



April 30, 2014

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SENT BY EMAIL ONLY

John Duckett
City Manager
City of Shasta Lake
P.O. Box 777
Shasta Lake, CA 96019

Dear Mr. Duckett:

Subject: Water and Wastewater Utility Rate Update

WATER UTILITY 2014 water rates were superseded by the Raftelis rate study performed in July 2016. Wastewater rates are active per this study.

The City's last Water Utility Rate Study Update was prepared by PACE in 2009. The 5-year financial plan developed in that rate study estimated Fiscal Year (FY) 13-14 Beginning Funds Available Balance to be about \$425,000 and Projected FY 13-14 Expenditures, including Capital Projects, to be approximately \$2,840,000.

Based upon the final accounting of FY 12-13, City staff has estimated the actual Funds Available at the beginning of FY 13-14 at about \$1,841,383. The main reason for this higher-than-expected fund balance is due to the carryover of Capital Improvement Funds that are intended to fund the on-going distribution replacement projects and other planned Capital Improvement Projects.

According to the City's adopted budget, the Water Utility's FY 13-14 Expenditures, including Capital Project Allocations, are estimated at about \$3,746,000, excluding depreciation. This is about \$909,000 higher than projected in the 2009 Rate Study, due in part to the carryover in Capital Project Allocations. Refer to attached Table 1. It was recommended in the 2009 Rate Study that the City develop a Water Capital Projects Fund so that 1) Capital Project Allocation Funds can be tracked separately from Operating Reserve Funds, and 2) Capital Project Funds can be accumulated so that economically sized projects can be implemented. Based on discussion with City staff, it is recommended that a 5 percent Operating Reserve be available at all times and remaining funds be allocated to Capital Projects.

In the 2009 Rate Study, over \$7,000,000 worth of potential water main replacement work was identified over the next 20 to 30 years. Thus, it will be imperative the City continues to aggressively fund a Capital Projects Fund.

Table 1 also indicates a 5-year projection of the Water Enterprise Expenditures and Transfers. In the 2009 Rate Study, a 3 percent inflation factor was used to project future expenditures. A review of the actual inflation of City expenses between FY 08-09 and FY 13-14 revealed the rate to be approximately 1 percent. It was felt an inflation factor closer to the actual consumer price index (CPI) would be more appropriate, so 2.5 percent was used for projecting future expenses.

Table 2 presents a summary of the 5-year financial plan values based upon FY 13-14 annual water consumption, which generated about \$325,000 less revenue than projected in the 2009 Rate Study. Annual water consumption increases are shown at the top of Table 2 and are based on projections by City staff of the number of single-family equivalent connections (SFEC) anticipated for each of the next five years. Refer to Table 6 for the actual anticipated number of annual SFECs.

As indicated at the bottom of Table 2, a 5 percent Operating Reserve will be maintained for all five years. The amount of Operating Reserve and Capital Project Allocation carryover is shown as Ending Balance/Operating Reserve at the bottom of Table 2.

A summary of the proposed water rates used in the 5-year financial plan is shown in Table 3.

Table 4 contains a year-by-year breakdown of anticipated Capital Projects for the next five years. The Capital Project Allocation will fund the City's water meter replacement program and future water main replacement projects.

Figure 1 indicates estimated average monthly water bills for various agencies based on an average single-family annual consumption of 22,000 CF. **It should be remembered that some of these agencies have relatively new systems and are not subject to the high distribution system repair and rehabilitation costs associated with the City of Shasta Lake Water System.**

Drought Surcharge: Due to the current drought conditions and associated 50 percent reduction levied by the U.S. Bureau of Reclamation, the City has secured acquisition of 900 acre-feet of water from the McConnell Foundation at \$250 per acre-foot for a total cost of \$225,000. Thus, it recently considered alternatives for addressing the potential revenue shortfall. The City decided to implement an "Excess Water Usage" penalty that adds a surcharge to the existing water consumption rates greater than 1,000 gallons per month. Based on City projections, it is estimated revenue streams of \$515,500, \$330,750, and \$146,000 would be generated for citywide conservation of 0%, 10%, and 20%, respectively. As indicated, if citywide conservation approaches 20 percent, the City will have difficulty generating the revenue needed to recover the cost of supplemental water.

WASTEWATER UTILITY

The City's last Wastewater Utility Rate Study Update was prepared by PACE in 2009. The 2009 Study estimated the FY 13-14 Beginning Funds Available Balance to be about \$281,000 and the Projected FY 13-14 Expenditures, including Capital Projects Allocation, to be approximately \$2,542,000.

Based upon the final accounting of FY 12-13, City staff has estimated the actual Funds Available at the beginning of FY 13-14 at about \$1,894,250. Based upon the City's adopted budget, the Wastewater Utility's FY 13-14 Expenditures, including Capital Projects Allocation, are estimated at about \$3,529,000, excluding depreciation. Refer to Table 5. This is about \$986,500 higher than projected in the 2009 Rate Study, due in part to the carryover in Capital Project Allocations. The actual FY 13-14 Beginning Funds Available Balance is about \$1,613,000 greater than forecast in the 2009 Study. This is due to the carryover of funds allocated for Capital Projects.

It was recommended in the 2009 Rate Study that the City develop a Wastewater Capital Projects Fund so that 1) Capital Project Allocation Funds can be tracked separately from Operating Reserve Funds, and 2) Capital Project Funds can be accumulated so that economically sized projects can be implemented. Based on discussion with City staff, it is recommended that a 5 percent Operating Reserve be available at all times and remaining funds be allocated to Capital Projects. Since the Operating Reserve is being reduced to 5 percent, it is recommended the City maintain at least 15 to 20 percent in the Capital Projects Allocation so the sum of both is 20 to 25 percent at all times.

Before the end of FY 13-14, the City will begin the environmental review process on its upcoming Direct Discharge Project for year-round treated wastewater discharge to Churn Creek. Over the remaining five years, the City anticipates spending up to \$2,225,000 of its own funds to complete environmental, design, and finance construction of these planned improvements. These and other planned Capital Improvements Projects are shown in attached Table 7.

Table 5 also indicates a 5-year projection of the Wastewater Enterprise Expenditures and Transfers. In the 2009 Rate Study, a 3 percent inflation factor was used to project future expenditures. A review of the actual inflation of City expenses between FY 08-09 and FY 13-14 revealed the rate to be approximately 2.4 percent. Therefore, an inflation factor of 2.5 percent was used for projecting the future costs.

Table 6 presents a summary of the 5-year financial plan values. The service charge revenue projections are based on the current number of 3,879 SFECs. Since the 2009 Rate Study, the City has lost approximately 41 SFECs. There has been some recent development activity in the City.

Thus, a modest number of additional annual SFECs is shown at the top of Table 6 based on projections by City staff.

Table 7 shows a summary of anticipated capital improvements over the next five years. As indicated, the Direct Discharge Project will require approximately \$2,225,000 in environmental, engineering design, and construction interim financing over the next five years. Other anticipated Capital Projects are also listed. In addition, it must be remembered that as the wastewater system ages, the need for replacement Capital Projects will increase. An example includes the On-going Infiltration and Inflow Reduction Program recommended in the 2005 Wastewater System Master Plan. Therefore, it is important to plan ahead for the resources required to accomplish the needed improvements.

Depending on the final project cost, financing terms, and grant funding component for the Direct Discharge Project, it is likely the City will need to implement a rate increase, specifically for debt servicing any long-term loan financing. At this time, it is anticipated the first debt service payments will not be due until the end of construction after FY 18-19.

A comparison of wastewater rates for neighboring and similar wastewater systems is shown on Figure 2. All of these communities have similar collection and treatment systems, but the City of Shasta Lake is required to provide a higher degree of treatment and also operates and maintains a much more extensive effluent storage and land application system than any of them. The required degree of treatment will increase substantially as a result of the Direct Discharge Project.

PACE Engineering is very pleased to have participated in this rate update and we thank your staff for their able assistance in its preparation. We will be happy to meet with you at your convenience to discuss this Water and Wastewater Utility Rate Update in detail.

Sincerely,



Paul J. Reuter
Managing Engineer

PR

Enclosures

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TABLE 5

City of Shasta Lake -- Wastewater Utility

Projected Expenditures and Transfers

	Inflation Factor	Estimated (FY 13-14)	Projected (FY 14-15)	Projected (FY 15-16)	Projected (FY 16-17)	Projected (FY 17-18)	Projected (FY 18-19)	COMMENTS
WASTEWATER ADMINISTRATION								
<u>Material, Supplies & Services</u>								
5513	Permits & Fees	2.5%	\$13,500	\$13,838	\$14,183	\$14,538	\$14,901	\$15,274
5521	Consulting	2.5%	\$5,000	\$5,125	\$5,253	\$5,384	\$5,519	\$5,657
5528	Bad Debts	2.5%	\$13,000	\$13,325	\$13,658	\$14,000	\$14,350	\$14,708
5590	Insurance	2.5%	\$34,080	\$34,932	\$35,805	\$36,700	\$37,618	\$38,558
5914	Property Assessment Payments	2.5%	\$53,750	\$55,094	\$56,471	\$57,883	\$59,330	\$60,813
<u>Internal Services</u>								
5710	Depreciation Expense		\$0	\$0	\$0	\$0	\$0	\$0
5750	Administration Fee	5.0%	\$377,030	\$395,882	\$415,676	\$436,459	\$458,282	\$481,196
5760	Motor Pool Charges	2.5%	\$30,921	\$31,694	\$32,486	\$33,299	\$34,131	\$34,984
<u>Other Debt Payments</u>								
	Additional Debt Service		\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal		\$527,281	\$549,889	\$573,533	\$598,263	\$624,131	\$651,192
TREATMENT FACILITY								
<u>Personnel Costs</u>								
	Salaries & Benefits (5010 - 5230)	2.5%	\$364,191	\$373,296	\$382,628	\$392,194	\$401,999	\$412,049
<u>Materials, Supplies & Services</u>								
5410	Utilities	2.5%	\$130,000	\$133,250	\$136,581	\$139,996	\$143,496	\$147,083
5420	Telephone	2.5%	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
5430	Alarms	2.5%	\$500	\$513	\$525	\$538	\$552	\$566
5505	General Operating Supplies	2.5%	\$2,500	\$2,563	\$2,627	\$2,692	\$2,760	\$2,829
5511	Chemicals	2.5%	\$25,000	\$25,625	\$26,266	\$26,922	\$27,595	\$28,285
5513	Permits & Fees	2.5%	\$1,000	\$1,025	\$1,051	\$1,077	\$1,104	\$1,131
5514	Lab Supplies	2.5%	\$17,000	\$17,425	\$17,861	\$18,307	\$18,765	\$19,234
5521	Services - Consulting	2.5%	\$10,000	\$10,250	\$10,506	\$10,769	\$11,038	\$11,314
5526	Services - Janitorial	2.5%	\$1,200	\$1,230	\$1,261	\$1,292	\$1,325	\$1,358
5527	Services Miscellaneous	2.5%	\$12,000	\$12,300	\$12,608	\$12,923	\$13,246	\$13,577
5561	Site Clean-up	2.5%	\$15,000	\$15,375	\$15,759	\$16,153	\$16,557	\$16,971
5565	Travel, Meetings, Dues	2.5%	\$1,200	\$1,230	\$1,261	\$1,292	\$1,325	\$1,358
5568	Advertisement	2.5%	\$1,000	\$1,025	\$1,051	\$1,077	\$1,104	\$1,131

TABLE 5 (continued)
City of Shasta Lake -- Wastewater Utility

Projected Expenditures and Transfers

		Inflation Factor	Estimated (FY 13-14)	Projected (FY 14-15)	Projected (FY 15-16)	Projected (FY 16-17)	Projected (FY 17-18)	Projected (FY 18-19)	COMMENTS
5572	Small Tools	2.5%	\$2,500	\$2,563	\$2,627	\$2,692	\$2,760	\$2,829	
5576	Computer Service & Supplies	2.5%	\$1,000	\$1,025	\$1,051	\$1,077	\$1,104	\$1,131	
5594	Safety	2.5%	\$3,000	\$3,075	\$3,152	\$3,231	\$3,311	\$3,394	
5610	General Maintenance	2.5%	\$21,000	\$21,525	\$22,063	\$22,615	\$23,180	\$23,760	
5611	Maintenance, Collection system	2.5%	\$0	\$0	\$0	\$0	\$0	\$0	
5613	Lab Testing (Note 1)	2.5%	\$36,500	\$37,413	\$50,102	\$39,307	\$40,290	\$41,297	
5630	Equipment Repair Maint	2.5%	\$32,300	\$33,108	\$33,935	\$34,784	\$35,653	\$36,544	
5755	Labor Allocation	2.5%	\$3,563	\$3,652	\$3,743	\$3,837	\$3,933	\$4,031	
	Subtotal		\$681,954	\$698,965	\$728,156	\$734,275	\$752,594	\$771,372	
COLLECTION SYSTEM									
5410	Utilities	2.5%	\$105,000	\$107,625	\$110,316	\$113,074	\$115,900	\$118,798	
5420	Telephone	2.5%	\$2,000	\$2,050	\$2,101	\$2,154	\$2,208	\$2,263	
5513	Permits and Fees	2.5%	\$3,000	\$3,075	\$3,152	\$3,231	\$3,311	\$3,394	
5565	Travel, Meetings, Dues	2.5%	\$4,000	\$4,100	\$4,203	\$4,308	\$4,415	\$4,526	
5567	Training	2.5%	\$4,000	\$4,100	\$4,203	\$4,308	\$4,415	\$4,526	
5611	Maint. Collection System	2.5%	\$15,000	\$15,375	\$15,759	\$16,153	\$16,557	\$16,971	
5614	Lift Station Maintenance	2.5%	\$30,000	\$30,750	\$31,519	\$32,307	\$33,114	\$33,942	
Internal Services									
5755	Labor Allocation	2.5%	\$592,814	\$674,834	\$691,705	\$708,997	\$726,722	\$744,890	
	Subtotal		\$755,814	\$841,909	\$862,957	\$884,531	\$906,644	\$929,310	
CAPITAL PROJECTS (Refer to Table 7)									
	Capital Project Allocation (Note 1)	3.0%	\$54,235	\$80,000	\$80,000	\$80,000	\$80,000	\$500,000	
	Direct Discharge Project (Note 2)		\$1,350,000	\$350,000		\$400,000	\$75,000	\$50,000	
	Chlorine/Sulfur System		\$11,000						
	Server Upgrade		\$6,500						
	I&I Reduction Project						\$250,000	\$400,000	
	Pump Station No. 3 Dimminutor		\$42,006						
	Wastewater Master Plan		\$100,000						
	Misc Projects (See Table 7)		\$0	\$600,000	\$925,000	\$580,000	\$500,000	\$0	
	Total Capital Project		\$1,563,741	\$1,030,000	\$1,005,000	\$1,060,000	\$905,000	\$950,000	
Total Expenditures and Transfers			\$3,528,790	\$3,120,763	\$3,169,646	\$3,277,069	\$3,188,370	\$3,301,873	

Notes: 1. Includes on-going I&I reduction program, planned CCTV/sewer cleaning program, mixed liquor pump repair at WWTP and other projects.
2. Reflects estimated costs for environmental, design and interim financing during construction (expected to begin in FY 17-18). It is anticipated debt service payments on a long-term loan to finance improvements won't be due until FY 19-20. A rate increase may be required prior to the end of FY 18-19.

TABLE 6
City of Shasta Lake -- Wastewater Utility
Summary of Enterprise Fund Financial Plan

	Estimated (FY 13-14)	Projected (FY 14-15)	Projected (FY 15-16)	Projected (FY 16-17)	Projected (FY 17-18)	Projected (FY 18-19)
WASTEWATER RATES USED						
Single Family Monthly Service Charge	\$56.70	\$58.40	\$60.45	\$62.56	\$64.75	\$67.02
Lifeline Single Family Monthly Service Charge	\$43.36	\$46.72	\$48.36	\$50.05	\$51.80	\$53.61
Rate Increase		3.0%	3.5%	3.5%	3.5%	3.5%
ESTIMATED NUMBER OF SINGLE FAMILY CONNECTION EQUIVALENTS						
Beginning of Year SFECs	3,879	3,889	3,899	3,919	3,949	3,979
Estimated Additional SFECs	10	10	20	30	30	30
Estimated Year End SFECs	3,889	3,899	3,919	3,949	3,979	4,009
Estimated Year End Lifeline	359	359	359	359	359	359
BEGINNING FUNDS AVAILABLE BALANCE	\$1,894,250	\$995,457	\$647,388	\$417,009	\$274,251	\$347,846
REVENUES						
Service Charges	\$2,566,296	\$2,678,644	\$2,783,276	\$2,899,459	\$3,024,250	\$3,154,225
Sales on Reclaimed Water	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Service Connections	\$400	\$400	\$400	\$400	\$400	\$400
Interest Earnings (Assumes 1% on Beg. Bal. Funds)	\$8,500	\$9,955	\$6,474	\$4,170	\$2,743	\$3,478
Pasture Rent	\$1,400	\$1,400	\$1,400	\$1,400	\$1,400	\$1,400
Other Operation Income	\$800	\$800	\$800	\$800	\$800	\$800
Transfer from P&FCC Fund	\$46,601	\$75,496	\$140,917	\$222,081	\$226,372	\$230,744
Total Revenue	\$2,629,997	\$2,772,694	\$2,939,267	\$3,134,310	\$3,261,965	\$3,397,047
EXPENDITURES						
Wastewater Administration (see Note 1)	\$527,281	\$549,889	\$573,533	\$598,263	\$624,131	\$651,192
Treatment Facility	\$681,954	\$698,965	\$728,156	\$734,275	\$752,594	\$771,372
Collection System	\$755,814	\$841,909	\$862,957	\$884,531	\$906,644	\$929,310
Transfers to Capital Improvements Fund	\$1,563,741	\$1,030,000	\$1,005,000	\$1,060,000	\$905,000	\$950,000
Total Expenditures	\$3,528,790	\$3,120,763	\$3,169,646	\$3,277,069	\$3,188,370	\$3,301,873
ENDING BALANCE/OPERATING RESERVE	\$995,457	\$647,388	\$417,009	\$274,251	\$347,846	\$443,020
YEAR END OPERATING RESERVE	5%	5%	5%	5%	5%	5%
Notes: 1. Excluding unfunded depreciation expense.						

TABLE 7

City of Shasta Lake -- Wastewater Utility

Capital Projects

	Inflation Factor	Estimated (FY 13-14)	Projected (FY 14-15)	Projected (FY 15-16)	Projected (FY 16-17)	Projected (FY 17-18)	Projected (FY 18-19)	COMMENTS
CAPITAL PROJECTS								TOTALS
Capital Project Allocation		\$54,235	\$80,000	\$80,000	\$80,000	\$80,000	\$500,000	\$874,235
Direct Discharge Project (Note 1)								
Environmental		\$300,000						\$300,000
Design (To start in FY 15-16)		\$1,050,000	\$350,000		\$400,000			\$1,800,000
Interim Financing Costs						\$75,000	\$50,000	\$125,000
Chlorine/Sulfur System		\$11,000						\$11,000
Server Upgrade		\$6,500						\$6,500
I&I Reduction Project						\$250,000	\$400,000	\$650,000
Pump Station No. 3 Dimminutor		\$42,006						\$42,006
Wastewater Master Plan (To be completed in FY 14-15)		\$100,000						\$100,000
Mixed Liquor Pump Repairs			\$75,000	\$75,000	\$75,000			\$225,000
Spare pumps for PS Relief, 3 and 4			\$50,000	\$50,000	\$30,000			\$130,000
Pump Station No. 1 Replacement (Design & Const)			\$75,000	\$350,000				\$425,000
Pine Grove Force Main Replacement					\$300,000			\$300,000
Pump Station No. 3 Bypass Force Main						\$500,000		\$500,000
CCTV/Sewer cleaning			\$400,000	\$450,000	\$175,000			\$1,025,000
Total Capital Project		\$1,563,741	\$1,030,000	\$1,005,000	\$1,060,000	\$905,000	\$950,000	\$6,513,741

Notes: 1. Reflects estimated costs for environmental, design and interim financing during construction (expected to begin in FY 17-18). It is anticipated debt service payments on a long-term loan to finance improvements won't be due until FY 19-20. A rate increase may be required prior to the end of FY 18-19.