City of Sherwood, Oregon

Water Utility:

FINANCIAL FORECAST & WATER RATES

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

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October 2013

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EXECUTIVE SUMMARY

Sherwood is nearing completion of a joint partnership with the City of Wilsonville and the Tualatin Valley Water District to construct a water treatment plant (WTP) and associated pumping station and conveyance lines to Sherwood. The City of Sherwood has incurred over \$26 million in debts with annual debt service of about \$1.8 million.

The current water rates do not produce sufficient revenue to pay all operating costs and debt service. The water utility is collecting less in revenues than it is spending. If the City does not increase rates, the current \$6.2 million cash reserve will decline each year until it reaches about \$1.3 million in FY 2020—in other words, the City will have spent about \$5.2 million of its cash reserves over the next 6 years. With rate increases of 2%, 3% or 4% per year through the Fiscal Year 2020¹, the cash reserves will decrease, but less rapidly.

The City is currently underway with a new water master plan. The old plan was based on using City wells and backup water from TVWD, and the list of capital improvements is likely to change in scope, cost, and timing of construction.

	Annual		Decrease in	Average Water Bill
	Water Rate	Cash & Equivalents	Cash & Equivalents	per Household
	Increases	FY 2020	FY 2014-2020	FY 2020
Forecast	(% per year)	(millions)	(millions)	(5,000 g/month)
Baseline	0.0%	\$1.3	-\$5.2	\$44.24
Alternative 1	2.0%	\$3.0	-\$3.5	\$51.00
Alternative 2	3.0%	\$4.0	-\$2.6	\$54.70
Alternative 3	4.0%	\$4.8	-\$1.7	\$58.40

Table 1 Summary of Alternative Forecasts

The rate increases will affect all of Sherwood's water customers. The average water bill for a residential customer using 5,000 gallons of water per month is \$44.24. The three alternative rate increases will increase the average residential water bill to as much as \$58.40 by FY 2020.

The City has a substantial cash reserve it can use to reduce the impact on its customers by phasing in small rate increases over the next few years. During that time, the City will be better informed on the cost of operating the new WTP, the need for future capital improvements, and how rapidly growth occurs in the City.

EFA recommends the City adopt a 2% rate increase in the next year, and adjust as necessary thereafter.

¹ References to fiscal years throughout this report assume the 12-month period ending June 30 of the stated year.

INTRODUCTION

The City of Sherwood has entered into intergovernmental agreements (IGAs) with the City of Wilsonville and the Tualatin Valley Water District (TVWD) to jointly construct the Willamette River water treatment plant and associated water lines to Sherwood, making Sherwood an invested partner with Wilsonville and TVWD. Construction of these improvements is nearly complete, and will change Sherwood's current sources of water from City wells and water purchased from the Bull Run water system, to a system that primarily uses Willamette River water with City wells providing peaking and backup water supplies. Since FY 2009, the City has borrowed \$26,350,688 to pay for its share of these capital improvements. Annual debt service is approximately \$1.8 million.

In this analysis, EFA develops a Baseline Forecast of the utility's financial future based on several assumptions, as well as 3 alternate forecasts with differing water rate increases. The report is divided into the following sections:

Financial History

The first section is a review of the utility's recent financial history. It combines the two funds used by the City to account for the water utility—the Operating Fund and the Capital Fund.

Financial Forecast

The second section contains a Baseline Forecast using a set of basic economic assumptions. We have also developed 3 alternate forecasts for different water rate increases.

Recommendations

The final section is a discussion of the financial impacts of the alternative rate adjustments, and concludes with EFA's recommendations for future rate adjustments.

FINANCIAL HISTORY

Prior to FY 2009, the City contracted with Tualatin Valley Water District (TVWD) to operate the City's water system. Midway through FY 2009, the City resumed administration and operation of the water system itself. FY 2010 was the first full year of City operations.

Table 2 shows the financial history of the utility in 5 major categories: *Cash Flows From Operating Activities, Debt Service, Cash Flows From Capital Improvements, Interest on Investments, and Cash & Equivalents, Beginning* and *Ending* of the fiscal year. These categories are summations of several line items that are shown in the Appendix Tables.

Cash From Operating Activities is the sum of all recurring sources of revenues (primarily revenue from water rates), and all recurring operating expenses (primarily personnel, materials and services, and water purchases). The *Net Cash From Operating Activities* is primarily intended to pay annual debt service (principal and interest) on the water utility's outstanding debts.

Debt Service has varied significantly between FY 2010 and FY 2013 because the City has been issuing short and long-term bonds to participate in the Wilsonville water treatment plant and the water lines and pump stations to transport the treated water from the treatment plant to Sherwood. In the five-year history, the City issued \$17.6 million in bonds. In FY 2010, the City refinanced its short-term bonds with long-term bonds. In its bond issues, the City has pledged the net operating revenue to pay annual debt service on the utility's bonds. In FY 2009 and 2010, the City borrowed approximately \$2.4 million from the Urban Renewal Fund and paid it back in FY 2011. Beginning in FY 2013, annual debt service increased to approximately \$1.8 million and will remain at that level through FY 2030.

Net Cash From Capital Activities is the sum of revenues dedicated to capital improvements (system development charge revenues (SDCs) and bond proceeds), capital expenditures, and debt service. *Net Cash From Capital Activities* adds to or subtracts from *Net Change in Cash & Equivalents*. In the fiveyear history, *Net Cash From Capital Activities* was negative in all years except FY 2011, when the utility issued additional bonds but didn't spend all the proceeds within the fiscal year.

Interest on Investments is interest earnings on *Cash & Equivalents* (or cash reserves) the City holds in banks and investments (Local Government Investment Pool). These earnings vary with interest rates and the amount of *Cash & Equivalents*.

Net Change In Cash & Equivalents is the sum of net cash from operating, capital and investment activities. It has been negative in all years but one (FY 2011), and as a result, *Cash & Equivalent* has decreased from about \$8.8 million in FY 2010 to \$6.2 million at the end of FY 2013.

Cash & Equivalents, Ending is the sum of the current year's *Net Change in Cash & Investments* and cash accumulated from previous years (*Cash Equivalents, Beginning*). This ending cash balance is held in reserve for use by water utility, and includes accumulated SDC revenues that by law can be spent only on capital improvements to the water fund. The City keeps most of these reserves in the Local Government Investment Pool, which has been earning interest at or below 1% per year.

Table 2 Water Utility Cash Flow History

		Hist	ory	
Fiscal Year ending June 30	2010	2011	2012	2013
Cash Flows From Operating Activities				
Total Revenues	3,417,368	3,450,572	3,970,113	4,570,440
Total Expenditures	(1,531,276)	(1,877,929)	(2,816,243)	(2,883,345)
Net Cash From Operating Activities	\$1,886,092	\$1,572,643	\$1,153,870	\$1,687,095
Debt Service	(323,134)	(10,556,242)	(515,649)	(1,838,268)
Net Cash after Debt Service	\$1,562,958	(\$8,983,599)	\$638,221	(\$151,173)
Cash Flows From Capital Improvements				
System Development Charges	113,258	193,837	114,518	417,182
Bond Proceeds	3,152,556	17,601,880		
Capital Expenditures	(6,641,828)	(4,887,069)	(2,568,139)	(2,653,193)
URA Loan	1,152,492	(2,446,530)		
Net Cash From Capital Improvements	(\$2,223,522)	\$10,462,118	(\$2,453,621)	(\$2,236,012)
Interest on Investments	56,529	41,932	44,429	24,963
Net Change In Cash & Equivalents	(\$604,035)	\$1,520,451	(\$1,770,971)	(\$2,362,221)
		0.55440		
CASH & EQUIVALENTS, Beginning	9,380,175	8,776,140	10,296,591	8,525,620
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UASH & EQUIVALENTS, Ending	\$8,776,140	\$10,296,591	\$8,525,620	\$6,163,399
CASH & EQUIVALENTS, Beginning CASH & EQUIVALENTS, Ending	9,380,175 \$8,776,140	8,776,140 \$10,296,591	10,296,591 \$8,525,620	8,525,620 \$6,163,399

FINANCIAL FORECAST

The financial forecast consists of a baseline and three alternatives. The Baseline Forecast assumes no rate increases through FY 2020. Alternative Forecasts 1 through 3 assume annual rate increases of 2%, 3% and 4%, respectively, that are applied to both base and consumption rates. All four forecasts are based on a set of fixed economic assumptions shown in Table 3.

Operating expenditures are forecast to increase at an average annual rate of 4% per year. Water Purchases are based on an annual growth rate of 1%, with a 3.5% annual increase in the cost of operating the Wilsonville water treatment plant.

The list and schedule of capital improvements is fixed, but is based on a water master plan that pre-dates the construction of the Wilsonville WTP and conveyance system. A new master plan is underway but will not be completed for several months. As shown in Table 3, four known projects are unscheduled, and although the need it apparent, no cost estimates exist for these projects. When the new master plan is completed, the list in Table 3 will likely be different in scope, timing, and costs.

The annual growth rate, although historically higher, is fixed at 1%. Over the past decade Sherwood's growth rate averaged 4.3% per year (2010 U.S. Census), most of which was due to new single-family housing units. Looking forward, however, the City has far less vacant land to accommodate growth than it had ten years ago. In addition, the Great Recession has structurally changed the economy, and Congress has enacted new laws that effectively limit household access to credit for new mortgages. These events will keep the growth of single-family housing units below historic levels of the past decade.

Table 3 Fixed Forecast Assumptions

]	Forecast		
Fiscal Year ending June 30	2014	2015	2016	2017	2018
OPERATING EXPENDITURES					
Personnel, % Δ Y-to-Y	5.0%	5.0%	5.0%	5.0%	5.0%
Materials & Services, $\% \Delta Y$ -to-Y	3.0%	3.0%	3.0%	3.0%	3.0%
Water Purchases					
Wilsonville Purchase (1,000 g)	681,388	702,247	709,269	716,362	723,526
TVWD/PDX Purchase (1,000 g)	13,906				
Total (1,000 gallons)	695,294	702,247	709,269	716,362	723,526
Wilsonville Water Price (\$/ccf)	\$1.403	\$1.452	\$1.503	\$1.556	\$1.610
Price Escalator	19.0%	3.5%	3.5%	3.5%	3.5%
CAPITAL EXPENDITURES (construct	ion year dollars)^				
Segment 3	\$1,172,000				
Water MP & Model	149,000	33,000			
SW Cipole Rd. Stub-out					50,000
Treatment Plant Expansion		1,099,000			
Langer Subdivision					69,000
Highway 99W Crossing			397,000		
Automatic Meter Reading	320,000	110,000	227,000	117,000	121,000
Seismic Upgrades					
535 Ft. Reservoir No. 1	These	projects have bee	en deferred unt	til after FY 20	18.
Highpoint Dr.		No cost esti	mates are avai	lable.	
Purchase 15 mgd from TVWD					
Total Capital Improvements	\$1,641,000	\$1,242,000	\$624,000	\$117,000	\$240,000

^ Capital expenditures were originally calculated in 2012 dollars, and we have escalated these costs by 3.5% per year to account for inflation. The City has recently begun updating its water master plan, which will result in a different list, costs, and schedule of capital improvements. This table ends in FY 2018 because no capital improvements are forecast beyond FY 2018. Although no specific projects are identified after that time, our forecast assumes an average cost of \$515,000 in FY 2019 and \$530,000 in FY 2020.

Baseline Forecast

The Baseline Forecast assumes no rate increases, no additional borrowing, and an annual growth rate of 1%—or equivalent to about 75 new single-family houses per year.

As illustrated in Table 4, the Baseline Forecast results in declining *Cash & Equivalents* in every year of the forecast but one. *Net Cash After Debt Service* is negative every year. *Net Cash From Capital Improvements* is negative in all years but two—FY 2014, due to a \$2.0 million reimbursement by Wilsonville because construction costs were less than expected; and FY 2017, due to fluctuations in scheduled capital improvements.

Interest on Investments is positive but declining in each year of the forecast due to an annual decrease in Cash & Equivalents.

Net Changes in Cash & Equivalents is declining because *Net Cash After Debt Service* and *Net Cash From Capital Improvements* are negative in most years of the forecast. As a result, *Cash & Equivalents, Ending* decreases from \$6.5 million in FY 2014 to \$1.3 million in FY 2020. Without any rate increases, the utility will spend \$5.2 million more over the next 6 years than it takes in from all sources of revenue.

In the following alternative forecasts, we project the financial results of increasing rates 2%, 3%, or 4% per year. These forecasts are presented in Figures 1 and 2 and in Tables 5, 6, and 7.

Table 4 Water Utility Baseline Forecast—0.0% Rate Increases

	_				Forecast			
Fiscal Year ending June 30	2013	2014	2015	2016	2017	2018	2019	2020
Cash Flows From Operations								
Total Revenues	4,570,440	4,593,421	4,639,421	4,685,421	4,731,421	4,778,421	4,825,421	4,873,421
Total Expenditures	(2,883,345)	(2,937,523)	(3,068,185)	(3,197,176)	(3,332,186)	(3,471,322)	(3,615,604)	(3,767,111)
Net Cash From Operating Activities	\$1,687,095	\$1,655,899	\$1,571,236	\$1,488,246	\$1,399,235	\$1,307,099	\$1,209,817	\$1,106,310
Debt Service	(1,838,268)	(1,829,777)	(1,826,876)	(1,828,876)	(1,825,676)	(1,828,225)	(1,825,326)	(1,827,727)
Net Cash After Debt Service	(\$151,173)	(\$173,878)	(\$255,640)	(\$340,630)	(\$426,441)	(\$521,125)	(\$615,508)	(\$721,416)
Cash Flows From Capital Improvements								
System Development Charges	417,182	107,000	213,000	216,000	219,000	219,000	222,000	225,000
Refund (prepaid construction costs)		2,000,000						
Capital Expenditures	(2,653,193)	(1,641,000)	(1,242,000)	(624,000)	(117,000)	(844,000)	(515,000)	(530,000)
Net Cash From Capital Improvements	(\$2,236,012)	\$466,000	(\$1,029,000)	(\$408,000)	\$102,000	(\$625,000)	(\$293,000)	(\$305,000)
Interest on Investments	\$24.062	\$62,000	\$50,000	\$40,000	\$45,000	\$28,000	\$28,000	¢12,000
interest on investments	\$24,903	\$03,000	\$39,000	\$49,000	\$45,000	\$38,000	\$28,000	\$18,000
Net Change In Cash & Equivalents	(\$2,362,221)	\$355 122	(\$1 225 640)	(\$699 630)	(\$279.441)	(\$1.108.125)	(\$880,508)	(\$1,008,416)
The change in Cash & Equivalents	(\$2,302,221)	\$555,122	(\$1,220,010)	(\$055,050)	(\$277,111)	(\$1,100,120)	(\$000,200)	(\$1,000,110)
CASH & EQUIVALENTS, Beginning	8,525,620	6,163,399	6,518,521	5,292,881	4,593,251	4,313,811	3,205,685	2,325,177
CASH & EQUIVALENTS, Ending	\$6,163,399	\$6,518,521	\$5,292,881	\$4,593,251	\$4,313,811	\$3,205,685	\$2,325,177	\$1,316,761

Alternative Forecasts

EFA has developed three alternative financial forecasts. Each assumes rate increases will go into effect on January 1 of each year, beginning 2014.

Baseline Forecast:No Rate IncreasesAlternative 1:2% Annual Rate IncreasesAlternative 2:3% Annual Rate IncreasesAlternative 3:4% Annual Rate Increases

Figures 1 and 2 illustrate the impacts of the alternative rate options. Figure 1 compares *Net Cash From Operating Activities* to debt service, which is fixed at about \$1.8 million per year. In 2014, debt service exceeds *Net Cash From Operating Activities*, and without any rate increases, the difference increases each year due to rising operating costs

In Alternative 1 (a rate increase of 2% per year) *Net Cash From Operating Activities* roughly equals debt service in FY 2015, and is just above debt service in the subsequent years of the forecast. This alternative represents the minimum level of rate increases needed to meet all operating costs and debt service. *Cash & Equivalents* decreases from \$6.5 million in FY 2014 to about \$3.0 million in FY 2020 because cash reserves are used to pay for capital improvements. Over the forecast period, cash will be reduced about \$3.5 million for cash acquisition of capital improvements.

Alternatives 2 and 3, with annual rate increases of 3% and 4%, respectively, produce incrementally more *Net Cash From Operating Activities* than is needed to meet operating costs and debt service. Alternative 2 results in \$4.0 million in *Cash & Equivalents* in FY 2020—a reduction of about \$2.6 million in cash reserves over the period. Alternative 3 results in about \$5.0 million in *Cash & Equivalents* in FY 2020—a reduction of \$1.7 million. These rate increases provide sufficient cash to pay all operating costs and debt service, but not all of the planned capital improvements.

All three alternative forecasts assume the City will use cash to pay for future capital improvements. However, the City will have better knowledge of future revenue requirements when the current master planning effort is completed. Depending on the findings, the City may have more improvements to pay for and may choose to finance some of these improvements to lessen the impact on water rates.



Figure 1 Net Operating Revenue vs. Debt Service

Figure 2 Cash & Equivalents, Ending vs. Debt Service



Table 5 Alternative Forecast 1—2 % Annual Rate Increases

	_		Forecast					
Fiscal Year ending June 30	2013	2014	2015	2016	2017	2018	2019	2020
Cash Flows From Operations								
Total Revenues	4,570,440	4,593,421	4,685,421	4,825,421	4,970,421	5,119,421	5,272,421	5,430,421
Total Expenditures	(2,883,345)	(2,937,523)	(3,070,185)	(3,204,176)	(3,344,186)	(3,488,322)	(3,638,604)	(3,795,111)
Net Cash From Operating Activities	\$1,687,095	\$1,655,899	\$1,615,236	\$1,621,246	\$1,626,235	\$1,631,099	\$1,633,817	\$1,635,310
Debt Service	(1,838,268)	(1,829,777)	(1,826,876)	(1,828,876)	(1,825,676)	(1,828,225)	(1,825,326)	(1,827,727)
Net Cash After Debt Service	(\$151,173)	(\$173,878)	(\$211,640)	(\$207,630)	(\$199,441)	(\$197,125)	(\$191,508)	(\$192,416)
Cash Flows From Capital Improvements								
System Development Charges	417,182	107,000	213,000	216,000	219,000	219,000	222,000	225,000
Refund (Construction Costs)		2,000,000						
Capital Expenditures	(2,653,193)	(1,641,000)	(1,242,000)	(624,000)	(117,000)	(844,000)	(515,000)	(530,000)
Net Cash From Capital Improvements	(\$2,236,012)	\$466,000	(\$1,029,000)	(\$408,000)	\$102,000	(\$625,000)	(\$293,000)	(\$305,000)
Interest on Investments	\$24,963	\$63,000	\$59,000	\$51,000	\$47,000	\$43,000	\$37,000	\$33,000
Net Change In Cash & Equivalents	(\$2,362,221)	\$355,122	(\$1,181,640)	(\$564,630)	(\$50,441)	(\$779,125)	(\$447,508)	(\$464,416)
CASH & EQUIVALENTS, Beginning	8,525,620	6,163,399	6,518,521	5,336,881	4,772,251	4,721,811	3,942,685	3,495,177
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CASH & EQUIVALENTS, Ending	\$6,163,399	\$6,518,521	\$5,336,881	\$4,772,251	\$4,721,811	\$3,942,685	\$3,495,177	\$3,030,761

Table 6 Alternative Forecast 2—3% Annual Rate Increases

	_	Forecast						
Fiscal Year ending June 30	2013	2014	2015	2016	2017	2018	2019	2020
Cash Flows From Operations								
Total Revenues	4,570,440	4,593,421	4,708,421	4,896,421	5,092,421	5,296,421	5,508,421	5,728,421
Total Expenditures	(2,883,345)	(2,937,523)	(3,071,185)	(3,208,176)	(3,350,186)	(3,497,322)	(3,649,604)	(3,809,111)
Net Cash From Operating Activities	\$1,687,095	\$1,655,899	\$1,637,236	\$1,688,246	\$1,742,235	\$1,799,099	\$1,858,817	\$1,919,310
Debt Service	(1,838,268)	(1,829,777)	(1,826,876)	(1,828,876)	(1,825,676)	(1,828,225)	(1,825,326)	(1,827,727)
Net Cash After Debt Service	(\$151,173)	(\$173,878)	(\$189,640)	(\$140,630)	(\$83,441)	(\$29,125)	\$33,492	\$91,584
Cash Flows From Capital Improvements								
System Development Charges	417,182	107,000	213,000	216,000	219,000	219,000	222,000	225,000
Refund (Construction Costs)		2,000,000						
Capital Expenditures	(2,653,193)	(1,641,000)	(1,242,000)	(624,000)	(117,000)	(844,000)	(515,000)	(530,000)
Net Cash From Capital Improvements	(\$2,236,012)	\$466,000	(\$1,029,000)	(\$408,000)	\$102,000	(\$625,000)	(\$293,000)	(\$305,000)
Interest on Investments	\$24,963	\$63,000	\$59,000	\$51,000	\$49,000	\$46,000	\$42,000	\$40,000
Net Change In Cash & Equivalents	(\$2,362,221)	\$355,122	(\$1,159,640)	(\$497,630)	\$67,559	(\$608,125)	(\$217,508)	(\$173,416)
CASH & EQUIVALENTS, Beginning	8,525,620	6,163,399	6,518,521	5,358,881	4,861,251	4,928,811	4,320,685	4,103,177
CASH & EQUIVALENTS, Ending	\$6,163,399	\$6,518,521	\$5,358,881	\$4,861,251	\$4,928,811	\$4,320,685	\$4,103,177	\$3,929,761

Table 7 Alternative Forecast 3—4% Annual Rate Increases

	_	Forecast						
Fiscal Year ending June 30	2013	2014	2015	2016	2017	2018	2019	2020
Cash Flows From Operations								
Total Revenues	4,570,440	4,593,421	4,731,421	4,967,421	5,215,421	5,476,421	5,750,421	6,038,421
Total Expenditures	(2,883,345)	(2,937,523)	(3,073,185)	(3,211,176)	(3,356,186)	(3,506,322)	(3,662,604)	(3,825,111)
Net Cash From Operating Activities	1,687,095	1,655,899	1,658,236	1,756,246	1,859,235	1,970,099	2,087,817	2,213,310
Debt Service	(1,838,268)	(1,829,777)	(1,826,876)	(1,828,876)	(1,825,676)	(1,828,225)	(1,825,326)	(1,827,727)
Net Cash After Debt Service	(\$151,173)	(\$173,878)	(\$168,640)	(\$72,630)	\$33,559	\$141,875	\$262,492	\$385,584
Cash Flows From Capital Improvements								
System Development Charges	417,182	107,000	213,000	216,000	219,000	219,000	222,000	225,000
Refund (Construction Costs)		2,000,000						
Capital Expenditures	(2,653,193)	(1,641,000)	(1,242,000)	(624,000)	(117,000)	(844,000)	(515,000)	(530,000)
Net Cash From Capital Improvements	(\$2,236,012)	\$466,000	(\$1,029,000)	(\$408,000)	\$102,000	(\$625,000)	(\$293,000)	(\$305,000)
Interest on Investments	\$24,963	\$63,000	\$59,000	\$52,000	\$50,000	\$49,000	\$47,000	\$48,000
Net Change In Cash & Equivalents	(\$2,362,221)	\$355,122	(\$1,138,640)	(\$428,630)	\$185,559	(\$434,125)	\$16,492	\$128,584
CASH & EQUIVALENTS, Beginning	8,525,620	6,163,399	6,518,521	5,379,881	4,951,251	5,136,811	4,702,685	4,719,177
CASH & EQUIVALENTS, Ending	\$6,163,399	\$6,518,521	\$5,379,881	\$4,951,251	\$5,136,811	\$4,702,685	\$4,719,177	\$4,847,761

Water Rate Impacts

The impact of the rate increases on the average monthly bill for a household are shown in Table 8.

Table 8	Rate Imn	acts on Averag	e Residential	Water Bill	(5.000 g/month)
I abic 0	mate mp	acts on metag	c nesiaentia	water Din	(0,000 g/ monuly)

	_	Forecast						
Fiscal Year ending June 30	2013	2014	2015	2016	2017	2018	2019	2020
Baseline—0.0% rate increases	\$44.24	\$44.24	\$44.24	\$44.24	\$44.24	\$44.24	\$44.24	\$44.24
Alternative 1-2% rate increases	\$44.24	\$45.30	\$46.20	\$47.10	\$48.00	\$49.00	\$50.00	\$51.00
Alternative 2—3% rate increases	\$44.24	\$45.80	\$47.20	\$48.60	\$50.10	\$51.60	\$53.10	\$54.70
Alternative 3—4% rate increases	\$44.24	\$46.20	\$48.00	\$49.90	\$51.90	\$54.00	\$56.20	\$58.40

RECOMMENDATIONS

Three key issues affect the financial forecasts and need to be considered in making rate increases.

First, the new source of water has not been operating long enough to produce stable financial results. We expect the Wilsonville water treatment plant and the associated pumping and piping facilities to take some years to stabilize operations. In the next two years the rates Wilsonville charges Sherwood could vary substantially from the current rate—either up or down.

Second, the City has just begun to re-evaluate its entire system in a new master planning process. This process could result in a different list of capital improvements and associated capital expenditures than contained in our assumptions.

Finally, the tradeoff between water rates and growth is important. We assume a 1% annual growth rate, which is less than a quarter of the historical growth rate. Since the City's water rates are based on expenditures that include fixed costs (*e.g.*, personnel and debt service), any new customers result in a small increase in operating costs—especially the amount of water purchased from Wilsonville. In the short run, growth offsets the need to increase rates; conversely, zero growth requires rate increases to keep up with inflating operating costs. Growth that is more or less than 1% per year may result in smaller or larger rate increases than forecast.

Given the condition of the national, state, and local economies, and assuming that rate increases will be made annually, EFA recommends a rate increase of at least 2% this year. In the second and subsequent years, rate increases can be determined by the prior year's financial results with the benefit of an updated master plan.

APPENDIX TABLES

Appendix Table 1: Detailed Financial History

Appendix Table 2: Detailed Baseline Financial Forecast

	Financial History						
Fiscal Year ending June 30	2010	2011	2012	2013			
CASH FLOWS FROM OPERATING ACTIVITIES							
Revenues							
Customer Receipts	\$3,414,925	\$3,450,572	\$3,970,113	\$4,531,018			
Other Revenues	2,443			39,421			
Total Revenues	\$3,417,368	\$3,450,572	\$3,970,113	\$4,570,440			
Expenditures							
Personal Services	719,536	623,371	552,800	601,835			
Materials & Services	200,563	1,254,558	2,263,443	976,990			
Water Purchases	611,177			1,304,520			
Total Expenditures	\$1,531,276	\$1,877,929	\$2,816,243	\$2,883,345			
CASH FLOWS FROM CAPITAL ACTIVITIES							
System Development Charges	113,258	193,837	114,518	417,182			
Capital Expenditures	(6,641,828)	(4,887,069)	(2,568,139)	(2,653,193)			
URA Loan	1,152,492	(2,446,530)					
Long-term Debt							
Proceeds from Issuance of Debt	3,152,556	17,601,880					
Principal	(41,758)	(10,254,791)	(493,186)	(824,425)			
Interest	(281,376)	(301,451)	(22,463)	(1,013,843)			
Net Cash From Capital Activities	(\$2,546,656)	(\$94,124)	(\$2,969,270)	(\$4,074,279)			
CASH FLOWS FROM INVESTING ACTIVITIES							
Net Cash From Investing Activities	\$56,529	\$41,932	\$44,429	\$24,963			
Net Change In Cash & Equivalents	(\$604,035)	\$1,520,451	(\$1,770,971)	(\$2,362,221)			
CASH & EQUIVALENTS, Beginning	9,380,175	8,776,140	10,296,591	8,525,620			
CASH & EQUIVALENTS, Ending	\$8,776,140	\$10,296,591	\$8,525,620	\$6,163,399			

Appendix Table 1 Detailed Financial History

Source: City of Sherwood, Comprehensive Annual Financial Report for fiscal years ending June 30, 2009, 2010, 2011, 2012. The FY 2013 financials are unaudited trial balances.

Water Utility: Financial Forecast & Water Rates

Appendix Table 2 Detailed Baseline Financial Forecast

	Forecast							
Fiscal Year ending June 30	2013	2014	2015	2016	2017	2018	2019	2020
CASH ELOWS EDOM ODEDATING ACTIVITIES								
Revenues	1125							
Customer Receipts	\$4 531 018	\$4 554 000	\$4 646 000	\$4 786 000	\$4 931 000	\$5,080,000	\$5 233 000	\$5 391 000
Other Revenues	39.421	39.421	39.421	39.421	39.421	39.421	39.421	39.421
Total Revenues	\$4.570.440	\$4.593.421	\$4.685.421	\$4.825.421	\$4.970.421	\$5,119,421	\$5.272.421	\$5,430,421
Expenditures	+ ',• ' ', ' ' '	+ .,= > = , = = =	+ .,,	+ .,,	+ .,, , , , ,	+++++++++++++++++++++++++++++++++++++++	+ = , = . = . = .	<i></i>
Personal Services	601,835	632,000	664,000	697,000	732,000	769,000	807,000	847,000
Materials & Services	147,449	152,000	157,000	162,000	167,000	172,000	177,000	182,000
Water Purchases	1,304,520							
Wilsonville		1,278,058	1,363,185	1,425,176	1,490,186	1,557,322	1,627,604	1,701,111
TVWD		19,465						
Facility & Equipment	53,362	55,000	57,000	59,000	61,000	63,000	65,000	67,000
Other Purchased Services	179,229	185,000	191,000	197,000	203,000	209,000	215,000	221,000
Franchise Fees	226,249	228,000	232,000	239,000	247,000	254,000	262,000	270,000
Other Supplies	88,982	92,000	95,000	98,000	101,000	104,000	107,000	110,000
Admin Overhead Reimbursement	281,719	296,000	311,000	327,000	343,000	360,000	378,000	397,000
Total Expenditures	\$2,883,345	\$2,937,523	\$3,070,185	\$3,204,176	\$3,344,186	\$3,488,322	\$3,638,604	\$3,795,111
Net Cash From Operating Activities	\$1,687,095	\$1,655,899	\$1,615,236	\$1,621,246	\$1,626,235	\$1,631,099	\$1,633,817	\$1,635,310
CASH FLOWS FROM CAPITAL ACTIVITIES								
System Development Charges	417,182	107,000	213,000	216,000	219,000	219,000	222,000	225,000
Capital Expenditures	(2,653,193)	(1,641,000)	(1,242,000)	(624,000)	(117,000)	(844,000)	(515,000)	(530,000)
Wilsonville Refund		2,000,000						
Principal	(824,425)	(872,052)	(893,987)	(921,524)	(944,683)	(978,486)	(1,007,958)	(1,048,121)
Interest	(1,013,843)	(957,725)	(932,889)	(907,352)	(880,993)	(849,739)	(817,368)	(779,606)
Net Cash From Capital Activities	(\$4,074,279)	(\$1,363,777)	(\$2,855,876)	(\$2,236,876)	(\$1,723,676)	(\$2,453,225)	(\$2,118,326)	(\$2,132,727)
CASH FLOWS FROM INVESTING ACTIVITIES								
Interest	24,963	63,000	59,000	51,000	47,000	43,000	37,000	33,000
Net Change In Cash & Equivalents	(\$2,362,221)	\$355,122	(\$1,181,640)	(\$564,630)	(\$50,441)	(\$779,125)	(\$447,508)	(\$464,416)
CASH & EOUIVALENTS, Beginning	8,525,620	6.163.399	6.518.521	5,336,881	4,772,251	4.721.811	3.942.685	3.495.177
CASH & EQUIVALENTS, Ending	\$6,163,399	\$6,518,521	\$5,336,881	\$4,772,251	\$4,721,811	\$3,942,685	\$3,495,177	\$3,030,761
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