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January 11, 2010

Mr. Charles Mosley  
Director of Public Works  
City of Sedona  
102 Roadrunner Drive  
Sedona, AZ 86336

Subject: Wastewater Rate Study – Final Draft Report

Dear Mr. Mosley:

In accordance with our agreement of May 12, 2009, Camp Dresser & McGee (CDM) has prepared this wastewater financial plan and rate study for the City of Sedona in accordance with a contract for professional service in the amount of \$42,640. This letter report and the attached tables document its findings and recommendations.

## Study Purpose

The purpose of the study is to update the decade-old wastewater financial plan and to identify several utility funding alternatives. Moreover, the monthly sewer service charges have been unchanged for 12 years, and the sewer capacity fee (although on an escalating schedule) is not indexed to inflation on regional construction costs. This new financial plan provides a ten-year roadmap through FY 2019/20 for funding the sewer utility operations, system maintenance, existing debt service and capital projects. The plan includes inflationary escalations on routine operating costs and essential projects planned for the next five years, as well as future facility rehabilitation expenditures.

Utility expenditures estimated for the final five years of the plan are subject to change, so we recommend that the proposed rate adjustment schedule be reviewed every three to five years. The key product of the financial plan is a projection of rate-based revenue requirements under several combinations of new user charges, fees and utility subsidies. The alternatives exclude the use of new bonds; instead the objective of the financial plan is to decrease the existing subsidies to the utility.

In addition to the financial plan, this study provides an update of the existing rate structure with new capacity standby charges for undeveloped parcels in sewer areas of the City. We have also updated capacity hookup fees for new connections to the system. The key product of this update is tables of updated customer billing rates and charges.



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## Summary of Findings and Conclusions

This summary is divided between the financial plan results and the updates to the existing rates and charges. The findings and conclusions described and illustrated in this summary section are detailed in the tables discussed in the second half of this report.

### Financial Plan

The financial plan is described in this section. Included in this section is a summary of the current sources and uses of funds, a ten-year projection of wastewater utility expenditures, and a description of three financial planning scenarios.

**Current Sources and Uses of Funds.** The utility system is operated as an enterprise. As such, the utility is audited annually with reports including a balance sheet, revenues and expenditures statement and a sources and uses of funds statement. Non-cash expenses of depreciation are part of the audits; for development of a financial plan the actual flow of funds is empathized over non-cash expenses.

The sources of funds for the enterprise are from several sources. These funding sources include sewer service charges to customers (31 percent of revenues, or \$390 per residence), city sales tax subsidies for debt service (53 percent), one-time capacity fees for new connections to the system (which vary but are most recently 4 percent), and interest earnings on cash reserves (12 percent). The total actual sources of funds last fiscal year (FY 2008-09) were \$10.0 million. In this current fiscal year the budgeted costs exceed available revenues, and require a \$1.4 million draw-down of reserves for pay-go project costs.

The uses of the sewer system funds during this current FY 2009-10 include labor costs (14 percent of total), supplies and services (19 percent), pay-go projects (13 percent) and debt service (54 percent). Another \$5.1 million in project expenditures will be funded from bond proceeds.

The current uses of funds are a result of significant cost increases since the last rate increase over 12 years ago. With the extension of the sewers throughout the City, the capital costs related to the collection system have increased over the last decade. These costs include debt service and pay-as-you-go project expenditures, and operations and maintenance (O&M) activities. The debt service is for bonds funding State-mandated and other sewer line extensions, as well as facility improvements to the wastewater treatment plant. Moreover, proper management of the discharges of wastewater treatment plant (WWTP) effluent and of disposal of sewage sludge have resulted in addition capital project and operating costs at the



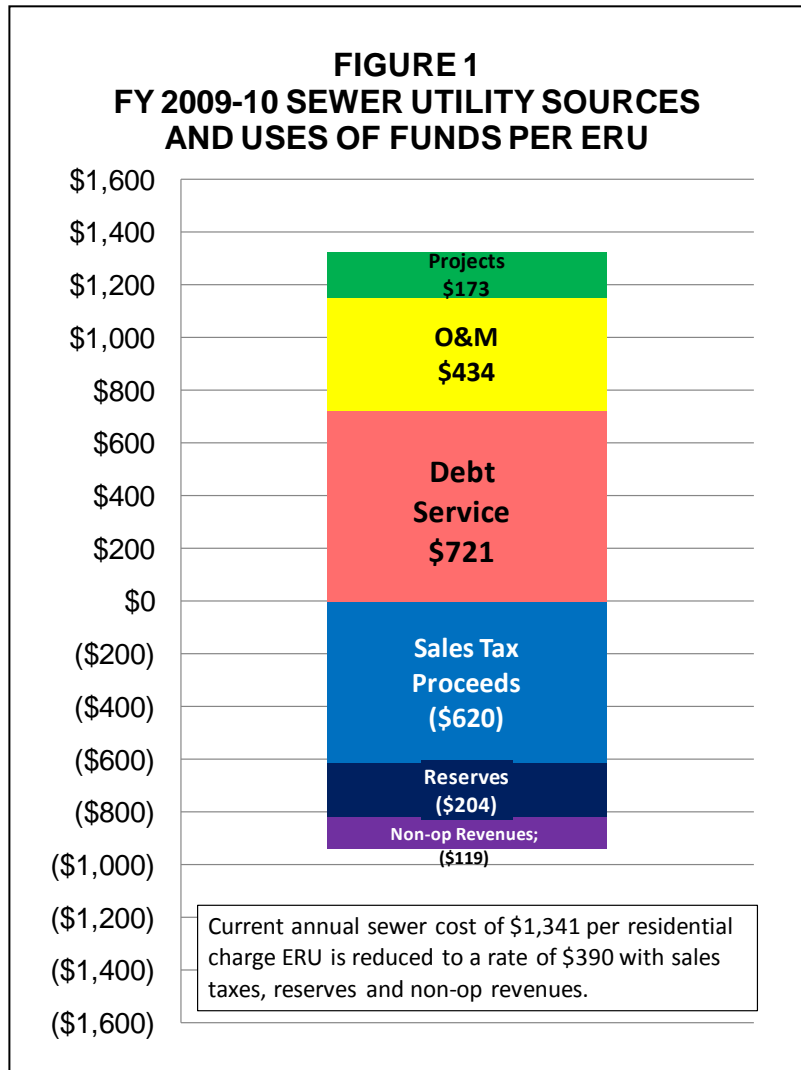
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plant. Finally, in the decade since the last adjustment to sewer service charges, inflationary escalations have significantly increased the costs of sewer services.

Figure 1 illustrates these sources and uses of funds for each single-family dwelling customer. The current sewer service charge of \$390 per year fails to cover annual operating costs of \$434. The overall shortfall in funds is compensated with a drawdown of \$204 per year in cash reserves. As shown, the current annual sewer system cost of \$1,341 per residence (ERU) is reduced to a rate of \$390 per year with offsets from city sales taxes, cash reserves and non-operating revenues. Municipal utility financial planning goals typically require sewer service charges fund no less than the operating expenditures and the non-cash depreciation of the enterprise. Standard financial policies exclude the use of subsidies for utilities operating in an enterprise fund.

As shown in the Figure 1, the current sewer service charges fund only a portion of the utility O&M costs, while interest earnings and cash drawn from reserves support the remaining operating costs, debt, and pay-as-you-go (pay-go) project expenditures. Without an

increase to the monthly sewer service charges, most of the enterprise costs must be supported from City sales tax proceeds and draw downs of available cash reserves.

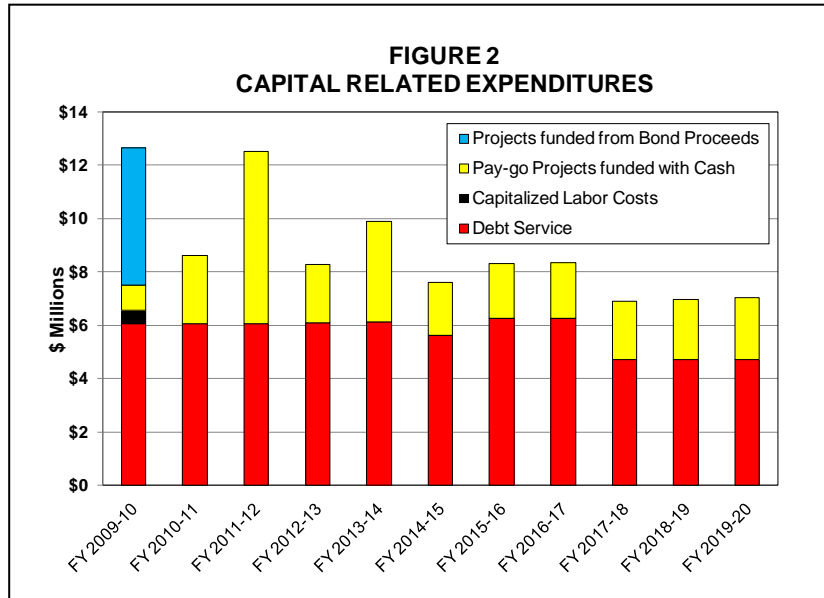




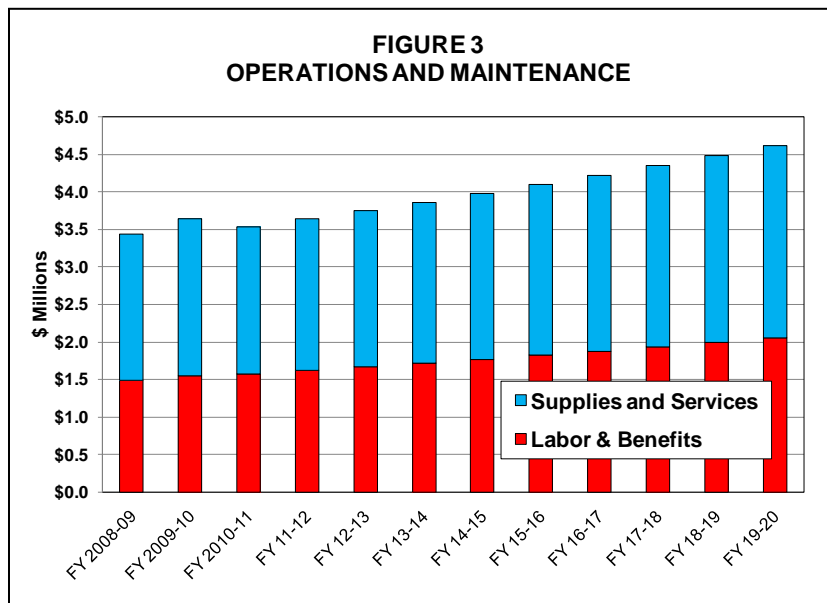
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### Ten-year projection of wastewater utility expenditures.

The ten-year projection of expenditures is divided between capital-related costs (projects and debt service) and O&M costs. These capital-related expenditures are illustrated in Figure 2. Capital-related costs included the five year capital improvement plan (CIP) of \$21 million through FY 2013-14. The CIP includes \$5.1 million in bond-funded projects this year, which will exhaust all available bond proceeds. For the remainder of the ten-year project an estimated \$28 million in pay-go project expenditures, including approximately \$2.2 million per year from FY 2014-15 to FY 2019-20, will be funded from cash reserves and net revenues. Details on this are provided in Tables 8 and 9.



Operation and maintenance (O&M) costs include labor costs and supplies and services. The supplies and services consist of plant maintenance, utilities and other operating costs. Figure 3 illustrates these costs. As shown, in FY 2009-10 O&M costs are \$1.5 million for labor and \$2.1 for supplies and services, for a total of \$3.6 million. The O&M expenditures are projected to grow to \$4.6 million, based in part on an annual inflation rate of 3 percent. Details on this are provided in Tables 7 and 10.





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The following section of this summary is a description of the proposed updates to the existing rates and charges, including the billing rate structure for different customer classes discharging to the sewers, and one-time capacity fees for new sewer hook-ups.

## **Rates and Charges Update**

The proposed updates to the existing rates and charges are described in this section.

**New Capacity Standby Charge.** Creation of a new monthly capacity standby charge has been identified as a key tool for enhancing the equity of sewer service deliveries citywide to both current and future customers, as well as a revenue enhancement for the wastewater enterprise. The charge is based on the City's costs for maintenance and depreciation on the facilities built and available to serve parcels that have delayed development and remain undeveloped. Our calculations set the charge at 0.722 ERUs. Note that no subsidies to the sewer service charges are provided to the proposed capacity standby charge.

**Sewer Service Charges.** In addition to the proposed new capacity standby charge described above, the adequacy and equity of the current sewer service charges is evaluated.

Currently residents and businesses are billed based on estimated sewage discharge volumes and strengths under 27 different customer classes. The discharges are based on a measurable unit (dwelling, fixture, seats, area etc) and the type of customer (residential, store, restaurant etc). The discharge units are described as a function of the discharge equivalents for a single family dwelling resident, or ERU. This common billing structure is appropriate for communities without reliable data on water usage by account.

The load on the City's sewer system from one ERU (equivalent residential unit) is defined as 200 gallons per day of sewage with a strength load of 200 parts per million for both Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS). One ERU account also imposes a measurable administrative burden on the system, and represents one sewer service. Details on this analysis are provided in Tables 20 and 21.

**Rate Equity Update.** Our evaluation of the current rate structure included a determination of the City's sewer system costs associated with flows, sewage strengths and account services, and a validation of the estimated customer loads on the system using industrial standard sewage strengths by customer classification. With this information we are able to validate the unit rates of the current structure.

Our proposed new rate structure adds a minor new "customer service account" billing element, at 0.095 ERUs. For single family dwellings, parcels or per sewer connection-based accounts the new billing element has no effect. However, for larger accounts with many



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billing units (i.e. restaurant seats or school students), the effect is to reduce the billing charge due to the “economies of scale” effect. Details on this are provided in Table 22.

Our findings are that the existing 27 different customer classes are needed to estimate the sewage flows from different customer classes. Moreover, we recommend that a multi-family dwelling customer class be added, as residential sewage flows are a function of persons per household, and the 2000 census describes the multi-family dwellings as having 86 percent of the occupancy of single-family household. These multi-family dwelling are also less likely to have washing machines or dishwashers, as well. As such, the proposed multi-family dwellings will be billed at 86 percent of the single-family dwelling rate. This proposed new customer class of an estimated 448 multi-family dwelling apartments among 100 accounts will result in an average bill that is 29 percent lower than the current charge (before any financial plan revenue increases). Details on this analysis are provided in Tables 14 and 21.

However, our evaluation of the discharge strengths by customer classes indicates that restaurants are currently undercharged for services, based on estimated sewage strengths divided among four different levels (low, residential, medium and high). As a result, restaurants bills are projected to be 28 percent higher, as listed in Table 23. For all other customer classes, the impact of the equity adjustments is lower, and schools will experience a 19 percent reduction in charges. For most, the adjustments are less than 10 percent, with the changes causing both higher and lower bills. This is shown in Table 25, which lists the changes in typical non-residential bills for Laundromats, restaurants, hotels retail stores and offices. The charges for single family residential units (1.0 ERU) are unchanged; in total, an additional 253 ERUs in bills will result from the rate equity update. Details on this analysis are provided in Table 22.



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The unit rates for the proposed new rate structure are provided in the following table. The unit rates do not include any revenue increases identified in the financial plan scenarios. As such, the proposed adjustments should be implemented as soon as possible. Alternatively, the rate-based revenue increases of the selected scenario can be combined with the proposed new rate structure, and all changes made effective for FY 2010-11 on July 1, 2010.

<b>PROPOSED RATE STRUCTURE FOR FY 2009-10</b>						
<b>Category</b>	<b>Billing Classifications</b>	<b>Billing Unit</b>	<b>Sewage Strength</b>	<b>Updated ERU per Billing Unit</b>	<b>FY 2008-09 Service chg (\$/Unit-mon)</b>	<b>Proposed Monthly Billing Rate</b>
<b>Existing Residential Account Charge (includes account-based charge based on one account per connection)</b>						
1	<b>Residential Single-Family Dwelling</b>	Dwelling Unit	R	<b>1.000</b>	<b>\$32.54</b>	<b>\$32.54</b>
2	Residential (Low Flow)	Connection	R (lf)	0.907	\$29.52	\$29.52
	Environmental Fee for Septic Tank in Sewered Area	Parcel		2.095	\$65.08	\$70.28
new	Sewered but Undeveloped Parcels	Parcel	R	0.722	na	\$23.50
<b>New Customer Service Charge (for accounts with multiple billing units)</b>						
		Account		0.095	na	\$3.11
<b>New Multi-family Residential Account Charge (plus account-based charge)</b>						
new	<b>Multi-family Dwellings</b>	Dwelling Unit	R	0.773	na	\$25.94
<b>Non-residential Account Charge (plus new account-based charge)</b>						
4	Theaters, Libraries, Churches	Seat	L	0.011	\$0.43	\$0.37
5	Bar w/o dining facility	Seat	L	0.074	\$2.88	\$2.49
7	Car Wash w/ Recycle	Bay	L	1.636	\$64.94	\$54.88
8	Department, Retail Stores	Restroom	L	0.143	\$4.90	\$4.78
10	Hotel, Motel, Bed & Breakfast, RV Park	Room	M	0.549	\$18.29	\$18.40
11	Resort - Cottages, Villas	Connection	M	1.096	\$36.58	\$36.75
12	Fitness Center / Beauty Salon	100 sq ft	L	0.053	\$2.02	\$1.77
15	Market	Connection	H	4.833	\$120.24	\$162.10
16	Mortuaries	Connection	L	4.778	\$189.94	\$160.25
17	Prof. Offices, Medical, Mfg, Contractors	100 sq ft	L	0.012	\$0.43	\$0.41
18	Repair Shops, Service Stations	Connection	M	0.761	\$24.05	\$25.54
20a	Restaurant	Seat	H	0.396	\$10.08	\$13.29
20b	Restaurant w/Patio Seats (seasonal)	Seat	H	0.203	\$5.04	\$6.80
21	School, College, w/gym, shower, cafeteria	Student	L	0.140	\$5.62	\$4.70
22	School, College w/cafeteria	Student	L	0.226	\$9.07	\$7.58
24	Public Restroom	Fixture	M	0.982	\$32.54	\$32.95
25	Laundromat (efficiency)	Machine	L	0.481	\$19.20	\$16.13
26	Laundromat (12-18 lb)	Machine	L	0.661	\$24.73	\$22.16
27	Laundromat (25-35 lb)	Machine	L	0.865	\$34.49	\$29.01
28	Laundromat (50 lb)	Machine	L	1.264	\$50.44	\$42.41



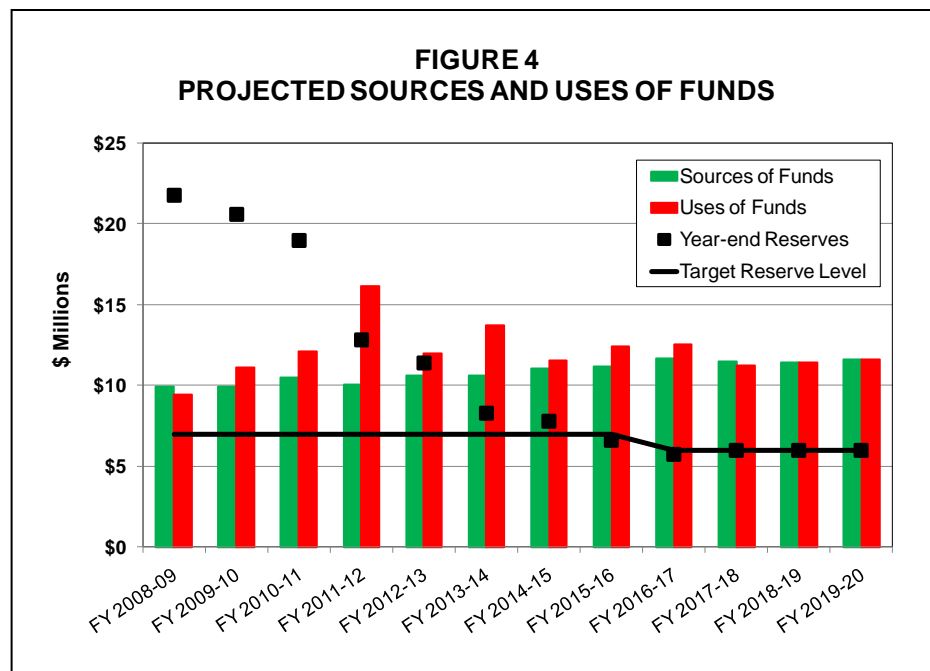
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**Updated Capacity Fee.** The current fiscal year capacity fee \$5,025. Based on the City's investment in wastewater system assets of \$50 million (based on replacement costs of assets net of depreciation and bonds outstanding) and the unrestricted cash reserves of \$27 million contributed by existing customers, the updated capacity fee should be increased to \$7,669 per ERU. As with the existing fees, this updated capacity fee should be escalated annually to adjust for inflation using the Engineering News Record Construction Cost Index (ENRCCI). Details on this analysis are provided in Table 17.

### Financial Planning Scenario Parameters.

Three financial planning scenarios are identified for comparison. The alternatives are based on reductions to the sales tax subsidies that currently support debt service, and the addition of a capacity standby charge to undeveloped parcels with sewer service available for hook up. As tabulated in the detailed tables accompanying this report, all three scenarios are based on the capital-related expenditures and O&M costs in the preceding figures and on \$21.7 million in unrestricted cash reserves available at the beginning of the current fiscal year. These reserves were developed from net operating revenues to the wastewater enterprise over the past years. These reserves were developed by annually retaining the unused portion of the sales tax allocated to the wastewater fund in the fund. The City's three-cent sales tax allocated to the Wastewater Fund has varied from 1.5 cents to the current 1.38 cents, or 46 percent of the sales tax.

Finally, all three scenarios result in the wastewater enterprise ending in a stable financial status with same cash reserve levels at the end of the ten-year plan. As such, all three scenarios have a cashflow comparable to the sources and uses of funds illustrated in Figure 4. Details on this analysis are provided in Table 10.







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There are three key elements to each scenario. The first impact is the increase in sewer service charges over the projected ten year financial plan (with the first five years having the most significant changes). The second is the addition of a monthly capacity standby charge billed to undeveloped residential parcels with access to sewer services. This proposed new charge adds the equivalent of 1,263 (14 percent of the customer base) in additional residential accounts to the rate-based revenues. The charge is based on the City's costs for maintenance and depreciation on the facilities built to serve residential parcels that now have delayed development. However, the new capacity standby charge must be enacted by the City and collected from undeveloped property owners using a billing and collection mechanism. Details on this analysis are provided in Tables 3, 10, 11 and 19.

The last key element of each scenario is the availability of sales tax proceeds for other City services when withdrawn from subsidizing the wastewater fund, which results in making more sales tax funds available for other City services. The three scenarios are tabulated below.

**Scenario 1.** As shown below, Scenario 1 is based on the total elimination of the sales tax subsidies over the next ten years with the support of the new capacity standby charge revenues. In six years by FY 2015-16, the residential sewer service charge has more than doubled from \$390 to \$896 per year, but the annual sales tax subsidies are reduced by \$3

FINANCIAL PLANNING SCENARIO NO. 1: SELF SUPPORTING ENTERPRISE IN 10 YEARS WITH STANDBY FEES												
Description	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Proposed Rate Increase	0%	0%	20%	20%	20%	15%	5%	10%	10%	8%	4%	2%
Sewer Service Charge (\$/ERU-yr)	\$390	\$390	\$469	\$562	\$675	\$776	\$815	\$896	\$986	\$1,065	\$1,107	\$1,124
Sewer Service Charge (\$/ERU-mon)	\$32.54	\$32.54	\$39.05	\$46.86	\$56.23	\$64.66	\$67.90	\$74.69	\$82.15	\$88.73	\$92.28	\$93.66
Increase in Sewer Service Billable ERUs		0.3%	20.0%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%
<b>Cash flow (\$1,000)</b>												
Sewer Service Charges	\$3,105	\$3,114	\$4,484	\$5,394	\$6,489	\$7,481	\$7,874	\$8,686	\$9,580	\$10,375	\$10,819	\$11,012
City Sales Tax to Sewer Fund	46%	46%	40%	35%	30%	25%	20%	15%	10%	5%	0%	0%
Sales Tax Proceeds	\$5,271	\$5,150	\$4,297	\$3,797	\$3,287	\$2,822	\$2,325	\$1,779	\$1,209	\$617	\$0	\$0

million. The key advantage of Scenario 1 is the elimination of sales tax subsidies, making the sewer enterprise fully self-supporting in ten years and releasing \$5.2 million per year for other city services. The key disadvantage is that it has the highest proposed sewer service charges of all alternatives, including the capacity standby charge.

**Scenario 2.** This second scenario is based on the reduction of the annual sales tax subsidies from the current \$5.3 million to \$2.5 million (from the current 46 percent to 20 percent) over ten years, with the support of the new capacity standby charge. In six years by FY 2015-16, the residential sewer service charge has increased from \$390 to \$722 per year, and subsidies



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are reduced by \$1.6 million annually. Scenario 2 uses a series of 10 and 15 percent annual rate increases starting in July 1, 2010, with lesser increases from 2016 through the rest of the financial plan. The key advantages of Scenario 2 are the balance between competing pros and cons, the lowest proposed sewer service charges of all alternatives and the reduced sales tax subsidies available for other city services. The key component of this scenario is that the new capacity standby charge must be enacted and collected from undeveloped

FINANCIAL PLANNING SCENARIO NO. 2: SALES TAX SUBSIDIES OF \$2.5 MILLION PER YEAR WITH STANDBY FEES												
Description	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Proposed Rate Increase	0%	0%	15%	15%	10%	10%	5%	10%	6%	4%	6%	2%
Sewer Service Charge (\$/ERU-yr)	\$390	\$390	\$449	\$516	\$568	\$625	\$656	\$722	\$765	\$796	\$843	\$856
Sewer Service Charge (\$/ERU-mon)	\$32.54	\$32.54	\$37.42	\$43.03	\$47.34	\$52.07	\$54.67	\$60.14	\$63.75	\$66.30	\$70.28	\$71.33
Increase in Sewer Service Billable ERUs		0.3%	20.0%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%
<b>Cash flow (\$1,000)</b>												
Sewer Service Charges	\$3,105	\$3,114	\$4,297	\$4,954	\$5,463	\$6,024	\$6,341	\$6,994	\$7,434	\$7,753	\$8,240	\$8,387
City Sales Tax to Sewer Fund	46%	46%	40%	40%	40%	35%	35%	30%	30%	25%	20%	20%
Sales Tax Proceeds	\$5,271	\$5,150	\$4,297	\$4,340	\$4,383	\$3,950	\$4,069	\$3,557	\$3,628	\$3,084	\$2,517	\$2,567

property owners. The procedure for collecting this charge will need to be developed by staff with appropriate provisions for late debt collections.

**Scenario 3.** This third scenario is based on the reduction of the annual sales tax subsidies from the current \$5.3 million to \$3.8 million over ten years (from 46 to 30 percent), but without the new capacity standby charge. By FY 2015-16 in six years, the residential sewer service charge has more than doubled from \$390 to \$861 per year, but subsidies are reduced by only \$1.6 million annually. The key distinction of Scenario 3 is that it does not require the new capacity standby charge, and the sewer service charge at the end of ten years is only slightly higher than Scenario 2. The key disadvantage is that it requires the highest continued subsidy of all alternatives.

FINANCIAL PLANNING SCENARIO NO. 3: SALES TAX SUBSIDIES OF \$3.8 MILLION PER YEAR WITH NO STANDBY FEES												
Description	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Proposed Rate Increase	0%	0%	15%	20%	20%	20%	11%	0%	0%	0%	0%	2%
Sewer Service Charge (\$/ERU-yr)	\$390	\$390	\$449	\$539	\$647	\$776	\$861	\$861	\$861	\$861	\$861	\$874
Sewer Service Charge (\$/ERU-mon)	\$32.54	\$32.54	\$37.42	\$44.91	\$53.89	\$64.66	\$71.78	\$71.78	\$71.78	\$71.78	\$71.78	\$72.85
Increase in Sewer Service Billable ERUs		0.3%	1.9%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
<b>Cash flow (\$1,000)</b>												
Sewer Service Charges	\$3,105	\$3,114	\$3,647	\$4,389	\$5,280	\$6,353	\$7,071	\$7,092	\$7,114	\$7,135	\$7,156	\$7,285
City Sales Tax to Sewer Fund	46%	46%	40%	40%	40%	35%	35%	30%	30%	30%	30%	30%
Sales Tax Proceeds	\$5,271	\$5,150	\$4,297	\$4,340	\$4,383	\$3,950	\$4,069	\$3,557	\$3,628	\$3,701	\$3,775	\$3,850



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**Sensitivity Analysis.** In addition to the three scenarios, a sensitivity analysis provides a comparison of the level of sales tax subsidies versus the increases in sewer service charges to replace the subsidy. The comparison is for year six of the financial plan. As shown, in FY 2014-15 a \$1.2 million reduction in the subsidy increases the monthly rates by \$6. In all scenarios, lower sales tax subsidies result in much higher rates.

Moreover, the use of the new capacity standby charge increases the customer base by 14 percent in 2010, which significantly reduces the rates to existing customers.

SENSITIVITY ANALYSIS: SEWER FUND SUBSIDY LEVEL VERSUS FY 2014-15 RATES				
Subsidy Level	Annual Sales Tax Subsidy (\$ Million/Percent Transfer)		Annual Rate (\$ per ERU)	
			With New Capacity Standby Fee	Without New Standby Fee
Existing Subsidy	\$5.3	46%	\$582	\$682
Scenario 2	\$4.1	35%	\$656	na
66%	\$3.5	30%	\$785	\$876
43%	\$2.3	20%	\$908	\$1,029
23%	\$1.2	10%	\$1,030	\$1,185
None	\$0.0	0%	\$1,155	\$1,349

Current year 2009 annual sewer service charges are \$390 per dwelling (ERU). With existing subsidies and no standby fee, the current rates must increase to \$680 by FY 2014-15.

## Detailed Analysis

The detailed analysis in this section provides the tables developing the findings and conclusions described in the summary. The report documents the purpose, findings and conclusions of each table. This detailed analysis is divided between the financial plan results and updates to the existing rates and charges.

## Financial Planning Analysis

This section presents the development of the annual revenue requirements to be recovered from updated wastewater service charges. This financial plan develops the rate-based revenue requirements for next ten years consistent with the City's financial policies for enterprise cash reserve targets. As described in the summary, Financial Planning Scenario 2 is presented in the tables. As such, all tables developing levels of revenues, cash balances and proposed rates are based on Scenario 2 parameters.

**Table 1 Assumptions.** The purpose of this table is to summarize the current financial indices and general wastewater utility financial policies including standards. City policy is to have target reserve totaling 1.2 months of (10 percent of annual) operating and maintenance expenditures, capital contingency reserves of 20 percent of year's pay-go capital improvement project expenditures, and one year of debt service. Other assumptions include customer growth and inflationary cost increases. We have estimated that salaries and benefits



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will increase at an annual rate of three percent, and that the City will receive three percent interest earnings on reserves. Per City staff the utility is anticipating 0.5 percent annual growth in residential accounts until the end of FY 2014-15 and 0.6 percent increase from FY 2015-16 through FY 2019-20. Also, there will be zero growth in non-residential accounts throughout the study period.

**Table 2 Existing Sewer Service Accounts.** The purpose of this table is to list the utility's existing sewer service customer accounts. As shown, there are currently 23 different customer classifications. For each classification in the table are listed the number of accounts, sewer discharge volume per billing unit, number of billing units and projected revenues. The billing system is based on ERUs, with 1.0 ERU equal to the customer burden associated with an average single family residential customer connection. Based on the reported current number and type of billing accounts, the City has a customer base of 8,370 ERUs. The budgeted customer revenue for FY 2008-09, at \$3.2 million, is one percent lower than would be expected for 8,370 ERUs, but this understatement of revenues is appropriate for conservative financial planning. As such, the 8,370 ERUs are used as the baseline condition for the development of growth projections and projection of future revenues. Also identified in the table are the 1,663 undeveloped parcels with access to the sewer system.

**Table 3 Projected Billable Customers.** The purpose of this table is to show the very low projected growth in sewer customers in next ten years as provided by the City. The projected annual growth rate incorporated herein is 0.50 to 0.60 percent for residential customers and zero percent for non-residential customers computed annually. Based on the growth projections, under the current rate structure the current 8,370 billable ERUS will grow to 8,796 ERUs in FY 2019-20. Customer growth affects the City's revenue requirements in three ways. First, it increases the customer base, which provides additional accounts subject to user charges. Second, it increases the demands and the costs for sewage treatment. Third, it is the source of capacity fee revenues resulting from hook-ups to the system.

Also provided in the table is a projection of billable customers that incorporates the cost of service equity findings and updated rate structure described in the following report sections. This update includes a new customer category for sewerred but undeveloped residential parcels with 1,201 ERUs, and a new multi-family dwelling residential apartment class with 300 ERUs that was segregated from the single family dwelling class. Based on the growth projections, under the updated rate structure the current 8,370 billable ERUS will increase to 10,073 in FY 2010-11 and grow to 10,313 ERUs by FY 2019-20.



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**Table 4 Sales Taxes to Wastewater Utility.** The purpose of this table is to project the City sales tax proceeds to wastewater enterprise. Currently, 1.38 percent (46 percent) of the three percent sales tax that is collected by the City is used for wastewater fund debt service. The sewer utility is projected to receive \$5.1 million in sales taxes revenues this year, compared to the current \$3.3 million in rate-based revenues. Under the Financial Plan Scenario 2 described in the summary, the sales tax proceeds subsidizing the sewer utility are projected to decline every year to \$2.6 million after 10 years.

**Table 5 Historical Revenues.** The purpose of this table is to summarize historical financial revenues to provide a basis for future revenues. Historical revenues for the sewer enterprise were obtained from City financial statements for FY 2006-07 and FY 2007-08 and the projected year end data for FY 2008-09. The historical revenues are divided into operating and non-operating revenues. Operating revenues from charges varied from \$3.1 million in FY 2006-07 to estimated \$3.2 million in FY 2008-09. The major source of sewer service revenues is City sales tax subsidies. The revenues from City sales tax have been varied from \$5.7 million in FY 2006-07 to estimated \$5.3 million in FY 2008-09.

**Table 6 Historical Salaries and Benefits.** The purpose of this table is to list the historical labor and benefit expenses, divided between administration and operations and construction services. These are relatively constant at \$1.5 million per year.

**Table 7 Past and Current Budgets.** The purpose of this table is to summarize the historical sources and uses of cash for FY 2006-07 through FY 2008-09, as well as the current budgeted revenues and expenses for FY 2009-10 and FY 2010-11. The flow of funds is divided into operating and non-operating revenues and expenses, and includes debt service requirements and non-cash expenses such as depreciation. Debt service for the sewer utility in FY 2008-09 was \$6.1 million, as detailed in Appendix 1. As shown for FY 2008-09, total annual rate-based operating revenues and subsidies were \$3.2 million and \$5.3 million, plus \$1.2 million for non-operating revenues. Annual O&M expense in the City excluding depreciation was around \$3.4 million, excluding non-cash depreciation.

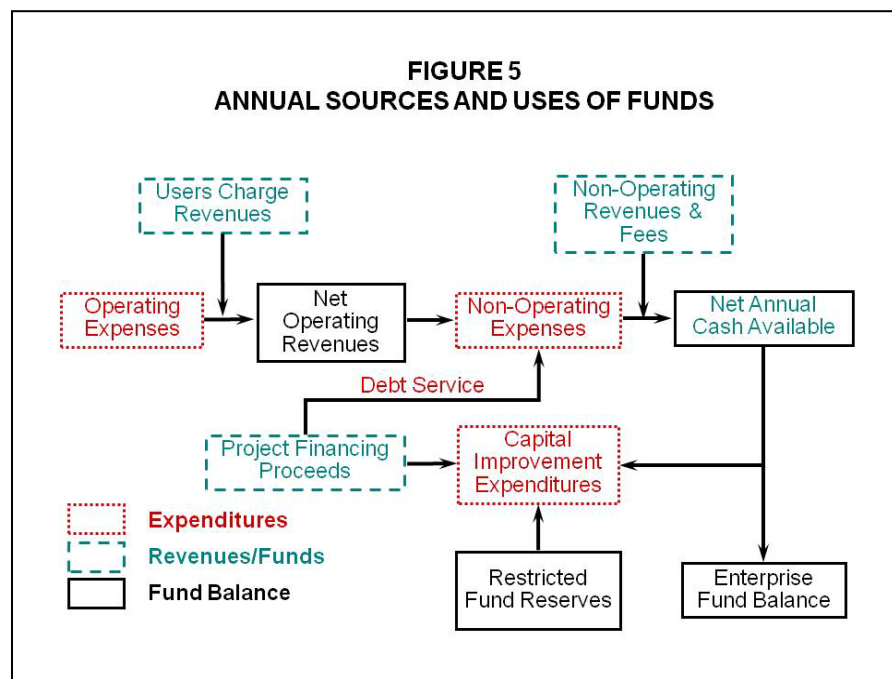
**Table 8 Capital Improvement Program.** The purpose of this table is to tabulate the current and projected capital improvement projects. All capital improvement projects are related to the upgrade of the current collection system and wastewater treatment plant. The most significant projects are related to the major pump station improvement and Chapel area sewer improvement. For FY 2008-09, there is \$14.6 million in project costs. Total capital costs for FY 2009-10 through FY 2013-14 are provided by the City staff. Projects during FY 2014-15 through FY 2019-20 are estimated at \$2.3 million per year as facility replacement project costs based on the annual depreciation in current dollars of City's fixed assets. Detailed calculation of the depreciation is shown in Table 15.



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**Table 9 Capital Funding Plan.** The purpose of this table is to show the funding plan for capital projects. As shown, most FY 2009-10 project costs are anticipated to be funded by the remaining estimated bond proceeds of \$5.1 million. The remaining capital costs will be funded on a cash-based pay-go basis. Over the next ten years, the City will expend \$28 million in cash. It is not anticipated that the City will have to issue another revenue bond to pay for the capital projects. Non-cash capital expenses such as depreciation and amortization are not included.

**Table 10 Projected Utility Cashflow.** The purpose of this key table is to project the rate-based revenue requirements and sewer utility financial performance for the next ten years under the Financial Planning Scenario 2. The calculations are based on a projection of the annual sources and uses of funds, as illustrated in Figure 5.



This table escalates operating expenses and capital expenditures to estimated future dollars based on inflationary factors. Current reserves as of ending FY 2008-09 are estimated at \$21.7 million, including the working cash and capital contingencies. These reserves do not include the year-end unused bond proceeds of \$5.1 million. Staff established a conservative reserve target of \$7 million, as described in Appendix 2

Summaries of the key study findings are as follows:

- Annual operating expenditures are projected to increase from \$3.4 million in FY 2008-09 to \$4.6 million in FY 2019-20 based on the inflationary escalations of three percent per year. Existing debt service on bonds funding the WWTP and sewer extensions are approximately \$6.1 million per year, except in the last three years when it drops to \$4.7 million.
- To fund all expenditures while maintaining the target reserve levels under the Financial Planning Scenario 2, the current annual rate-based service charge revenues of \$3.1 million



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must increase by \$5 million per year to \$8.3 million by FY 2019-20 through rate adjustments. The largest element of this increase is from the \$2.8 million per year reduction in sales tax subsidies during the same period. The second element of the elimination of the \$2 million per year drawdown in cash reserves for deficits in net operating revenues after debt service and pay-go project spending. As shown, over the next five years a series of 15 and 10 percent annual rate increases are required, followed by five increases averaging 6 percent per year.

- The current unrestricted reserve balance of \$21.7 million in the wastewater fund will decrease to the targeted \$6 million at end of the year FY 2019-20 to meet the targeted reserve.

As described in the summary, three financial planning scenarios were evaluated; the alternatives were based on reductions to the sales tax subsidies that currently support debt service, and the addition of a capacity standby charge to undeveloped parcels with sewer service available for hook up. Out of three planning scenarios, Scenario 2 was used for the findings in the detailed tables presented herein. The key advantages of Scenario 2 are the balance between competing pros and cons, the lowest proposed sewer service charges of all alternatives and the reduced sales tax subsidies available for other city services.

**Table 11 Sewer Service Charges and Capacity Fees.** The purpose of this table is to list the current and future sewer service charges, and contrast the charges with the sewer utility costs per ERU. The current sewer service charge is \$390 per ERU. As shown, the FY 2009-10 annual sewer system cost of \$1,341 per residence (ERU) is reduced to a rate of \$390 per year with offsets from city sales taxes, reserves and non-operating revenues. The shortfall in sources of funds is compensated with a drawdown of \$143 per year in cash reserves and the current sales tax subsidies of \$614 per ERU. At an absolute minimum, the rate-based revenues must fund annual operating costs of \$434. However, it is irregular in the municipal utility industry for any subsidies to be used, especially for a utility budgeted within an enterprise. The financial planning Scenario 2 calls for the sewer service charges to increase to \$843 over the next ten years, which will reduce the annual sales tax subsidies to \$245 per ERU. Note that our revenue projections include an estimated 5 percent non-payment of sewer service charges.



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**Table 12 Rate Survey.** The purpose of this table is to show comparison of sewer service charges and the capacity fees of other wastewater utilities in Arizona.

Comparisons of sewer service charges among different communities is popular, but can be very misleading; the City's annual \$614 per ERU subsidy from sales tax proceeds, as well as the \$721 per ERU in annual debt being a case of point. The costs of community sewer service that are outside the control of the city government include:

- Treatment level required by state regulators;
- Difficult sewerage due to a prohibition of septic systems by state regulators;
- Residential densities impacting sewer length and cost per house;
- Economies of scale for smaller facilities impacting unit costs;
- Soil condition and topography impacting collection system costs; and
- Land cost for treatment plant sites.

Alternative revenue sources for wastewater utilities will also affect monthly sewer service charges. These include:

- Tax subsidies, including sales and property;
- Special improvement districts with benefit assessments on property tax rolls;
- Interfund transfers from city general funds;
- State and federal project grants and earmarks and low interest rate loans; and
- Labor costs and power rates in the community.

A proper comparison of charges is typically prepared in a benchmarking study, which will segregate the costs, revenues and service levels to normalize the comparison and provide an apples to apples review. Otherwise, a wastewater rate survey should be critically reviewed using the same judgment used for a water rate survey between communities of abundance and shortages.

As shown in Table 12, City of Sedona has had a monthly sewer service bill of \$32.54 per ERU. This current rate is lower than the average of all nine utilities surveyed, with Bullhead City, Chino Valley and Lake Havasu having higher bills and five other utilities at lower rates. Currently, the City has a \$5,025 per ERU capacity fee for the treatment plant. There is no current fee for the collection system.

**Table 13 Projected Rates with Existing Structure.** The purpose of this table is to show the proposed rates using the existing rate structure and the rate-based revenue increases shown in Table 10. As shown, under Financial Plan Scenario 2, the residential sewer service charge of \$32.54 per month will increase 60 percent over four years to \$52.07 in FY 2013-14. Note that most of this increase is a result of reducing the sales tax subsidies to the utility.





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## Rates and Charges Update Analysis

This section presents the development of the updates to the existing rates and charges. All the described tables are attached to the end of this report.

**Table 14 Census Persons per Household.** The purpose of this table is to estimate the sewage discharge differences between single family and multi-family dwellings (SFD and MFD). As shown, the persons per household (PPH) identified in the 2000 Census indicates that there are an average of 2.12 PPH in SFDs and 1.81 PPH in MFDs, indicating a 14 percent difference. The table also indicates a charge per single family dwellings of 0.905 ERUs. As developed in the following tables, a proposed account-based customer service charge of 0.095 ERUs will be added to each SFD account, bringing the total charge per single family household to 1.0 ERUs. In summary, we conclude that the sewer service charge per MFD dwelling unit be reduced to 14 percent below the charge per SFD dwelling at 0.773 versus 0.905 ERUs per dwelling unit.

**Table 15 Wastewater Fixed Assets.** The purpose of this table is to characterize the wastewater utility fixed assets. This information is used to calculate capacity fees, to develop an annual level of project expenditures for asset replacement and rehabilitation (R&R), and to allocate assets between the collection system and treatment plant for the cost of service equity calculations. Although the total original book value of all assets is approximately \$150 million, the assets listed include only building improvements, wastewater lines, machineries and equipment classifications with a value at least \$1 million. The local neighborhood collection facility values are excluded from the calculations of updated capacity fees, as no credit should be provided to the developer for their contribution of equivalent facilities in their subdivision. However, any infill development connecting to local utility pipelines should pay for all utility assets. Moreover, land, equipment, furniture, computer software and hardware are not included.

As shown, the FY 2008-09 original cost less depreciation (OCLD) value of assets is \$78 million. Of more importance, annual depreciation based on replacement costs is \$2.0 million, and the replacement cost less depreciation (RCLD) value of the system is \$105 million. RCLD asset values are developed using ENRCCI inflationary escalations on OCLD values. RCLD values represent the value of facilities at the time when a customer actually connects, and represents the utility's implicit cost of early investing in excess facility capacity for the benefit of future development.

The \$2.0 million is used to estimate annual project expenditures for the years beyond the current CIP, and the \$105 million is the basis for the updated capacity fee.



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**Table 16 Wastewater Flow and Capacity.** The purpose of this table is to list the current system flows (1.2 million gallons per day (MGD) with 8,370 current ERUs), and system capacity (1.6 million gallons per day (MGD) with 11,160 ERU capacity). These values, based on recent plant capacity determinations, include waste stream strength, and are used with the system assets to identify unit values. Limiting factors to reaching the 2.0 MGD capacity for the full treatment system include the capacities of the effluent disposal system, the aeration and clarifier basins, and the Ultra-Violet disinfection process.

**Table 17 Updated Equity (Buy-In) Capacity Fee.** Discussions with City staff have concluded that facilities serving new developments will no longer be subsidized with revenues from existing customers or from the Sedona community. Instead, the funding of future sewer system hook-ups will be from capacity fees for individual (infill related) parcels with access to existing sewer lines. Moreover, new sewer systems serving future residential developments will be constructed by developers, funded by developer exactions, or supported by improvement district bonds repaid with special property assessments.

As previously described, Table 12 Rate Survey identifies the capacity fees charged by several regional wastewater agencies. Table 17 provides the calculation for updated capacity fees for the City of Sedona based in the industry standard defined in the equity (buy-in) method of capacity fee calculation. Tables 15 and 16 developed the values used in the fee calculation, along with the \$55 million in outstanding bonds and \$26.9 million in existing cash reserves. The existing system assets include both the replacement cost less depreciation (RCLD) of facilities at \$105 million and \$27 million in cash reserves. The \$55 million in outstanding bond principal is excluded from the net facility values.

The unit load from a single-family dwelling sewer customer Equivalent Residential Unit (ERU) represents one unit of utility service. The facility values and reserves are divided by the total system capacity (11,160 ERUs) and current customer base (8,370 ERUs), respectively. The resulting fee per ERU can multiplied by the anticipated load from each new customer is based on their class and other indices such as square footage, fixture counts, or hotel bed count. As shown, the net system investment of \$77 million results in an updated capacity fee of \$7,669 per ERU. Capacity fees should be escalated annually to adjust for inflation using the Engineering News Record Construction Cost Index (ENRCCI).

**Table 18 Utility Cost of Service Allocations.** The purpose of this table is to allocate the FY 2008-09 wastewater enterprise expenditures to different expenditure categories, as identified from financial statements, budgets, and other documents provided by staff and based on typical industrial parameters.



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There are three utility cost categories used in this analysis. They are:

- Wastewater Flows in the collection system and treatment plant
- Strength-related Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) in the treatment process
- Customer Service Accounts

These allocations are allocated using the cost-causative approach. As shown, 68 percent of the costs are allocable to flows in collection and treatment, 22 percent to strength (BOD and TSS), and the remainder to service accounts. Note that these expenditure parameters are equivalent to the customer loading parameters, thus providing the cross-reference between customer loads and utility costs. Table 18 also identifies the facilities maintenance share of the annual costs for the development of the capacity standby charges. These facilities maintenance activities represent 43 percent of the O&M budget, excluding depreciation.

The result of this cost of service allocation procedure is used to develop equitable costs of service and identifies the equity of the customer bills. The purpose of a cost of service analysis is to determine the wastewater system costs incurred to serve each of customer classes. To recover the costs of providing the wastewater services based on cost of service principals, the utility costs are first allocated into expenditure categories as developed above. In the following tables, the customer burdens on the system are identified, so that their wastewater loading characteristics can be cross-referenced with the expenditure categories. This results in an allocation of the costs to each customer class.

**Table 19 New Capacity Standby Charge.** Creation of a new monthly capacity standby charge has been identified as a key tool for enhancing the equity of sewer service deliveries citywide to both current and future customers. The charge is based on the City's costs for maintenance and depreciation on the facilities built and available to serve parcels that have delayed development and remain undeveloped. In this case, facilities built and available refers to wastewater collection sewers owned by the City and ready to be connected to a sewer lateral from a privately-owned parcel.

As shown in the table, the annual maintenance of the collection and treatment facilities is \$1.3 million, excluding annual operating cost. Moreover, based on the book value of the wastewater facilities, annual depreciation is \$1.4 million. As the system capacity for 11,160 ERU dischargers, the city's annual cost for unused facilities is \$245 per ERU, or 0.627 ERUs. It is proposed that the City's estimated cost of billing the undeveloped parcel owners be added to this rate, bringing the total cost to 0.722 ERUs. Developed parcels that choose not to construct sewer laterals and pay the one-time capacity fee will be charged both the



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proposed capacity standby charge and the Environmental Fee, resulting in a monthly charge of 2.722 ERUs.

**Table 20 Sewage Strengths by Customer Type.** This table details sewage strength information useful in categorizing the discharges by customer classifications. Most of the data is from sampling studies from large metropolitan sewerage agencies, as reported in California State Water Resources Control Board. While a variety of sewage strengths by standard industry code (SIC) are listed, the City's actual customer current flows are used to define an average sewage strengths by one of four strength categories of low, residential, medium and high. These average strengths are used to develop the cost of equity findings in the following tables. Note that this table may be used to classify new customers as they connect with the system.

**Table 21 Existing Rate Structure.** This table provides the existing sewer system periodic charges, and FY 2008-09 customer loads. As no actual metering of water use is possible to calculate wastewater discharges, they are estimated from ten different billing units providing estimated flows. These are connection, Parcel, Seat, Bay, Restroom, Room, 100 sq ft, Student, Fixture and Machine. Moreover, the current customer billing system includes a factor for sewage strength, as represented by the 22 different customer classifications.

Currently it is difficult to develop actual water use and water returned to sewer information. Although the City's actual costs of providing sewer services exceed \$1,300 per year, we propose that the current billing units continue to be used to estimate sewage flows. However, in the following tables the current system will be validated with the City's current costs of service allocations among discharge flows, strengths and customer accounts. Moreover, using the standard sewage strength data developed on the prior table, the unit charges by customer classification can be updated.

**Table 22 Cost of Service Unit Rates.** This table combines the results of the prior tables to determine the wastewater loads in ERUs by customer class, based on cost of service principals, the currently estimated sewage flows and the base period FY 2008-09. The table is based on 1.0 ERUs remaining the load from one single family dwelling parcel account. While retaining the existing billing unit method, it updates the charge (in ERUs) per billing unit for each customer class. Finally, it also incorporates the additional burden placed on the wastewater system from the undeveloped parcels with access to sewer services. As shown, the total utility service costs have been allocated among sewage flow (68 percent), sewage strength (22 percent) and customer accounts (10 percent). These costs are cross referenced to ERUs, and the ERU loads allocated to each customer class. The unit charge is calculated for each billing parameter (account, gallon per day discharge, and pound per day of sewage strength), in ERUs. The result is that each account should be charged 0.095 ERUs per bill



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plus a per billing unit charge that is very similar to the current billing rates, with three exceptions. These exceptions are the new charges for undeveloped but sewered parcels, a division of residential customers between single family dwelling and multi-family apartment dwellings, and higher charges for the 83 restaurants in the City.

**Table 23 Current versus Updated Unit Rates.** In this table, the updated ERUs allocated to each customer class are compared with the current allocations. As shown, the total ERUs have increased by approximately 1,400 ERUs, primarily due to the 1,200 new ERUs billed to undeveloped but sewered residential parcels. Although a new multi-family residential dwelling class is recommended with a 26 percent drop in charges, and school billing rates are reduced by 19 percent, restaurant charges should be increased for equity by 28 percent over the current rates. Note that all these changes are in addition to the proposed rate-based revenue increases starting in FY 2010-11. The charges for residential customers (with the exception of multi-dwelling apartments), are normally billed at one billing unit per account.

**Table 24 Projected Rates with Updated Structure.** The updated and equitable ERUs per billing unit, and the increases to rate-based revenue requirements developed in the financial plan Scenario 2, are combined in this table tabulating unit rates through FY 2019-20. In addition to the unit rates shown for both residential and non-residential customer class, all but single-family dwelling accounts must also be billed the new account-based customer charge.

**Table 25 Projected Non-residential Bills.** The projected sewer service bills for seven different business are listed in this table. Also provided are the billing changes in FY 2009-10 resulting from the enactment of rate restructuring for fairness and equity.

**Appendix Tables.** There are two tables in the appendix, including a summary of the annual debt service from all existing bonds funding sewer facilities, and a calculation of the annual cash reserve target levels.



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## Concluding Remarks

We have enjoyed meeting with you and other City managers to prepare this interesting study and document its findings and conclusions, and look forward to seeing the Public Works Department continue to deliver sustainable wastewater service on a fair and equitable basis to the residents and businesses of the City of Sedona.

Please contact me at (949) 930-7276, or your Phoenix-based client service manager Doug Kobrick at (602) 281-7900, if you have any questions or comments.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Grant Hoag'. The signature is fluid and cursive, with the first name 'Grant' being more prominent.

Grant Hoag, P.E.  
Project Manager  
Camp Dresser & McKee Inc.

Attachments: Tables

TABLE 1  
ASSUMPTIONS

Description	Value
Minimum Pay as you go (per year)	20%
<hr/>	
Inflation & Interest (per year)	
O&M and Capital (a)	3.0%
Reserve Interest Earnings Rate (b)	3.0%
<hr/>	
Target Reserve Levels (per staff 11/4/09)	
Working Cash (months of O&M)	1.2
Capital Contingency (years of pay-go CIP)	20%
Years of Debt Service	One
<hr/>	
Account Growth Rate (c)	
Residential Accounts	
2009 to 2015	0.5%
2016 to 2020	0.6%
Non-Residential Accounts	0.0%

a. Salary and benefit increases are based on CPI inflation for Arizona state in year 2009.

b. Historical time value of money is 3 percent.

c. Source: City staff on 8/20, 7/1 and 11/4 2009.

TABLE 2  
EXISTING SEWER SERVICE ACCOUNTS

Category	Billing Classifications	Billing Units	Avg Flow per Billing Unit (gal/month)	ERU per Billing Unit	Service chg (\$/Unit-mon)	FY 2008-09			FY 2008-09
						Accts	Units	ERUS	Revenues
1	Residential	Connection	6,080	1.00	\$32.54	2,591	2,759	2,759	\$1,077,334
2	Residential (Low Flow, incd apartments)	Connection	4,378	0.907	\$29.52	1,786	2,081	1,888	\$737,173
new	Sewered but Unconnected Undeveloped Parcels (b)			0.00	\$0.00		1,663	0	\$0
	Environmental Fee for Sewered but Unconnected Developed Parcels (c)			2.00	\$65.08	41	41	82	\$32,019
<b>Residential Total</b>						<b>4,418</b>		<b>4,729</b>	<b>1,846,527</b>
4	Theaters, Libraries, Churches	Seat	80	0.01	\$0.43	26	4,206	56	\$21,703
5	Bar w/o dining facility	Seat	486	0.09	\$2.88	18	314	28	\$10,835
6	Car Wash w/o Recycle	Bay	32,000	3.78	\$122.98		0	0	\$0
7	Car Wash w/ Recycle	Bay	8,000	2.00	\$64.94	2	5	10	\$3,896
8	Department, Retail Stores	Restroom	1,000	0.15	\$4.90	158	345	52	\$20,286
9	Hospital, Convalescent	Bed	12,160	2.00	\$65.09		0	0	\$0
10	Hotel, Motel, Bed & Breakfast, RV Park	Room	3,040	0.56	\$18.29	47	1,687	948	\$370,263
11	Resort - Cottages, Villas	Connection	6,080	1.12	\$36.58	16	600	674	\$263,376
12	Fitness Center / Beauty Salon	100 sq ft	500	0.06	\$2.02	24	434	27	\$10,517
15	Market	Connection	7,600	3.70	\$120.24	4	4	13	\$5,050
16	Mortuaries	Connection	12,000	5.84	\$189.94	1	1	6	\$2,279
17	Prof. Offices, Medical, Mfg, Contractors	100 sq ft	100	0.01	\$0.43	202	6,165	81	\$31,810
18	Repair Shops, Service Stations	Connection	3,850	0.74	\$24.05	15	16	12	\$4,618
19	Repair Shops, Service Stations w/RV disposal	Connection	7,000	2.32	\$75.60		0	0	\$0
20	Restaurant	Seat	608	0.31	\$10.08	82	4,635	1,436	\$560,589
	Restaurant w/Patio Seats (seasonal)	Seat	304	0.15	\$5.04	1	20	3	\$1,210
21	School, College, w/gym, shower, cafeteria	Student	760	0.17	\$5.62	1	390	67	\$26,302
22	School, College w/cafeteria	Student	608	0.28	\$9.07	1	402	112	\$43,754
23	School, College w/o gym, shower, cafeteria	Student	456	0.06	\$2.02		0	0	\$0
24	Public Restroom	Fixture	6,080	1.00	\$32.54	17	87	87	\$33,972
25	Laundromat (efficiency)	Machine	3,600	0.59	\$19.20	1	18	11	\$4,147
26	Laundromat (12-18 lb)	Machine	4,650	0.76	\$24.73	1	1	1	\$297
27	Laundromat (25-35 lb)	Machine	6,450	1.06	\$34.49	1	8	8	\$3,311
28	Laundromat (50 lb)	Machine	9,450	1.55	\$50.44	1	6	9	\$3,632
<b>Non-Residential Total</b>						<b>619</b>		<b>3,641</b>	<b>1,421,845</b>
<b>Grand Total</b>						<b>5,037</b>		<b>8,370</b>	
						<b>Total Charges Calculated</b>			<b>\$3,268,372</b>
						<b>Total Charges Provided</b>			<b>\$3,229,221</b>
						<b>Difference</b>			<b>-1%</b>
Capacity fee (FY 2008-09)		New SFD Connection			\$5,025				

ERUs: Equivalent residential units.

Sedona's last wastewater rate increase was in 1997.

a. Source: Wastewater Rates Schedule provided by City staff. Cap fee 2008.XLS, Number of units and Customers data provided by City staff.

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b. There are no sewered unconnected ERUs in FY 2008-09.

c. Environmental Fees are for sewered developed parcels not connecting. The environmental fees for non-connection is double the regular monthly



TABLE 3  
PROJECTED BILLABLE CUSTOMERS

Description	Projected Y-E											
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
<b>Existing Rate Structure ERUs</b>												
Residential Regular (c)	2,759	2,773	2,928	2,943	2,958	2,973	2,988	3,006	3,024	3,042	3,060	3,078
Residential (Low Flow)	1,481	1,489	1,496	1,503	1,511	1,519	1,527	1,535	1,543	1,551	1,559	1,567
Environmental Fee	82	82	82	82	82	82	82	82	82	82	82	82
Multi-family Dwellings (billed as low flow)	406	408	410	412	414	416	418	420	422	424	426	428
Non-Residential ERUS	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641
Subtotal	8,370	8,393	8,557	8,581	8,606	8,631	8,656	8,684	8,712	8,740	8,768	8,796
Sewered but Unconnected Res. Parcels (a)	1,663	1,663	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749
Cap Standby Rate (ERU per Res Parcel)	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Total New ERUs	1,201	1,201	1,263	1,263	1,263	1,263	1,263	1,263	1,263	1,263	1,263	1,263
<b>Updated Cost of Service Rate Structure ERUs (see following tables)</b>												
Residential	2,759	2,773	2,928	2,943	2,958	2,973	2,988	3,006	3,024	3,042	3,060	3,078
Residential (Low Flow, excd apartments)	1,487	1,494	1,501	1,509	1,517	1,525	1,533	1,541	1,549	1,557	1,565	1,573
Environmental Fee	82	82	82	82	82	82	82	82	82	82	82	82
Undeveloped Sewered Parcels	1,201	1,201	1,263	1,263	1,263	1,263	1,263	1,263	1,263	1,263	1,263	1,263
Multi-family Dwellings (apartments)	300	301	303	305	307	309	311	313	315	317	319	321
Subtotal Residential ERUs	5,829	5,851	6,077	6,102	6,127	6,152	6,177	6,205	6,233	6,261	6,289	6,317
Non-Residential ERUS (b)	3,996	3,996	3,996	3,996	3,996	3,996	3,996	3,996	3,996	3,996	3,996	3,996
<b>Total Billable ERUs</b>	<b>9,825</b>	<b>9,847</b>	<b>10,073</b>	<b>10,098</b>	<b>10,123</b>	<b>10,148</b>	<b>10,173</b>	<b>10,201</b>	<b>10,229</b>	<b>10,257</b>	<b>10,285</b>	<b>10,313</b>
Projected New Capacity Connections (Billable ERUs)		23	155	24	25	25	25	28	28	28	28	28
Projected New Sewered but Unconnected Res. Parcels (a)			86									

ERUs: Equivalent Residential Billing Units (Annual charge per single-family dwelling unit)

b. Additional non-residential ERUs from the equity calculations are developed in the following sections.

a. Per City-provided information on 11/6/09, there will be 161 prepaid fees of \$338,100 and 155 new fees at the current fee schedule in Chapel in FY 2010-11, 86 new Chapel capacity standby fees in FY 2010-11 (in addition to the 1,663 current sewered unconnected parcels), and approximately 25 new fees per year in the future for citywide infill.

TABLE 4  
SALES TAXES TO WASTEWATER UTILITY

Description (a)	Projected YE	Projected										
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Annual Growth in Sedona Taxable Sales (c)				1%	1%	3%	3%	2%	2%	2%	2%	2%
City of Sedona Taxable Sales	\$381,965,942	\$373,167,101	\$358,053,830	\$361,634,368	\$365,250,712	\$376,208,233	\$387,494,480	\$395,244,370	\$403,149,257	\$411,212,242	\$419,436,487	\$427,825,217
Sales Tax Rate	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Sales Tax Revenues	\$11,458,978	\$11,195,013	\$10,741,615	\$10,849,031	\$10,957,521	\$11,286,247	\$11,624,834	\$11,857,331	\$12,094,478	\$12,336,367	\$12,583,095	\$12,834,757
Tax Proceeds Transferred to Sewer Fund	46%	46%	40%	40%	40%	35%	35%	30%	30%	25%	20%	20%
<b>Wastewater Fund Tax Proceeds</b>	<b>\$5,271,130</b>	<b>\$5,149,706</b>	<b>\$4,296,646</b>	<b>\$4,339,612</b>	<b>\$4,383,009</b>	<b>\$3,950,186</b>	<b>\$4,068,692</b>	<b>\$3,557,199</b>	<b>\$3,628,343</b>	<b>\$3,084,092</b>	<b>\$2,516,619</b>	<b>\$2,566,951</b>
Tax Proceeds available for Sewer Fund Debt Service Coverage (b)	\$9,072,578	\$9,078,858	\$9,080,561	\$9,078,213	\$9,160,961	\$9,176,111	\$8,434,661	\$9,411,311	\$9,364,886	\$7,081,652	\$7,083,995	\$7,083,995

a. In FY 2008-09, City of Sedona collected 3 percent in City sales tax of which 46 percent is allocated to Wastewater enterprise fund.

b. Debt Service Coverage Ratio is 1.5 minimum per 2007 Bond.

c. Per City staff 11/4/09: Taxable Sales - Decrease by 5% from original FY10/11 estimates, use 1% for two years, then increase to 3% in 13/14 and 14/15 then back to 2% for the rest of the years.

TABLE 5  
HISTORICAL REVENUES

Description (a)	Actual		Projected YE
	FY 2006-07	FY 2007-08	FY 2008-09
<b>Operating Revenues</b>			
Monthly fees	\$3,094,020	\$3,178,705	\$3,229,221
City Sales Tax (b)	\$5,732,824	\$5,683,318	\$5,271,130
<b>Total Operating Revenues</b>	<b>\$8,826,844</b>	<b>\$8,862,023</b>	<b>\$8,500,351</b>
<b>Non-operating Revenues</b>			
Permit fees & Misc.	\$83,020	\$6,936	\$8,857
Billing Late Fees	\$27,798	\$32,932	\$36,963
Environmental Penalty	\$31,280	\$30,990	\$33,358
Loan Service Charges	\$324	\$329	\$243
NSF Fees	\$170	\$90	\$150
Interest	\$126,037	\$47,275	\$47,441
Septage Fees	\$7,231	\$22,216	\$22,883
Recharge/Water Credits	\$0	\$0	\$0
Monthly Fee Rebate (c)	\$0	(\$316)	(\$430)
Capacity Fees	\$900,942	\$0	\$333,014
Pre-paid Capacity Fees	(\$6,300)	\$0	(\$23,100)
Capacity Fees Interest/Penalty	\$12,141	\$12,568	\$11,842
Interest: LGIP	\$636,902	\$359,499	\$510,413
Interest: Pre Pay Cap Fee	\$100,464	\$143,512	\$49,571
Interest: T-bills	\$552,142	\$695,622	\$350,931
Interest: Bond Series	\$2,857	\$177,207	\$217,271
W.I.F.A	\$0	\$0	\$0
<b>Subtotal Non-Op Revenues</b>	<b>\$2,475,008</b>	<b>\$1,528,860</b>	<b>\$1,599,407</b>
<b>Total Revenues</b>	<b>\$11,301,852</b>	<b>\$10,390,883</b>	<b>\$10,099,758</b>
Other Revenues (d)	\$0	\$45,000	\$6,162,748

a. Source: Five year projections of Wastewater Fund Revenues and Expenditures document provided by City on 6/12.

b. Currently, Sales tax of 3% for City is divided among three different funds per Table 6.

c. Monthly Rebates are for the Water Conservation. For FY 2008-09 the rebate is assumed to be at \$1000.

d. Bond proceeds available in the wastewater fund.

TABLE 6  
HISTORICAL SALARIES AND BENEFITS

Description (a)	Historical		Projected YE
	FY 2006-07	FY 2007-08	FY 2008-09
<i>Admin &amp; Plant Operations</i>			
Salary and Wages	\$660,304	\$717,755	\$719,180
Overtime	\$21,529	\$32,261	\$39,885
Employee Expenses	\$261,433	\$290,667	\$294,187
<b>Total</b>	\$943,266	\$1,040,683	\$1,053,252
<i>Construction</i>			
Salary and Wages	\$340,016	\$324,792	\$307,666
Overtime	\$1,228	\$1,713	\$1,913
Employee Expenses	\$130,928	\$122,227	\$122,019
<b>Total</b>	\$472,172	\$448,732	\$431,598
<b>Total Salaries and Benefits</b>	<b>\$1,415,438</b>	<b>\$1,489,415</b>	<b>\$1,484,850</b>

a. Source: Five year projections of Wastewater Fund Revenues and Expenditures document provided by City on 6/12.

b. Salaries and Benefits also include the salaries and wages for operations as well as for construction of capital projects.

TABLE 7  
PAST AND CURRENT BUDGETS

Description	Historical		Projected YE	Budget	
	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
<b>Operating Revenues</b>					
Monthly Fees	\$3,094,020	\$3,178,705	\$3,229,221	\$3,210,492	\$3,258,649
City Sales Tax Proceeds	\$5,732,824	\$5,683,318	\$5,271,130	\$5,149,706	\$5,201,203
Billing Late Fees	\$27,798	\$32,932	\$36,963	\$33,261	\$33,594
Total Operating Revenues	\$8,854,642	\$8,894,955	\$8,537,314	\$8,393,459	\$8,493,446
<b>Non-Operating Revenue</b>					
Interest (a)	\$1,418,402	\$1,423,115	\$1,175,627	\$839,334	\$786,737
Other Charges	\$127,866	\$72,813	\$53,803	\$174,770	\$175,316
Capacity Fees	\$900,942	\$0	\$333,014	\$206,000	\$532,500
Total Non-Op Revenues	\$2,447,210	\$1,495,928	\$1,562,444	\$1,220,104	\$1,494,553
<b>O&amp;M: Salaries and Benefits</b>					
Salary and Wages	\$1,000,320	\$1,042,547	\$1,026,846	\$1,060,883	\$1,071,492
Overtime	\$22,757	\$33,974	\$41,798	\$59,222	\$59,814
Employee Expenses	\$392,361	\$412,894	\$416,206	\$432,640	\$440,102
Total Salaries and Benefits	\$1,415,438	\$1,489,415	\$1,484,850	\$1,552,745	\$1,571,408
<b>O&amp;M: Supplies and Services</b>					
Professional services	\$90,622	\$55,573	\$83,852	\$94,470	\$84,691
Utilities	\$296,378	\$355,963	\$382,976	\$406,050	\$386,806
Administrative Operations	\$394,872	\$447,910	\$374,282	\$394,988	\$378,025
Plant Maintenance	\$0	\$0	\$909,040	\$898,800	\$918,130
Collections	\$284,844	\$492,017	\$110,424	\$196,829	\$111,528
Contn Legal/Operation/Lab Fees	\$131,550	\$60,566	\$87,124	\$100,224	\$84,992
Total Supplies and Services	\$1,198,266	\$1,412,029	\$1,947,698	\$2,091,361	\$1,964,172
<b>Subtotal Operating Expenses</b>	<b>\$2,613,704</b>	<b>\$2,901,444</b>	<b>\$3,432,548</b>	<b>\$3,644,106</b>	<b>\$3,535,580</b>
Debt Service (interest and principal, b)	\$4,517,089	\$5,883,352	\$6,048,385	\$6,052,572	\$6,053,707
Non-cash Depreciation (c)	\$1,925,635	\$1,925,635	\$1,437,837	\$1,437,837	\$1,437,837

a. Interest revenue includes interest income on LGIP, T-Bills, Pre pay Capacity fees and Bond Series.

b. Debt Service schedule is as per the total debt service schedule for ww fund only, document provided by City on 6/15. It includes the Bonds series for 1998, 2002, 2004-1, 2004-2, 2005, 2007 and WIFA.

c. Source: Capital Annual Financial Statements for Wastewater Enterprise Funds for FY 2007-08.

d. Budgeted fee revenues such as capacity fees, interest earnings and sales tax proceeds are provided for information only, and replaced with calculated projections in FY 2009-10.

TABLE 8  
CAPITAL IMPROVEMENT PROGRAM

Construction -- WWTP	Upgrade	Expansion	Projected YE		Projected															
			FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20						
Vehicle Replacement - Inspector	100%	0%																		
TV Inspection Truck	100%	0%						\$175,000		\$0										
Solids Handling Upgrades	100%	0%	\$700,000	\$400,000	\$1,500,000					\$3,690,000										
Major Pump Station Improvements	50%	50%	\$7,153,347	\$4,179,629																
Minor Pump Station Upgrades	100%	0%	\$0	\$120,000	\$75,000	\$0	\$75,000	\$75,000												
Berm Maintenance	100%	0%	\$625,000	\$300,000																
Irrigation System Repairs	100%	0%	\$0	\$0	\$55,000	\$55,000	\$0	\$0												
Chapel Area Sewer Improvements	0%	100%	\$3,835,000	\$2,394																
Odor Reduction Project	100%	0%	\$300,000	\$18,535																
Chapel Area 1A Sewer Collection	0%	100%	\$800,000	\$38,350																
Northview Pump Station Abandonment	100%	0%	\$125,000	\$440,000																
WWTP Effluent Upgrades	0%	100%	\$0	\$25,000	\$480,000	\$5,200,000	\$0	\$0												
WWTP Recharge Project	100%	0%	\$0	\$500,000	\$454,000	\$1,225,000	\$1,925,000	\$0	\$0											
Other Minor Projects in FY 08-09 & 09-10	100%	0%	\$535,250	\$47,500																
Projected Asset Replacement Projects (based on annual depreciation in then-current dollars)										\$1,980,082	\$2,039,485	\$2,100,669	\$2,163,689	\$2,228,600	\$2,295,458					
<b>Sub Total - Construction (b)</b>			<b>\$14,073,597</b>	<b>\$6,071,408</b>	<b>\$2,564,000</b>	<b>\$6,480,000</b>	<b>\$2,175,000</b>	<b>\$3,765,000</b>	<b>\$1,980,082</b>	<b>\$2,039,485</b>	<b>\$2,100,669</b>	<b>\$2,163,689</b>	<b>\$2,228,600</b>	<b>\$2,295,458</b>						
<b>Misc Collection Projects - Master Plan</b>	100%	0%	\$500,000																	
<b>Capitalized Labor Costs (c)</b>				\$518,722																
<b>Grand Total Capital Costs</b>			<b>\$14,573,597</b>	<b>\$6,590,130</b>	<b>\$2,564,000</b>	<b>\$6,480,000</b>	<b>\$2,175,000</b>	<b>\$3,765,000</b>	<b>\$1,980,082</b>	<b>\$2,039,485</b>	<b>\$2,100,669</b>	<b>\$2,163,689</b>	<b>\$2,228,600</b>	<b>\$2,295,458</b>						

a. Source: All capital improvement projects are as per listed in five year outlook plan for ww funds revenues and expenditures provided by City on 6/12. The WWTP solids handling and recharge project costs for FY 2009-10 and 10-11 were updated by the City

b. All Capital Improvement projects listed in this table are Upgrade projects as per the City staff.

c. Capitalized labor in FY 2009-10 came out as 3.6 percent of the project costs. The same percentage is used to calculate the capitalized labor in following years.

TABLE 9  
CAPITAL FUNDING PLAN

Description	Projected										
	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
<b>Project Funding Source</b>											
Grant Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenue Bond Funds (included committed funds)	\$5,142,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cash based Pay-as-you-Go (Pay-Go, a)	\$1,447,886	\$2,564,000	\$6,480,000	\$2,175,000	\$3,765,000	\$1,980,082	\$2,039,485	\$2,100,669	\$2,163,689	\$2,228,600	\$2,295,458
<b>Total Project Expenditures</b>	<b>\$6,590,130</b>	<b>\$2,564,000</b>	<b>\$6,480,000</b>	<b>\$2,175,000</b>	<b>\$3,765,000</b>	<b>\$1,980,082</b>	<b>\$2,039,485</b>	<b>\$2,100,669</b>	<b>\$2,163,689</b>	<b>\$2,228,600</b>	<b>\$2,295,458</b>
<b>Construction Fund Sources and Applications</b>											
Beginning Fund Balance (b)	\$5,142,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>GO Bond or Grant Proceeds</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less Bonded Debt Service Reserve (1 year of debt)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less Bond Issuance Fee	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less Projects funded from Construction Fund	(\$5,142,244)	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest Earnings on Unspent Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Fund Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

a. Cash based Pay-as-you-Go (Pay-Go) projects are at least 20 percent of total capital expenditures in any one year, and include capitalized labor costs.

b. In FY ending 2009-10 the unspent construction funds per City staff were \$5.1 million excluding restricted prepaid capacity fees of \$1.2 million for expansion-related projects.

**TABLE 10  
PROJECTED UTILITY CASH FLOW**

Description (a)	Projected YE	Projected										
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
<b>Rate (\$/ERU) Increase</b>	0%	0%	15%	15%	10%	10%	5%	10%	6%	4%	6%	2%
<b>Rate (\$/ERU-year)</b>	\$390	\$390	\$449	\$516	\$568	\$625	\$656	\$722	\$765	\$796	\$843	\$856
<b>Operating Revenues</b>												
Monthly Fees	\$3,104,953	\$3,113,535	\$4,297,202	\$4,954,046	\$5,462,942	\$6,024,077	\$6,340,863	\$6,994,147	\$7,434,145	\$7,752,674	\$8,240,268	\$8,386,641
City Sales Tax	\$5,271,130	\$5,149,706	\$4,296,646	\$4,339,612	\$4,383,009	\$3,950,186	\$4,068,692	\$3,557,199	\$3,628,343	\$3,084,092	\$2,516,619	\$2,566,951
<b>Total Operating Revenues</b>	<b>\$8,376,083</b>	<b>\$8,263,241</b>	<b>\$8,593,847</b>	<b>\$9,293,659</b>	<b>\$9,845,951</b>	<b>\$9,974,263</b>	<b>\$10,409,555</b>	<b>\$10,551,346</b>	<b>\$11,062,488</b>	<b>\$10,836,766</b>	<b>\$10,756,886</b>	<b>\$10,953,592</b>
<b>Operating Expenses</b>												
Labor & Benefits	\$1,484,850	\$1,552,745	\$1,571,408	\$1,618,550	\$1,667,107	\$1,717,120	\$1,768,634	\$1,821,693	\$1,876,343	\$1,932,634	\$1,990,613	\$2,050,331
Supplies and Services	\$1,947,698	\$2,091,361	\$1,964,172	\$2,023,097	\$2,083,790	\$2,146,303	\$2,210,693	\$2,277,013	\$2,345,324	\$2,415,683	\$2,488,154	\$2,562,799
Total Operating Expenses	\$3,432,548	\$3,644,106	\$3,535,580	\$3,641,647	\$3,750,897	\$3,863,423	\$3,979,326	\$4,098,706	\$4,221,667	\$4,348,317	\$4,478,767	\$4,613,130
<b>Net Operating Revenue</b>	<b>\$4,943,535</b>	<b>\$4,619,135</b>	<b>\$5,058,268</b>	<b>\$5,652,012</b>	<b>\$6,095,054</b>	<b>\$6,110,840</b>	<b>\$6,430,229</b>	<b>\$6,452,640</b>	<b>\$6,840,821</b>	<b>\$6,488,449</b>	<b>\$6,278,120</b>	<b>\$6,340,463</b>
<b>Non Operating Revenues</b>												
Interest	\$1,175,627	\$839,334	\$568,137	\$385,439	\$342,673	\$249,797	\$234,634	\$198,656	\$172,867	\$180,747	\$180,555	\$180,469
Other Charges	\$90,766	\$208,031	\$214,272	\$220,700	\$227,321	\$234,141	\$241,165	\$248,400	\$255,852	\$263,527	\$271,433	\$279,576
Capacity Fees (b)	\$333,014	\$119,146	\$1,163,475	\$184,067	\$191,736	\$191,736	\$191,736	\$214,744	\$214,744	\$214,744	\$214,744	\$214,744
<b>Total Non Operating Revenues</b>	<b>\$1,599,407</b>	<b>\$1,685,233</b>	<b>\$1,945,884</b>	<b>\$790,206</b>	<b>\$761,730</b>	<b>\$675,673</b>	<b>\$667,535</b>	<b>\$661,800</b>	<b>\$643,463</b>	<b>\$659,019</b>	<b>\$666,733</b>	<b>\$674,790</b>
<b>Adjusted Net Income (Loss)</b>	<b>\$6,542,943</b>	<b>\$6,304,369</b>	<b>\$7,004,151</b>	<b>\$6,442,217</b>	<b>\$6,856,785</b>	<b>\$6,786,513</b>	<b>\$7,097,764</b>	<b>\$7,114,441</b>	<b>\$7,484,284</b>	<b>\$7,147,468</b>	<b>\$6,944,852</b>	<b>\$7,015,252</b>
<b>Total Existing Debt</b>	\$6,048,385	\$6,052,572	\$6,053,707	\$6,052,142	\$6,107,307	\$6,117,407	\$5,623,107	\$6,274,207	\$6,243,257	\$4,721,101	\$4,722,663	\$4,722,663
<b>Pay as you go Project Funding</b>	\$0	\$1,447,886	\$2,564,000	\$6,480,000	\$2,175,000	\$3,765,000	\$1,980,082	\$2,039,485	\$2,100,669	\$2,163,689	\$2,228,600	\$2,295,458
<b>Net Increase (Decrease) in Cash</b>	<b>\$494,558</b>	<b>(\$1,196,089)</b>	<b>(\$1,613,556)</b>	<b>(\$6,089,925)</b>	<b>(\$1,425,522)</b>	<b>(\$3,095,894)</b>	<b>(\$505,426)</b>	<b>(\$1,199,251)</b>	<b>(\$859,642)</b>	<b>\$262,677</b>	<b>(\$6,411)</b>	<b>(\$2,869)</b>
<b>Beginning Unrestricted Reserves</b>		\$21,747,537	\$20,551,448	\$18,937,892	\$12,847,968	\$11,422,445	\$8,326,552	\$7,821,126	\$6,621,875	\$5,762,233	\$6,024,911	\$6,018,500
<b>Ending Unrestricted Reserves (e)</b>	<b>\$21,747,537</b>	\$20,551,448	\$18,937,892	\$12,847,968	\$11,422,445	\$8,326,552	\$7,821,126	\$6,621,875	\$5,762,233	\$6,024,911	\$6,018,500	\$6,015,631
Target Reserves (operating & capital)	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000
WWTP Capacity (connection) Fee per New ERU in FY 11-12	\$5,025	\$5,150	\$5,325	\$7,669	\$7,669	\$7,669	\$7,669	\$7,669	\$7,669	\$7,669	\$7,669	\$7,669

a. Source: All data is as per the five year outlook for WW enterprise provide by City staff on 6/12.

b. Capacity Fee is calculated based on the growth in ERUs and the current capacity fee per unit.

c. Some of the excess Sales Tax dollars were directed to General fund for City services including facility and vehicle maintenance and administration and payroll services.

e. Source: city staff 11/4/09, including \$338,000 for 161 Chapel Hill prepaid fees recognized in FY 10-11. Not shown are remaining restricted prepaid capacity fees of \$0.7 million. Unspent bond proceeds are separate and shown in Table 9.



TABLE 11  
SEWER SERVICE CHARGES & CAPACITY FEES

	Projected											
	YE	Unit Cost (\$ per ERU)										
	<i>FY 2008-09</i>	<i>FY 2009-10</i>	<i>FY 2010-11</i>	<i>FY 2011-12</i>	<i>FY 2012-13</i>	<i>FY 2013-14</i>	<i>FY 2014-15</i>	<i>FY 2015-16</i>	<i>FY 2016-17</i>	<i>FY 2017-18</i>	<i>FY 2018-19</i>	<i>FY 2019-20</i>
<b>City Sewer System Costs</b>												
O&M Costs	\$410	\$434	\$351	\$361	\$371	\$381	\$391	\$402	\$413	\$424	\$435	\$447
Debt Service	\$723	\$721	\$601	\$599	\$603	\$603	\$553	\$615	\$610	\$460	\$459	\$458
Pay-go Project Costs	\$0	\$173	\$255	\$642	\$215	\$371	\$195	\$200	\$205	\$211	\$217	\$223
Less Funding from Sales Taxes	(\$630)	(\$614)	(\$427)	(\$430)	(\$433)	(\$389)	(\$400)	(\$349)	(\$355)	(\$301)	(\$245)	(\$249)
Less Funding from Misc Revs	(\$172)	(\$181)	(\$171)	(\$52)	(\$47)	(\$35)	(\$33)	(\$29)	(\$25)	(\$24)	(\$23)	(\$23)
Money to (from) Reserves	\$59	(\$143)	(\$160)	(\$603)	(\$141)	(\$305)	(\$50)	(\$118)	(\$84)	\$26	(\$1)	(\$0)
<b>Total Annual Sewer Service Charge per ERU</b>	<b>\$390</b>	<b>\$390</b>	<b>\$449</b>	<b>\$516</b>	<b>\$568</b>	<b>\$625</b>	<b>\$656</b>	<b>\$722</b>	<b>\$765</b>	<b>\$796</b>	<b>\$843</b>	<b>\$856</b>
Total Billable ERUs	8,370	8,393	10,073	10,098	10,123	10,148	10,173	10,201	10,229	10,257	10,285	10,313
Non-payment of Monthly Fees	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
<b>Annual Sewer Service Charge Revenues</b>	<b>\$3,104,953</b>	<b>\$3,113,535</b>	<b>\$4,297,202</b>	<b>\$4,954,046</b>	<b>\$5,462,942</b>	<b>\$6,024,077</b>	<b>\$6,340,863</b>	<b>\$6,994,147</b>	<b>\$7,434,145</b>	<b>\$7,752,674</b>	<b>\$8,240,268</b>	<b>\$8,386,641</b>

TABLE 12  
RATE SURVEY

Agency	Volume Charge (\$/unit)	Base Fee (\$ monthly)	Volume Usage (Hcf, a)	Monthly Residential Bill	Capacity Impact (hookup) Fee	Capacity Fee Purpose
Cottonwood (2008)	na	Flat \$16.75		\$16.75	unk	
Flagstaff (2008)	\$3.12 per winter Kgal	\$0	9 Hcf	\$21.00	unk	
Queen Creek	\$3.07 per winter Kgal	\$6.54	9 Hcf	\$27.21	unk	
Prescott Valley	\$2.26 per Kgal	\$10.45	12 Hcf	\$30.74	\$3,273	Sewer
Bullhead City Sewer Improvement District No. 1	na	Flat \$31.00/mon & \$395/yr		\$63.92	\$4,080	Conveyance & Treatment
Bullhead City Sewer Improvement District No. 3	na	Flat \$31.00/mon & \$884/yr		\$104.75	\$4,080	Conveyance & Treatment
Camp Verde SD	\$1.75 per Fixture Unit (18 units typical)	na		\$31.50	none	na
Sedona	na	\$32.54	na	\$32.54	\$5,025	Treatment
Chino Valley	na	Flat \$45.20		\$45.20	\$4,180	Unknown
Lake Havasu	\$6.53 per winter Hcf after min use plus subsidies (b)	\$36.50 for 6 Hcf/month	9 Hcf	\$87.66	\$2,000	Treatment
<b>Average of all Agencies</b>				<b>\$46.13</b>		

a. Monthly bills are based on 12 Hcf per month (9 Hcf if wintertime only) for comparison purposes. 1 Hcf = 0.748 Kgal

TABLE 13  
PROJECTED RATES WITH EXISTING STRUCTURE

Category	Billing Classifications	Units	FY 2008-09 Service chg (\$/Unit-mon)	Projected											
				FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	
<b>Proposed Rate Increase</b>				<b>0%</b>	<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>10%</b>	<b>5%</b>	<b>10%</b>	<b>6%</b>	<b>4%</b>	<b>6%</b>	<b>2%</b>	
1	Residential	Connection	\$32.54	\$32.54	\$37.42	\$43.03	\$47.34	\$52.07	\$54.67	\$60.14	\$63.75	\$66.30	\$70.28	\$71.33	
2	Residential (Low Flow)	Connection	\$29.52	\$29.52	\$33.95	\$39.04	\$42.94	\$47.24	\$49.60	\$54.56	\$57.83	\$60.15	\$63.76	\$64.71	
	Environmental Fee for Unconnected Developed Parcels	Parcel	\$65.08	\$65.08	\$74.84	\$86.07	\$94.68	\$104.14	\$109.35	\$120.28	\$127.50	\$132.60	\$140.56	\$142.67	
4	Theaters, Libraries, Churches	Seat	\$0.43	\$0.43	\$0.49	\$0.57	\$0.63	\$0.69	\$0.72	\$0.79	\$0.84	\$0.88	\$0.93	\$0.94	
5	Bar w/o dining facility	Seat	\$2.88	\$2.88	\$3.31	\$3.81	\$4.19	\$4.61	\$4.84	\$5.32	\$5.64	\$5.87	\$6.22	\$6.31	
6	Car Wash w/o Recycle	Bay	\$122.98	\$122.98	\$141.43	\$162.64	\$178.91	\$196.80	\$206.64	\$227.30	\$240.94	\$250.57	\$265.61	\$269.59	
7	Car Wash w/ Recycle	Bay	\$64.94	\$64.94	\$74.68	\$85.88	\$94.47	\$103.92	\$109.11	\$120.03	\$127.23	\$132.32	\$140.26	\$142.36	
8	Department, Retail Stores	Restroom	\$4.90	\$4.90	\$5.64	\$6.48	\$7.13	\$7.84	\$8.23	\$9.06	\$9.60	\$9.98	\$10.58	\$10.74	
9	Hospital, Convalescent	Bed	\$65.09	\$65.09	\$74.85	\$86.08	\$94.69	\$104.16	\$109.37	\$120.30	\$127.52	\$132.62	\$140.58	\$142.69	
10	Hotel, Motel, Bed & Breakfast, RV Park	Room	\$18.29	\$18.29	\$21.03	\$24.19	\$26.61	\$29.27	\$30.73	\$33.80	\$35.83	\$37.27	\$39.50	\$40.09	
11	Resort - Cottages, Villas	Connection	\$36.58	\$36.58	\$42.07	\$48.38	\$53.21	\$58.54	\$61.46	\$67.61	\$71.67	\$74.53	\$79.00	\$80.19	
12	Fitness Center / Beauty Salon	100 sq ft	\$2.02	\$2.02	\$2.32	\$2.67	\$2.94	\$3.23	\$3.39	\$3.73	\$3.96	\$4.12	\$4.36	\$4.43	
15	Market	Connection	\$120.24	\$120.24	\$138.28	\$159.02	\$174.92	\$192.41	\$202.03	\$222.23	\$235.57	\$244.99	\$259.69	\$263.59	
16	Mortuaries	Connection	\$189.94	\$189.94	\$218.43	\$251.20	\$276.32	\$303.95	\$319.14	\$351.06	\$372.12	\$387.01	\$410.23	\$416.38	
17	Prof. Offices, Medical, Mfg, Contractors	100 sq ft	\$0.43	\$0.43	\$0.49	\$0.57	\$0.63	\$0.69	\$0.72	\$0.79	\$0.84	\$0.88	\$0.93	\$0.94	
18	Repair Shops, Service Stations	Connection	\$24.05	\$24.05	\$27.66	\$31.81	\$34.99	\$38.49	\$40.41	\$44.45	\$47.12	\$49.00	\$51.94	\$52.72	
19	Repair Shops, Service Stations w/RV disposal	Connection	\$75.60	\$75.60	\$86.94	\$99.98	\$109.98	\$120.98	\$127.03	\$139.73	\$148.11	\$154.04	\$163.28	\$165.73	
20	Restaurant	Seat	\$10.08	\$10.08	\$11.59	\$13.33	\$14.66	\$16.13	\$16.94	\$18.63	\$19.75	\$20.54	\$21.77	\$22.10	
	Restaurant w/Patio Seats (seasonal)	Seat	\$5.04	\$5.04	\$5.80	\$6.67	\$7.33	\$8.07	\$8.47	\$9.32	\$9.87	\$10.27	\$10.89	\$11.05	
21	School, College, w/gym, shower, cafeteria	Student	\$5.62	\$5.62	\$6.46	\$7.43	\$8.18	\$8.99	\$9.44	\$10.39	\$11.01	\$11.45	\$12.14	\$12.32	
22	School, College w/cafeteria	Student	\$9.07	\$9.07	\$10.43	\$12.00	\$13.19	\$14.51	\$15.24	\$16.76	\$17.77	\$18.48	\$19.59	\$19.88	
23	School, College w/o gym, shower, cafeteria	Student	\$2.02	\$2.02	\$2.32	\$2.67	\$2.94	\$3.23	\$3.39	\$3.73	\$3.96	\$4.12	\$4.36	\$4.43	
24	Public Restroom	Fixture	\$32.54	\$32.54	\$37.42	\$43.03	\$47.34	\$52.07	\$54.67	\$60.14	\$63.75	\$66.30	\$70.28	\$71.33	
25	Laundromat (efficiency)	Machine	\$19.20	\$19.20	\$22.08	\$25.39	\$27.93	\$30.72	\$32.26	\$35.49	\$37.62	\$39.12	\$41.47	\$42.09	
26	Laundromat (12-18 lb)	Machine	\$24.73	\$24.73	\$28.44	\$32.71	\$35.98	\$39.57	\$41.55	\$45.71	\$48.45	\$50.39	\$53.41	\$54.21	
27	Laundromat (25-35 lb)	Machine	\$34.49	\$34.49	\$39.66	\$45.61	\$50.17	\$55.19	\$57.95	\$63.75	\$67.57	\$70.27	\$74.49	\$75.61	
28	Laundromat (50 lb)	Machine	\$50.44	\$50.44	\$58.01	\$66.71	\$73.38	\$80.72	\$84.75	\$93.23	\$98.82	\$102.77	\$108.94	\$110.57	

TABLE 14  
CENSUS PERSONS PER HOUSEHOLD

Description	Population	Dwelling Units	Persons per Household
<u>Single Family Dwellings</u>			
1, detached	7,146	3,335	
1, attached	564	302	
Total	7,710	3,637	2.12
<u>Multi-family Dwelling Apartments</u>			
2	109	59	
3 or 4	170	116	
5 to 9	291	153	
10 to 19	123	65	
20 to 49	119	55	
Total	812	448	1.81
<b>Grand Total (2000 Census)</b>	<b>8,522</b>	<b>4,085</b>	
FY 08-09 Dwellings Billed for Sewer Growth	11,471 35%	4,881 19%	
Persons per Household Ratio			0.855
Charge per Single Family Dwelling (ERU)			0.905
<b>Charge per Multi-family Dwelling (ERU)</b>			<b>0.773</b>
<u>Residences Excluded from Analysis</u>			
Boat, RV, van, etc.	59	41	
Mobile home	1,562	811	

Census 2000 Summary File 4 (SF 4) - Sedona city

TABLE 15  
WASTEWATER FIXED ASSETS

Asset Description (a)	Percent Allocation		Acquisition Year	Asset Life (c)	Years in Service	Annual Original Cost	Annual Depreciation	FY 2008-09 Orig Cost Less Depr.		Replacement Cost New	Annual RC Depreciation	FY 2008-09 RCNLD (b)
	WWTP	Collection						(OCLD)	ENRCCI			
Current Year			2009									
Building Improvement	100%	0%	2001	50	8	\$3,328,560	\$66,571	\$2,795,990	6,343	\$4,360,765	\$87,215	\$3,663,042
WW Plant Improvements	100%	0%	1996	50	13	\$4,184,850	\$83,697	\$3,096,789	5,620	\$6,187,919	\$123,758	\$4,579,060
Wastewater Lines	0%	100%	1993	80	16	\$12,746,244	\$159,328	\$10,196,995	5,210	\$20,330,382	\$254,130	\$16,264,305
WW Line Additions	0%	100%	1994	80	15	\$634,356	\$7,929	\$515,414	5,408	\$974,759	\$12,184	\$791,992
Wastewater Lines	0%	100%	1993	80	16	\$12,746,244	\$159,328	\$10,196,995	5,210	\$20,330,382	\$254,130	\$16,264,305
WW Plant and Projects 95-96	100%	0%	1996	50	13	\$174,268	\$3,485	\$128,958	5,620	\$257,681	\$5,154	\$190,684
WW Projects FY 97-98	100%	0%	1998	50	11	\$4,283,645	\$85,673	\$3,341,243	5,920	\$6,013,022	\$120,260	\$4,690,157
Wastewater Projects FY 98-99	100%	0%	1999	50	10	\$5,598,469	\$111,969	\$4,478,775	6,059	\$7,678,376	\$153,568	\$6,142,700
Wastewater Projects FY 99-00	100%	0%	2000	50	9	\$8,947,469	\$178,949	\$7,336,925	6,221	\$11,952,012	\$239,040	\$9,800,650
Wastewater Projects 2000-2001	100%	0%	2001	50	8	\$920,578	\$18,412	\$773,286	6,343	\$1,206,054	\$24,121	\$1,013,086
WW Lines Additions FY 2002	0%	100%	2002	80	7	\$4,514,833	\$56,435	\$4,119,785	6,538	\$5,738,492	\$71,731	\$5,236,374
WW Lines Additions FY 2003	0%	100%	2003	80	6	\$2,705,787	\$33,822	\$2,502,853	6,694	\$3,358,992	\$41,987	\$3,107,067
WW Lines Additions FY 2004	0%	100%	2004	80	5	\$1,825,889	\$22,824	\$1,711,771	7,115	\$2,132,556	\$26,657	\$1,999,271
WW Lines Additions FY 2004-05	0%	100%	2005	80	4	\$3,867,146	\$48,339	\$3,673,789	7,446	\$4,315,872	\$53,948	\$4,100,078
WW Lines Additions FY 2005-06	0%	100%	2006	80	3	\$4,248,357	\$53,104	\$4,089,044	7,751	\$4,554,747	\$56,934	\$4,383,944
WW Lines Additions FY 2006-07	0%	100%	2007	80	2	\$6,766,923	\$84,587	\$6,597,750	7,966	\$7,059,143	\$88,239	\$6,882,664
WW Lines Additions FY 2007-08	0%	100%	2008	80	1	\$4,734,430	\$59,180	\$4,675,250	8,310	\$4,734,430	\$59,180	\$4,675,250
Plant Buildings 1991-1994	100%	0%	1994	50	15	\$5,793,968	\$115,879	\$4,055,778	5,408	\$8,903,083	\$178,062	\$6,232,158
Plant Improvements 95-06	100%	0%	1996	50	13	\$3,871,039	\$77,421	\$2,864,569	5,620	\$5,723,903	\$114,478	\$4,235,688
Plant Improvements 97-98	100%	0%	1998	50	11	\$545,127	\$10,903	\$425,199	5,920	\$765,204	\$15,304	\$596,859
<b>Total Value (b)</b>			<b>1999</b>	<b>64</b>		<b>\$92,438,182</b>	<b>\$1,437,837</b>	<b>\$77,577,157</b>	<b>8,310</b>	<b>\$126,577,772</b>	<b>\$1,980,082</b>	<b>\$104,849,336</b>
										WWTP: <b>\$1,060,960</b>		<b>\$41,144,084</b>
										Collection: <b>\$919,122</b>		<b>\$63,705,252</b>
										WWTP: 54%		39%
										Collection: 46%		61%

ENRCCI: Engineering News Record Construction Cost Index Average for 20 Cities in US. OCLD: Original Cost Less Depreciation. RCNLD: Replacement Cost New Less Depreciation This index represents inflationary escalations in facility costs.

c. Asset life is projected from standard service life values for comparable assets and systems. These values differ from City records.

a. Total of all fixed assets is approximately \$150 million. The fixed assets shown include only building improvements, wastewater lines, machineries and equipment of equal or more than \$1 million in value. Assets such as the land, equipment, furniture, computer software and hardware are not included.

TABLE 16  
WASTEWATER FLOW AND CAPACITY

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<b>Description</b>	<b>Total ERUs</b>	<b>2009 Flows (MGD)</b>	<b>Total Build-out Capacity (MGD)</b>	<b>Wastewater Flow Capacity (ERUs)</b>
Sewer System	8,370	1.2	1.6	11,160

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Source: City Staff on August 16, 2009.

TABLE 17  
 UPDATED EQUITY (BUY-IN) CAPACITY FEE

Description	Value
Current Replacement Cost less Depreciation (RCLD) of Existing Fixed Assets	
Treatment Plant	\$41,144,084
Collection System	\$63,705,252
Subtotal	<u>\$104,849,336</u>
Less Total Debt Outstanding (est)	<u>\$55,110,000</u>
Net Value	\$49,739,336
System Dry Weather Flow Capacity (ERUs)	11,160
Unit Value of Existing Assets (\$ per ERU)	<u>\$4,457</u>
Current Working Capital and Reserves (a)	\$26,889,781
Current Customer Base	<u>8,370</u>
Unit Value of Cash (\$ per ERU)	\$3,213
<b>Net Investment in System</b>	<b>\$76,629,117</b>
<b>Updated Capacity Fee (\$/ERU)</b>	<b>\$7,669</b>
Current Capacity Fee	\$5,025

Capacity fees should be escalated annually to adjust for inflation using the Engineering News Record Construction Cost Index (ENRCCI).

a. Prepaid capacity fees of \$1.2 million are not included.

TABLE 18  
UTILITY COST OF SERVICE ALLOCATIONS

Description	Facilities Maintenance Share	Collection System	Treatment		Accounts	FY 2008-09 Total
			Flow	Strength		
<b>Labor Costs</b>						
<b>Cost of Service Allocation Percentages</b>						
Salary and Wages	30%	30%	30%	30%	10%	100%
Overtime		0%	50%	50%		100%
Employee Expenses	30%	30%	30%	30%	10%	100%
<b>Other Supplies and Services</b>						
Professional services		25%	25%	50%		100%
Utilities		0%	100%			100%
Administrative Operations		0%			100%	100%
Plant Maintenance	100%	0%	50%	50%		100%
Collections	100%	100%				100%
Contn Legal/Operation/Lab Fees		0%		100%		100%
<b>Depreciation</b>	<b>100%</b>	<b>46%</b>	<b>27%</b>	<b>27%</b>		<b>100%</b>
<b>Labor Costs</b>						
<b>Cost of Service Allocation Amounts</b>						
Salary and Wages		\$215,754	\$215,754	\$215,754	\$71,918	\$719,180
Overtime		\$0	\$19,943	\$19,943	\$0	\$39,885
Employee Expenses		\$88,256	\$88,256	\$88,256	\$29,419	\$294,187
<b>Total O&amp;M Salaries and Benefits</b>		<b>\$304,010</b>	<b>\$323,953</b>	<b>\$323,953</b>	<b>\$101,337</b>	<b>\$1,053,252</b>
<b>Other Supplies and Services</b>						
Professional services		\$20,963	\$20,963	\$41,926	\$0	\$83,852
Utilities		\$0	\$382,976	\$0	\$0	\$382,976
Administrative Operations		\$0	\$0	\$0	\$374,282	\$374,282
Plant Maintenance		\$0	\$454,520	\$454,520	\$0	\$909,040
Collections		\$110,424	\$0	\$0	\$0	\$110,424
Contn Legal/Operation/Lab Fees		\$0	\$0	\$87,124	\$0	\$87,124
<b>Total Other Supplies and Services</b>		<b>\$131,387</b>	<b>\$858,459</b>	<b>\$583,570</b>	<b>\$374,282</b>	<b>\$1,947,698</b>
<b>Total O&amp;M (excluding depreciation)</b>		<b>\$435,397</b>	<b>\$1,182,412</b>	<b>\$907,523</b>	<b>\$475,619</b>	<b>\$3,000,950</b>
<b>Depreciation (replacement cost)</b>		<b>\$1,594,734</b>	<b>\$192,674</b>	<b>\$192,674</b>	<b>\$0</b>	<b>\$1,980,082</b>
<b>Grand Total</b>		<b>\$2,030,131</b>	<b>\$1,375,086</b>	<b>\$1,100,197</b>	<b>\$475,619</b>	<b>\$4,981,032</b>
Grand Total		41%	28%	22%	10%	100%
<b>Consolidation Allocations</b>			<b>68%</b>	<b>22%</b>	<b>10%</b>	<b>100%</b>
<b>Facility Maintenance versus Operations</b>						
Facilities Maintenance	43%	\$201,627	\$545,723	\$545,723		\$1,293,073
System Operations (including utilities)	57%	\$233,770	\$636,689	\$361,800	\$475,619	\$1,665,510
<b>Total O&amp;M (excluding depreciation)</b>	<b>100%</b>	<b>\$435,397</b>	<b>\$1,182,412</b>	<b>\$907,523</b>	<b>\$475,619</b>	<b>\$3,000,950</b>
Depreciation (original cost)		\$667,421	\$385,208	\$385,208	\$0	\$1,437,837

Cost allocations among the service functions are based on typical industrial parameters.



TABLE 19  
NEW CAPACITY STANDBY CHARGE

Description	WWTP	Collection	Total
Annual Depreciation of Fixed Assets	\$770,417	\$667,421	\$1,437,837
Annual Maintenance of Facilities	\$1,091,446	\$201,627	\$1,293,073
Annual Cost of Unused Facilities System Capacity (ERUs)	\$1,861,863	\$869,048	\$2,730,910 11,160
Annual Cost of Unused Facilities (\$ per ERU annually)			\$245
Current Sewer System Charge (\$/Year-ERU)			\$390
Capacity Standby Charge for Sewered Unconnected Parcels (ERUs)			0.627
New Per-account Charge for all Billed Accounts			0.095
<b>Total Capacity Standby Charge (ERU per year per parcel)</b>			<b>0.722</b>

Capacity Standby charges are for Sewered but undeveloped Parcels.  
Sewered developed parcels are also charged an Environmental fee.

TABLE 20  
SEWAGE STRENGTHS BY CUSTOMER TYPE

User Description	SIC Code	BOD (ppm)	SS (ppm)	Average (ppm)	Current Flows (gpd)
<b>Low Strength Dischargers</b>					
Car Wash (Tunnel Area, with Recycling)	75	20	150	85	1,995
Professional Offices	89	130	80	105	16,284
Schools	82	130	100	115	35,862
Barber & Beauty Shops	72	150	110	130	5,384
Laundromat, Public & Coin Operated	72	150	110	130	5,829
Apparel and Accessory Store	56	150	150	150	
Bowling/Skating	79	150	150	150	
Department, Retail Stores & Gen. Commercial	59	150	150	150	10,385
Grocery Market w/out Butcher or Baker	54	150	150	150	
Kennel/ Veterinarian	7	150	150	150	
Machine Shop	35	150	150	150	
Motion Pictures/Theater/Auditorium	78	150	150	150	11,110
Nursery or Greenhouse	59	150	150	150	
Shopping Center	59	150	150	150	
Health Services	80	250	100	175	1,167
Bars w/o Dining Facilities	58	200	200	200	5,546
Churches	86	200	200	200	
Convenience Store: Preprocessed Food	58	200	200	200	
Social Services	83	200	200	200	
Hotel w/o Dining Facilities	70	310	120	215	
<b>Average Low Strength</b>		<b>140</b>	<b>116</b>	<b>128</b>	93,561
<b>Residential Strength</b>	88	200	200	200	834,007
<b>Medium Strength Dischargers</b>					
Laboratory, Analytical	80	339	151	245	
Auto Repair/Sales Shop & Service Station	75	280	280	280	2,364
Agricultural/Landscaping Service	7	300	300	300	
Laundromat, Commercial & Dry Cleaning	72	450	240	345	
Hotel with Dining Facilities	70	310	400	355	324,366
Mall (with Food Services)	53	400	400	400	
<b>Average Medium Strength</b>		<b>310</b>	<b>399</b>	<b>354</b>	326,729
<b>High Strength Dischargers</b>					
Bar or Night Club with Food	58	600	400	500	
Bakery or Bakery w/Deli	54	800	800	800	
Restaurant or Deli Bar	58	1,000	600	800	304,981
Supermarket (Grocery) with Butcher or Baker	54	800	800	800	2,585
<b>Average High Strength</b>		<b>998</b>	<b>602</b>	<b>800</b>	307,566

- a. Source: Most values are from the California State Water Resources Control Board.  
b. The residential strength from the mass balance can be contrasted with the California SWRCB estimated values of 200/200 BOD/TSS.

TABLE 21  
EXISTING RATE STRUCTURE

Category	Billing Classifications	Billing Unit	Avg Flow per Unit (gal/month)	Avg GPD/Unit (a)	ERU per Billing Unit	Current Billed Loading (ERUs)
<b>Residential</b>						
1	Residential	Connection	6,080	200	1.000	2,759
2	Residential (Low Flow incd apartments)	Connection	4,378	144	0.907	1,888
	Environmental Fee for Unconnected Developed Parcels	Parcel	na		2.000	82
<b>Non-residential</b>						
4	Theaters, Libraries, Churches	Seat	80	3	0.013	56
5	Bar w/o dining facility	Seat	486	16	0.089	28
7	Car Wash w/ Recycle	Bay	8,000	263	1.996	10
8	Department, Retail Stores	Restroom	1,000	33	0.151	52
10	Hotel, Motel, Bed & Breakfast, RV Park	Room	3,040	100	0.562	948
11	Resort - Cottages, Villas	Connection	6,080	200	1.124	674
12	Fitness Center / Beauty Salon	100 sq ft	500	16	0.062	27
15	Market	Connection	7,600	250	3.695	13
16	Mortuaries	Connection	12,000	395	5.837	6
17	Prof. Offices, Medical, Mfg, Contractors	100 sq ft	100	3	0.013	81
18	Repair Shops, Service Stations	Connection	3,850	127	0.739	12
20	Restaurant	Seat	608	20	0.310	1,436
	Restaurant w/Patio Seats (seasonal)	Seat	304	10	0.155	3
21	School, College, w/gym, shower, cafeteria	Student	760	25	0.173	67
22	School, College w/cafeteria	Student	608	20	0.279	112
24	Public Restroom	Fixture	6,080	200	1.000	87
25	Laundromat (efficiency)	Machine	3,600	118	0.590	11
26	Laundromat (12-18 lb)	Machine	4,650	153	0.760	1
27	Laundromat (25-35 lb)	Machine	6,450	212	1.060	8
28	Laundromat (50 lb)	Machine	9,450	311	1.550	9
<b>Grand Total</b>						8,370

a. The average GPD per unit is not modified in this update

TABLE 22  
COST OF SERVICE UNIT RATES

Category	Billing Classifications	Billing Unit	Accounts	Billing Units	Avg GPD/Unit (a)	Flow (gpd Loading)	Sewage Strength Class	Average Sewage Strength (ppm)	Sewage Strength (ppd Loading)	Updated Billed Loading (ERUs)	Updated Billed Loading (ERUs)
<b>Residential</b>											
1	Residential	Connection	2,591	2,759	200	551,498	R	200	920	28%	2,759
2	Residential (Low Flow, excd apartments)	Connection	1,686	1,633	173	282,509	R (lf)	231	544	15%	1,487
	Environmental Fee		41	41	0	-	na	na	na	1%	82
new	Undeveloped Sewered Parcels (b)	Parcel	1,663	1,663	0		R	200	400	12%	1,201
new	Multi-family Dwellings (apartments)	Dwelling Unit	100	448	148	66,266	R	200	111	3%	300
Subtotal:										59%	5,829
<b>Non-residential</b>											
4	Theaters, Libraries, Churches	Seat	26	4,206	2.6	11,110	L	128	12	0.5%	49
5	Bar w/o dining facility	Seat	18	314	16	5,546	L	128	6	0.3%	25
7	Car Wash w/ Recycle	Bay	2	5	263	1,995	L	128	2	0.1%	8
8	Department, Retail Stores	Restroom	158	345	33	10,385	L	128	11	0.7%	64
10	Hotel, Motel, Bed & Breakfast, RV Park	Room	47	1,687	100	189,541	M	354	560	9.5%	930
11	Resort - Cottages, Villas	Connection	16	600	200	134,825	M	354	399	6.7%	659
12	Fitness Center / Beauty Salon	100 sq ft	24	434	16	5,384	L	128	6	0.3%	25
15	Market	Connection	4	4	250	2,585	H	800	17	0.2%	17
16	Mortuaries	Connection	1	1	395	1,167	L	128	1	0.0%	5
17	Prof. Offices, Medical, Mfg, Contractors	100 sq ft	202	6,165	3	16,284	L	128	17	1.0%	94
18	Repair Shops, Service Stations	Connection	15	16	127	2,364	M	354	7	0.1%	14
20	Restaurant	Seat	82	4,635	20	286,971	H	800	1,915	19%	1,844
	Restaurant w/Patio Seats (seasonal)	Seat	1	20	10	619	H	800	4	0.0%	4
21	School, College, w/gym, shower, cafeteria	Student	1	390	25	13,464	L	128	14	0.6%	55
22	School, College w/cafeteria	Student	1	402	20	22,398	L	128	24	0.9%	91
24	Public Restroom	Fixture	17	87	200	17,390	M	354	51	0.9%	87
25	Laundromat (efficiency)	Machine	1	18	118	2,123	L	128	2	0.1%	9
26	Laundromat (12-18 lb)	Machine	1	1	153	152	L	128	0	0.0%	1
27	Laundromat (25-35 lb)	Machine	1	8	212	1,695	L	128	2	0.1%	7
28	Laundromat (50 lb)	Machine	1	6	311	1,859	L	128	2	0.1%	8
Subtotal:										41%	3,996
<b>Total</b>			6,700			1,868,185			5,029	100%	9,825
			9.5%			68.4%			22.1%		100%
Allocated Charge per Load Type (ERUs, FY 2008-09)			938			6,717			2,170		9,825
New Account-based Charge for all Customer Accounts (ERU per Account)											0.0955
Residential Single Family Dwelling Parcel (1.0 ERU)					200	7.31E-05		200	3.33E-01	0.074	0.9045
Low Strength Discharges					200	7.32E-05		128	2.14E-01	0.047	0.5805
Medium Strength Discharges					200	7.32E-05		354	5.91E-01	0.131	1.6035
High Strength Discharges					200	7.32E-05		800	1.33E+00	0.295	3.6182

a. The average GPD per unit is not modified in this update

TABLE 23  
CURRENT VERSUS UPDATED UNIT RATES

Category	Billing Classifications	Billing Unit	Accounts	Billing Units	Billing ERU per Billing Unit	Current Billed Loading (ERUs)	Updated Billed Loading (ERUs)	Change from Existing Rates	Proposed Rate Structure (FY08-09)		
									Billing ERU per Account	Billing ERU per Billing Unit	ERU per Parcel
<b>Residential</b>											
1	Residential	Connection	2,591	2,759	1.000	2,759	2,759	0%	0.095	0.905	1.000
2	Residential (Low Flow, excd apartments)	Connection	1,686	1,633	0.907	1,487	1,487	0%	0.095	0.812	0.907
	Environmental Fee		41	41	2.000	86	82	5%	0.095	2.000	2.095
new	Undeveloped Sewered Parcels (b)	Parcel	1,663	1,663	0.000	0	1,201	new	0.095	0.627	0.722
new	Multi-family Dwellings (apartments)	Dwelling Unit	100	448	1.000	448	300	-26%	0.095	0.773	na
						4,780	5,829				
<b>Non-residential</b>											
4	Theaters, Libraries, Churches	Seat	26	4,206	0.013	56	49	-12%	0.095	0.011	
5	Bar w/o dining facility	Seat	18	314	0.089	28	25	-10%	0.095	0.074	
7	Car Wash w/ Recycle	Bay	2	5	1.996	10	8	-16%	0.095	1.636	
8	Department, Retail Stores	Restroom	158	345	0.151	52	64	24%	0.095	0.143	
10	Hotel, Motel, Bed & Breakfast, RV Park	Room	47	1,687	0.562	948	930	-2%	0.095	0.549	
11	Resort - Cottages, Villas	Connection	16	600	1.124	674	659	-2%	0.095	1.096	
12	Fitness Center / Beauty Salon	100 sq ft	24	434	0.062	27	25	-6%	0.095	0.053	
15	Market	Connection	4	4	3.695	13	17	34%	0.095	4.833	
16	Mortuaries	Connection	1	1	5.837	6	5	-17%	0.095	4.778	
17	Prof. Offices, Medical, Mfg, Contractors	100 sq ft	202	6,165	0.013	81	94	16%	0.095	0.012	
18	Repair Shops, Service Stations	Connection	15	16	0.739	12	14	15%	0.095	0.761	
20	Restaurant	Seat	82	4,635	0.310	1,436	1,844	28%	0.095	0.396	
	Restaurant w/Patio Seats (seasonal)	Seat	1	20	0.155	3	4	34%	0.095	0.203	
21	School, College, w/gym, shower, cafeteria	Student	1	390	0.173	67	55	-19%	0.095	0.140	
22	School, College w/cafeteria	Student	1	402	0.279	112	91	-19%	0.095	0.226	
24	Public Restroom	Fixture	17	87	1.000	87	87	0%	0.095	0.982	
25	Laundromat (efficiency)	Machine	1	18	0.590	11	9	-18%	0.095	0.481	
26	Laundromat (12-18 lb)	Machine	1	1	0.760	1	1	0%	0.095	0.661	
27	Laundromat (25-35 lb)	Machine	1	8	1.060	8	7	-17%	0.095	0.865	
28	Laundromat (50 lb)	Machine	1	6	1.550	9	8	-17%	0.095	1.264	
						3,641	3,996				
<b>Total</b>			<u>6,700</u>			<u>8,421</u>	<u>9,825</u>				

TABLE 24  
PROJECTED RATES WITH UPDATED STRUCTURE

Category	Billing Classifications	Billing Unit	Sewage Strength	Updated ERU per Billing Unit	FY 2008-09 Service chg (\$/Unit-mon)	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
<b>Rate Increase</b>				<b>Projected Rate Increase:</b>		0%	15%	15%	10%	10%	5%	10%	6%	4%	6%	2%
<b>New Account-based Charge for all Customers</b>		<b>Account</b>		<b>0.095</b>	<b>na</b>	<b>\$3.11</b>	<b>\$3.57</b>	<b>\$4.11</b>	<b>\$4.52</b>	<b>\$4.97</b>	<b>\$5.22</b>	<b>\$5.74</b>	<b>\$6.09</b>	<b>\$6.33</b>	<b>\$6.71</b>	<b>\$6.81</b>
	Low Strength Discharges	200 GPD	L	0.581	\$18.89	\$18.89	\$21.72	\$24.98	\$27.48	\$30.23	\$31.74	\$34.91	\$37.01	\$38.49	\$40.80	\$41.41
	Residential Strength Discharges	200 GPD	R	0.905	\$29.43	\$29.43	\$33.85	\$38.92	\$42.82	\$47.10	\$49.45	\$54.40	\$57.66	\$59.97	\$63.57	\$64.52
	Medium Strength Discharges	200 GPD	M	1.603	\$52.18	\$52.18	\$60.00	\$69.00	\$75.90	\$83.49	\$87.67	\$96.44	\$102.22	\$106.31	\$112.69	\$114.38
	High Strength Discharges	200 GPD	H	3.618	\$117.74	\$117.74	\$135.40	\$155.71	\$171.28	\$188.40	\$197.82	\$217.61	\$230.66	\$239.89	\$254.28	\$258.10
<b>Residential Account Monthly Charge (including account-based charge based on one account per connection)</b>																
1	Residential Single-Family Dwelling Parcel	Connection	R	1.000	\$32.54	\$32.54	\$37.42	\$43.03	\$47.34	\$52.07	\$54.67	\$60.14	\$63.75	\$66.30	\$70.28	\$71.33
2	Residential (Low Flow)	Connection	R (lf)	0.907	\$29.52	\$29.52	\$33.95	\$39.05	\$42.95	\$47.25	\$49.61	\$54.57	\$57.84	\$60.16	\$63.77	\$64.72
	Environmental Fee for Septic Tank in Sewered Area	Parcel		2.095	\$65.08	\$70.28	\$80.51	\$92.27	\$101.29	\$111.21	\$116.67	\$128.12	\$135.68	\$141.03	\$149.36	\$151.57
new	Sewered but Undeveloped Parcels (b)	Parcel	R	0.722	na	\$23.50	\$27.02	\$31.08	\$34.18	\$37.60	\$39.48	\$43.43	\$46.04	\$47.88	\$50.75	\$51.51
new	Multi-family Dwellings (plus one account charge per bill)	Dwelling Unit	R	0.773	na	\$25.94	\$29.71	\$34.05	\$37.38	\$41.04	\$43.06	\$47.29	\$50.08	\$52.05	\$55.12	\$55.94
<b>Non-residential Account Monthly Charge (plus new account-based charge)</b>																
4	Theaters, Libraries, Churches	Seat	L	0.011	\$0.43	\$0.37	\$0.42	\$0.48	\$0.53	\$0.58	\$0.61	\$0.67	\$0.71	\$0.74	\$0.78	\$0.80
5	Bar w/o dining facility	Seat	L	0.074	\$2.88	\$2.49	\$2.86	\$3.27	\$3.59	\$3.94	\$4.14	\$4.54	\$4.81	\$5.00	\$5.30	\$5.38
7	Car Wash w/ Recycle	Bay	L	1.636	\$64.94	\$54.88	\$62.86	\$72.05	\$79.09	\$86.83	\$91.09	\$100.04	\$105.94	\$110.11	\$116.62	\$118.35
8	Department, Retail Stores	Restroom	L	0.143	\$4.90	\$4.78	\$5.48	\$6.28	\$6.89	\$7.56	\$7.93	\$8.71	\$9.23	\$9.59	\$10.16	\$10.31
10	Hotel, Motel, Bed & Breakfast, RV Park	Room	M	0.549	\$18.29	\$18.40	\$21.07	\$24.15	\$26.51	\$29.11	\$30.54	\$33.54	\$35.52	\$36.91	\$39.10	\$39.68
11	Resort - Cottages, Villas	Connection	M	1.096	\$36.58	\$36.75	\$42.10	\$48.25	\$52.96	\$58.15	\$61.00	\$66.99	\$70.95	\$73.74	\$78.10	\$79.26
12	Fitness Center / Beauty Salon	100 sq ft	L	0.053	\$2.02	\$1.77	\$2.03	\$2.33	\$2.55	\$2.80	\$2.94	\$3.23	\$3.42	\$3.55	\$3.76	\$3.82
15	Market	Connection	H	4.833	\$120.24	\$162.10	\$185.69	\$212.82	\$233.62	\$256.50	\$269.08	\$295.50	\$312.94	\$325.27	\$344.49	\$349.59
16	Mortuaries	Connection	L	4.778	\$189.94	\$160.25	\$183.57	\$210.39	\$230.95	\$253.57	\$266.01	\$292.13	\$309.37	\$321.56	\$340.56	\$345.60
17	Prof. Offices, Medical, Mfg, Contractors	100 sq ft	L	0.012	\$0.43	\$0.41	\$0.47	\$0.54	\$0.59	\$0.65	\$0.68	\$0.74	\$0.79	\$0.82	\$0.87	\$0.88
18	Repair Shops, Service Stations	Connection	M	0.761	\$24.05	\$25.54	\$29.25	\$33.53	\$36.80	\$40.41	\$42.39	\$46.55	\$49.30	\$51.24	\$54.27	\$55.07
20a	Restaurant	Seat	H	0.396	\$10.08	\$13.29	\$15.23	\$17.45	\$19.16	\$21.03	\$22.06	\$24.23	\$25.66	\$26.67	\$28.25	\$28.67
20b	Restaurant w/Patio Seats (seasonal)	Seat	H	0.203	\$5.04	\$6.80	\$7.79	\$8.92	\$9.80	\$10.76	\$11.28	\$12.39	\$13.12	\$13.64	\$14.45	\$14.66
21	School, College, w/gym, shower, cafeteria	Student	L	0.140	\$5.62	\$4.70	\$5.39	\$6.17	\$6.78	\$7.44	\$7.80	\$8.57	\$9.08	\$9.43	\$9.99	\$10.14
22	School, College w/cafeteria	Student	L	0.226	\$9.07	\$7.58	\$8.69	\$9.96	\$10.93	\$12.00	\$12.59	\$13.83	\$14.64	\$15.22	\$16.12	\$16.36
24	Public Restroom	Fixture	M	0.982	\$32.54	\$32.95	\$37.74	\$43.26	\$47.48	\$52.13	\$54.69	\$60.06	\$63.61	\$66.11	\$70.02	\$71.06
25	Laundromat (efficiency)	Machine	L	0.481	\$19.20	\$16.13	\$18.48	\$21.18	\$23.25	\$25.52	\$26.78	\$29.41	\$31.14	\$32.37	\$34.28	\$34.79
26	Laundromat (12-18 lb)	Machine	L	0.661	\$24.73	\$22.16	\$25.39	\$29.10	\$31.94	\$35.07	\$36.79	\$40.40	\$42.79	\$44.47	\$47.10	\$47.80
27	Laundromat (25-35 lb)	Machine	L	0.865	\$34.49	\$29.01	\$33.24	\$38.09	\$41.82	\$45.91	\$48.16	\$52.89	\$56.01	\$58.22	\$61.66	\$62.57
28	Laundromat (50 lb)	Machine	L	1.264	\$50.44	\$42.41	\$48.58	\$55.68	\$61.12	\$67.10	\$70.40	\$77.31	\$81.87	\$85.10	\$90.13	\$91.46



APPENDIX 1  
EXISTING DEBT SERVICE

Description	Historical		Budgeted	Projected										
	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
<b>Bond Series - Debt Service Schedules</b>														
<b>Series 1998</b>														
Principal (restarts in 2021)	\$185,000	\$205,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest	\$456,223	\$447,990	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663
Total	\$641,223	\$652,990	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663	\$438,663
<b>Series 2002</b>														
Principal	\$225,000	\$235,000	\$245,000	\$255,000	\$260,000	\$280,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest	\$63,678	\$54,678	\$45,278	\$34,865	\$23,900	\$12,460	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$288,678	\$289,678	\$290,278	\$289,865	\$283,900	\$292,460	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Series 2004 - 1</b>														
Principal	\$1,785,000	\$1,865,000	\$1,965,000	\$2,060,000	\$2,180,000	\$2,290,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest	\$607,250	\$518,000	\$424,750	\$326,500	\$223,500	\$114,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$2,392,250	\$2,383,000	\$2,389,750	\$2,386,500	\$2,403,500	\$2,404,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Series 2004 - 2</b>														
Principal	\$0	\$0	\$0	\$0	\$0	\$0	\$2,970,000	\$3,130,000	\$2,790,000	\$3,585,000	\$1,385,000	\$0	\$0	\$0
Interest	\$664,850	\$664,850	\$664,850	\$664,850	\$664,850	\$664,850	\$664,850	\$516,350	\$359,850	\$220,350	\$55,400	\$0	\$0	\$0
Total	\$664,850	\$664,850	\$664,850	\$664,850	\$664,850	\$664,850	\$3,634,850	\$3,646,350	\$3,149,850	\$3,805,350	\$1,440,400	\$0	\$0	\$0
<b>Series 2005</b>														
Principal	\$0	\$0	\$205,000	\$220,000	\$215,000	\$210,000	\$0	\$0	\$0	\$0	\$2,335,000	\$3,875,000	\$4,080,000	\$4,080,000
Interest	\$530,088	\$530,088	\$530,088	\$523,938	\$516,238	\$508,713	\$500,838	\$500,838	\$500,838	\$500,838	\$500,838	\$407,438	\$204,000	\$204,000
Total	\$530,088	\$530,088	\$735,088	\$743,938	\$731,238	\$718,713	\$500,838	\$500,838	\$500,838	\$500,838	\$2,835,838	\$4,282,438	\$4,284,000	\$4,284,000
<b>Series 2007</b>														
Principal		\$895,000	\$775,000	\$805,000	\$840,000	\$875,000	\$910,000	\$945,000	\$985,000	\$1,020,000	\$1,070,000			
Interest		\$467,746	\$754,756	\$723,756	\$691,556	\$657,956	\$622,956	\$586,556	\$548,756	\$509,356	\$458,356			
Total	\$0	\$1,362,746	\$1,529,756	\$1,528,756	\$1,531,556	\$1,532,956	\$1,532,956	\$1,531,556	\$1,533,756	\$1,529,356	\$1,528,356	\$0	\$0	\$0
<b>Grand Total Debt Service</b>	<b>\$4,517,089</b>	<b>\$5,883,352</b>	<b>\$6,048,385</b>	<b>\$6,052,572</b>	<b>\$6,053,707</b>	<b>\$6,052,142</b>	<b>\$6,107,307</b>	<b>\$6,117,407</b>	<b>\$5,623,107</b>	<b>\$6,274,207</b>	<b>\$6,243,257</b>	<b>\$4,721,101</b>	<b>\$4,722,663</b>	<b>\$4,722,663</b>

a. All the bond series principal and interest payments are for wastewater fund only and are based on the existing total debt service provided by the City on 6/15.  
Source: File "all debt service.xls"



APPENDIX 2  
 TARGET CASH RESERVE REQUIREMENTS

Description	Target	Value	Projected										
			FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Working Cash	Months of O&M	1.2	\$364,411	\$353,558	\$364,165	\$375,090	\$386,342	\$397,933	\$409,871	\$422,167	\$434,832	\$447,877	\$461,313
Capital Contingency	Years of Pay-GO CIP	20%	\$657,280	\$678,560	\$657,580	\$482,400	\$481,960	\$420,500	\$426,620	\$432,860	\$439,220	\$445,720	\$452,400
One Year of Debt Service (rolling average)			\$6,053,140	\$6,052,925	\$6,079,725	\$6,112,357	\$5,870,257	\$5,948,657	\$6,258,732	\$5,482,179	\$4,721,882	\$4,722,663	\$4,722,663
<b>Total Target Reserve Requirements (rounded)</b>			<b>\$7,000,000</b>	<b>\$7,000,000</b>	<b>\$7,000,000</b>	<b>\$7,000,000</b>	<b>\$7,000,000</b>	<b>\$7,000,000</b>	<b>\$7,000,000</b>	<b>\$6,000,000</b>	<b>\$6,000,000</b>	<b>\$6,000,000</b>	<b>\$6,000,000</b>

Source: City of Sedona Staff