



**Chandler • Arizona**  
*Where Values Make The Difference*

# 80  
JUN 14 2007

**MEMORANDUM**                      **Management Services Memo No. 07-154**

**DATE:**            JUNE 8, 2007

**TO:**                MAYOR AND COUNCIL

**THRU:**            W. MARK PENTZ, CITY MANAGER *WP*  
                      RICH DLUGAS, ASSISTANT CITY MANAGER *RD*

**FROM:**            O.D. BURR, ACTING MANAGEMENT SERVICES DIRECTOR *ODB*  
                      DAVE SIEGEL, MUNICIPAL UTILITIES DIRECTOR *DS*

**SUBJECT:**        ADOPTION OF NOTICE OF INTENTION TO INCREASE CERTAIN  
                      WATER, RECLAIMED WATER AND SEWER FEES AND SET DATE FOR  
                      PUBLIC HEARING JULY 23, 2007

RECOMMENDATION: Staff recommends Council adopt by motion the Notice of Intention to Increase Certain Water, Reclaimed Water and Sewer Fees and set the date for Public Hearing as to the proposed revisions on July 23, 2007.

BACKGROUND/DISCUSSION: During the last several years' budget presentations, staff has briefed Council that water and sewer increases would be necessary by FY07/08. At the September 14, 2006 Council Meeting, Council awarded a contract to Red Oak Consulting for completion of a water and sewer rate study. As part of the rate study, Council appointed an eight-member citizen committee at the November 16, 2006 Council Meeting to work with Red Oak Consulting and staff on rate design recommendations. At the May 24, 2007 Council Meeting, Council approved changes to both the water and sewer rate structures. The proposed rate increases were applied to these water and sewer rate structures, resulting in some increases and some decreases in the rate components.

In order to adequately notify interested parties of this update, letters will be sent on Friday, June 15, 2007 to the ten largest water users for FY05/06 informing them of the proposed revisions to the water, reclaimed water and sewer fees and the planned date of the Public Hearing. Additionally, a notice will appear on all utility bills for a month beginning June 15, 2007.

The Notice of Intention will be published in the Arizona Republic newspaper showing the date, time and place of the Public Hearing on July 23, 2007. In compliance with State Statutes, a copy

of the report supporting the revised water, reclaimed water and sewer fees will be filed with the City Clerk for public review.

FINANCIAL IMPLICATIONS: The financial plan developed by Red Oak Consulting shows that rate increases of 9% for water revenues and 12% for sewer revenues are needed to maintain the financial integrity of the water and sewer enterprises, including debt service coverage and cash reserve policy requirements over the next two fiscal years. Reclaimed water rates will increase to be a percentage of the block 2 single-family water rates.

PROPOSED MOTION: Move to adopt the Notice of Intention to Increase Certain Water, Reclaimed Water and Sewer Fees and to set the date for the Public Hearing on July 23, 2007.

cc: Pat McDermott, Assistant City Manager  
Cynthia Haglin, Assistant City Attorney  
Bob Mulvey, Assistant Municipal Utilities Director  
Rick Giardina, Red Oak Consulting

Attachments: Notice of Intention to Increase Certain Water, Reclaimed Water and Sewer Fees  
Implementation Schedule for Revisions to the Water, Reclaimed Water and Sewer Fees  
Red Oak Consulting Water and Wastewater Rate Study

CITY OF CHANDLER  
NOTICE OF INTENTION TO INCREASE CERTAIN  
WATER, RECLAIMED WATER AND SEWER FEES

NOTICE IS HEREBY GIVEN THAT at a Regular Meeting of the Chandler City Council to be held in the Council Chambers, 22 South Delaware Street, on Monday, July 23, 2007 at 7:00 p.m., it is the Council's intention to Increase Certain Water, Reclaimed Water and Sewer Fees effective October 1, 2007. A Public Hearing will be held on Monday, July 23, 2007 at a Regular Meeting of the Chandler City Council to be held in the Council Chambers, 22 South Delaware Street at 7:00 p.m. to consider the Increase to Certain Water, Reclaimed Water and Sewer Fees.

A copy of the report supporting the Increase to Certain Water, Reclaimed Water and Sewer Fees will be available in the office of the City Clerk commencing June 15, 2007.

Published in the \_\_\_\_\_ on \_\_\_\_\_.

# **Implementation Schedule for Revisions to the Water, Reclaimed Water and Sewer Fees**

## **Dates to make October 1, 2007 Effective Date**

June 14, 2007	Council - Adopt by Motion Notice of Intention and Publish Date of Public Hearing
July 23, 2007	Council – Conduct Public Hearing (must be at least 30 days after Notice of Intent)
July 23, 2007	Council – Introduce and Tentatively Adopt Ordinance to Increase Certain Water, Reclaimed Water and Sewer Fees
August 9, 2007	Council – Adopt Ordinance to Increase Certain Water, Reclaimed Water and Sewer Fees
October 1, 2007	New Water, Reclaimed Water and Sewer Fees in Effect



## City of Chandler

55 North Arizona Place • Chandler AZ 85225

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# Water and Wastewater Rate Study

June 2007

Report Prepared By:



100 Fillmore Street  
Suite 200  
Denver CO 80206  
303-316-6500

0627508



June 5, 2007

Ms. Julie Buel  
Senior Financial Analyst  
City of Chandler  
55 North Arizona Place  
Chandler, Arizona 85225

Dear Ms. Buel:

On behalf of Red Oak Consulting I am pleased to submit this report on the Water and Wastewater Rate Study completed for the City of Chandler, Arizona.

Thank you for the opportunity to be of service to the City on this important project. Questions regarding our report should be directed to me at (303) 316-6505.

Very truly yours,

RED OAK CONSULTING  
A division of Malcolm Pirnie, Inc.

Richard D. Giardina  
Vice President

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- A. Financial Summaries

## Introduction

The firm of Red Oak Consulting (Red Oak) was retained by the City of Chandler (the City) to develop financial plans for the water and wastewater utility as well as develop alternative water and wastewater rates. The last time the City raised utility rates was 1994.

The financial plan is based on the City's proposed fiscal year (FY) 2007-08 budget and includes the six-year study period covering the years FY 2006-07 through FY 2011-12. For accounting and reporting purposes the City uses a fiscal year ending June 30.

The results of the financial planning task provide an indication of the need for additional revenues to maintain the financial integrity of the City's Water and Wastewater Enterprise Fund. While the City maintains a single utility enterprise fund, financial information is captured separately for the water and wastewater operations. It is this information that Red Oak used to develop the individual financial plans contained in Appendix A to this report. It is Red Oak's philosophy that each operation generate the necessary revenues to be self-sufficient; that is there should not be any subsidy between the two district operations.

Red Oak also worked with the City to evaluate reclaimed water rates. Rates for water, wastewater and reclaimed water service will be discussed in turn, in the balance of this report.

## Findings

The most significant findings and recommendations resulting from this study are listed below. The balance of this report, including the appendices, contains supporting schedules regarding key findings listed below.

1. Water and wastewater operations cash balances or reserves (cash reserve ratio) should be established such that water reserves are equal to at least 20% (approximately 75 days) and wastewater is equal to 15% (approximately of 55 days) of annual cash operation and maintenance (O&M) costs. This reflects a reduction from the City's current policy of 25% for both operations.
2. Debt service coverage requirements (which are calculated by dividing net revenue after O&M costs by annual debt service) should be at least 1.20 times the annual debt service for revenue bonds (a legal requirement) and target 1.00 for all other debt. Debt service coverage is measured separately for both operations, however, the legal requirement of 1.20 times coverage on revenue bonds is measured by combining the results of both operations – measured on a total fund or utility basis.

The proposed revenue increases are premised upon an every other year approach. The projected water revenue increases for the study period are noted in Table 1.

## Water

**Table 1.  
Water Operations**

<u>Fiscal Year</u>	<u>Revenue Increase</u>	<u>Cash Reserve Ratio</u> <sup>(1)</sup>	<u>Debt Service Coverage Ratio</u> <sup>(2)</sup>
2006-07	0%	65%	1.46
2007-08	9%	29%	1.59
2008-09	0%	14%	1.31
2009-10	8%	18%	1.75
2010-11	0%	20%	1.89
2011-12	0%	25%	2.05
<b>Average Monthly Residential Bill</b> <sup>(3)</sup>			
FY 2006-07	\$20.34		
FY 2011-12	\$23.94		
% Change	18%		
<sup>(1)</sup> Coverage ratio calculated on rate revenue (Appendix A-2). <sup>(2)</sup> Coverage ratio calculated on revenue bond debt for combined water and wastewater operating funds (Appendix A-1). <sup>(3)</sup> Assumes the City's existing summer rate structure and 12,000 gallons of water use.			

The proposed revenue increases begin with a 9% increase in FY 2007-08. The rates for all subsequent years are computed based on the previous year's rate multiplied by the indicated rate increase (Table 1). The total increase between FY 2007-08 and FY 2011-12 is approximately \$3.60 a month, when comparing the City's existing summer rate structure with the proposed increases using 12,000 gallons of water use.

Even with the projected revenue increases the cash reserve ratio is expected to dip below 20% in some years of the study period. Note that the cash reserve ratio is a self-imposed guideline and not a legal requirement, however, the cash reserve ratio should not dip below 20% for prolonged periods of time. The cash reserve ratio in FY 2008-09 is 14%, and 18% in FY 2009-10, but rebounds to 20% by FY 2010-11.

The debt service coverage requirements are met in all years of the six-year planning horizon. The average monthly summer bill in FY 2007-08 for a single family residential customer using 12,000 gallons a month is projected to be \$22.17.

The proposed 9% revenue increase was applied in an across the board fashion to the rate structure recommendation proposed by the City-appointed Rate Structure Design Task Force. The rates with the proposed revenue increase and the new rate structure are shown in Tables 2 and 3.

The proposed Inside City to Outside City rate differential is 1.4. In other words, rates for Outside City customers are 1.4 times higher than those for Inside City customers.

**Table 2.  
Proposed Water Monthly Base Charge**

<u>Meter Size</u>	<u>Inside City</u>	<u>Outside City</u>
5/8-inch	\$ 6.31	\$ 8.84
3/4-inch	7.20	10.08
1-inch	9.19	12.87
1 1/2-inch	14.47	20.26
2-inch	20.37	28.52
3-inch	42.94	60.12
4-inch	60.60	84.84
6-inch	115.07	161.10
8-inch	174.34	244.08
10-inch	297.06	415.89
12-inch	419.79	587.71

**Table 3.  
Proposed Water Monthly Volume Charges**

<u>Class</u>	<u>Usage Block</u> (gallons)	<u>Proposed Inside City</u>		<u>Proposed Outside City</u>	
		<u>Winter</u> (\$ per 1,000 gallons)	<u>Summer</u> (\$ per 1,000 gallons)	<u>Winter</u> (\$ per 1,000 gallons)	<u>Summer</u> (\$ per 1,000 gallons)
Single Family	0 – 10,000	\$1.23	\$1.23	\$1.73	\$1.73
	10,001 – 20,000	1.53	1.84	2.15	2.58
	20,001 – 40,000	2.29	3.21	3.21	4.50
	> 40,000	4.01	6.41	5.62	8.98
Multi-Family	0 – 10,000	0.76	0.76	1.07	1.07
	10,001 – 20,000	0.94	0.94	1.32	1.32
	20,001 – 40,000	1.18	1.41	1.66	1.98
	> 40,000	1.48	2.47	2.08	3.46
Industrial	All Usage	1.62	2.07	2.27	2.90
Landscape	All Usage	1.59	2.53	2.23	3.55
Nonresidential <sup>(1)</sup>	All Usage	1.51	2.08	2.12	2.92

<sup>(1)</sup> Includes all other nonresidential customer classes except industrial and landscape.

The proposed revenue increases were applied to all fixed and volume charges. The complete water cashflow schedule can be found in Appendix A.

## Wastewater (Sewer)

Similar to the revenue increase schedule for the water operations, Red Oak proposes an every other year revenue increase schedule for the City's wastewater operations. The proposed wastewater revenue increases are illustrated in Table 4.

**Table 4.**  
**Wastewater Operations**

<u>Fiscal Year</u>	<u>Revenue Increase</u>	<u>Cash Reserve Ratio</u> <sup>(1)</sup>	<u>Debt Service Coverage Ratio</u> <sup>(2)</sup>
2006-07	0%	85%	1.46
2007-08	12%	67%	1.59
2008-09	0%	36%	1.31
2009-10	13%	24%	1.75
2010-11	0%	13%	1.89
2011-12	13%	14%	2.05
Average Monthly Residential Bill			
FY 2006-07	\$14.26		
FY 2011-12	\$22.55		
% Change	58%		
<sup>(1)</sup> Coverage ratio calculated on rate revenue (Appendix A-3).			
<sup>(2)</sup> Coverage ratio calculated on revenue bond debt for combined water and wastewater operating funds (Appendix A-1).			

A 12% revenue increase in FY 2007-08 is projected to be necessary in order to maintain the financial integrity of the wastewater operations. The rates for all subsequent years are computed based on the previous year's rate multiplied by the indicated rate increase (Table 4). The total increase between FY 2007-08 and FY 2011-12 is approximately \$8.29 a month.

The wastewater cash reserve ratio is expected to dip below 15% in some years of the study period. As was the case for the water utility, the cash reserve ratio is not a legal requirement, but rather a self-imposed standard. While the cash reserve ratio drops in every year of the study period from FY 2006-07 through FY 2010-11 to a low of 13%, the ratio begins to rebound in the following year. The debt service coverage requirements are met in all years of the six-year planning horizon.

The proposed 12% revenue increase was applied to all rates proposed by the Rate Structure Design Task Force in an across the board fashion. The monthly bill for a single family residential customer is projected to be \$17.66 in FY 2007-08. The single family

residential class rate structure is based on a flat charge that does not vary by wastewater flows.

The proposed Inside City to Outside City rate differential is 1.6. In other words, rates for Outside City customers are 1.6 times higher than those for Inside City customers.

The rates with the proposed revenue increase and the City's newly adopted new rate structure shown in Table 5.

**Table 5.  
Proposed Wastewater Operations**

<u>Class</u>	<u>Billing Unit</u>	<u>Inside City</u>	<u>Outside City</u>
Single Family Dwelling Unit	Monthly Base Charge	\$17.67	\$28.28
Multi-Family Dwelling Unit	Monthly Base Charge	5.39	8.63
Commercial	Monthly Base Charge	4.65	7.44
	Per 1,000 gals	2.11	3.38
Commercial Processing & Manufacturing	Monthly Base Charge	4.65	7.44
	Per 1,000 gals	2.11	3.38
Medical Institutions	Monthly Base Charge	4.65	7.44
	Per 1,000 gals	2.11	3.38
Educational Institutions	Monthly Base Charge	4.65	7.44
	Per 1,000 gals	2.11	3.38
Large Volume Industrial	Monthly Base Charge	4.65	7.44
	Per 1,000 gals	2.11	3.38
Approved Commercial/Industrial	Monthly Base Charge	4.65	7.44
	Per 1,000 gals	2.11	3.38

The proposed revenue increases were applied to all of the wastewater flat, fixed and volume charges. The complete wastewater cashflow schedule can be found in Appendix A.

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## Reclaimed Water

The City provides reclaimed water service, which is wastewater that has been treated and purified for reuse purposes such as irrigation, rather than being discharged into a body of water. Reclaimed water service is a component of the City's wastewater operations.

Block 2 of the single family structure is intended to represent irrigation use; it is therefore Red Oak's recommendation that the reclaimed water rate be linked to the block 2 rate of the single family class. The City has proposed that reclaimed water rates be set at 10% of the block 2 water volume rate for single family class. The reclaimed water rate is currently approximately 3% of the block 2 single family rate for Inside City customers and 6% for Outside City customers. Table 6 reflects the proposed reclaimed water rates.

**Table 6.**  
**Proposed Reclaimed Water Rates**  
**(\$ per 1,000 gallons)**

	<u>Winter</u>	<u>Summer</u>
Inside City	\$0.153	\$0.184
Outside City	0.215	0.258

Inside City rates are projected to increase by \$0.113 per 1,000 gallons in both the winter and summer period. In the future as the potable water rates increase reclaimed water rates would increase as well.

The special request recovered water is any water that could be delivered outside the normal means. Special arrangements must be made on a situational basis. The City has proposed special request recovered water rates to be set at 70% of the block 2 volume rate of the single family class as shown in Table 7. In the future, as the potable water rate increases, the special request recovered water rates would increase as well.

**Table 7.**  
**Proposed Special Request Recovered Water Rates**  
**(\$ per 1,000 gallons)**

	<u>Winter</u>	<u>Summer</u>
Inside City	\$1.071	\$1.288
Outside City	1.500	1.804

The Inside City rate is proposed to increase by \$0.481 per 1,000 gallons in the winter and \$0.698 per 1,000 gallons in the summer.

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## Conclusions

Red Oak proposes an every other year approach to revenue increases for both the water and wastewater operations. The revenue increases are necessary in order for water and wastewater operations to fund O&M costs and capital programs. The debt service coverage ratios on outstanding revenue debt are above the legal 1.20 coverage requirements in each of the six years of the study period.

The reclaimed water rate is recommended to be linked to the single family block 2 rate. While this does increase the rate paid for reclaimed water, the rate is still much cheaper than the potable water rate and should encourage consumers to use the reclaimed system rather than potable water for irrigation purposes.

All rate increases for FY 2007-08 are proposed to become effective October 1<sup>st</sup>, at the beginning of the next winter period. At this time, the City is not required to adopt projected future year revenue increases. The increases that have been projected for FY 2007-08 are anticipated to be sufficient to maintain the financial integrity of the water and wastewater operations through FY 2008-09. As part of the annual budget process the financial integrity of the water and wastewater operations should be reviewed and rates should be adjusted appropriately.

**City of Chandler**  
**Water and Wastewater Rate Study**

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**Appendix A: Financial Summaries**



City of Chandler, AZ  
 Utility Rate Study  
 Cash Flow Projection  
 Combined Water & Wastewater Operating Funds

FILE: Chandler.xls  
 SCHEDULE: Combined  
 DATE: 06/05/07  
 RANGE: Operations

DESCRIPTION	Projected					
	Budget FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
<b>Revenues</b>						
Water Charges	\$37,200,000	\$40,601,805	\$42,452,061	\$46,806,152	\$47,357,685	\$47,909,218
Wastewater Charges	19,989,195	22,276,980	23,439,194	27,039,678	27,358,296	31,274,913
Other Operating Revenues	1,109,210	1,166,768	1,228,805	1,291,384	1,346,245	1,407,504
Interest	2,415,000	1,024,831	634,904	461,278	428,302	448,833
Miscellaneous	0	0	0	0	0	0
<b>Total Revenues</b>	<b>60,713,405</b>	<b>65,070,383</b>	<b>67,754,963</b>	<b>75,598,492</b>	<b>76,492,528</b>	<b>81,040,468</b>
<b>Operating Expenditures</b>						
Operating	43,389,076	46,108,968	51,975,523	54,691,179	57,501,534	60,501,116
<b>Total Operating Expenditures</b>	<b>43,389,076</b>	<b>46,108,968</b>	<b>51,975,523</b>	<b>54,691,179</b>	<b>57,501,534</b>	<b>60,501,116</b>
<b>Net Operating Income Available for Debt Service</b>	<b>17,324,329</b>	<b>18,961,415</b>	<b>15,779,440</b>	<b>20,907,313</b>	<b>18,990,994</b>	<b>20,539,352</b>
<b>Existing Debt Service</b>						
Revenue Bonds	11,891,349	11,917,484	12,059,309	11,976,706	10,046,491	10,029,067
General Obligation Bonds	2,780,238	2,777,563	2,773,525	2,785,425	1,426,650	337,250
Other	0	0	0	0	0	0
<b>Total Existing Debt Service</b>	<b>14,679,586</b>	<b>14,695,047</b>	<b>14,832,834</b>	<b>14,762,131</b>	<b>11,473,141</b>	<b>10,366,317</b>
<b>Proposed Debt Service</b>						
Revenue Bonds	-	-	-	-	-	-
General Obligation Bonds	-	1,265,426	1,762,127	2,081,493	2,400,056	2,731,458
Other	-	-	-	-	-	-
<b>Total Proposed Debt Service</b>	<b>-</b>	<b>1,265,426</b>	<b>1,762,127</b>	<b>2,081,493</b>	<b>2,400,056</b>	<b>2,731,458</b>
<b>DSC Ratio</b>						
<b>Total</b>	<b>1.18</b>	<b>1.19</b>	<b>0.95</b>	<b>1.24</b>	<b>1.37</b>	<b>1.57</b>
<b>Revenue Debt - 1.20 Target</b>	<b>1.46</b>	<b>1.59</b>	<b>1.31</b>	<b>1.75</b>	<b>1.89</b>	<b>2.05</b>
<b>G.O. Debt - 1.00 Target</b>	<b>1.95</b>	<b>1.74</b>	<b>0.82</b>	<b>1.83</b>	<b>2.34</b>	<b>3.42</b>
<b>Income Available After Debt Service</b>	<b>2,644,743</b>	<b>3,000,943</b>	<b>(815,521)</b>	<b>4,063,690</b>	<b>5,117,797</b>	<b>7,441,577</b>
<b>Other Cash Inflows/(Outflows)</b>						
Revenue Bond Proceeds	-	-	-	-	-	-
General Obligation Bond Proceeds	-	15,770,000	6,190,000	3,980,000	3,970,000	4,130,000
Other Proceeds	-	-	-	-	-	-
Debt-Funded CIP	-	(15,520,677)	(6,092,900)	(3,916,500)	(3,904,300)	(4,063,000)
Reserve-Funded CIP	(42,461,749)	(16,844,417)	(10,137,350)	(7,092,100)	(9,038,200)	(7,794,640)
Loans (TO)/FROM Water SDC Fund	(20,000,000)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Loans FROM Wastewater SDC Fund	650,000	650,000	650,000	650,000	650,000	650,000
Issuance Expenses	-	(249,323)	(97,100)	(61,500)	(65,700)	(67,000)
<b>Total Other Cash Inflows/(Outflows)</b>	<b>(61,811,749)</b>	<b>(14,194,417)</b>	<b>(7,487,350)</b>	<b>(4,442,100)</b>	<b>(6,388,200)</b>	<b>(5,144,640)</b>
<b>Increase/(Decrease) in Cash Balance</b>	<b>(59,167,006)</b>	<b>(11,193,474)</b>	<b>(8,302,871)</b>	<b>(378,410)</b>	<b>(1,270,403)</b>	<b>2,296,937</b>
<b>Beginning of Year Cash Balance</b>	<b>90,364,513</b>	<b>31,217,507</b>	<b>20,024,033</b>	<b>11,721,161</b>	<b>11,342,752</b>	<b>10,072,349</b>
<b>End of Year Cash Balance</b>	<b>\$31,217,507</b>	<b>\$20,024,033</b>	<b>\$11,721,161</b>	<b>\$11,342,752</b>	<b>\$10,072,349</b>	<b>\$12,369,287</b>
<b>Cash Reserve Ratio</b>	<b>170%</b>	<b>79%</b>	<b>42%</b>	<b>34%</b>	<b>33%</b>	<b>33%</b>

City of Chandler, AZ  
 Water Utility  
 Cash Flow Projection  
 Operations Fund - Water

FILE: Chandler.xls  
 SCHEDULE: Water  
 DATE: 06/05/07  
 RANGE: Operations

DESCRIPTION	Projected				
	Budget FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11 FY 2011-12
<b>Operating Revenues</b>					
Water Charges	\$37,200,000	\$40,601,805	\$42,452,061	\$46,806,152	\$47,357,685
Other Operating Revenues	916,950	967,778	1,022,852	1,078,222	1,127,622
Interest	2,020,000	524,568	256,618	211,609	265,007
Miscellaneous	0	0	0	0	0
<b>Total Operating Revenues</b>	<b>40,136,950</b>	<b>42,094,151</b>	<b>43,731,531</b>	<b>48,095,983</b>	<b>48,750,314</b>
<b>Operating Expenditures</b>					
Operating	27,583,751	29,257,194	31,994,439	33,426,336	35,009,349
<b>Total Operating Expenditures</b>	<b>27,583,751</b>	<b>29,257,194</b>	<b>31,994,439</b>	<b>33,426,336</b>	<b>35,009,349</b>
<b>Net Operating Revenue Available for Debt Service</b>	<b>12,553,199</b>	<b>12,836,957</b>	<b>11,737,092</b>	<b>14,669,646</b>	<b>13,740,965</b>
<b>Existing Debt Service</b>					
Revenue Bonds	7,272,763	7,289,097	7,341,572	7,746,539	8,041,663
General Obligation Bonds	2,435,647	2,426,311	2,422,775	2,433,186	1,244,407
Other	0	0	0	0	0
<b>Total Existing Debt Service</b>	<b>9,708,410</b>	<b>9,715,408</b>	<b>9,764,347</b>	<b>10,179,724</b>	<b>9,286,070</b>
<b>Proposed Debt Service</b>					
Revenue Bonds	-	-	-	-	-
General Obligation Bonds	-	-	-	-	-
Other	-	-	-	-	-
<b>Total Proposed Debt Service</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DSC Ratio</b>					
<b>Total</b>	<b>1.29</b>	<b>1.32</b>	<b>1.20</b>	<b>1.44</b>	<b>1.48</b>
<b>Revenue Debt - 1.20 Target</b>	<b>1.73</b>	<b>1.76</b>	<b>1.60</b>	<b>1.89</b>	<b>1.71</b>
<b>G.O. Debt - 1.00 Target</b>	<b>2.17</b>	<b>2.29</b>	<b>1.81</b>	<b>2.85</b>	<b>4.58</b>
<b>Income Available After Debt Service</b>	<b>2,844,790</b>	<b>3,121,549</b>	<b>1,972,745</b>	<b>4,489,922</b>	<b>4,454,896</b>
<b>Other Cash Inflows/(Outflows)</b>					
Revenue Bond Proceeds	-	-	-	-	-
General Obligation Bond Proceeds	-	-	-	-	-
Other Proceeds	-	-	-	-	-
Debt-Funded CIP	-	-	-	-	-
Reserve-Funded CIP	(29,607,096)	(15,199,817)	(8,591,950)	(5,421,200)	(4,931,000)
Loans (TO)/FROM Water SDC Fund	(20,000,000)	2,000,000	2,000,000	2,000,000	2,000,000
Loans TO Wastewater Op Fund	-	-	-	-	-
Loans FROM Wastewater SDC Fund	650,000	650,000	650,000	650,000	650,000
Issuance Expenses	-	-	-	-	-
<b>Total Other Cash Inflows/(Outflows)</b>	<b>(48,957,096)</b>	<b>(12,549,817)</b>	<b>(5,941,950)</b>	<b>(2,771,200)</b>	<b>(3,503,700)</b>
<b>Increase/(Decrease) in Cash Balance</b>	<b>(46,112,306)</b>	<b>(9,428,268)</b>	<b>(3,969,205)</b>	<b>1,718,722</b>	<b>951,196</b>
<b>Beginning of Year Cash Balance</b>	<b>63,940,638</b>	<b>17,828,332</b>	<b>8,400,064</b>	<b>4,430,859</b>	<b>6,149,581</b>
<b>End of Year Cash Balance</b>	<b>\$17,828,332</b>	<b>\$8,400,064</b>	<b>\$4,430,859</b>	<b>\$6,149,581</b>	<b>\$7,100,777</b>
<b>Cash Reserve Ratio</b>	<b>65%</b>	<b>29%</b>	<b>14%</b>	<b>18%</b>	<b>25%</b>

City of Chandler, AZ  
Wastewater Utility  
Cash Flow Projection  
Operations Fund - Wastewater

FILE: Chandler.xls  
SCHEDULE: Wastewater  
DATE: 06/05/07  
RANGE: Operations

DESCRIPTION	Projected					
	Budget FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
<b>Operating Revenues</b>						
Wastewater Charges	\$19,989,185	\$22,276,980	\$23,439,194	\$27,039,678	\$27,358,296	\$31,274,913
Other Operating Revenues	192,260	190,989	205,954	213,162	220,623	228,345
Interest	395,000	500,263	378,285	249,669	163,295	126,234
Miscellaneous	-	-	-	-	-	-
<b>Total Operating Revenues</b>	<b>20,576,455</b>	<b>22,976,232</b>	<b>24,023,433</b>	<b>27,502,509</b>	<b>27,742,214</b>	<b>31,629,491</b>
<b>Operating Expenditures</b>						
Operating	15,805,325	16,851,774	19,981,085	21,264,842	22,492,185	23,859,418
<b>Total Operating Expenditures</b>	<b>15,805,325</b>	<b>16,851,774</b>	<b>19,981,085</b>	<b>21,264,842</b>	<b>22,492,185</b>	<b>23,859,418</b>
<b>Net Operating Revenue Available for Debt Service</b>	<b>4,771,130</b>	<b>6,124,458</b>	<b>4,042,348</b>	<b>6,237,667</b>	<b>5,250,029</b>	<b>7,770,074</b>
<b>Existing Debt Service</b>						
Revenue Bonds	4,618,586	4,628,387	4,717,737	4,230,167	2,004,828	1,760,472
General Obligation Bonds	352,591	351,252	350,750	352,239	182,243	45,950
Other	0	0	0	0	0	0
<b>Total Existing Debt Service</b>	<b>4,971,177</b>	<b>4,979,638</b>	<b>5,068,487</b>	<b>4,582,406</b>	<b>2,187,071</b>	<b>1,806,422</b>
<b>Proposed Debt Service</b>						
Revenue Bonds	-	1,265,426	1,762,127	2,081,493	2,400,056	2,731,458
General Obligation Bonds	-	-	-	-	-	-
Other	-	-	-	-	-	-
<b>Total Proposed Debt Service</b>	<b>0</b>	<b>1,265,426</b>	<b>1,762,127</b>	<b>2,081,493</b>	<b>2,400,056</b>	<b>2,731,458</b>
<b>DSC Ratio</b>						
Total	0.96	0.98	0.59	0.94	1.14	1.71
Revenue Debt - 1.20 Target	1.03	1.32	0.86	1.47	2.62	4.41
G.O. Debt - 1.00 Target	0.43	0.93	(0.32)	0.82	1.28	2.16
<b>Income Available After Debt Service</b>	<b>(200,047)</b>	<b>(120,606)</b>	<b>(2,788,267)</b>	<b>(426,232)</b>	<b>662,902</b>	<b>3,232,194</b>
<b>Other Cash Inflows/(Outflows)</b>						
Revenue Bond Proceeds	0	0	0	0	0	0
G.O. Bond Proceeds	0	15,770,000	6,190,000	3,980,000	3,970,000	4,130,000
Other Proceeds	0	0	0	0	0	0
Debt-Funded CIP	0	(15,520,677)	(6,092,900)	(3,918,500)	(3,904,300)	(4,063,000)
Reserve-Funded CIP	(12,854,653)	(1,644,600)	(1,545,400)	(1,670,900)	(2,884,500)	(2,863,640)
Loans FROM/(TO) Wastewater SDC Fund	0	0	0	0	0	0
Loans FROM/(TO) Water Operating Fund	0	0	0	0	0	0
Issuance Expenses	0	(249,323)	(97,100)	(61,500)	(65,700)	(67,000)
<b>Total Other Cash Inflows/(Outflows)</b>	<b>(12,854,653)</b>	<b>(1,644,600)</b>	<b>(1,545,400)</b>	<b>(1,670,900)</b>	<b>(2,884,500)</b>	<b>(2,863,640)</b>
<b>Increase/(Decrease) in Cash Balance</b>	<b>(13,054,700)</b>	<b>(1,765,206)</b>	<b>(4,333,667)</b>	<b>(2,087,132)</b>	<b>(2,221,598)</b>	<b>368,554</b>
<b>Beginning of Year Cash Balance</b>	<b>26,443,875</b>	<b>13,389,175</b>	<b>11,623,969</b>	<b>7,290,302</b>	<b>5,193,171</b>	<b>2,971,572</b>
<b>End of Year Cash Balance</b>	<b>\$13,389,175</b>	<b>\$11,623,969</b>	<b>\$7,290,302</b>	<b>\$5,193,171</b>	<b>\$2,971,572</b>	<b>\$3,340,127</b>
<b>Cash Reserve Ratio</b>	<b>85%</b>	<b>67%</b>	<b>36%</b>	<b>24%</b>	<b>13%</b>	<b>14%</b>