

Table 2
City of Livingston 2013 Water Rate Study
Typical Bill Impacts for Residential and Commercial Customers

DRAFT

Scenario B - Reduced CIP

Customer Type	Current 2013	Calendar Year				
		2014	2015	2016	2017	2018
Metered Residential	<i>1" meter</i>					
Service Charge	\$8.70	\$24.47	\$30.46	\$33.09	\$33.88	\$38.78
Meter Fee	\$1.20	\$2.87	\$2.98	\$3.09	\$3.21	\$3.33
Consumption Charge [1]	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Residential Bill	\$9.90	\$27.34	\$33.44	\$36.18	\$37.09	\$42.11
Flat Rate Residential	\$8.65	\$29.25	\$35.77	\$38.70	\$39.68	\$45.05
Commercial	<i>1" meter</i>					
Service Charge	\$8.70	\$24.47	\$30.46	\$33.09	\$33.88	\$38.78
Meter Fee	\$1.20	\$2.87	\$2.98	\$3.09	\$3.21	\$3.33
Consumption Charge [2]	\$7.00	\$10.94	\$13.71	\$14.80	\$15.04	\$17.26
Total Commercial Bill	\$16.90	\$38.28	\$47.15	\$50.98	\$52.13	\$59.37
Flat Rate Commercial	\$9.90	\$41.43	\$51.03	\$55.17	\$56.42	\$64.25

Source: City of Livingston and HEC.

"typical"

[1] Average monthly use of 20,000 gallons.

[2] Average monthly use of 55,000 gallons.

Table 8
City of Livingston 2013 Water Rate Study
Capital Improvements Plan

DRAFT

Scenario B - Reduced CIP

Improvement	Estimated Cost	Funding Source	Fiscal Year					
			2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Well 8	\$2,269,700	TCP Settlement	\$1,900,000	\$369,700	\$0	\$0	\$0	\$0
Well 12	\$0	DWSRF Loan	\$0	\$0	\$0	\$0	\$0	\$0
Well 13	\$1,720,000	DWSRF Loan	\$150,000	\$1,570,000	\$0	\$0	\$0	\$0
Well 14 (pipeline and treatment)	\$1,580,000	TCP Settlement	\$100,000	\$650,000	\$0	\$0	\$830,000	\$0
Well 15	\$0	DWSRF Loan	\$0	\$0	\$0	\$0	\$0	\$0
Well 16 (exploratory)	\$60,000	TCP Settlement	\$60,000	\$0	\$0	\$0	\$0	\$0
Well 17	\$1,760,000	TCP & Grant	\$900,000	\$860,000	\$0	\$0	\$0	\$0
Well 18	\$2,730,000	DWSRF Loan	\$0	\$150,000	\$550,000	\$1,100,000	\$930,000	\$0
SCADA Upgrades	\$60,000	Connection Fees	\$60,000	\$0	\$0	\$0	\$0	\$0
Network / Computer replacements	\$17,680	Rates	\$0	\$17,120	\$560	\$0	\$0	\$0
Forklift	\$8,400	Rates	\$0	\$8,400	\$0	\$0	\$0	\$0
Air Compressor	\$12,018	Rates	\$0	\$12,018	\$0	\$0	\$0	\$0
Vehicles	\$38,300	Rates	\$0	\$6,300	\$14,000	\$18,000	\$0	\$0
PLC upgrade	\$30,000	Rates	\$0	\$30,000	\$0	\$0	\$0	\$0
Tank Painting and Protection	\$430,000	Rates	\$0	\$30,000	\$0	\$0	\$0	\$400,000
Total Infrastructure Costs - 2013 \$	\$10,716,098		\$3,170,000	\$3,703,538	\$564,560	\$1,118,000	\$1,760,000	\$400,000
Costs by Funding Source								
Grant (well 17)	\$1,395,000		\$900,000	\$495,000	\$0	\$0	\$0	\$0
Connection Fees	\$60,000		\$60,000	\$0	\$0	\$0	\$0	\$0
DWSRF Loan	\$4,450,000		\$150,000	\$1,720,000	\$550,000	\$1,100,000	\$930,000	\$0
Cash Funded - Rates	\$536,398		\$0	\$103,838	\$14,560	\$18,000	\$0	\$400,000
Cash Funded - TCP Settlement	\$4,274,700		\$2,060,000	\$1,384,700	\$0	\$0	\$830,000	\$0
Total Estimated Costs - 2013 \$'s	\$10,716,098		\$3,170,000	\$3,703,538	\$564,560	\$1,118,000	\$1,760,000	\$400,000
Total Infrastructure Costs in Future \$ [1]								
CDBG Grant Well 17 [2]	\$1,395,000		\$900,000	\$495,000	\$0	\$0	\$0	\$0
Connection Fees	\$60,000		\$60,000	\$0	\$0	\$0	\$0	\$0
DWSRF Loan	\$4,858,000		\$150,000	\$1,804,000	\$593,000	\$1,231,000	\$1,080,000	\$0
Cash Funded - Rates	\$626,000		\$0	\$108,000	\$16,000	\$20,000	\$0	\$482,000
Cash Funded - TCP Settlement	\$4,462,000		\$2,060,000	\$1,438,000	\$0	\$0	\$964,000	\$0
Total Estimated Costs - Future \$	\$11,401,000		\$3,170,000	\$3,845,000	\$609,000	\$1,251,000	\$2,044,000	\$482,000

Source: City of Livingston and HEC.

"cip"

[1] Cost estimates have been escalated by the past 5-year California Construction Index annual increase of

3.82%

[2] Fixed grant amount does not escalate.

Table 15
City of Livingston 2013 Water Rate Study
Projected Revenue Requirement

DRAFT

Scenario B - Reduced CIP

Revenues and Expenses	Assumptions	Fiscal Year					
		Recommended 2013-14	1 2014-15	2 2015-16	3 2016-17	4 2017-18	5 2018-19
Operating Expenses							
Personnel	6.0%	\$700,814	\$742,863	\$787,434	\$834,680	\$884,761	\$937,847
Utilities	5.0%	\$593,750	\$623,438	\$654,609	\$687,340	\$721,707	\$757,792
Contracted Services	4.0%	\$162,000	\$168,480	\$175,219	\$182,228	\$189,517	\$197,098
Equipment and Repairs [1]	4.0%	\$115,000	\$119,600	\$124,384	\$129,359	\$134,534	\$139,915
Wells Media and Chemical Costs	4.0%	\$0	\$78,000	\$573,248	\$596,178	\$620,025	\$924,656
Insurance	4.0%	\$30,000	\$31,200	\$32,448	\$33,746	\$35,096	\$36,500
Supplies	4.0%	\$56,200	\$58,448	\$60,786	\$63,217	\$65,746	\$68,376
Meter Replacement Program	3.8%	\$34,570	\$145,112	\$152,369	\$159,970	\$169,317	\$179,144
Total Operating Expenses		\$1,692,333	\$1,967,140	\$2,560,498	\$2,686,719	\$2,820,703	\$3,241,328
Debt Service							
1977 FHA Loan		\$18,102	\$18,102	\$18,102	\$18,102	\$16,969	\$0
1994 State Water Drinking Bond		\$59,139	\$0	\$0	\$0	\$0	\$0
DWSRF Loan 1		\$0	\$86,000	\$86,000	\$86,000	\$86,000	\$86,000
DWSRF Loan 2		\$0	\$0	\$0	\$136,500	\$136,500	\$136,500
Total Debt Service		\$77,241	\$104,102	\$104,102	\$240,602	\$239,469	\$222,500
Capital Expenditures Greater than Rehabilitation [1]		\$0	\$108,000	\$16,000	\$20,000	\$0	\$0
System Rehabilitation		\$0	\$0	\$0	\$0	\$0	\$0
Emergency Repair Fund		\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Operating Reserves		\$0	\$0	\$0	\$0	\$0	\$100,000
SUBTOTAL Annual Cost		\$1,769,574	\$2,279,242	\$2,780,600	\$3,047,321	\$3,160,171	\$3,663,828
Credits							
Developer Fees	[2]	\$0	\$0	\$0	\$0	\$0	\$0
Meter Installation Fees	[2]	\$0	\$0	\$0	\$0	\$0	\$0
Penalty Fees	1.0% of sales	\$10,400	\$20,800	\$26,200	\$28,800	\$29,800	\$34,800
Interest Income		\$29,700	\$50,000	\$4,000	\$4,000	\$4,000	\$4,000
TCP Settlement Revenue	[3]	\$0	\$0	\$0	\$0	\$0	\$0
Gain (Sale of Assets)	[4]	\$600	\$0	\$0	\$0	\$0	\$0
Other Revenues	constant	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Meter Replacement Program	3.8%	\$34,570	\$145,112	\$152,369	\$159,970	\$169,317	\$179,144
Total Credits		\$77,770	\$218,412	\$185,069	\$195,270	\$205,617	\$220,444
	Est. 2013						
REVENUE REQUIREMENT	\$1,332,960	\$1,691,804	\$2,060,830	\$2,595,531	\$2,852,051	\$2,954,554	\$3,443,384
Increase (Decrease) from Prior Year			\$727,870	\$534,701	\$256,520	\$102,504	\$488,829
<i>Annual Percentage Change</i>			54.6%	25.9%	9.9%	3.6%	16.5%

Source: HEC.

"rev req"

[1] A portion of the tank cost in year 5 is funded with reserves.

[2] Excluded; new development fee revenues should be monitored for potential to reduce existing rate payer burden and/or buydown of debt service.

[3] TCP Settlement revenue was a non-recurring payment to the City.

[4] None anticipated.

Table 20
City of Livingston 2013 Water Rate Study
Projected Five-year Water Fund Cash Flow

DRAFT Scenario B - Reduced

Revenues and Expenses	Cost Escalation Assumptions	Estimate Fiscal Year 2012-13	Fiscal Year					
			2013-14	1 2014-15	2 2015-16	3 2016-17	4 2017-18	5 2018-19
		<i>Population Growth Rate [1]</i>	1.2%	1.2%	1.2%	2.0%	2.0%	2.0%
		<i>New Rates Effective</i>	3/1/2014	1/1/2015	1/1/2016	1/1/2017	1/1/2018	
Operating Revenues								
Water Sales July through December			\$666,480	\$1,030,415	\$1,297,765	\$1,426,025	\$1,477,277	\$1,721,692
Water Sales January through June			\$848,448	\$1,297,765	\$1,426,025	\$1,477,277	\$1,721,692	\$1,721,692
Total Water Sales		\$1,332,960	\$1,514,927	\$2,328,180	\$2,723,791	\$2,903,303	\$3,198,969	\$3,443,384
Developer Fees	[2]	\$85,907	\$0	\$0	\$0	\$0	\$0	\$0
Meter Installation Fees	[2]	\$75	\$0	\$0	\$0	\$0	\$0	\$0
Penalty Fees	1.0% of sales	\$31,928	\$10,400	\$20,800	\$26,200	\$28,800	\$29,800	\$34,800
Interest Income		\$29,706	\$29,700	\$50,000	\$4,000	\$4,000	\$4,000	\$4,000
Gain (Sale of Assets)		\$0	\$600	\$0	\$0	\$0	\$0	\$0
Other Revenues	constant	\$7,205	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Meter Replacement Program	3.8%	\$0	\$34,570	\$145,112	\$152,369	\$159,970	\$169,317	\$179,144
Total Operating Revenues		\$1,487,782	\$1,592,697	\$2,546,592	\$2,908,860	\$3,098,573	\$3,404,586	\$3,663,828
Operating Expenses								
Personnel	6.0%	\$508,902	\$515,720	\$742,863	\$787,434	\$834,680	\$884,761	\$937,847
Utilities	5.0%	\$510,901	\$475,000	\$623,438	\$654,609	\$687,340	\$721,707	\$757,792
Contracted Services	4.0%	\$92,528	\$155,200	\$168,480	\$175,219	\$182,228	\$189,517	\$197,098
Equipment and Repairs	4.0%	\$130,062	\$115,000	\$119,600	\$124,384	\$129,359	\$134,534	\$139,915
Wells Media and Chemical Costs	4.0%	\$0	\$0	\$78,000	\$573,248	\$596,178	\$620,025	\$924,656
Insurance	4.0%	\$30,222	\$29,350	\$31,200	\$32,448	\$33,746	\$35,096	\$36,500
Supplies	4.0%	\$41,947	\$58,500	\$58,448	\$60,786	\$63,217	\$65,746	\$68,376
Meter Replacement Program	3.8%	\$0	\$34,570	\$145,112	\$152,369	\$159,970	\$169,317	\$179,144
Total Operating Expenses		\$1,314,563	\$1,383,340	\$1,967,140	\$2,560,498	\$2,686,719	\$2,820,703	\$3,241,328
Operating Revenue before Capital Improvements and Debt Service		\$173,219	\$209,357	\$579,452	\$348,362	\$411,854	\$583,883	\$422,500
Debt Service								
1977 FHA Loan		\$18,102	\$18,102	\$18,102	\$18,102	\$18,102	\$16,969	\$0
1994 State Water Drinking Bond		\$59,139	\$59,139	\$0	\$0	\$0	\$0	\$0
DWSRF Loan 1		\$0	\$0	\$86,000	\$86,000	\$86,000	\$86,000	\$86,000
DWSRF Loan 2		\$0	\$0	\$0	\$0	\$136,500	\$136,500	\$136,500
Total Debt Service		\$77,241	\$77,241	\$104,102	\$104,102	\$240,602	\$239,469	\$222,500
<i>Debt Service Coverage [3]</i>		2.24	2.71	5.57	3.35	1.71	2.44	1.90
Capital Expenditures (non-TCP funded)		\$1,738,836	\$60,000	\$108,000	\$16,000	\$20,000	\$0	\$482,000
Net Revenues (Deficit)		(\$1,642,857)	\$72,117	\$367,350	\$228,260	\$151,252	\$344,415	(\$282,000)
Beginning Fund Balance (Operating and Capital)		\$1,866,422	\$223,565	\$295,681	\$663,032	\$891,292	\$1,042,544	\$1,386,958
Add Back System Rehabilitation		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Revenues (Deficit)		(\$1,642,857)	\$72,117	\$367,350	\$228,260	\$151,252	\$344,415	(\$282,000)
End Fund Balance		\$223,565	\$295,681	\$663,032	\$891,292	\$1,042,544	\$1,386,958	\$1,104,958
Minimum Operating Reserves [4]	<i>4 months expenses</i>	\$456,288	\$479,213	\$673,813	\$871,599	\$913,673	\$958,334	\$1,098,543
TCP Settlement Funds		\$2,424,686	\$2,674,686	\$2,114,686	\$5,502,000	\$5,502,000	\$5,502,000	\$4,538,000
Matured Investments		\$250,000	\$1,500,000	\$4,825,314	\$0	\$0	\$0	\$0
Use of Cash		\$0	(\$2,060,000)	(\$1,438,000)	\$0	\$0	(\$964,000)	\$0
TCP Loan		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loan Repayments		\$0	\$0	\$0	\$0	\$0	\$0	\$0
End Cash Balance TCP Funds		\$2,674,686	\$2,114,686	\$5,502,000	\$5,502,000	\$5,502,000	\$4,538,000	\$4,538,000
Combined Balance Water Funds		\$2,898,251	\$2,410,367	\$6,165,032	\$6,393,292	\$6,544,544	\$5,924,958	\$5,642,958

Source: HEC.

"flow"

[1] Growth rate for first three years based on Dep't of Finance estimates of growth since 2010; following years of growth based on historical average from 1990 to 2012.

[2] No new development fee revenue included.

[3] Coverage of 1.15x required to issue future debt, per the DWR Loan.

[4] Minimum reserves include the Reserve Fund for the FHA loan (\$18,100) and 4 months of expenses

Table 25
City of Livingston 2013 Water Rate Study
2014 Rates Bill Impacts on the City's Largest Industrial Customers

Customer	Calculated Bills with Current Rates	Calculated Bills with Proposed 2014 Rates	Increased (Decrease) Annual Bills
Foster Farms	<i>Uses consumption Jul 2012 through Jun 2013</i>		
Industrial Account	\$851,222	\$863,441	\$12,219
Commercial Account	\$144	\$367	\$223
Irrigation Account	\$2,613	\$5,595	\$2,982
Total	\$853,979	\$869,403	\$15,424
Fresenius			
Industrial Account	\$7,351	\$11,390	\$4,039

Source: HEC

"ind bill"