163,734,486	181,269,208	200,826,688
Operations and Maintenance Costs:					
Employees Compensation	35,992,372	36,620,059	37,297,962	38,593,022	39,957,912
Other Operation and Maintenance Costs	40,037,416	41,928,263	43,444,841	45,023,534	47,789,532
Capital Expenses	4,219,228	4,356,353	4,497,934	4,644,117	4,795,051
Operations and Maintenance Costs:	80,249,016	82,904,675	85,240,738	88,260,673	92,542,495
Net Revenues	49,640,955	66,309,033	78,493,748	93,008,535	108,284,193
Plus Cash Balances Remaining After Reserves	3,363,067	24,813,700	32,949,778	44,426,143	53,968,900
Net Revenues Including Remaining Cash Balances	53,004,022	91,122,733	111,443,527	137,434,678	162,253,094
Debt Service Payments:					
Principal	14,186,650	16,951,949	16,774,555	16,201,296	16,918,880
Interest	9,701,350	9,473,470	8,807,605	8,144,384	7,466,127
Total Existing Debt Service Payments	23,888,000	26,425,419	25,582,160	24,345,680	24,385,007
Proposed Debt (Principal & Interest)	-	13,043,250	23,791,500	36,031,500	66,493,235
Total Debt Service Payments	23,888,000	39,468,669	49,373,660	60,377,180	90,878,242
Debt Service Coverage for Existing Debt	2.08	2.51	3.07	3.82	4.44
Debt Service Coverage for Revenue Obligations	2.22	2.31	2.26	2.28	1.79

Schedule 2: Historic Revenues and Expenditures



Schedule 2: Historic Revenues and Expenditures (Continued)



FISCAL YEAR 2009-10
FINANCIAL PLAN

Schedule 3: Capital and Non-Operating Expenses (FY 2009-010 – FY 2013-14)

	Fiscal Year Ending June 30				
	2010	2011	2012	2013	2014
Capital and Non-Operating Costs					
Capital Outlays					
Departmental Capital Outlays (1)	\$ 4,219,228	\$ 4,356,353	\$ 4,497,934	\$ 4,644,117	\$ 4,795,051
Direct CIP Funding (Cash-SDF Projects)	-	-	-	-	-
<i>Subtotal Capital Outlays</i>	<i>\$ 4,219,228</i>	<i>\$ 4,356,353</i>	<i>\$ 4,497,934</i>	<i>\$ 4,644,117</i>	<i>\$ 4,795,051</i>
Debt Service					
Existing Debt Service	\$ 23,888,000	\$ 26,425,419	\$ 25,582,160	\$ 24,345,680	\$ 24,385,007
Proposed Debt Service					
Short Term Financing (COPs)	-	-	-	-	-
Obligations	-	13,043,250	23,791,500	36,031,500	66,493,235
WIFA Loans	-	-	-	-	-
<i>Subtotal Debt Service</i>	<i>\$ 23,888,000</i>	<i>\$ 39,468,669</i>	<i>\$ 49,373,660</i>	<i>\$ 60,377,180</i>	<i>\$ 90,878,242</i>
Total Non-Operating Expenses	\$ 28,107,228	\$ 43,825,022	\$ 53,871,594	\$ 65,021,298	\$ 95,673,292

(1) Capital outlays greater than \$5,000.

**FISCAL YEAR 2009-10
FINANCIAL PLAN**

Schedule 4: ROMP Projects

<u>Project Description</u>	<u>FY 2010 - 2012</u>	<u>FY 2013 - 2015</u>	<u>FY 2016 - 2019</u>
R07A Ina Rd WPCF HPO Replacement	\$ 101,912,239	\$ 17,169,484	\$ -
R07B Ina Rd WPCF 12.5 MGD Expansion	63,246,314	6,912,297	-
R07C Ina Rd. WPCF BNRAS System Modification	4,075,862	4,763,243	-
R07D Ina Rd WPCF Biosolids Facilities Improvements	42,292,739	23,124,818	-
R07E Ina Rd. WPCF Power Generation & Distribution	24,125,092	-	-
R07F Ina Rd WPCF Class A Biosolids Improvements	158,000	-	21,560,686
Plant Interconnect	32,175,888	-	-
SCADA	8,020,276	5,196,650	-
R07G 32 MGD Reclamation Campus	79,823,200	193,272,999	-
R07H Roger Rd WWTP Demolition	249,921	166,295	37,855,971
R07I PCRWRD Central Laboratory Complex	17,623,330	-	-
R07J PCRWRD Central Laboratory Complex Site Civil	11,172,918	-	-
Subtotal	\$ 384,875,779	\$ 250,605,786	\$ 59,416,657
Total (1)			\$ 694,898,222

(1) Capital Project Costs as of 12/8/09.

**FISCAL YEAR 2009-10
FINANCIAL PLAN**

Schedule 5: Treatment Projects

<u>Project Description</u>	<u>FY 2010 - 2012</u>	<u>FY 2013 - 2015</u>	<u>FY 2016 - 2019</u>
WW Avra Valley WRF Security	\$ 1,202,350	\$ -	\$ -
Avra Valley BNROD Expansion to 4 MGD	298,200	-	-
Corona de Tucson WWTF-Sludge Storage Facility	7,899	-	-
Corona de Tucson WWTF - Odor Control for Headworks	262,500	-	-
Corona de Tucson WWTF-UV Disinfection & Filtration	2,205,000	2,315,250	-
Green Valley BNROD Exp 2.0 to 4.0 MGD	210,000	607,753	41,260,763
Green Valley WRF - Electrical Rehab	478,072	-	-
Green Valley WWTF - Sludge Digestion Facility Cover	525,000	-	-
Ina Rd WRF Odor Control for Centrifuge	245,000	-	-
WW Ina Rd WRF Gravity Thickener #4	254,858	-	-
Ina Rd WPCF Corrosion Prevention Program	215,250	115,763	-
Ina Rd WPCF Concrete Floor Replacements	230,725	237,313	-
Ina Rd WPCF Digester Gas Equipment Replacement	369,748	-	-
Ina Rd WPCF Enclosed Transfer Station Dewatering	736,000	-	-
Ina Rd WPCF-Gravity Belt Thickeners for Biosolids	1,487,932	-	-
Ina Rd WPCF New Heat Exchanger	115,500	-	-
Ina Rd WPCF Lighting Improvements	215,004	-	-
Ina Rd., WPCF-Road Replacements/Additions	800,625	-	-
Ina Rd WRF Rough Screens	458,225	-	-
Ina Rd WPCF SCADA Process Optimization	1,230,425	405,169	-
Ina Rd WPCF-Upgrade of Blower Heat Exchanger	-	-	2,816,434
Ina Road WRF Washer Compactor Replacement	555,000	-	-
Marana WWTP Expansion	18,099,334	7,168,999	-
Marana BNROD Exp 1.5 to 3.0 MGD	-	-	28,164,343
Marana WRF Sludge Loading	8,232	-	-
Roger Rd WRF Odor Control for Digesters	629,417	-	-
Roger Rd WRF Process Water	200,056	-	-
Roger Road WWTP Rehabilitation Electrical Study	142,135	-	-
Ina Scum Pumping System	10,000	-	-
Subtotal	\$ 31,192,487	\$ 10,850,247	\$ 72,241,541
Total (1)			\$ 114,284,274

(1) Capital Project Costs as of 12/8/09.

Schedule 6: Conveyance Projects

<u>Project Description</u>	<u>FY 2010 - 2012</u>	<u>FY 2013 - 2015</u>	<u>FY 2016 - 2019</u>
Tanque Verde Interceptor (1997 Auth Phase)	\$ 594,605	\$ -	\$ -
Arivaca Junction WWTF Relief Sewer	190,970	4,171,176	-
Capstan Lift Station	1,035,000	-	-
Region Wide Conveyance Odor Control System	340,000	-	-
RW Conveyance Vapor Treatment Unit Odor Control	448,555	-	-
Region Wide Conveyance Odor Control	767,000	-	-
Continental Ranch Regional Pump Station	221,100	-	-
System-Wide Conveyance Rehabilitation Program	8,610,000	14,582,655	-
Grant Rd at Craycroft Rd. Intersection Improvements	143,850	-	-
Green Valley WWTF-Screens, Washer & Compactors	560,000	-	-
Large Line Rehabilitation & Construction JOC	2,880,533	-	-
La Canada Rd: Ind Rd to Calle Concordia	536,000	-	-
SS6.12 Mt. Lemmon Sewer System	1,036,238	-	-
Mountain Ave: Roger Rd. to Ft. Lowell	562,645	-	-
Mission View Wash	6,410,679	-	-
System-wide Sewer Conveyance Augmentation Program	15,225,000	36,494,128	-
Prince Rd. & I-10 ADOT Sewer Modifications	3,400,335	4,878,637	1,549,039
Prudence Lift Station	750,000	-	-
Richey Yard Field Operations Division Facility	710,572	-	-
Speedway Camino Seco to Houghton Rd.	145,950	-	-
Santa Cruz Interceptor, Phase III	20,581,460	-	-
Sabino Creek Pump Station	1,053,216	-	-
Sunrise Lift Station	45	-	-
Sewer Utility Modification Program	7,345,892	17,186,810	-
Tanque Verde Interceptor (2004 Auth Phase)	2,783,089	10,092,718	-
Subtotal	\$ 76,332,734	\$ 87,406,124	\$ 1,549,039
Total (1)			\$ 165,287,897

(1) Capital Project Costs as of 12/8/09.

**FISCAL YEAR 2009-10
FINANCIAL PLAN**

Schedule 7: Continuing Disclosures FY 2004-05 Through FY 2008-09

	Fiscal Year Ended June 30				
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
System Revenues:					
Sewer Utility Service	\$ 50,393,306	\$ 61,735,147	\$ 69,294,198	\$ 74,636,355	\$ 86,738,469
Sewer Connection Revenue	36,906,421	42,219,962	30,756,891	31,036,931	18,283,654
Engineering Review & Inspection Fees	70,754	29,005	80,912	65,769	91,822
Other Income	<u>2,154,886</u>	<u>1,843,295</u>	<u>3,826,947</u>	<u>3,525,367</u>	<u>873,247</u>
Total Revenues	89,525,367	105,827,409	103,958,948	109,264,422	105,987,192
Operations and Maintenance Costs:					
Employees Compensation	24,639,951	27,541,776	29,627,566	34,526,659	33,947,157
Consultants and Outside Services	2,652,106	5,113,446	6,788,680	9,515,947	6,943,746
Treatment Supplies and Chemicals	6,230,226	7,616,054	10,221,597	9,789,655	9,845,204
Repairs & Maintenance	2,747,503	4,291,962	5,610,027	3,877,604	5,478,004
General and Administrative	10,202,490	11,735,333	14,943,334	18,123,891	15,892,212
Capital Expenses	<u>322,314</u>	<u>1,072,669</u>	<u>2,405,380</u>	<u>2,687,020</u>	<u>1,079,718</u>
Operations and Maintenance Costs:	46,794,590	57,371,240	69,596,584	78,520,776	73,186,041
Net Revenues	42,730,777	48,456,169	34,362,364	30,743,646	32,801,151
Debt Service Payments					
Principal	4,705,000	9,500,734	13,737,957	13,071,589	5,974,466
Interest	<u>4,471,844</u>	<u>5,709,880</u>	<u>6,409,007</u>	<u>7,314,555</u>	<u>5,990,443</u>
Total Debt Service Payments	9,176,844	15,210,614	20,146,964	20,386,144	11,964,909
Debt Service Coverage for Existing Debt	4.66	3.19	1.71	1.51	2.74

FISCAL YEAR 2009-10
FINANCIAL PLAN

Schedule 8: Revenue from Proposed Standard Service Fee

	2010	2011	2012	2013	2014
Annualized Standard Service Fee (\$/Bill)	\$ 9.07	\$ 10.46	\$ 11.14	\$ 11.86	\$ 12.63
Total Number of Annual Bills	3,085,158	3,085,158	3,146,861	3,209,799	3,273,994
Revenue from Standard Service Fee	\$ 27,982,384	\$ 32,270,754	\$ 35,056,035	\$ 38,068,210	\$ 41,352,578

Attachments

Draft Amendments to Pima County Code addressing Sanitary Sewer User and Connection Fee increases will be attached here.

ORDINANCE 2010-__

**AN ORDINANCE OF THE BOARD OF SUPERVISORS OF
PIMA COUNTY, ARIZONA; RELATING TO
WASTEWATER; AMENDING PIMA COUNTY CODE,
TITLE 13, CHAPTER 24, SANITARY SEWER USER FEES
AND TITLE 13, CHAPTER 20, SANITARY SEWER
CONSTRUCTION, CONNECTIONS AND FEES**

BE IT ORDAINED BY THE PIMA COUNTY BOARD OF SUPERVISORS:

SECTION 1. *Amendment.* The Pima County Code, Title 13, Chapter 24, is hereby amended as follows:

13.24.030

Fee calculation.

A. A monthly fee shall be levied and collected from all users for the service of sanitary sewage collection, treatment and disposal provided through the wastewater system. User fees are calculated according to the following rate formulas for all customers:

$$\text{Residential Monthly User Fee} = (F \times R) + A$$

$$\text{High Strength Class Monthly User Fee} =$$

$$F \times (R \times HS) + A$$

Where F = Monthly wastewater flow contribution to the public sanitary sewer equal to:

One hundred percent of the metered monthly water consumption; or

The user class average flow for contributors whose water consumption is not metered; or

One hundred percent of the wastewater flow measured by:

Direct meter reading, or

The difference in direct wastewater flow meter readings, or

A combination of direct wastewater flow meter readings and metered monthly water consumption, or

Other acceptable methods.

Where wastewater flow contribution is based on metered monthly water consumption or user class average flow, this amount shall not exceed the average amount of the months of December, January, and February, computed in the same manner.

HS = High Strength Factor determined and based on the wastewater strength of a given class relative to residential wastewater strength as defined in this chapter.

A = 8.329.82* Standard service fee.

R = User fee volume rate.

1. From the effective date of the Ordinance through June 30, ~~2009~~2010, the user fee volume rate (R) per one hundred cubic feet (ccf) of monthly residential wastewater flow contributions = ~~\$1.89~~\$2.406. The user fee volume rate will rise to ~~\$2.13~~\$2.647 on July 1, ~~2009~~2010, and will rise to ~~\$2.40~~\$2.912 on ~~January~~July 1, 2010, to ~~\$3.203~~\$3.523 on July 1, 2012, and to ~~\$3.523~~\$3.523 on July 1, 2013.

* Staff note: This number will rise to ~~\$9.82~~\$10.46 effective ~~January~~July 1, 2010 followed by an increase to ~~\$11.14~~\$11.14 on July 1, 2011, to ~~\$11.86~~\$11.86 on July 1, 2012, and to ~~\$12.63~~\$12.63 on July 1, 2013.

B. The monthly volume of discharge for all users served by a private water company is presumed to be one hundred percent of the average water use as reflected by the billings for the months of December, January and February.

C. If neither direct metered wastewater flow data nor metered water use data is available for a user, the discharge shall be estimated using the average unit discharge associated with that user's class.

D. Consistent with governing regulations of the United States Environmental Protection Agency, the Director has determined that certain classes of users discharge wastewater that contains higher concentrations of chemical oxygen demand or suspended solids or both when compared to the composite strength of wastewater discharge from all residential users, and that accordingly impose additional costs on the operation and maintenance of the system.

1. A user found to discharge wastewater containing a higher concentration of chemical oxygen demand or suspended solids or both when compared to the composite strength of wastewater discharges from residential users and who is currently not assigned to a user class will be assessed a rate based on the concentrations of chemical oxygen demand and suspended solids as these rates are defined in 13.24.180.

E. In addition to any user fees established by this chapter, a user who is detected discharging any toxic wastes into the sanitary sewerage system in violation of Chapter 13.36 of the Pima County Code shall be subject to the increased cost of the treatment of the prohibited substance. This provision shall not preclude the director from imposing the additional penalties provided in Chapter 13.36 of the Pima County Code.

SECTION 2. Amendment. The Pima County Code, Title 13, Chapter 24, is hereby amended as follows:

13.24.040

Rate schedule.

A. The user fee rate for customers identified with each user class shall be as shown in the rate schedule codified at the end of this chapter. Each user fee rate was determined in accordance with Section 13.24.030.

B. A service fee, codified in the service fee schedule at the end of this chapter, shall be levied upon each sewer account to recover fixed system costs and costs not proportional to flow. The standard service fee shall be ~~\$8.32~~\$9.82 per month until ~~December 31, 2009~~June 30, 2010. On ~~January~~July 1, 2010, the service fee will rise to ~~\$9.82~~\$10.46 followed by an increase to ~~\$11.14~~\$11.86 on July 1, 2011, to ~~\$11.86~~\$12.63 on July 1, 2012, and to ~~\$12.63~~\$13.40 on July 1, 2013.

C. The above-referenced rates and charges shall be reflected in sewer user bills beginning with the first billing cycle after the effective date of the ordinance.

SECTION 3. Amendment. The Pima County Code, Title 13, Chapter 24, is hereby amended as follows:

13.24.180

Volume Rate and Service Fee schedules-Tables.

A. Volume Rate

The volumetric portions of monthly bills are computed and charged to wastewater customers by user class as set forth in the table below, and are based on the average wastewater strengths shown:

Class	Class Name	High-Strength Factor	<u>March 20, 2009 Rate (dollars per ccf)</u>	<u>July 1, 2009 Rate (dollars per ccf)</u>	<u>Jan. 1, 2010 Rate (dollars per ccf)</u>	<u>July 1, 2010 Rate (dollars per ccf)</u>	<u>July 1, 2011 Rate (dollars per ccf)</u>	<u>July 1, 2012 Rate (dollars per ccf)</u>	<u>July 1, 2013 Rate (dollars per ccf)</u>
1	Residential/All other customer classes	1.00	<u>\$1.893</u>	<u>\$2.134</u>	<u>\$2.406</u>	<u>\$2.647</u>	<u>\$2.912</u>	<u>\$3.203</u>	<u>\$3.523</u>
1A	Residential/All other customer	1.00	<u>0.473</u>	<u>0.533</u>	<u>0.602</u>	<u>0.662</u>	<u>0.728</u>	<u>0.801</u>	<u>0.881</u>

	classes								
1B	Residential/All other customer classes	1.00	0.945	1.066	1.202	<u>1.324</u>	<u>1.456</u>	<u>1.602</u>	<u>1.762</u>
1C	Residential/All other customer classes	1.00	1.419	1.600	1.804	<u>1.985</u>	<u>2.184</u>	<u>2.402</u>	<u>2.642</u>
3C	Auto body and fender repair	2.10	3.975	4.482	5.053	<u>5.559</u>	<u>6.115</u>	<u>6.726</u>	<u>7.398</u>
3K	Mortuary	1.09	2.063	2.326	2.623	<u>2.885</u>	<u>3.174</u>	<u>3.491</u>	<u>3.840</u>
3N	Laundromat	1.09	2.063	2.326	2.623	<u>2.885</u>	<u>3.174</u>	<u>3.491</u>	<u>3.840</u>
4E	Pet clinic	1.20	2.270	2.564	2.888	<u>3.176</u>	<u>3.494</u>	<u>3.844</u>	<u>4.228</u>
4G	Restaurant, with seating and china	2.03	3.842	4.332	4.884	<u>5.373</u>	<u>5.911</u>	<u>6.502</u>	<u>7.152</u>
4H	Restaurant, fast food	2.32	4.391	4.954	5.582	<u>6.141</u>	<u>6.756</u>	<u>7.431</u>	<u>8.173</u>
5A	Car wash, self-service	1.19	2.252	2.539	2.863	<u>3.150</u>	<u>3.465</u>	<u>3.812</u>	<u>4.192</u>
5C	Bottling company	1.68	3.180	3.586	4.043	<u>4.447</u>	<u>4.892</u>	<u>5.381</u>	<u>5.919</u>
5F	Printing; copying	1.01	1.912	2.156	2.430	<u>2.673</u>	<u>2.941</u>	<u>3.235</u>	<u>3.558</u>
5G	Electrical component manufacturer	1.14	2.158	2.433	2.743	<u>3.018</u>	<u>3.320</u>	<u>3.651</u>	<u>4.016</u>
5I	Industrial laundry	1.06	2.006	2.262	2.551	<u>2.806</u>	<u>3.087</u>	<u>3.395</u>	<u>3.734</u>
5J	Bakery	3.63	6.872	7.748	8.736	<u>9.609</u>	<u>10.571</u>	<u>11.627</u>	<u>12.788</u>
5K	Miscellaneous food processor	2.33	4.410	4.973	5.607	<u>6.168</u>	<u>6.785</u>	<u>7.463</u>	<u>8.209</u>
5L	Chemical, Pharmaceutical	1.25	2.366	2.668	3.008	<u>3.309</u>	<u>3.640</u>	<u>4.004</u>	<u>4.404</u>
5M	Meat packing	2.38	4.505	5.079	5.727	<u>6.300</u>	<u>6.931</u>	<u>7.623</u>	<u>8.385</u>
5S	Car wash, full service	1.23	2.328	2.625	2.959	<u>3.256</u>	<u>3.582</u>	<u>3.940</u>	<u>4.333</u>

B. Service Fee

The service fee added to each monthly bill is charged to wastewater customers by user class as set forth in the table below:

Class	Class Name	<u>Service Fee effective March 20, 2009</u>	<u>Service Fee effective January 1, 2010</u>	<u>Service Fee effective July 1, 2010</u>	<u>Service Fee effective July 1, 2011</u>	<u>Service Fee effective July 1, 2012</u>	<u>Service Fee effective July 1, 2013</u>
1	Residential/All other customer classes	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
1A	Residential/All other customer classes	2.08	2.45	<u>2.62</u>	<u>2.79</u>	<u>2.97</u>	<u>3.16</u>
1B	Residential/All other customer classes	4.16	4.91	<u>5.23</u>	<u>5.57</u>	<u>5.93</u>	<u>6.32</u>
1C	Residential/All other customer classes	6.24	7.36	<u>7.85</u>	<u>8.36</u>	<u>8.90</u>	<u>9.47</u>
3C	Auto body and fender repair	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
3K	Mortuary	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
3N	Laundromat	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
4E	Pet clinic	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
4G	Restaurant, with seating and china	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
4H	Restaurant, fast food	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5A	Car wash, self-service	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5C	Bottling company	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5F	Printing; copying	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5G	Electrical component manufacturer	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5I	Industrial laundry	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5J	Bakery	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5K	Miscellaneous food processor	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5L	Chemical, Pharmaceutical	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5M	Meat packing	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>
5S	Car wash, full service	8.32	9.82	<u>10.46</u>	<u>11.14</u>	<u>11.86</u>	<u>12.63</u>

SECTION 4. *Amendment.* The Pima County Code, Title 13, Chapter 20, is hereby amended as follows:

13.20.045

Connection fees.

A. Connection Fee Rates. Except as otherwise provided in this section, persons installing fixtures tributary to the public sanitary sewer system shall pay the following connection fee:

1. Residential:

- a. From the effective date of the Ordinance ~~to December 31, 2007~~through June 30, 2010, the residential connection fee will be ~~\$201.00~~233.30 per fixture unit equivalent.
- b. From ~~January~~July 1, 2008 ~~2010 to through~~June 30, 2008~~2011~~, the residential connection fee will be ~~\$213.06~~248.46 per fixture unit equivalent.
- c. From July 1, 2011 through June 30, 2012, the residential connection fee will be \$264.61 per fixture unit equivalent.
- d. From July 1, 2012 through June 30, 2013, the residential connection fee will be \$281.81 per fixture unit equivalent.
- e. Beginning July 1, 2008~~2013~~, the residential connection fee will be ~~\$233.30~~300.13 per fixture unit equivalent.

2. Commercial and Industrial:

- a. From the effective date of the Ordinance ~~to December 31, 2007~~through June 30, 2010, the commercial and industrial connection fee will be ~~\$402.09~~466.71 per fixture unit equivalent.
- b. From ~~January~~July 1, 2008~~2010 to through~~June 30, 2008~~2011~~, the commercial and industrial connection fee will be ~~\$426.22~~497.05 per fixture unit equivalent.
- c. From July 1, 2011 through June 30, 2012, the commercial and industrial connection fee will be \$529.36 per fixture unit equivalent.
- d. From July 1, 2012 through June 30, 2013, the commercial and industrial connection fee will be \$563.77 per fixture unit equivalent.
- e. Beginning July 1, 2008~~2013~~, the commercial and industrial connection fee will be ~~\$466.71~~600.42 per fixture unit equivalent.

SECTION 5. *Severability.* If any provision of this Ordinance, or the application of any provision thereof is determined by a court of law to be invalid, the invalidity of that provision shall not affect other provisions or the application of this ordinance which can be given effect without the provision determined to be invalid, and to this end the provisions of this Ordinance are severable.

SECTION 6. *County Officers and Employees.* The various County officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this Ordinance.

SECTION 7. *Effective Date.* This Ordinance shall become effective 31 days after it is adopted by the Board of Supervisors.

PASSED AND ADOPTED BY THE BOARD OF SUPERVISORS OF PIMA COUNTY, ARIZONA.

PIMA COUNTY BOARD OF SUPERVISORS

Chairman

ATTEST:

Clerk of the Board

Dated: _____

APPROVED AS TO CONTENT:

Director, Regional Wastewater Reclamation Dept.

APPROVED AS TO FORM:

Deputy County Attorney

ORDINANCE 2010-__

**AN ORDINANCE OF THE BOARD OF SUPERVISORS OF
PIMA COUNTY, ARIZONA; RELATING TO
WASTEWATER; AMENDING PIMA COUNTY CODE,
TITLE 13, CHAPTER 24, SANITARY SEWER USER FEES
AND TITLE 13, CHAPTER 20, SANITARY SEWER
CONSTRUCTION, CONNECTIONS AND FEES**

BE IT ORDAINED BY THE PIMA COUNTY BOARD OF SUPERVISORS:

SECTION 1. *Amendment.* The Pima County Code, Title 13, Chapter 24, is hereby amended as follows:

13.24.030

Fee calculation.

A. A monthly fee shall be levied and collected from all users for the service of sanitary sewage collection, treatment and disposal provided through the wastewater system. User fees are calculated according to the following rate formulas for all customers:

$$\text{Residential Monthly User Fee} = (F \times R) + A$$

$$\text{High Strength Class Monthly User Fee} =$$

$$F \times (R \times HS) + A$$

Where F = Monthly wastewater flow contribution to the public sanitary sewer equal to:

One hundred percent of the metered monthly water consumption; or

The user class average flow for contributors whose water consumption is not metered; or

One hundred percent of the wastewater flow measured by:

Direct meter reading, or

The difference in direct wastewater flow meter readings, or

A combination of direct wastewater flow meter readings and metered monthly water consumption, or

Other acceptable methods.

Where wastewater flow contribution is based on metered monthly water consumption or user class average flow, this amount shall not exceed the average amount of the months of December, January, and February, computed in the same manner.

HS = High Strength Factor determined and based on the wastewater strength of a given class relative to residential wastewater strength as defined in this chapter.

$A = 9.82 \times \text{Standard service fee.}$

R = User fee volume rate.

1. From the effective date of the Ordinance through June 30, 2010, the user fee volume rate (R) per one hundred cubic feet (ccf) of monthly residential wastewater flow contributions = \$2.406, The user fee volume rate will rise to \$2.647 on July 1, 2010, to \$2.912 on July 1, 2011, to \$3.203 on July 1, 2012, and to \$3.523 on July 1, 2013.

* Staff note: This number will rise to \$10.46 effective July 1, 2010 followed by an increase to \$11.14 on July 1, 2011, to \$11.86 on July 1, 2012, and to \$12.63 on July 1, 2013.

B. The monthly volume of discharge for all users served by a private water company is presumed to be one hundred percent of the average water use as reflected by the billings for the months of December, January and February.

C. If neither direct metered wastewater flow data nor metered water use data is available for a user, the discharge shall be estimated using the average unit discharge associated with that user's class.

D. Consistent with governing regulations of the United States Environmental Protection Agency, the Director has determined that certain classes of users discharge wastewater that contains higher concentrations of chemical oxygen demand or suspended solids or both when compared to the composite strength of wastewater discharge from all residential users, and that accordingly impose additional costs on the operation and maintenance of the system.

1. A user found to discharge wastewater containing a higher concentration of chemical oxygen demand or suspended solids or both when compared to the composite strength of wastewater discharges from residential users and who is currently not assigned to a user class will be assessed a rate based on the concentrations of chemical oxygen demand and suspended solids as these rates are defined in 13.24.180.

E. In addition to any user fees established by this chapter, a user who is detected discharging any toxic wastes into the sanitary sewerage system in violation of Chapter 13.36 of the Pima County Code shall be subject to the increased cost of the treatment of the prohibited substance. This provision shall not preclude the director from imposing the additional penalties provided in Chapter 13.36 of the Pima County Code.

SECTION 2. Amendment. The Pima County Code, Title 13, Chapter 24, is hereby amended as follows:

13.24.040

Rate schedule.

A. The user fee rate for customers identified with each user class shall be as shown in the rate schedule codified at the end of this chapter. Each user fee rate was determined in accordance with Section 13.24.030.

B. A service fee, codified in the service fee schedule at the end of this chapter, shall be levied upon each sewer account to recover fixed system costs and costs not proportional to flow. The standard service fee shall be \$9.82 per month until June 30, 2010. On July 1, 2010, the service fee will rise to \$10.46 followed by an increase to \$11.14 on July 1, 2011, to \$11.86 on July 1, 2012, and to \$12.63 on July 1, 2013.

C. The above-referenced rates and charges shall be reflected in sewer user bills beginning with the first billing cycle after the effective date of the ordinance.

SECTION 3. Amendment. The Pima County Code, Title 13, Chapter 24, is hereby amended as follows:

13.24.180

Volume Rate and Service Fee schedules-Tables.

A. Volume Rate

The volumetric portions of monthly bills are computed and charged to wastewater customers by user class as set forth in the table below, and are based on the average wastewater strengths shown:

Class	Class Name	High-Strength Factor	Jan. 1, 2010 Rate (dollars per ccf)	July 1, 2010 Rate (dollars per ccf)	July 1, 2011 (dollars per ccf)	July 1, 2012 (dollars per ccf)	July 1, 2013 (dollars per ccf)
1	Residential/All other customer classes	1.00	\$2.406	\$2.647	\$2.912	\$3.203	\$3.523
1A	Residential/All other customer classes	1.00	0.602	0.662	0.728	0.801	0.881

1B	Residential/All other customer classes	1.00	1.202	1.324	1.456	1.602	1.762
1C	Residential/All other customer classes	1.00	1.804	1.985	2.184	2.402	2.642
3C	Auto body and fender repair	2.10	5.053	5.559	6.115	6.726	7.398
3K	Mortuary	1.09	2.623	2.885	3.174	3.491	3.840
3N	Laundromat	1.09	2.623	2.885	3.174	3.491	3.840
4E	Pet clinic	1.20	2.888	3.176	3.494	3.844	4.228
4G	Restaurant, with seating and china	2.03	4.884	5.373	5.911	6.502	7.152
4H	Restaurant, fast food	2.32	5.582	6.141	6.756	7.431	8.173
5A	Car wash, self-service	1.19	2.863	3.150	3.465	3.812	4.192
5C	Bottling company	1.68	4.043	4.447	4.892	5.381	5.919
5F	Printing; copying	1.01	2.430	2.673	2.941	3.235	3.558
5G	Electrical component manufacturer	1.14	2.743	3.018	3.320	3.651	4.016
5I	Industrial laundry	1.06	2.551	2.806	3.087	3.395	3.734
5J	Bakery	3.63	8.736	9.609	10.571	11.627	12.788
5K	Miscellaneous food processor	2.33	5.607	6.168	6.785	7.463	8.209
5L	Chemical, Pharmaceutical	1.25	3.008	3.309	3.640	4.004	4.404
5M	Meat packing	2.38	5.727	6.300	6.931	7.623	8.385
5S	Car wash, full service	1.23	2.959	3.256	3.582	3.940	4.333

B. Service Fee

The service fee added to each monthly bill is charged to wastewater customers by user class as set forth in the table below:

Class	Class Name	Service Fee effective January 1, 2010	Service Fee effective July 1, 2010	Service Fee effective July 1, 2011	Service Fee effective July 1, 2012	Service Fee effective July 1, 2013
1	Residential/All other customer classes	\$9.82	10.46	11.14	11.86	12.63
1A	Residential/All other customer classes	2.45	2.62	2.79	2.97	3.16
1B	Residential/All other customer classes	4.91	5.23	5.57	5.93	6.32
1C	Residential/All other customer classes	7.36	7.85	8.36	8.90	9.47
3C	Auto body and fender repair	9.82	10.46	11.14	11.86	12.63
3K	Mortuary	9.82	10.46	11.14	11.86	12.63
3N	Laundromat	9.82	10.46	11.14	11.86	12.63
4E	Pet clinic	9.82	10.46	11.14	11.86	12.63
4G	Restaurant, with seating and china	9.82	10.46	11.14	11.86	12.63
4H	Restaurant, fast food	9.82	10.46	11.14	11.86	12.63
5A	Car wash, self-service	9.82	10.46	11.14	11.86	12.63
5C	Bottling company	9.82	10.46	11.14	11.86	12.63
5F	Printing; copying	9.82	10.46	11.14	11.86	12.63
5G	Electrical component manufacturer	9.82	10.46	11.14	11.86	12.63
5I	Industrial laundry	9.82	10.46	11.14	11.86	12.63
5J	Bakery	9.82	10.46	11.14	11.86	12.63
5K	Miscellaneous food processor	9.82	10.46	11.14	11.86	12.63
5L	Chemical, Pharmaceutical	9.82	10.46	11.14	11.86	12.63
5M	Meat packing	9.82	10.46	11.14	11.86	12.63
5S	Car wash, full service	9.82	10.46	11.14	11.86	12.63

SECTION 4. *Amendment.* The Pima County Code, Title 13, Chapter 20, is hereby amended as follows:

13.20.045

Connection fees.

A. Connection Fee Rates. Except as otherwise provided in this section, persons installing fixtures tributary to the public sanitary sewer system shall pay the following connection fee:

1. Residential:

- a. From the effective date of the Ordinance through June 30, 2010, the residential connection fee will be \$233.30 per fixture unit equivalent.
- b. From July 1, 2010 through June 30, 2011, the residential connection fee will be \$248.46 per fixture unit equivalent.
- c. From July 1, 2011 through June 30, 2012, the residential connection fee will be \$264.61 per fixture unit equivalent.
- d. From July 1, 2012 through June 30, 2013, the residential connection fee will be \$281.81 per fixture unit equivalent.
- e. Beginning July 1, 2013, the residential connection fee will be \$2300.13 per fixture unit equivalent.

2. Commercial and Industrial:

- a. From the effective date of the Ordinance through June 30, 2010, the commercial and industrial connection fee will be \$466.71 per fixture unit equivalent.
- b. From July 1, 2010 through June 30, 2011, the commercial and industrial connection fee will be \$497.05 per fixture unit equivalent.
- c. From July 1, 2011 through June 30, 2012, the commercial and industrial connection fee will be \$529.36 per fixture unit equivalent.
- d. From July 1, 2012 through June 30, 2013, the commercial and industrial connection fee will be \$563.77 per fixture unit equivalent.
- e. Beginning July 1, 2013, the commercial and industrial connection fee will be \$600.42 per fixture unit equivalent.

SECTION 5. *Severability.* If any provision of this Ordinance, or the application of any provision thereof is determined by a court of law to be invalid, the invalidity of that provision shall not affect other provisions or the application of this ordinance which can be given effect without the provision determined to be invalid, and to this end the provisions of this Ordinance are severable.

SECTION 6. *County Officers and Employees.* The various County officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this Ordinance.

SECTION 7. *Effective Date.* This Ordinance shall become effective 31 days after it is adopted by the Board of Supervisors.

PASSED AND ADOPTED BY THE BOARD OF SUPERVISORS OF PIMA COUNTY, ARIZONA.

PIMA COUNTY BOARD OF SUPERVISORS

Chairman

ATTEST:

Clerk of the Board

Dated: _____

APPROVED AS TO CONTENT:

Director, Regional Wastewater Reclamation Dept.

APPROVED AS TO FORM:

Deputy County Attorney

Appendix

Rating Agencies Information

Attached are the following items:

- *Moody's April 14, 2009 Ratings Letter*
- *Standard & Poor's March 19, 2009 Ratings Letter*
- *Fitch Ratings (Excerpts regarding Public Financing)*
- *Standard & Poor's Key Water And Seer Utility Credit Ratio Ranges*



Moody's Investors Service

Global Credit Research

New Issue

14 APR 2009

Save as PDF

New Issue: **Pima (County of) AZ Sewer Enterprise****MOODY'S LOWERS PIMA COUNTY, ARIZONA, SEWER ENTERPRISE REVENUE BONDS TO A2 FROM A1****RATING ACTION AFFECTS \$183.9 MILLION IN RATED DEBT, INCLUDING CURRENT OFFERING**

Pima (County of) AZ Sewer Enterprise
Water/Sewer
AZ

Moody's Rating

ISSUE	RATING
Sewer Revenue Bonds Series 2009	A2
Sale Amount	\$18,940,000
Expected Sale Date	04/21/09
Rating Description	Sewer Revenue Bonds

Moody's Outlook Stable**Opinion**

NEW YORK, Apr 14, 2009 -- Moody's Investors Service has lowered Pima County, Arizona's, Sewer Revenue Bonds to A2 from A1 and has assigned an A2 rating to the current offering of \$18.9 million of Series 2009 bonds; the outlook has been revised to stable from negative. The rating action affects \$183.9 million in rated debt. The downgrade primarily reflects the rapid deterioration in debt service coverage to thin, but adequate levels, the expectation that the system will continue to be under pressure given its significant, regulatory driven capital improvement plan, and challenges ahead in obtaining voter authorization to issue \$875 million in revenue bonds over the next five years. It is also noted that prior to fiscal 2009, rate increases had not kept pace with expenditure growth, resulting in a rising operating ratio and a complete dependence upon connection fee revenues to cover debt service. Beginning in FY09, the county board approved a series of large rate increases, which were necessary to address rapidly declining connection fees and to provide bonding capacity as the utility's debt level will be constrained by its additional bonds test with the current offering. Positively, the rate increases will fundamentally shift the system's revenues towards user charges over time, providing more stability for debt service coverage going forward. The current offering is secured by the wastewater utility's net revenues, including connection fees, and is on parity with \$229.5 million in sewer revenue bonds outstanding. Bond proceeds will help finance the design phase of the system's capital improvement plan.

LARGE, REGIONAL SERVICE AREA IN EASTERN PIMA COUNTY

The Pima County (GO rated Aa3 with a stable outlook) wastewater enterprise provides service to the eastern portions of the county, including Tucson (GO Aa3), South Tucson, and the towns of Oro Valley and Marana. As a regional service provider, the number of customer accounts is sizeable at 260,007 and has grown at an average annual rate of 3.3% since 2004, slowing to 1.7% in 2008. It is noted that the Town of Marana has filed a lawsuit against the county seeking to rescind a 1979 agreement with the county to operate and supply services to the town. The Superior Court has ruled that the town has the right to own and operate the system within the town, but has made no determination regarding the ownership of the facility, which remains under control of the county. While the outcome of the litigation is unknown at this time, the treatment volume of the town represents less than 1% of the system's entire capacity.

Within the Tucson metro area, the utility maintains 3,300 miles of sewer lines, 29 pump stations, and three

sewer treatment plants. The combined treatment capacity of all three Tucson metro area plants is 82.0 MGD (the distribution of capacity amongst the 3 plants is as follows: Roger 50%, Ina 46%, Randolph 4%) to meet the combined average daily dry weather flow of 68 MGD. Outside of the metro area, the utility maintains eight smaller treatment facilities with a current combined capacity of 10.5 MGD to meet an average flow of just over 3 MGD. The bulk of the treated effluent is discharged into the Santa Cruz River with a smaller portion used as reclaimed water for irrigation purposes by the City of Tucson.

DEPENDENCE ON CONNECTION FEE REVENUES TO PAY FOR DEBT SERVICE RESULTS IN RAPID DETERIORATION IN COVERAGE

The Pima County wastewater enterprise relied upon connection fee revenues for coverage of its debt service to a greater extent than typical, resulting in an immediate weakening in debt service coverage as building activity slowed. From 2002 to 2006, coverage of annual debt service by pledged revenues steadily improved to quite healthy levels, peaking at 3.2 times in fiscal 2006 compared to narrow levels in 2002 of 1.4 times. However, this improvement was largely due to significant growth in connection fee revenues, which generated nearly 40% of gross receipts in 2006. This presented a significant vulnerability as new construction activity slowed with the weakening housing market, beginning in 2007. For example, in fiscal 2008, coverage of annual debt service narrowed to 1.5 times. Of note, coverage of peak debt service by 2008 net revenues totaled only 1.2 times, which equals the additional bonds test requirement. More troubling is the fact that coverage of debt service without connection charges was non-existent at -0.01 times in 2008, compared to 0.4 times in 2006. Correspondingly, the utility's operating ratio weakened to 100.5%, indicating that rate increases have not kept pace with rising operating costs with the system relying completely upon connection fee revenues to cover debt service in FY08. Officials report that the rapid growth in operating costs in recent history was related to replacement of aged infrastructure after a sewer main collapsed in 2002. Positively, net working capital for 2008 increased to \$43.8 million (40.1% of gross receipts), \$10 million of which is a designated, board approved emergency reserve fund.

A preliminary forecast for fiscal 2009 provided by county officials indicates slightly weaker annual debt service coverage of 1.4 times. The forecast assumes a total of \$21.0 million in connection fee receipts, representing a 32.7% decrease from 2008 actual collections and 2009 budgeted figures. Actual coverage for 2009 could be less than the 1.4 times estimated if connection fee revenues do not materialize as projected or if expenditures grow at all; it is noted that the county estimated a 0.0% growth in expenditures for FY09 compared to a four-year average increase of 15.4% annually, which the county believes it will achieve through a hiring freeze and other budget saving actions. Moody's notes that current connection fee revenues received through March 30, 2009, as reported by the county, totaled \$13.6 million which would provide a thin 1.06 times coverage, though this figure should improve somewhat as additional connection fees are collected during the remainder of the fiscal year. The forecast also reflects a 9.5% user charge increase effective July 1, 2008, followed by a 12.75% rate increase effective March 20, 2009. Due to the implementation of two very sizeable rate increases, FY09 debt service coverage, net of connection fees, is expected to improve to a thin 0.5 times.

RAPID DECLINE IN CONNECTION FEE REVENUES AND SIGNIFICANT CAPITAL PLAN REQUIRES BOARD TO APPROVE LARGE RATE INCREASES

Management has historically approved regular user fee increases although these rate adjustments had been relatively modest until FY06. Prior user fee adjustments averaged 3.6% annually and were as follows: 4% in 2005, 5% in 2003, and 3.8% in 2002. Since 2006, rate increases have been larger (8% in 2006, 12% in 2007, and 15% in 2008), but still not sufficient to match the rate of growth in expenditures, as evidenced by the growing operating ratio and declining debt service coverage, net of connection fee revenues. Moody's notes that the board approved user rate adjustments for FY07 were below the levels recommended in the rate study and in the utility's 2006 financial plan. Both had called for multi-year, double-digit rate increases. Rate increases in FY08, FY09, and FY10 match the recommended levels outlined in the financial plan.

Positively, approved rate increases for FY09 and FY10 will result in a shift in gross revenues to a more stable revenue stream of base user charges from growth-related connection fees. In addition to the two rate adjustments in FY09, the board also approved semi-annual rate increases for FY10 equal to 12.75% each which will go into effect on July 1, 2009 and January 1, 2010. Assuming no additional borrowing, this would provide more than sum sufficient (1.0 times) coverage of debt service without connection fees. Nevertheless, the utility is facing a significant capital plan with immediate financing needs, placing considerable pressure on the system to support these obligations.

SIGNIFICANT CAPITAL NEEDS TO ADDRESS AGING INFRASTRUCTURE AND POPULATION GROWTH

In November 2007, the county completed its sewer regional optimizer master plan which outlines \$1.03

billion in capital needs over the next 10 years, 90% (\$938.3 billion) of which will need to occur from FY09 to FY14, a significant increase from estimates provided in early 2007. The bulk of the CIP projects are regulatory driven including demolishing the 50-year old Roger Road plant, building a new, smaller plant, expanding the Ina Plant, constructing a large inter-connector pipeline, and improving the de-nitrification process at the various treatment facilities. The accelerated schedule of the CIP is being driven by regulatory requirements that need to be met including completion of the Ina Road project by January 30, 2014 and Roger Road plant by January 30, 2015; failure to meet these deadlines could result in fines or potentially a moratorium on new sewer connections.

Faced with a significant capital plan, Pima County also faces several key challenges to financing the projects. Unlike the majority of utility enterprises in the U.S. which can issue revenue bonds without voter authorization, under Arizona statutes, Pima County must receive voter approval to issue any revenue bonds. With the current offering, the county will retain \$10 million in authorized but un-issued revenue bond capacity which the county expects to fully utilize by early 2010 through the state Water Infrastructure Financing Authority (WIFA). The county expects to finance the design phase of the projects with the proceeds from the current offering, \$35 million in certificates of participation to be issued in 2009, and the WIFA loan. Under the county's financial plan, capital costs over the next five years will total \$938.3 million and will require returning to voters either November 2009 or 2010 seeking \$565 million in sewer bond authorization, followed by another request in 2012 for \$310 million with the remainder expected to be funded from system development funds. Historically, voters have approved these requests although, given the current economic environment, this may be a challenge. As noted above, it was also critical that the county increase its rates as it is currently constrained by its additional bonds test which is equal to 1.20 times peak debt service by the preceding fiscal year net revenues.

Given the utility's capital needs, its debt ratio will likely rise to above average levels. As of fiscal 2008, the utility's debt ratio measured 31.1%, which is expected to rise to approximately 33.7% in 2009. Principal payout on all sewer debt over ten years is higher than average at 64.2%, which provides the utility with some flexibility in layering future obligations.

LEGAL PROVISIONS ARE SLIGHTLY WEAKER THAN TYPICAL

The current offering is secured by net revenues from the wastewater utility, including connection fees. The bonds are on parity with \$229.5 million in outstanding bonds including loan agreements with WIFA. Legal provisions are slightly weaker than typical with a rate covenant and additional bonds test of 1.20 times annual and peak debt service, respectively. Unlike many other large utility systems, Pima County wastewater enterprise does not provide for a two-tiered rate covenant which requires a minimum amount of debt service coverage by base user charges. The debt service reserve requirement is equal to the average annual debt service on all outstanding bonds.

Outlook

The long-term rating outlook on the sewer revenue bonds is stable. The stable outlook recognizes the system's large capital program, which now approaches \$938.3 million (\$875 million of which is expected to be paid from bond proceeds) for the next five years, and the associated challenges with such a plan. The series of large rate increases for FY09 and FY10 will fundamentally shift gross revenues towards user charges, providing a more stable source for coverage of debt service going forward. Future credit reviews will focus on the county's five-year capital plan and the progress towards achieving key milestones including the voter authorization needed for debt issuance and adjustments to the financial plan to maintain adequate coverage of debt service.

KEY STATISTICS

2008 Customers: 260,007

Principal payout (10 years): 64.2%

Fiscal 2008 Financial statistics:

Annual debt service coverage: 1.5 times

Annual debt service coverage, net of connection fees: -0.01 times

Coverage of peak debt service (in 2015) by pledged revenues: 1.2 times

Operating ratio: 100.5%

Net working capital as % of gross revenues: 40.1% (\$43.8 million)

Connection fees as % of gross revenues: 28.4%

Debt ratio: 31.1%

The last rating action for Pima County, Arizona, sewer revenue bonds was March 27, 2008 when the an A1 rating with a negative outlook was assigned to the bonds.

The principal methodology used in rating the current offering was Analytical Framework for Water and Sewer System Ratings, which can be found at www.moodys.com in the Credit Policy & Methodologies directory, in the Rating Methodologies subdirectory. Other methodologies and factors that may have been considered in the process of rating this issuer can also be found in the Credit Policy & Methodologies directory.

Analysts

Jolene K. Yee
Analyst
Public Finance Group
Moody's Investors Service

Dan Steed
Backup Analyst
Public Finance Group
Moody's Investors Service

Matthew Jones
Senior Credit Officer
Public Finance Group
Moody's Investors Service

Contacts

Journalists: (212) 553-0376
Research Clients: (212) 553-1653

CREDIT RATINGS ARE MOODY'S INVESTORS SERVICE, INC.'S (MIS) CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MIS DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS DO NOT CONSTITUTE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS ARE NOT RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. CREDIT RATINGS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MIS ISSUES ITS CREDIT RATINGS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

© Copyright 2009, Moody's Investors Service, Inc. and/or its licensors including Moody's Assurance Company, Inc. (together, "MOODY'S"). All rights reserved.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY COPYRIGHT LAW AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the

March 19, 2009

Summary:

Pima County, Arizona; Water/Sewer

Primary Credit Analyst:

Paul Dyson, San Francisco (1) 415-371-5079; paul_dyson@standardandpoors.com

Secondary Credit Analyst:

David G Hitchcock, New York (1) 212-438-2022, david_hitchcock@standardandpoors.com

Table Of Contents

Rationale

Outlook

Summary:

Pima County, Arizona; Water/Sewer

Credit Profile

US\$18.94 mil swr rev bonds ser 2009 due 07/01/2024

Long Term Rating	A+/Stable	New
Pima Cnty swr		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed

Rationale

Standard & Poor's Ratings Services assigned its 'A+' rating to Pima County, Ariz.'s \$18.94 million sewer revenue bonds, series 2009. In addition, Standard & Poor's affirmed its 'A+' underlying rating (SPUR) on the county's outstanding sewer improvement and refunding revenue bonds.

Net revenues of the sewer system secure the bonds.

The rating reflects the utility's:

- Service area that encompasses the large and diverse Pima County ('AA-' general obligation rating) regional economy, including the City of Tucson;
- Approved rate increases that are forecasted to improve debt service coverage (DSC) ratios and allow for diminished reliance on connection fees, especially important given the decline in new construction in the county (although in 2010 the county projects 1.4x coverage without such fees); and
- Consistently strong system liquidity since fiscal 2005 at no less than 152 days of operations, although not backed by a formal reserve policy;

Factors that offset these strengths include the utility's:

- Heavy reliance on connection fees in fiscal 2007 and especially fiscal 2008, when coverage without such fees fell to a negative 0.01x from a positive 0.18x in fiscal 2007, also considered weak; and
- Substantial capital plan totaling \$814 million, \$500 million-600 million of which is related to non-discretionary projects that will likely require additional borrowing and higher rates to meet debt service obligations.

Bond proceeds will fund improvements to existing wastewater treatment facilities. Legal provisions include a 1.20x rate covenant and additional bonds test, and a reserve fund funded at average annual debt service.

The Pima County Regional Wastewater Reclamation Department provides wastewater collection and treatment services to the Tucson metropolitan area, as well as eight outlying service areas. Combined treatment capacity is 92.45 million gallons per day (mgd) versus average daily flow of 67 mgd and peak flow of 91 mgd. The county's population has grown gradually, rising 3% on average annually during 2000-2008. Employment in the county has also consistently increased, keeping the unemployment rate relatively low at 4.9% in 2008, which was below the 5.8% national rate. Income indicators are average, with a median household effective buying income of 93% of the national level, and are suppressed, in part, by the county's significant student and military presence. New

construction activity, particularly in the residential sector, had been very strong until two years ago. Building permits are now at or near record lows, affecting connection fees, as discussed below. The wastewater system has also grown steadily in recent years, with its customer base increasing at a 3.4% average annual rate since fiscal 2000 to 260,007 in fiscal 2009; growth slowed, however, to just 1.7% in fiscal 2008.

The average monthly sewer bill is affordable at \$20.26, based on 8,000 gallons, despite rate increases of 12% in fiscal 2007 and 15% in fiscal 2008. Management intends to raise rates further -- by 22.25% in fiscal 2009 and 25.5% in fiscal 2010 -- to provide greater stability in revenue streams, reduce reliance on connection fees, meet rising debt service requirements, and partially fund capital needs. Connection fees have increased rapidly as the county's growth accelerated in fiscals 2003-2006, rising to \$42 million in 2006 from just \$20 million in 2003. However, as the county's growth has slowed in the past two years, connection fees have declined as well, falling to \$31 million in 2007 and 2008, and projected at just \$21 million annually over the 2009-2012 period.

The utility has had good overall DSC and liquidity in recent years, although it has grown increasingly reliant on diminishing connection fee revenues as a weakening housing market has slowed construction. During fiscals 2003-2007, DSC ranged from a high of 4.7x in 2005 to a low of 1.5x in fiscal 2008, and is projected to decline further to 1.3x for 2009. Moreover, despite recent rate increases, fiscal 2008 DSC excluding connection fees was a very weak negative 0.01x, down from 0.18x in fiscal 2007. As management has already implemented or approved larger rate increases through 2010, it estimates reliance on connection fees will be significantly reduced, with forecasted coverage in 2009 without connection fees at 0.49x, rising to 1.4x in 2010 and 1.6x in 2011. Total coverage in fiscal 2010 is projected at a strong 2.2x, rising to 2.4x in 2011, assuming additional bonding in the form of a Water Infrastructure and Finance Authority loan of \$10 million in July 2009. Liquidity is strong, with \$56.9 million in unrestricted cash at the end of fiscal 2008, equal to 207 days' operations; unrestricted cash has exceeded 100 days since fiscal 2004. Forecasted unrestricted cash reserves for fiscal 2009 are \$32.6 million, or 152 days' cash, well above the county's 30-day operating cash policy. However, the county aims to maintain a combination of 30 days' cash plus \$10 million in unrestricted cash, which, for fiscal 2010, would equal \$16.7 million, or 78 days' cash.

The utility plans to spend approximately \$814 million during fiscals 2009-2013 for capital projects. About \$500 million-600 million of that amount is in response to permitting regulations that will require the district to upgrade its treatment facilities. District management has completed its planning for these projects and expects to request an estimated \$565 million in revenue bonding authorization from voters within two years.

Outlook

The stable outlook reflects the district's projected diminished reliance on connection fees given several recent and upcoming large rate increases, especially important when considering the recent decline in growth within the county. Given the forecasted debt service increases and the county's large capital needs, our rating reflects our expectation that management will closely monitor the pace of development and adjust rates as necessary to maintain adequate DSC and liquidity. Limiting upward rating movement are the system's large capital improvement plan and lingering dependence on future growth-related revenues to maintain good coverage ratios.

Ratings Detail (As Of March 19, 2009)

Pima Cnty swr rev rfdg bnds ser 1991 dtd 08/01/91 due 07/01/1992-2015

Unenhanced Rating

A+(SPUR)/Stable

Affirmed

Ratings Detail (As Of March 19, 2009) (cont.)

Pima Cnty swr (ASSURED GTY)

Unenhanced Rating

A+(SPUR)/Stable

Affirmed

Pima Cnty swr (FSA)

Unenhanced Rating

A+(SPUR)/Stable

Affirmed

Many issues are enhanced by bond insurance.

Complete ratings information is available to RatingsDirect subscribers at www.ratingsdirect.com. All ratings affected by this rating action can be found on Standard & Poor's public Web site at www.standardandpoors.com; under Ratings in the left navigation bar, select Find a Rating.

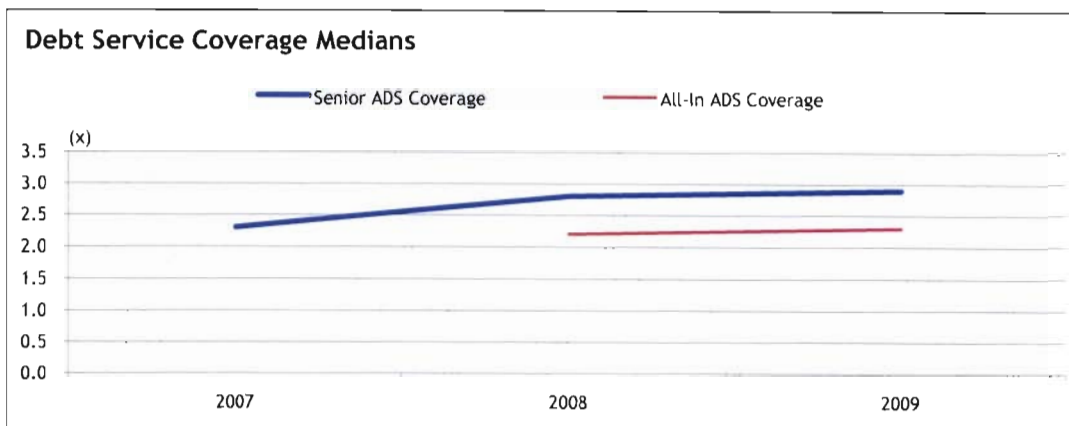
Copyright © 2009, Standard & Poors, a division of The McGraw-Hill Companies, Inc. (S&P). S&P and/or its third party licensors have exclusive proprietary rights in the data or information provided herein. This data/information may only be used internally for business purposes and shall not be used for any unlawful or unauthorized purposes. Dissemination, distribution or reproduction of this data/information in any form is strictly prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P, its affiliates or its third party licensors, S&P, its affiliates and its third party licensors do not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall S&P, its affiliates and its third party licensors be liable for any direct, indirect, special or consequential damages in connection with subscribers or others use of the data/information contained herein. Access to the data or information contained herein is subject to termination in the event any agreement with a third-party of information or software is terminated.

Analytic services provided by Standard & Poor's Ratings Services (Ratings Services) are the result of separate activities designed to preserve the independence and objectivity of ratings opinions. The credit ratings and observations contained herein are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Accordingly, any user of the information contained herein should not rely on any credit rating or other opinion contained herein in making any investment decision. Ratings are based on information received by Ratings Services. Other divisions of Standard & Poor's may have information that is not available to Ratings Services. Standard & Poor's has established policies and procedures to maintain the confidentiality of non-public information received during the ratings process.

Ratings Services receives compensation for its ratings. Such compensation is normally paid either by the issuers of such securities or third parties participating in marketing the securities. While Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscriptions to its publications. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

Any Passwords/user IDs issued by S&P to users are single user-dedicated and may ONLY be used by the individual to whom they have been assigned. No sharing of passwords/user IDs and no simultaneous access via the same password/user ID is permitted. To reprint, translate, or use the data or information other than as provided herein, contact Client Services, 55 Water Street, New York, NY 10041; (1)212.438.7280 or by e-mail to: research_request@standardandpoors.com.

Debt Service Coverage



Despite the continued upward movement in customer debt levels, median annual senior lien debt service (ADS) coverage for the sector has resisted deterioration. Indeed, senior lien ADS coverage sectorwide has even increased incrementally year over year. Currently, senior lien ADS coverage is 2.9x, while the three-year historical average is a similar 3.0x, well above the 1.20x or 1.25x typical ADS requirement under bond covenants. Also demonstrating the strong debt service performance of the sector, ADS coverage on all classes of debt obligations is 2.3x. In terms of debt as a percentage of operating revenues, the burden to systems is relatively modest considering the capital-intensive nature of the industry — only 15% on a senior lien basis and 21% on an all-in basis — and comparable with that of single-purpose local governments like school districts.

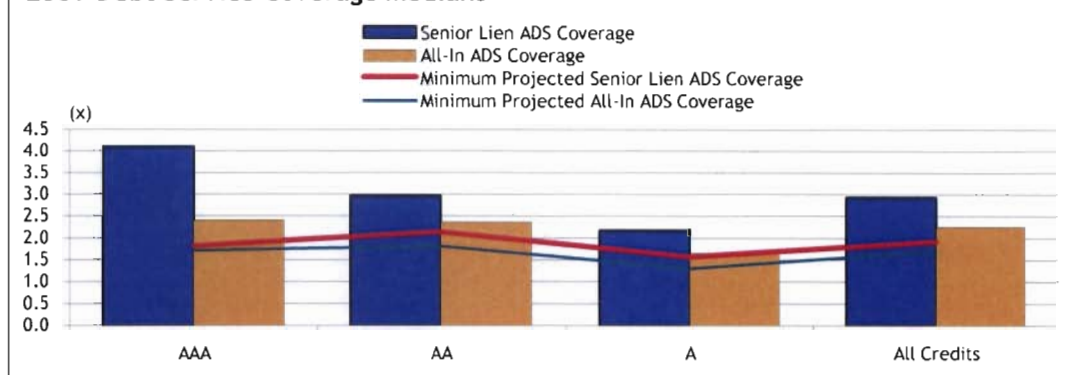
When considering revenues used in calculating ADS coverage, Fitch includes all pledged revenue sources but also calculates ADS coverage without one-time revenues such as connection fees, provided they are pledged to bondholders. Because residential development is a large contributor to these types of revenues, and also because of the ongoing housing downturn that has occurred throughout the U.S., Fitch began including information in 2008 on senior lien ADS coverage without these sources to provide the market with additional information on exposure to the sector. To enhance this information, Fitch has elected to include the same data with the current medians as it relates to total debt.

While most systems collect such fees, the elimination of connection charges from net revenues does not lead to a wholesale reduction in current senior lien ADS or total ADS coverage for the sector; the median falls to 2.3x from 2.9x on senior lien debt and to 1.8x from 2.3x for all debt. Instead, the near-term effect on coverage is expected to be more localized and based on the level of these funds to recurring revenues, which varies considerably from credit to credit. Having said this, perhaps the greatest pressure to rate affordability over at least the next few years likely will not be determined by costs relative to MHI, but instead by the willingness of ratemakers to implement planned adjustments in the face of weak economic conditions and the need to raise revenues from constituents for other purposes.

Currently, issuers are anticipating senior lien ADS coverage will fall from an existing 2.9x to a minimum of 1.9x as additional debt is incurred over the five-year forecast period. Similarly, all-in ADS is anticipated to weaken, albeit to a lesser degree, with coverage expected to drop from 2.3x to lows of 1.7x. While Fitch fully expects coverage levels will soften over the next few years from increased leveraging and weak collection of growth-related fees, it is important to note that each of Fitch's prior medians anticipated similar declines, but actual results have been much more positive.

Consequently, Fitch believes issuer forecasts are conservative on balance and that, while some deterioration in coverage should occur, the extent of such declines could be significantly less than anticipated.

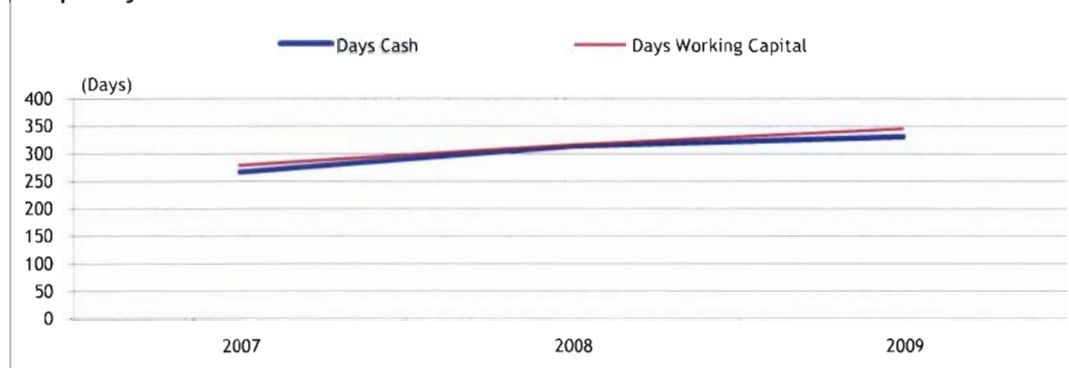
2009 Debt Service Coverage Medians



Cash Flows, Liquidity, and Rate Flexibility

Similar to the sector's strong ADS coverage levels, other current financial indicators also are extremely positive. Liquidity, in particular, is healthy and, like ADS coverage, has steadily increased year over year. For the latest medians, days cash on hand was 331, up from 266 in 2007, while the current level of working capital of 345 days rose from 279 over the same period.

Liquidity Medians



This rising flexibility is attributable to the sector's historically solid cash flows, which have produced the high ADS coverage discussed above and led to surplus operations. Demonstrating the current level of cash flow performance, utilities generated free cash (e.g. surplus revenues after payment of operating and debt service costs and operating transfers out) equal to 122% of depreciation with the latest round of medians. In other words, utilities on balance are generating more than sufficient revenues to maintain infrastructure at the current level.

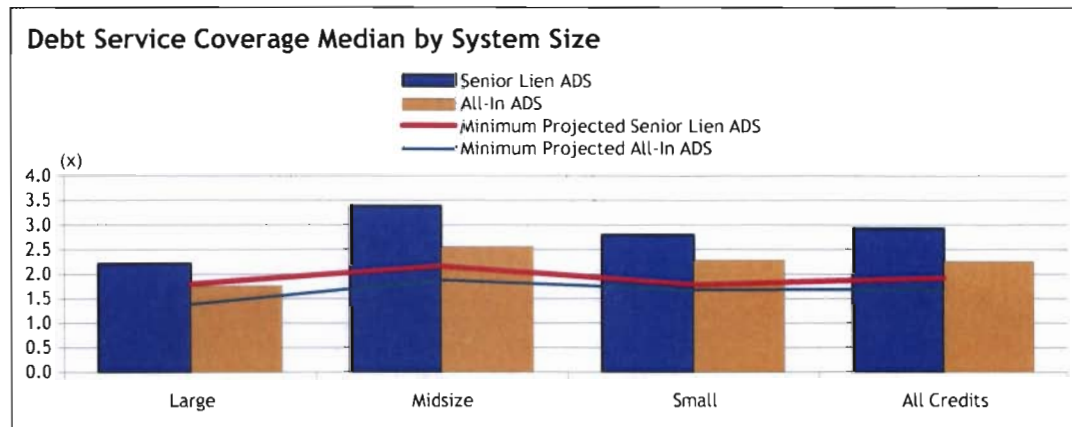
Obviously, this statistic does not measure all the capital and supply pressures utilities face that are forcing systems to increase leveraging. However, the current strength of cash flows at least provides a solid footing from which utilities can operate and continue to address these needs. On the downside, the same connection fee revenues, which have offset leverage needs and kept ADS coverage extremely strong, have also contributed to the health of system cash flows. As a result, to the extent these fees are reduced, cash flows will be affected, as well. This, in turn, could also trigger a decline in liquidity performance with subsequent medians.

Medians Discussion

Challenges the sector faces affect utilities differently depending on their size and, consequently, the medians point to some interesting observations according to the level of population served. Based on Fitch's size classification (see table, below), large systems currently have the highest customer debt levels at \$1,716, with small utilities posting the next-highest levels at \$1,574 and midsize systems at \$921. While it is not surprising that the debt burden for larger system customers is currently higher given the scope of replacing aging facilities, historical legacy costs, and heightened regulatory focus on these systems due to their prolific nature, it is noteworthy that the medians point to an equalization in debt among all systems at the five-year mark. As a result, it is anticipated that midtier systems will see, by far, the greatest escalation in leveraging over the next few years, with customer debt levels rising an astounding 121%; conversely, small and large systems anticipate more moderate adjustments of 33% and 18%, respectively.

System Size Classification

System Size	Population Served
Large	≥ or equal to 500,000
Midsize	100,000–499,999
Small	< 100,000



While coverage levels attributable to midtier systems are high and above all other systems, the increased use of debt over the next few years is expected to bring these margins more in line with other systems. Currently, midsize system total ADS coverage is 2.6x, compared with 2.3x for small systems and 1.8x for large utilities. However, minimum projected all-in ADS coverage for midsize systems is expected to fall the most of all utilities, declining to 1.9x, as opposed to lows of 1.7x and 1.4x for small and large systems, respectively.

Despite capital pressures expected to affect midsize utilities over the next few years, the medians indicate large systems will continue to face the greatest challenges overall. For one, liquidity levels, while good, are below national medians; days cash on hand is 249, while days of working capital is 251. In addition, overall cash flows are weaker with larger systems, equaling just 89% of depreciation expense with the 2009 medians. Another potential challenge is that large systems are projecting either the highest or near-highest levels of annual increases to water and sewer rates. However, in this regard, the cost for service for these systems is relatively low at 1.2% of MHI. But given the previously discussed concern related to political willingness to raise rates, large systems could be the ones most affected, particularly for systems serving areas significantly impacted by recent economic events.

Appendix C: Year-Over-Year Medians Comparison

	2007	2008	2009
Community Characteristics/Customer Growth and Concentration			
Population	119,037	234,103	162,338
Median Household Income (\$)	40,656	45,733	45,820
Total Water Customers	37,299	61,076	50,410
Annual Growth (%)	2.5	2.4	1.6
Total Sewer Customers	32,903	64,039	48,000
Annual Growth (%)	2.8	2.5	1.9
Top 10 Customers as % of Revenues	9	8	8
Capacity			
Ensured Water Supply Through (Year)	2027	2030	2029
Age of Plant (Years)	13	13	12
Water Treatment Capacity Remaining (%)	53	50	50
Sewer Treatment Capacity Remaining (%)	32	35	35
Capital Demands and Debt Policies			
Average Annual CIP Costs Per Customer (\$)	266	348	356
CIP Debt Financed (%)	62	63	66
Total Outstanding Debt to Net Plant Assets (%)	40	39	39
Debt to FADS (x) ^{a,b}	—	—	4.9
Total Outstanding Long-Term Debt Per Customer (\$) ^a	1,012	1,185	1,454
Total Outstanding Long-Term Debt Per Capita (\$) ^{a,b}	—	—	379
Ten-Year Principal Payout (%)	40	30	40
Twenty-Year Principal Payout (%)	87	70	82
Projected Debt Per Customer — Year Five (\$) ^a	1,599	1,808	2,036
Projected Debt Per Capita — Year Five (\$) ^{a,b}	—	—	607
Charges and Rate Affordability			
Individual Water/Sewer Utility Average Monthly Residential Bill (\$)	23	29	28
Individual Water/Sewer Utility Average Annual Bill as % of Median Household Income (MHI)	0.6	0.7	0.8
Combined Water/Sewer Utility Average Monthly Residential Bill (\$)	47	56	56
Combined Water/Sewer Utility Average Annual Bill as % of MHI	1.4	1.4	1.3
Average Annual Projected Water Rate Increases (%)	4.1	4.4	4.9
Average Annual Projected Sewer Rate Increases (%)	5.0	5.1	5.9
Coverage and Financial Performance/Cash and Balance Sheet Considerations			
Three-Year Historical Average Senior Lien ADS Coverage (x) ^a	—	2.7	3.0
Senior Lien ADS Coverage (x) ^a	2.3	2.8	2.9
Senior Lien ADS Coverage Excluding Connection Fees (x)	2.0	2.3	2.3
Minimum Projected Senior Lien ADS Coverage (x) ^a	1.8	1.9	1.9
Senior Lien MADS Coverage (x)	1.9	2.0	2.1
Senior Lien Debt Service as % of Gross Revenues	18	16	15
Three-Year Historical Average All-In ADS Coverage (x) ^{a,b}	—	—	2.1
All-In ADS Coverage (x) ^a	—	2.2	2.3
All-In ADS Coverage Excluding Connection Fees (x) ^b	—	—	1.8
Minimum Projected All-In ADS Coverage (x) ^{a,b}	—	—	1.7
All-In MADS Coverage (x) ^b	—	—	1.8
All-In Debt Service as % of Gross Revenues	—	20	21
Operating Margin (%)	34	36	33
Operating Cash Flow Ratio (x) ^b	—	—	1.1
Days of Operating Revenues in Accounts Receivable	45	45	47
Days Cash on Hand ^a	266	313	331
Days of Working Capital ^a	279	316	345
Quick Ratio ^b	—	—	2.9
Current Ratio ^b	—	—	3.3
Free Cash as % of Depreciation ^{a,b}	—	—	122

^aIndicates key ratio. ^bNew with the 2009 medians.

Appendix D: 2009 Water and Sewer Medians

	Rating Category			All Credits
	AAA	AA	A	
Community Characteristics/Customer Growth and Concentration				
Population	566,351	319,898	68,309	162,338
Median Household Income (\$)	57,567	46,805	42,887	45,820
Total Water Customers	196,292	76,240	27,697	50,410
Annual Growth (%)	4.9	1.8	1.5	1.6
Total Sewer Customers	151,151	87,031	17,009	48,000
Annual Growth (%)	5.2	1.7	3.2	1.9
Top 10 Customers as % of Revenues	5	8	9	8
Capacity				
Ensured Water Supply Through (Year)	2027	2035	2022	2029
Age of Plant (Years)	11	13	11	12
Water Treatment Capacity Remaining (%)	41	54	47	50
Sewer Treatment Capacity Remaining (%)	27	36	36	35
Capital Demands and Debt Policies				
Average Annual CIP Costs Per Customer (\$)	387	334	384	356
CIP Debt Financed (%)	63	63	78	66
Total Outstanding Debt to Net Plant Assets (%)	39	35	55	39
Debt to FADS (x) ^{a b}	6.4	4.4	7.0	4.9
Total Outstanding Long-Term Debt Per Customer (\$) ^a	1,744	1,289	1,875	1,454
Total Outstanding Long-Term Debt Per Capita (\$) ^{a b}	570	358	474	379
Ten-Year Principal Payout (%)	39	43	39	40
Twenty-Year Principal Payout (%)	86	83	81	82
Projected Debt Per Customer — Year Five (\$) ^a	3,211	1,940	2,329	2,036
Projected Debt Per Capita — Year Five (\$) ^{a b}	992	545	822	607
Charges and Rate Affordability				
Individual Water/Sewer Utility Average Monthly Residential Bill (\$)	N.A.	26	33	28
Individual Water/Sewer Utility Average Annual Bill as % of Median Household Income (MHI) ^a	N.A.	0.7	0.8	0.8
Combined Water/Sewer Utility Average Monthly Residential Bill (\$)	56	54	74	56
Combined Water/Sewer Utility Average Annual Bill as % of MHI ^a	1.1	1.3	1.6	1.3
Average Annual Projected Water Rate Increases (%)	7.8	4.9	4.7	4.9
Average Annual Projected Sewer Rate Increases (%)	8.9	6.0	4.5	5.9
Coverage and Financial Performance/Cash and Balance Sheet Considerations				
Three-Year Historical Average Senior Lien ADS Coverage (x) ^a	3.2	3.0	2.5	3.0
Senior Lien ADS Coverage (x) ^a	4.1	3.0	2.2	2.9
Senior Lien ADS Coverage Excluding Connection Fees (x)	3.4	2.5	1.8	2.3
Minimum Projected Senior Lien ADS Coverage (x) ^a	1.8	2.1	1.6	1.9
Senior Lien MADS Coverage (x)	1.8	2.1	1.6	2.1
Senior Lien Debt Service as % of Gross Revenues	17	15	21	15
Three-Year Historical Average All-In ADS Coverage (x) ^{a b}	2.4	2.3	1.8	2.1
All-In ADS Coverage (x) ^a	2.4	2.4	1.7	2.3
All-In ADS Coverage Excluding Connection Fees (x) ^{a b}	2.3	1.9	1.4	1.8
Minimum Projected All-In ADS Coverage (x) ^{a b}	1.7	1.8	1.3	1.7
All-In MADS Coverage (x) ^b	1.7	1.8	1.4	1.8
All-In Debt Service as % of Gross Revenues	22	18	27	21
Operating Margin (%)	44	34	33	33
Operating Cash Flow Ratio (x) ^b	2.5	1.0	1.1	1.1
Days of Operating Revenues in Accounts Receivable	61	44	56	47
Days Cash on Hand ^a	385	332	325	331
Days of Working Capital ^a	404	374	314	345
Quick Ratio ^b	1.9	2.9	3.1	2.9
Current Ratio ^b	2.1	3.3	3.7	3.3
Free Cash as % of Depreciation ^{a b}	151	109	129	122

^aIndicates key ratio. ^bNew with the 2009 medians. N.A. – Not available.

September 15, 2008

Criteria | Governments | U.S. Public Finance:

Key Water And Sewer Utility Credit Ratio Ranges

Primary Credit Analysts:

Theodore Chapman, Dallas (1) 214-871-1401; theodore_chapman@standardandpoors.com

James Wiemken, Chicago (1) 312-233-7005; james_wiemken@standardandpoors.com

Table Of Contents

Reading Behind The Numbers

Key Rating Factors

A Note of Caution

Key Ratios

Income Levels – Household/Per Capita Effective Buying Income As A
Percentage Of U.S. Level

Debt Service Coverage

Liquidity

Total Debt To Net Property, Plant And Equipment

Top 10 Customers As A Percentage Of Total Operating Revenues

Fixed-Charge Coverage

Key Water And Sewer Utility Credit Ratio Ranges

Municipally-owned utilities continue to demonstrate rating stability and solid-investment-grade financial metrics despite concern about current economic conditions and the impact on local governments (see the article, "U.S. Public Finance Report Card: Water Supply Pressures Could Test The Stability Of Providers," dated Feb. 4, 2008, on RatingsDirect).

The representative ranges of ratios for water and/or sewer utility revenue bond issuers below provides an indication, through the use of descriptors, of what constitutes a high to low ratio from an analytical credit perspective. The selected ratios represent key factors Standard & Poor's Ratings Services uses in the credit rating process.

Municipalities may also own and/or operate other enterprises such as electric utilities, solid waste or other systems. While many of the metric addressed below also are part of the analysis for these other enterprises, Standard & Poor's will address key ratios specifically for those enterprises at a later date.

The ratios complement Standard & Poor's periodic updates of historical median ratios for rated utilities. (These medians represent measures of economic, financial, and system indebtedness characteristics.) The statistics will drift up and down during economic cycles because Standard & Poor's analysis is forward looking. In recent years, the medians have tended to outperform analytical guidelines.

However, it is not the case that an issuer must attain certain financial metrics in order to guarantee a certain rating or rating level. Financial condition -- historical, current, and likely future -- is only one of the criteria points for a water and sewer utility revenue bond rating.

Reading Behind The Numbers

Means, particularly for lesser-weighted ratios, may give a false impression in certain cases that deviations from the means may imply the need for a rating change, when in fact we may believe there is analytical comfort in a broad band of numbers for a particular ratio.

Examples of this phenomenon are evident when comparing key ratio ranges to the means for similar ratios. While a credit with a liquidity of six months' cash on hand would be technically "below average," relative to the rated universe of issuers, regardless of system size, we would nevertheless likely view it as having strong cash reserves.

Similarly, an issuer with total debt service coverage of all obligations of 1.4x, meaning pledged revenues are 40% greater than the revenue requirements, would likely be characterized as "good," all other things being equal.

Key Rating Factors

The relative weight of each factor is discussed in detail in Standard & Poor's Criteria section on RatingsDirect (the most recent article was published June 25, 2007). When evaluating water and sewer systems, Standard & Poor's examines six main factors:

- Economic considerations;
- Financial data/capital improvement plan;
- Rate criteria;
- Operational characteristics;
- Management; and
- Legal provisions.

Variation in the relative strengths or weaknesses of any of these factors can influence our opinion of creditworthiness and, accordingly, our ratings. Additionally, there is no dependent relationship between a general obligation (GO) rating and the revenue rating of the same entity. Due to the significance of the service area and economic base in our analysis and the frequent overlap of senior staff at the government and utility levels, the ratings of GO bonds and revenue bonds tend to be close, but there is also significant room for divergence, as seen in the case of Jefferson County, Ala.

A Note of Caution

Ratios do not tell the whole story -- they are only a portion of what Standard & Poor's uses in its analysis. Economic, administrative, structural, and other qualitative factors may outweigh any of these ratios when a rating is assigned. Numbers alone cannot determine an entity's willingness to meet its financial obligations, nor can they reveal a history of reactive or nonexistent rate adjustments or the operating restraints presented by the state/local framework.

The key ratios below do not represent a complete set of the ratios Standard & Poor's uses in its analysis. We also incorporate information from many internal and external databases. Depending on various credit conditions, certain ratios can take on more significance than others. In addition, a municipal entity's trends in any of these ratios may be more important to us than the historical ratios. A rating, after all, is prospective in nature.

Key Ratios

Income Levels – Household/Per Capita Effective Buying Income As A Percentage Of U.S. Level

As is the case with GO debt ratings, wealth and income levels are an important credit factor in our analysis, as they provide insight regarding the economic resources of a utility's service area. It does not necessarily imply the rate base's ability to pay a utility bill or a utility's willingness to make rate adjustments, but we believe it is still one of many important factors. One way to evaluate wealth and income levels is to look at the household/per capita effective buying income of the locality relative to the average U.S. level.

Below 65% Low

65% - 90% Adequate

90% - 110% Good

110% - 130% Strong

Above 130% Very Strong

Debt Service Coverage

Given that there usually are legal covenants that require an issuer to provide some transparent level of security to the bondholders, Standard & Poor's views the minimum level of operating revenues (excluding impact fees and other nonrecurring revenues) available for debt service as generally sufficient, i.e. 1.0x, for all liens. A ratio of less than 1.0x may indicate a mismatch between revenues and revenue requirements, and, possibly, a technical default by the bondholder that may compel further action such as a review of the appropriateness of the current rate schedule and structure.

Wholesale or regional systems, or joint action agencies, which typically provide water or sewer services on a cost-of-service-based rate schedule, will typically have lower coverage, although the criteria for wholesale utilities -- which typically includes an analysis of the system's participants' general creditworthiness -- allows less emphasis to be paid to the wholesaler's financial metrics.

<1.0x Insufficient

1.0x to 1.25x Adequate

1.26x to 1.50x Good

>1.50x Strong

Liquidity

A typical water utility earns most of its revenues -- often more than half -- from May through August. While sanitary sewer systems typically have more constant revenue flows, it is increasingly common for sewer billings to be either tied to water demand, or even be a flat, fixed rate. Because there is usually some fluctuation in cash flows due to seasonal demands, the amount of precipitation, or other economic or customer base trends, we look to whether a utility has some reasonable level of unrestricted cash or equivalents for working capital. In our analysis, Standard & Poor's also gives credit to cash and investments that may be designated, but ultimately available for any lawful purpose such as a renewal and replacement fund or a rate stabilization fund. Generally speaking, a system that simply distributes a third party's treated water to its retail customers, or collects and conveys its sewer flows to a regional sewer treatment facility operated by another entity, has less operating and financial risk, in our view, and may therefore require less working capital.

<30 days Low

30 to 60 days Adequate

60 to 120 days Good

>120 days Strong

Total Debt To Net Property, Plant And Equipment

Simply referred to as "debt to plant," this ratio is an approximation that can be used as a proxy for total system indebtedness. A ratio of 0% means the system has no debt outstanding and 100% means there is as much debt outstanding as net depreciable value of the system's assets, although it is certainly possible for the number to be greater than 100%. Total debt per retail customer account is another useful measure in our view, but when the issuer is a regional or wholesale system, the number of ultimate water meters is not always discernable. System indebtedness is useful for a number of reasons: it can give insight into, for example, whether the system is in the middle of a large growth- or rehabilitation-driven capital program (in which case the debt to plant number is high). It can also be closely tied to the system's rates and capacity for additional debt.

<40% Low

40% to 60% Moderate

60% to 80% Moderately high

>80% High

Top 10 Customers As A Percentage Of Total Operating Revenues

A system's high dependence on one or more of its principal customers for revenue need not constrain its rating. However, the fact a system's business could be affected by the changing fortunes of one of its principal customers should not be overlooked either. Therefore, Standard & Poor's looks at the relative diversity or concentration of operating revenues derived from sales to customers to gain insight into this potential vulnerability.

Examples might include a water-intensive food processor shuttering operations, the expiration of the contract of a large wholesale customer, or a major local employer relocating a facility to somewhere outside the service area. Conversely, if revenue distribution among the principal customers is relatively evenly dispersed, concentration concerns are more likely to be mitigated even if in totality the top customers comprise a large portion of total revenues.

<15% Very diverse

15% to 25% Diverse

26% to 40% Moderately concentrated

>40% Concentrated

Fixed-Charge Coverage

Similar to debt service, fixed-charge coverage is Standard & Poor's internally adjusted coverage calculation that factors into account that some utility systems are distribution-only and/or collection-only, with capital-intensive treatment plants built, owned and operated by another entity. Obligations to those third parties are typically off-balance sheet and often treated as operating expenses, not debt. These may also include raw-water purchases or

other contractual obligations or participation in a joint action agency.

We believe fixed-charge coverage allows a more realistic comparison between "pipes-only" systems and those that also include treatment plants. Standard & Poor's treats any recurring long-term obligation as fixed, especially capacity payments or other minimum demand costs that the system must pay regardless of whether the service is delivered. The adjusted debt service coverage calculation, therefore, removes these fixed charges from operating expenses and instead treats them as if they were debt, allowing for a more meaningful quantitative comparison between these systems and those with actual on-balance sheet debt.

<1.0x Insufficient

1.0x to 1.20x Adequate

1.21x to 1.40x Good

>1.40x Strong

Copyright © 2008 Standard & Poor's, a division of The McGraw-Hill Companies, Inc. (S&P). S&P and/or its third party licensors have exclusive proprietary rights in the data or information provided herein. This data/information may only be used internally for business purposes and shall not be used for any unlawful or unauthorized purposes. Dissemination, distribution or reproduction of this data/information in any form is strictly prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P, its affiliates or its third party licensors, S&P, its affiliates and its third party licensors do not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall S&P, its affiliates and its third party licensors be liable for any direct, indirect, special or consequential damages in connection with subscriber's or others use of the data/information contained herein. Access to the data or information contained herein is subject to termination in the event any agreement with a third-party of information or software is terminated.

Analytic services provided by Standard & Poor's Ratings Services (Ratings Services) are the result of separate activities designed to preserve the independence and objectivity of ratings opinions. The credit ratings and observations contained herein are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Accordingly, any user of the information contained herein should not rely on any credit rating or other opinion contained herein in making any investment decision. Ratings are based on information received by Ratings Services. Other divisions of Standard & Poor's may have information that is not available to Ratings Services. Standard & Poor's has established policies and procedures to maintain the confidentiality of non-public information received during the ratings process.

Ratings Services receives compensation for its ratings. Such compensation is normally paid either by the issuers of such securities or third parties participating in marketing the securities. While Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscriptions to its publications. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

Any Passwords/user IDs issued by S&P to users are single user-dedicated and may ONLY be used by the individual to whom they have been assigned. No sharing of passwords/user IDs and no simultaneous access via the same password/user ID is permitted. To reprint, translate, or use the data or information other than as provided herein, contact Client Services, 55 Water Street, New York, NY 10041; (1)212.438.9823 or by e-mail to: research_request@standardandpoors.com.