

Water Rate Revenue Requirements FY14-FY18

Factors

City of Bozeman  
Water Rate Study  
Exhibit 1  
Escalation Factors

	Budgeted FY13	FY14	FY15	Projected FY16	FY17	FY18
<b>Revenues</b>						
Rates - Acct Growth	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Other Revenues	1.0%	1.0%	1.0%	1.0%	2.0%	2.0%
Interest Income	0.75%	1.0%	1.0%	1.5%	1.5%	2.0%
<b>Expenses</b>						
Utilities	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Labor	3.9%	2.0%	2.5%	2.5%	2.5%	2.5%
Benefits - Medical	10.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Materials & Supplies	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Chemicals	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Electricity	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Natural Gas	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Gas & Oil	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Equipment	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Miscellaneous	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%
<b>Debt Service</b>						
Revenue Bond (Outstanding)						
Term in Years	20	20	20	20	20	20
Rate	5.50%					
New SRF Loan						
Term in Years	20	20	20	20	20	20
Rate	3.75%	3.00%	3.00%	3.00%	3.00%	3.00%

Water Rate Revenue Requirements FY14-FY18

Revenues

City of Bozeman  
Water Rate Study  
Exhibit 2  
Revenues

	Actuals FY12	Budgeted FY13	FY14	FY15	Projected FY16	FY17	FY18
<b>Rate Revenues</b>							
Rate Revenues	6,426,858.00	6,368,949.00	6,496,327.98	6,626,254.54	6,758,779.63	6,893,955.22	7,031,834.33
Unmetered Sales	2,505.00	2,550.00	2,575.50	2,601.26	2,627.27	2,679.81	2,733.41
Low Income Discount	(13,075.00)	(12,000.00)	(12,000.00)	(12,000.00)	(12,000.00)	(12,000.00)	(12,000.00)
ACH Discount	(30,851.00)	(30,000.00)	(30,000.00)	(30,000.00)	(30,000.00)	(30,000.00)	(30,000.00)
<b>Total Rate Revenue</b>	<b>6,385,437.00</b>	<b>6,329,499.00</b>	<b>6,456,903.48</b>	<b>6,586,855.79</b>	<b>6,719,406.90</b>	<b>6,854,635.04</b>	<b>6,992,567.74</b>
<b>Other Revenues</b>							
Sales of Water Materials	74,679.00	55,000.00	100,000.00	101,000.00	102,010.00	104,050.20	106,131.20
Hydrant Fees	159,338.00	137,713.00	139,090.13	140,481.03	141,885.84	144,723.56	147,618.03
Interest Income	142,875.00	105,000.00	94,000.00	105,778.00	65,470.00	26,140.00	26,662.80
Refunds & Reimb	2,528.00	1,030.00	1,040.30	1,050.70	1,061.21	1,082.43	1,104.08
Hookup Charges	28,824.00	20,000.00	30,000.00	30,300.00	30,603.00	31,215.06	31,839.36
Other/Grants	87,830.00	45,450.00	95,904.50	96,863.55	97,832.18	99,788.82	101,784.60
Late Charges	26,937.00	24,000.00	24,000.00	24,240.00	24,482.40	24,972.05	25,471.49
Hang Tag Charges	26,100.00	22,000.00	22,000.00	22,220.00	22,442.20	22,891.04	23,348.86
<b>Total Other Revenue</b>	<b>549,111.00</b>	<b>410,193.00</b>	<b>506,034.93</b>	<b>521,933.28</b>	<b>485,786.83</b>	<b>454,863.17</b>	<b>463,960.43</b>
<b>Operating Revenues</b>	<b>6,934,548.00</b>	<b>6,739,692.00</b>	<b>6,962,938.41</b>	<b>7,108,789.07</b>	<b>7,205,193.73</b>	<b>7,309,498.20</b>	<b>7,456,528.17</b>
<b>Other:</b>							
Contributed Capital	564,404.00	-					
Cash in Lieu of Water Rights	113,676.00	-					
<b>Grand Total</b>	<b>7,612,628.00</b>	<b>6,739,692.00</b>	<b>6,962,938.41</b>	<b>7,108,789.07</b>	<b>7,205,193.73</b>	<b>7,309,498.20</b>	<b>7,456,528.17</b>

Water Rate Revenue Requirements FY14-FY18

Operating Expenditures

City of Bozeman  
Water Rate Study  
Exhibit 3  
Operating Expenditures

Actuals FY12	Budgeted FY13	Projected				
		FY14	FY15	FY16	FY17	FY18

Water Plant

Water Treatment Plant Ops

<i>Personnel</i>	574,485.00	576,055.00	687,012.00	704,187.30	721,791.98	719,836.78	737,832.70	<b>FY14 - 2FTE's, 2 Months Startup</b>
Benefits - Medical	87,740.00	96,681.00	105,681.00	114,135.48	123,266.32	133,127.62	143,777.83	<b>FY14 - 1 FTE Water Conserv Spec.</b>
Overtime	34,224.00	26,583.00	26,583.00	26,583.00	26,583.00	26,583.00	26,583.00	
<b>Total Personnel</b>	<b>696,449.00</b>	<b>699,319.00</b>	<b>819,276.00</b>	<b>655,730.00</b>	<b>655,730.00</b>	<b>655,730.00</b>	<b>655,730.00</b>	
<i>Operations</i>	725,551.00	949,118.00	920,532.00	948,147.96	976,592.40	1,005,890.17	1,036,066.88	
Chemicals	165,111.00	160,000.00	240,000.00	264,000.00	290,400.00	319,440.00	351,384.00	
Gas & Oil	8,147.00	10,500.00	10,500.00	11,340.00	12,247.20	13,226.98	14,285.13	
Electricity	49,041.00	60,000.00	80,000.00	86,400.00	93,312.00	100,776.96	108,839.12	
Natural Gas	32,186.00	50,000.00	70,000.00	73,500.00	77,175.00	81,033.75	85,085.44	
<b>Total Operations</b>	<b>980,036.00</b>	<b>1,229,618.00</b>	<b>1,321,032.00</b>	<b>1,383,387.96</b>	<b>1,449,726.60</b>	<b>1,520,367.86</b>	<b>1,595,660.56</b>	

Water Operations

Water Operations

<i>Personnel</i>	1,027,255.00	1,051,558.00	769,843.00	829,089.08	849,816.30	871,061.71	892,838.25	<b>+1 FTE in FY15</b>
Benefits - Medical	172,211.00	187,374.00	88,805.00	107,909.40	116,542.15	125,865.52	135,934.77	<b>+1 FTE in FY15</b>
Overtime	11,673.00	23,873.00	23,873.00	23,873.00	23,873.00	23,873.00	23,873.00	
<b>Total Personnel</b>	<b>1,211,139.00</b>	<b>1,262,805.00</b>	<b>761,973.00</b>	<b>960,871.48</b>	<b>990,231.45</b>	<b>1,020,800.23</b>	<b>1,052,646.02</b>	
<i>Operations</i>	682,349.00	690,246.00	766,357.00	789,347.71	813,028.14	837,418.99	837,418.99	
Chemicals	-	-	-	-	-	-	-	
Gas & Oil	31,298.00	30,000.00	32,000.00	34,560.00	37,324.80	40,310.78	43,535.65	
Electricity	45,008.00	40,000.00	40,000.00	43,200.00	46,656.00	50,388.48	54,419.56	
Natural Gas	7,049.00	8,000.00	8,000.00	8,400.00	8,820.00	9,261.00	9,724.05	
<b>Total Operations</b>	<b>765,704.00</b>	<b>768,246.00</b>	<b>786,357.00</b>	<b>875,507.71</b>	<b>905,828.94</b>	<b>937,379.25</b>	<b>945,098.24</b>	

Utility Locates

<i>Personnel</i>	-	-	-	-	-	-	-	
Benefits - Medical	-	-	-	-	-	-	-	
Overtime	-	-	-	-	-	-	-	
<b>Total Personnel</b>	<b>-</b>							
<i>Operations</i>	7,443.00	7,250.00	7,450.00	7,673.50	7,903.71	8,140.82	8,385.04	
<b>Total Operations</b>	<b>7,443.00</b>	<b>7,250.00</b>	<b>7,450.00</b>	<b>7,673.50</b>	<b>7,903.71</b>	<b>8,140.82</b>	<b>8,385.04</b>	

Water Services

<i>Operations</i>	27,433.00	35,000.00	35,000.00	37,800.00	40,824.00	44,089.92	47,617.11	
<b>Total Operations</b>	<b>27,433.00</b>	<b>35,000.00</b>	<b>35,000.00</b>	<b>37,800.00</b>	<b>40,824.00</b>	<b>44,089.92</b>	<b>47,617.11</b>	

Water Rate Revenue Requirements FY14-FY18

Operating Expenditures

Meter Reading

<i>Personnel</i>	112,007.00	60,549.00	106,955.00	109,628.88	112,369.60	115,178.84	118,058.31
Benefits - Medical	23,388.00	14,304.00	20,820.00	22,485.60	24,284.45	26,227.20	28,325.38
Overtime	2,775.00	-	-	2,775.00	2,775.00	2,775.00	2,775.00
<b>Total Personnel</b>	<b>138,170.00</b>	<b>74,853.00</b>	<b>127,775.00</b>	<b>134,889.48</b>	<b>139,429.04</b>	<b>144,181.04</b>	<b>149,158.69</b>
<i>Operations</i>	162,833.00	228,850.00	230,350.00	237,260.50	244,378.32	251,709.66	259,260.95
Chemicals	-	-	-	-	-	-	-
Gas & Oil	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-
Natural Gas	-	-	-	-	-	-	-
<b>Total Operations</b>	<b>162,833.00</b>	<b>228,850.00</b>	<b>230,350.00</b>	<b>237,260.50</b>	<b>244,378.32</b>	<b>251,709.66</b>	<b>259,260.95</b>

Hydrants

<i>Operations</i>	11,051.00	50,000.00	50,000.00	54,000.00	58,320.00	62,985.60	68,024.45
<b>Total Operations</b>	<b>11,051.00</b>	<b>50,000.00</b>	<b>50,000.00</b>	<b>54,000.00</b>	<b>58,320.00</b>	<b>62,985.60</b>	<b>68,024.45</b>

Valves

<i>Operations</i>	17,760.00	15,000.00	17,500.00	18,900.00	20,412.00	22,044.96	23,808.56
<b>Total Operations</b>	<b>17,760.00</b>	<b>15,000.00</b>	<b>17,500.00</b>	<b>18,900.00</b>	<b>20,412.00</b>	<b>22,044.96</b>	<b>23,808.56</b>

Main Repairs

<i>Operations</i>	7,279.00	20,000.00	20,000.00	21,600.00	23,328.00	25,194.24	27,209.78
<b>Total Operations</b>	<b>7,279.00</b>	<b>20,000.00</b>	<b>20,000.00</b>	<b>21,600.00</b>	<b>23,328.00</b>	<b>25,194.24</b>	<b>27,209.78</b>

<b>Grand Total Operating Expenses</b>	<b>4,025,297.00</b>	<b>4,390,941.00</b>	<b>4,176,713.00</b>	<b>4,387,620.62</b>	<b>4,536,112.06</b>	<b>4,692,623.58</b>	<b>4,832,599.40</b>
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ck fig	<i>report</i>	11470790	6719154	5933687
	<i>capital &amp; debt</i>	7451297	2328213	1843364
	<i>diff</i>	(5,804.00)	-	(86,390.00)

<i>Past Rate Study Amounts</i>	4,164,685.00	4,310,839.00	4,452,120.00	4,600,743.00	4,733,825.00
<i>diff</i>	139,388.00	(80,102.00)	275,407.00	213,122.38	197,712.94

Water Rate Revenue Requirements FY14-FY18

Capital Expenditures - Wat Fund

City of Bozeman  
 Water Rate Study  
 Exhibit 4  
 Capital Expenditures - Water Fund

	Actuals FY12	Budgeted FY13	FY14	FY15	Projected FY16	FY17	FY18	Totals
	-	-	-	-				-
Water Operations								
W03 - Bi Annual Eng	-		22,500.00	22,500.00	22,500.00	22,500.00	22,500.00	
W04 - BiAnnual Upgrades	968,400.00	1,205,720.00	974,165.00	1,147,720	969,435	1,097,145	952,450	
W12 - 1 Ton Truck with Hoist		46,794.00						
WW23 - Mini Excavator & Trailer (Share)		25,000.00						
PW02 - Laurel Glen Shop (Carryover)	72,432.00	78,000.00						
W16 - Backhoe (Carryover)		96,000.00						
GF99 - IBM i5 Replacement	2,040.00							
W15 - Meter Van	17,432.00							
W24 - Fixed Base Meter Read System		90,000.00	60,000.00					
W26 - Internal Pipeline Assmt of Sourdough			50,000.00					
W25 - Replacement Vehicle (Plant)						40,000.00		
W27 - ReEngineering the Lyman Tank Liner			50,000.00					
PW01 - Shops Facility Expansion Plan			-	10,000.00				
***Water Right Purchase***	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	
<b>Grand Total - Capital Expenditures for Water Fund</b>	<b>1,260,304.00</b>	<b>1,741,514.00</b>	<b>1,356,665.00</b>	<b>1,380,220.00</b>	<b>1,191,935.00</b>	<b>1,359,645.00</b>	<b>1,174,950.00</b>	
Less: Funding Sources other than Rates								
Grants	-	-	-	-	-	-	-	-
Cash on Hand	-	-	-	-	-	-	-	-
SRF Loan	-	-	-	-	-	-	-	-
<b>Total Funding Sources other than Rates</b>	<b>-</b>							
Rate Revenues Required for CIP	1,260,304.00	1,741,514.00	1,356,665.00	1,380,220.00	1,191,935.00	1,359,645.00	1,174,950.00	

Water Rate Revenue Requirements FY14-FY18

Capital Expenditures - Impact

City of Bozeman  
 Water Rate Study  
 Exhibit 5  
 Capital Expenditures - Water Impact Fee Fund

	Actuals FY12	Budgeted FY13	FY14	FY15	Projected FY16	FY17	FY18	Totals
Water Plant								
W07 - WTP Construction								-
WIF-04 Lyman Improvements (FY08 CIP Carryover)								
WIF-01 Sourdough Creek dam								
WIF-09 Water Supply/Storage Expansion Study								
WIF-08 WTP Debt Service			2,750,295.00	884,427.00	902,115.00	920,158.00		
<b>Grand Total - Water Impact Fee Fund</b>	-	-	-	-	-	-	-	-

Water Rate Revenue Requirements FY14-FY18

Reserve Recap

City of Bozeman  
 Water Rate Study  
 Exhibit 8  
 Reserves Recap

Budgeted FY13	Projected				
	FY14	FY15	FY16	FY17	FY18

Water Fund

Operating & Capital Reserve						
Beginning Balance	5,041,229.00	5,487,549.92	4,829,256.06	5,039,688.57	5,593,829.67	6,145,846.25
Add: Operating Revenues	6,739,692.00	6,962,938.41	7,108,789.07	7,205,193.73	7,309,498.20	7,456,528.17
Add: Additional Rate Revenue	-	-	197,605.67	405,116.05	622,908.58	851,372.87
Less: Operating Expenditures	(4,390,941.00)	(4,176,713.00)	(4,387,620.62)	(4,536,112.06)	(4,692,623.58)	(4,832,599.40)
Less: Capital Expenditures	(1,741,514.00)	(1,356,665.00)	(1,380,220.00)	(1,191,935.00)	(1,359,645.00)	(1,174,950.00)
Less: Debt Service Payment	(160,916.08)	(689,530.27)	(1,328,121.62)	(1,328,121.62)	(1,328,121.62)	(1,328,121.62)
Less: Funding of Debt Service Reserve		(1,398,324.00)	-	-	-	
Ending Balance - Water Fund	5,487,549.92	4,829,256.06	5,039,688.57	5,593,829.67	6,145,846.25	7,118,076.27
Ending Balance - Debt Service Reserve		1,398,324.00	1,398,324.00	1,398,324.00	1,398,324.00	1,398,324.00
<b>Operating &amp; Capital Reserve Target</b>	<b>8,145,637.89</b>	<b>8,119,226.22</b>	<b>8,145,228.53</b>	<b>8,163,535.69</b>	<b>8,182,831.63</b>	<b>8,200,088.93</b>
45 O&M	541,348.89	514,937.22	540,939.53	559,246.69	578,542.63	595,799.93
Annual Deprec	7,604,289.00	7,604,289.00	7,604,289.00	7,604,289.00	7,604,289.00	7,604,289.00

Water Impact Fee Fund

Beginning Balance	5,000,000.00	2,774,710.00	874,415.00	839,988.00	787,873.00	717,715.00
Add: Impact Fee Revenues	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00
Add: SRF Loan Proceeds	-	-	-	-	-	-
Less: Capital Expenditures	-	-	-	-	-	-
Less: Debt Service	(3,075,290.00)	(2,750,295.00)	(884,427.00)	(902,115.00)	(920,158.00)	-
Ending Balance - Water Impact Fees	2,774,710.00	874,415.00	839,988.00	787,873.00	717,715.00	1,567,715.00

Water Rate Revenue Requirements FY14-FY18

Rate Requirements

City of Bozeman  
Water Rate Study  
Exhibit 9  
Water Fund Rate Requirements

	Actuals FY12	Budgeted FY13	FY14	FY15	Projected FY16	FY17	FY18
<b>Revenues</b>							
Water Sales	6,385,437.00	6,329,499.00	6,456,903.48	6,586,855.79	6,719,406.90	6,854,635.04	6,992,567.74
Other Revenues	549,111.00	410,193.00	506,034.93	521,933.28	485,786.83	454,863.17	463,960.43
<b>Total Revenues</b>	<b>6,934,548.00</b>	<b>6,739,692.00</b>	<b>6,962,938.41</b>	<b>7,108,789.07</b>	<b>7,205,193.73</b>	<b>7,309,498.20</b>	<b>7,456,528.17</b>
<b>Expenses</b>							
<i>O&amp;M Expenses</i>							
Water Treatment Plant Ops	1,676,485.00	1,928,937.00	2,140,308.00	2,039,117.96	2,105,456.60	2,176,097.86	2,251,390.56
Water Operations	1,976,843.00	2,031,051.00	1,548,330.00	1,836,379.19	1,896,060.40	1,958,179.48	1,997,744.26
Utility Locates	7,443.00	7,250.00	7,450.00	7,673.50	7,903.71	8,140.82	8,385.04
Water Services	27,433.00	35,000.00	35,000.00	37,800.00	40,824.00	44,089.92	47,617.11
Meter Reading	301,003.00	303,703.00	358,125.00	372,149.98	383,807.36	395,890.71	408,419.64
Hydrants	11,051.00	50,000.00	50,000.00	54,000.00	58,320.00	62,985.60	68,024.45
Valves	17,760.00	15,000.00	17,500.00	18,900.00	20,412.00	22,044.96	23,808.56
Main Repairs	7,279.00	20,000.00	20,000.00	21,600.00	23,328.00	25,194.24	27,209.78
<i>Debt Service</i>							
New Plant Debt Service		160,916.08	689,530.27	1,328,121.62	1,328,121.62	1,328,121.62	1,328,121.62
Rates Dedicated to CIP	1,260,304.00	1,741,514.00	1,356,665.00	1,380,220.00	1,191,935.00	1,359,645.00	1,174,950.00
<b>Total Expenses</b>	<b>5,285,601.00</b>	<b>6,293,371.08</b>	<b>6,222,908.27</b>	<b>7,095,962.24</b>	<b>7,056,168.68</b>	<b>7,380,390.20</b>	<b>7,335,671.03</b>
<b>Balance or (Deficiency) of Funds</b>	1,648,947.00	446,320.92	740,030.14	12,826.83	149,025.05	(70,892.00)	120,857.14
<b>Proposed Rate Adjustment - ANNUALLY</b>		<b>4.5%</b>	<b>0.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>
Additional Revenue beyond Current Levels			\$ -	\$ 197,605.67	\$ 405,116.05	\$ 622,908.58	\$ 851,372.87
<i>Debt Service Coverage Ratio</i>	<i>Minimum: 1.25</i>	<i>n/a</i>	<i>2.20</i>	<i>2.31</i>	<i>2.44</i>	<i>2.62</i>	
Average Residential Customer (10 CF, 3/4" Meter)	\$ 38.43	\$ 40.16	\$ 40.16	\$ 41.36	\$ 42.61	\$ 43.88	
With Rate Increase	1.73	-	1.20	1.24	1.28	1.32	
	\$ 40.16	\$ 40.16	\$ 41.36	\$ 42.61	\$ 43.88	\$ 45.20	