

Option B - Updated Rate Study FY12-FY16

Factors

City of Bozeman
Water Rate Study
Exhibit 1
Escalation Factors

	Budgeted FY11	FY12	FY13	Projected FY14	FY15	FY16
Revenues						
Rates - Acct Growth	1.0%	1.0%	1.0%	1.0%	2.0%	2.0%
Other Revenues	1.0%	1.0%	1.0%	1.0%	2.0%	2.0%
Interest Income	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Expenses						
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%
Debt Service						
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%	3.75%	3.75%	3.75%	3.75%	3.75%

City of Bozeman
Water Rate Study
Exhibit 2
Revenues

	Actuals FY10	Budgeted FY11	FY12	FY13	Projected FY14	FY15	FY16
Rate Revenues							
Rate Revenues	5,597,551.00	5,720,376.00	5,777,579.76	5,835,355.56	5,893,709.11	6,011,583.30	6,131,814.96
Unmetered Sales	2,252.00	2,500.00	2,525.00	2,550.25	2,575.75	2,627.27	2,679.81
Low Income Discount	(9,401.00)	(10,000.00)	(10,000.00)	(10,000.00)	(10,000.00)	(10,000.00)	(10,000.00)
ACH Discount	(29,643.00)	(25,000.00)	-	-	-	-	-
Total Rate Revenue	5,560,759.00	5,687,876.00	5,770,104.76	5,827,905.81	5,886,284.87	6,004,210.56	6,124,494.77
Other Revenues							
Sales of Water Materials	53,339.00	50,000.00	50,500.00	51,005.00	51,515.05	52,545.35	53,596.26
Hydrant Fees	175,063.00	135,000.00	136,350.00	137,713.50	139,090.64	141,872.45	144,709.90
Interest Income	197,205.00	106,000.00	94,000.00	105,778.00	65,470.00	26,140.00	26,401.40
Refunds & Reimb	5,463.00	1,020.00	1,030.20	1,040.50	1,050.91	1,071.93	1,093.36
Hookup Charges	19,475.00	16,320.00	16,483.20	16,648.03	16,814.51	17,150.80	17,493.82
Other/Grants	50,866.00	45,000.00	45,450.00	45,904.50	46,363.55	47,290.82	48,236.63
Late Charges	22,126.00	20,402.00	20,200.00	20,402.00	20,606.02	21,018.14	21,438.50
Hang Tag Charges	22,025.00	18,360.00	18,180.00	18,361.80	18,545.42	18,916.33	19,294.65
Total Other Revenue	545,562.00	392,102.00	382,193.40	396,853.33	359,456.09	326,005.81	332,264.53
Operating Revenues	6,106,321.00	6,079,978.00	6,152,298.16	6,224,759.14	6,245,740.95	6,330,216.37	6,456,759.30
<i>Other:</i>							
Contributed Capital	2,365,633.83						
Cash in Lieu of Water Rights	7,357.00	30,000.00					
Grand Total	8,479,311.83	6,109,978.00	6,152,298.16	6,224,759.14	6,245,740.95	6,330,216.37	6,456,759.30

Option B - Updated Rate Study FY12-FY16

Operating Expenditures

City of Bozeman
Water Rate Study
Exhibit 3
Operating Expenditures

	Actuals FY10	Budgeted FY11	Projected			
			FY12	FY13	FY14	FY15

Water Plant								
Water Treatment Plant Ops								
<i>Personnel</i>	536,263.00	542,174.00	553,017.48	566,842.92	601,013.99	596,039.34	610,940.32	FY14 - 2FTE's, 2 Months Startup
Benefits - Medical	79,605.00	86,025.00	92,907.00	100,339.56	108,366.72	117,036.06	126,398.95	
Overtime	29,812.00	26,583.00	26,583.00	26,583.00	26,583.00	26,583.00	26,583.00	
Total Personnel	645,680.00	654,782.00	643,979.00	655,730.00	655,730.00	655,730.00	655,730.00	
<i>Operations</i>	831,575.00	871,189.00	897,324.67	924,244.41	951,971.74	980,530.89	1,009,946.82	
Chemicals	136,319.00	160,000.00	176,000.00	193,600.00	212,960.00	234,256.00	257,681.60	
Gas & Oil	6,574.00	8,000.00	8,640.00	9,331.20	10,077.70	10,883.91	11,754.62	
Electricity	47,032.00	60,000.00	64,800.00	69,984.00	75,582.72	81,629.34	88,159.68	
Natural Gas	39,683.00	52,000.00	54,600.00	57,330.00	60,196.50	63,206.33	66,366.64	
Total Operations	1,061,183.00	1,151,189.00	1,201,364.67	1,254,489.61	1,310,788.66	1,370,506.47	1,433,909.37	
Water Operations								
Water Operations								
<i>Personnel</i>	815,683.00	869,232.00	928,616.64	951,832.06	975,627.86	1,000,018.55	1,025,019.02	
Benefits - Medical	130,660.00	149,544.00	170,807.52	184,472.12	199,229.89	215,168.28	232,381.75	
Overtime	17,061.00	23,873.00	23,873.00	23,873.00	23,873.00	23,873.00	23,873.00	
Total Personnel	963,404.00	1,042,649.00	1,123,297.16	1,160,177.18	1,198,730.75	1,239,059.84	1,281,273.76	
<i>Operations</i>	651,882.00	692,511.00	713,286.33	734,684.92	756,725.47	779,427.23	779,427.23	
Chemicals	-	-	-	-	-	-	-	
Gas & Oil	25,969.00	25,000.00	27,000.00	29,160.00	31,492.80	34,012.22	36,733.20	
Electricity	21,675.00	20,000.00	21,600.00	23,328.00	25,194.24	27,209.78	29,386.56	
Natural Gas	8,773.00	8,000.00	8,400.00	8,820.00	9,261.00	9,724.05	10,210.25	
Total Operations	708,299.00	745,511.00	770,286.33	795,992.92	822,673.51	850,373.28	855,757.25	
Utility Locates								
<i>Personnel</i>	-	-	-	-	-	-	-	
Benefits - Medical	-	-	-	-	-	-	-	
Overtime	-	448.00	448.00	448.00	448.00	448.00	448.00	
Total Personnel	-	448.00	448.00	448.00	448.00	448.00	448.00	
<i>Operations</i>	5,104.00	7,250.00	7,467.50	7,691.53	7,922.27	8,159.94	8,404.74	
Total Operations	5,104.00	7,250.00	7,467.50	7,691.53	7,922.27	8,159.94	8,404.74	
Water Services								
<i>Operations</i>	28,009.00	35,000.00	37,800.00	40,824.00	44,089.92	47,617.11	51,426.48	
Total Operations	28,009.00	35,000.00	37,800.00	40,824.00	44,089.92	47,617.11	51,426.48	

Option B - Updated Rate Study FY12-FY16

Operating Expenditures

Meter Reading								
	<i>Personnel</i>	123,713.00	51,937.00	52,975.74	54,300.13	55,657.64	57,049.08	58,475.30
	Benefits - Medical	17,134.00	9,300.00	10,044.00	10,847.52	11,715.32	12,652.55	13,664.75
	Overtime	686.00	2,775.00	2,775.00	2,775.00	2,775.00	2,775.00	2,775.00
	Total Personnel	141,533.00	64,012.00	65,794.74	67,922.65	70,147.96	72,476.63	74,915.06
	<i>Operations</i>	177,957.00	229,600.00	236,488.00	243,582.64	250,890.12	258,416.82	266,169.33
	Chemicals	-	-	-	-	-	-	-
	Gas & Oil	-	-	-	-	-	-	-
	Electricity	-	-	-	-	-	-	-
	Natural Gas	-	-	-	-	-	-	-
	Total Operations	177,957.00	229,600.00	236,488.00	243,582.64	250,890.12	258,416.82	266,169.33
Hydrants								
	<i>Operations</i>	36,649.00	42,000.00	45,360.00	48,988.80	52,907.90	57,140.54	61,711.78
	Total Operations	36,649.00	42,000.00	45,360.00	48,988.80	52,907.90	57,140.54	61,711.78
Valves								
	<i>Operations</i>	16,656.00	15,000.00	16,200.00	17,496.00	18,895.68	20,407.33	22,039.92
	Total Operations	16,656.00	15,000.00	16,200.00	17,496.00	18,895.68	20,407.33	22,039.92
Main Repairs								
	<i>Operations</i>	20,317.00	15,000.00	16,200.00	17,496.00	18,895.68	20,407.33	22,039.92
	Total Operations	20,317.00	15,000.00	16,200.00	17,496.00	18,895.68	20,407.33	22,039.92
Grand Total Operating Expenses		3,804,791.00	4,002,441.00	4,164,685.40	4,310,839.33	4,452,120.45	4,600,743.30	4,733,825.61
ck fig	<i>report</i>	5613737	10780660					
	<i>capital & debt</i>	1808946	6778219					
	<i>diff</i>	-	-					
<i>Past Rate Study Amounts</i>		<i>3,799,282.00</i>	<i>3,974,785.00</i>	<i>4,101,624.00</i>	<i>4,239,538.00</i>	<i>4,367,785.00</i>		
<i>diff</i>		<i>(5,509.00)</i>	<i>(27,656.00)</i>	<i>(63,061.40)</i>	<i>(71,301.33)</i>	<i>(84,335.45)</i>		

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

	Actuals FY10	Budgeted FY11	FY12	FY13	Projected FY14	FY15	FY16	Totals
Water Plant								
<i>W07 - WTP Construction</i>	<i>995,126.00</i>	<i>5,276,505.00</i>	<i>10,430,851.17</i>	<i>10,430,851.17</i>				<i>27,133,333.33</i>
Water Operations								
W03 - Bi Annual Eng	-		90,000.00		90,000.00		90,000.00	
W04 - BiAnnual Upgrades	875,072.00	1,100,000.00	922,555.00	1,205,720	974,165	947,720	969,435	
W12 - Truck W Hoist				46,791.00				
W16 - Backhoe			111,362.00					
W15 - Meter Van		32,448.00						
W17 - 1 Ton Truck				37,856.00				
W22 - 1/2 Ton Truck		35,000.00						
PW1 - Shops Complex	26,119.00			10,000.00				
PW2 - Laurel Glen Shop			100,000.00					
GF99 - IBM i5 Replacement		7,500.00						
WW22 - Lower Yard Insulation	15,700.00							
W23 - Lyman Creek Dechlorination		50,000.00						
WW23 - Mini Excavator & Trailer				25,000.00				
Water Right Purchase			200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	
Grand Total - Capital Expenditures for Water Fund	1,912,017.00	6,501,453.00	11,854,768.17	11,956,218.17	1,264,165.00	1,147,720.00	1,259,435.00	
Less: Funding Sources other than Rates								
Grants	-	-	-	-	-	-	-	-
Cash on Hand	-	4,200,000.00	2,000,000.00	1,000,000.00				7,200,000.00
SRF Loan	-	-	-	8,000,000.00	7,000,000.00	1,500,000.00	-	16,500,000.00
Total Funding Sources other than Rates	-	4,200,000.00	2,000,000.00	9,000,000.00	7,000,000.00	1,500,000.00	-	
Rate Revenues Required for CIP	1,912,017.00	2,301,453.00	9,854,768.17	2,956,218.17	(5,735,835.00)	(352,280.00)	1,259,435.00	

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

	Actuals FY10	Budgeted FY11	FY12	FY13	Projected FY14	FY15	FY16	Totals
Water Plant								
<i>W07 - WTP Construction</i>	<i>84,690.00</i>	<i>500,000.00</i>	<i>6,533,333.33</i>	<i>6,533,333.33</i>	-	-	-	<i>13,651,356.67</i>
WIF-04 Lyman Improvements (FY08 CIP Carryover)	400,426.00							
WIF-01 Sourdough Creek dam	69,954.00	200,000.00						
WIF-09 Water Supply/Storage Expansion Study			250,000.00					
Grand Total - Water Impact Fee Fund	555,070.00	700,000.00	6,783,333.33	6,533,333.33	-	-	-	

City of Bozeman
 Water Rate Study
 Exhibit 6
 Water Treatment Plant Construction Project

	Actuals FY10	Budgeted FY11	Projected					Totals
			FY12	FY13	FY14	FY15	FY16	
WTP								
Water Fund	995,126.00	5,276,505.00	10,430,851.17	10,430,851.17	-			27,133,333.33
Impact Fees	-	500,000.00	6,533,333.33	6,533,333.33	-			13,566,666.67
Grand Total - Project Costs	995,126.00	5,776,505.00	16,964,184.50	16,964,184.50	-	-	-	40,700,000.00

				FY11	FY12	FY13	FY14	
Total Project Costs		Estimate						
*** April 2011 Bid Award		40,700,000.00						
Water Fund	67%	27,133,333.33	995,126.00	5,276,505.00	10,430,851.17	10,430,851.17	-	27,133,333.33
Impact Fees	33%	13,566,666.67	-	500,000.00	6,533,333.33	6,533,333.33	-	13,566,666.67
Construction Costs (Total Less Design/Eng)		Estimate						
		33,936,000.00						
Water Fund	67%	22,624,000.00		17%	43%	40%		22,624,000.00
Impact Fees	33%	11,312,000.00		5,276,505.00	8,673,747.50	8,673,747.50		11,312,000.00
Engineering/Legal/Admin		Estimate	<i>FY08/FY09/FY10</i>					
		6,764,000.00	<i>Combined</i>					
Water Fund	67%	4,509,333.33	995,126.00	33.00%	33.00%	33.00%		4,509,333.33
Impact Fees	33%	2,254,666.67	-	-	1,757,103.67	1,757,103.67		2,254,666.67

City of Bozeman
 Water Rate Study
 Exhibit 7
 Water Fund Debt Service

	Actuals FY10	Budgeted FY11	Projected				
			FY12	FY13	FY14	FY15	FY16
Lyman Creek Bonds II - Final Payment FY11 Debt Service (Actuals)	30,387.00	32,916.00	-	-	-	-	-
WTP SRF Loan							
Debt Service Estimated Payments			\$0.00	\$786,700.82	\$1,287,328.61	\$1,394,605.99	\$1,394,605.99
<i>Total SRF Loan Amounts - Utility</i>			-	8,000,000.00	15,000,000.00	16,500,000.00	16,500,000.00
<i>Total SRF Loan Amounts - Impact Fees</i>			-	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Grand Total Debt Service	30,387.00	32,916.00	\$0.00	\$786,700.82	\$1,287,328.61	\$1,394,605.99	\$1,394,605.99

Option B - Updated Rate Study FY12-FY16

Reserve Recap

City of Bozeman
Water Rate Study
Exhibit 8
Reserves Recap

	Actuals FY10	Budgeted FY11	FY12	FY13	Projected FY14	FY15	FY16
Water Fund							
Operating & Capital Reserve							
Beginning Balance		11,241,829.00	6,784,997.00	(2,793,653.17)	(5,815,027.36)	844,828.06	2,796,459.81
Add: Operating Revenues		6,079,978.00	6,152,298.16	6,224,759.14	6,245,740.95	6,330,216.37	6,456,759.30
Add: Additional Rate Revenue		-	288,505.24	594,325.79	918,356.32	1,264,484.67	1,633,933.64
Add: SRF Loan Proceeds		-	-	8,000,000.00	7,000,000.00	1,500,000.00	-
Less: Operating Expenditures		(4,002,441.00)	(4,164,685.40)	(4,310,839.33)	(4,452,120.45)	(4,600,743.30)	(4,733,825.61)
Less: Capital Expenditures		(6,501,453.00)	(11,854,768.17)	(11,956,218.17)	(1,264,165.00)	(1,147,720.00)	(1,259,435.00)
Less: Debt Service Payment		(32,916.00)	-	(786,700.82)	(1,287,328.61)	(1,394,605.99)	(1,394,605.99)
Less: Funding of Debt Service Reserve			-	(786,700.82)	(500,627.79)	-	
Ending Balance - Water Fund		6,784,997.00	(2,793,653.17)	(5,815,027.36)	844,828.06	2,796,459.81	3,499,286.15
Ending Balance - Debt Service Reserve			-	786,700.82	1,287,328.61	1,287,328.61	1,287,328.61
Operating & Capital Reserve Target		8,556,594.63	8,576,597.36	8,594,616.34	8,612,034.56	8,630,357.93	8,646,765.34
45 O&M		493,451.63	513,454.36	531,473.34	548,891.56	567,214.93	583,622.34
Annual Deprec		8,063,143.00	8,063,143.00	8,063,143.00	8,063,143.00	8,063,143.00	8,063,143.00

Water Impact Fee Fund

Beginning Balance	8,768,618.00	8,668,618.00	2,535,284.67	(598,048.67)	(198,048.67)	301,951.33
Add: Impact Fee Revenues	400,000.00	400,000.00	400,000.00	400,000.00	500,000.00	500,000.00
Add: SRF Loan Proceeds	-	-	3,000,000.00	-	-	-
Less: Capital Expenditures	(500,000.00)	(6,533,333.33)	(6,533,333.33)	-	-	-
	-	-	-	-	-	-
Ending Balance - Water Impact Fees	8,668,618.00	2,535,284.67	(598,048.67)	(198,048.67)	301,951.33	801,951.33

Option B - Updated Rate Study FY12-FY16

Rate Requirements

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

	Actuals FY10	Budgeted FY11	FY12	FY13	Projected FY14	FY15	FY16
Revenues							
Water Sales	5,560,759.00	5,687,876.00	5,770,104.76	5,827,905.81	5,886,284.87	6,004,210.56	6,124,494.77
Other Revenues	545,562.00	392,102.00	382,193.40	396,853.33	359,456.09	326,005.81	332,264.53
Total Revenues	6,106,321.00	6,079,978.00	6,152,298.16	6,224,759.14	6,245,740.95	6,330,216.37	6,456,759.30
Expenses							
<i>O&M Expenses</i>							
Water Treatment Plant Ops	1,706,863.00	1,805,971.00	1,845,343.67	1,910,219.61	1,966,518.66	2,026,236.47	2,089,639.37
Water Operations	1,671,703.00	1,788,160.00	1,893,583.49	1,956,170.10	2,021,404.26	2,089,433.12	2,137,031.01
Utility Locates	5,104.00	7,698.00	7,915.50	8,139.53	8,370.27	8,607.94	8,852.74
Water Services	28,009.00	35,000.00	37,800.00	40,824.00	44,089.92	47,617.11	51,426.48
Meter Reading	319,490.00	293,612.00	302,282.74	311,505.29	321,038.08	330,893.45	341,084.38
Hydrants	36,649.00	42,000.00	45,360.00	48,988.80	52,907.90	57,140.54	61,711.78
Valves	16,656.00	15,000.00	16,200.00	17,496.00	18,895.68	20,407.33	22,039.92
Main Repairs	20,317.00	15,000.00	16,200.00	17,496.00	18,895.68	20,407.33	22,039.92
<i>Debt Service</i>							
Existing Debt Service	30,387.00	32,916.00					
New Plant Debt Service			-	786,700.82	1,287,328.61	1,394,605.99	1,394,605.99
<i>Rates Dedicated to CIP</i>	1,912,017.00	2,301,453.00	9,854,768.17	2,956,218.17	(5,735,835.00)	(352,280.00)	1,259,435.00
Total Expenses	5,747,195.00	6,336,810.00	14,019,453.57	8,053,758.31	3,614.06	5,643,069.29	7,387,866.60
Balance or (Deficiency) of Funds	359,126.00	(256,832.00)	(7,867,155.41)	(1,828,999.17)	6,242,126.90	687,147.08	(931,107.30)
REQUIRED RATE ADJUSTMENT CUMULATIVE	-	-	5.0%	10.3%	15.8%	21.6%	27.6%
Proposed Rate Adjustment - ANNUALLY		3.2%	5.0%	5.0%	5.0%	5.0%	5.0%
Additional Revenue beyond Total Revenues			\$ 288,505.24	\$ 594,325.79	\$ 918,356.32	\$ 1,264,484.67	\$ 1,633,933.64
<i>Debt Service Coverage Ratio</i>	<i>Minimum: 1.25</i>	<i>n/a</i>	<i>3.19</i>	<i>2.11</i>	<i>2.15</i>	<i>2.41</i>	
Average Residential Customer (10 CF, 3/4" Meter)	\$ 35.64	\$ 36.78	\$ 38.62	\$ 40.55	\$ 42.58	\$ 44.71	
With Rate Increase	1.14	1.84	1.93	2.03	2.13	2.24	
	\$ 36.78	\$ 38.62	\$ 40.55	\$ 42.58	\$ 44.71	\$ 46.94	