



**Fiscal Year 2018**

# **WATER IMPACT FEE STUDY**

**For**

**CITY OF BOZEMAN,  
MONTANA**



**Public Resources Management Group, Inc.**

*Utility, Rate, Financial, and Management Consultants*



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December 3, 2018

Honorable Mayor and Members of the  
City Commission  
City of Bozeman  
121 N. Rouse Avenue  
Bozeman, MT 59715

Subject: **Water Impact Fee Study**

Public Resources Management Group, Inc. ("PRMG") has completed our review of the water impact fees for the City of Bozeman, Montana (the "City") water system (the "System"), and has summarized the results of our analyses, assumptions, and conclusions in this service area report, which is submitted for your consideration. This service area report summarizes and provides a basis for the updated impact fees recommended for the water system (the "System") that are a source of funding for the City's expansion-related capital costs for the System.

The proposed water impact fees have been designed to meet a number of goals and objectives that include:

- The water impact fees are based on the requirements of Title 7, Chapter 6, Part 16 of the Montana Code and, therefore, comply with Montana State Law;
- The water impact fees are designed to recover the capital costs associated with providing water capacity to new development including the cost of existing system assets with capacity available to serve new development and expansion-related projects included in the City's capital improvement program (the "CIP");
- The impact fees do not include the funding requirements associated with any infrastructure deficiencies of the water system (e.g., renewals and replacements) or any operating and maintenance expenses; and
- The impact fees are based upon reasonable level of service standards that generally meet the needs of the City's new customers, that are indicative of criteria used for long-term infrastructure planning, and that are consistent with the current level of service provided to existing customers.

Based on information provided by the City regarding the capital cost of system facilities, customer service levels, existing capacity utilization, the assumptions and considerations outlined in this report, and our studies and evaluations, PRMG considers the proposed water

Honorable Mayor and Members of the City Commission  
City of Bozeman  
December 3, 2018  
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impact fees to be cost-based, reasonable, and representative of the capital cost of serving new development.

Following this letter, we have provided an executive summary, which outlines our observations, recommendations and conclusions to the City. The accompanying report provides the details of the analyses conducted on behalf of the City.

We appreciate the opportunity to be of service to the City and would like to thank the City staff for their assistance and cooperation during the course of this study.

Very truly yours,

**Public Resources Management Group, Inc.**



Henry L. Thomas  
Senior Vice-President

HLT/leg  
Attachments

**CITY OF BOZEMAN, MONTANA**

**WATER IMPACT FEE STUDY**

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**CITY OF BOZEMAN, MONTANA**

**WATER IMPACT FEE STUDY**

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# **EXECUTIVE SUMMARY AND RECOMMENDATIONS**

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# CITY OF BOZEMAN, MONTANA

## WATER IMPACT FEE STUDY

### EXECUTIVE SUMMARY AND RECOMMENDATIONS

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#### PURPOSE OF WATER IMPACT FEES

The purpose of water impact fees is to recover the pro-rata share of allocated capital costs that are considered growth-related from new customers connecting to the system or from existing customers that are requesting an increase in the reserved water capacity associated with increased development on their property. To the extent that new population growth and associated development impose identifiable capital costs to municipal services, capital funding practices to include the assignment of such costs to those residents or system users responsible for those costs rather than to the entire population base is reasonable. Generally, this practice has been labeled as "growth paying its own way" to minimize existing user cost burdens. The application of impact fees to finance capital infrastructure allocated to such new capacity requests is common in Montana and throughout the United States and has been used as a capital funding source by the City of Bozeman (the "City") for a number of years.

The City last reviewed its water impact fees in 2012. Since Montana's enabling impact fee legislation requires a review and update of impact fees at least every five (5) years, the City commissioned impact fee reviews in 2017.

#### OBSERVATIONS, RECOMMENDATIONS, AND CONCLUSIONS

The following is a summary of the observations, recommendations and conclusions developed by PRMG during our investigation, analyses, and preparation of this report:

1. The imposition of impact fees must satisfy the requirements of Montana State Law based on the criteria set forth in Title 7, Chapter 6, Part 16 of the Montana Code Annotated (the "MCA") and should reflect a rational nexus whereby the benefits received by new development are reasonably related to the impact fees.
2. The City's water facilities such as treatment and transmission facilities are interconnected and serve an overall system need and, as such, the proposed impact fee is based on a single service area or system-wide fee for the water system. The proposed water impact fee is \$2,687 per equivalent dwelling unit ("EDU"). For residential water service, the City charges a water impact fee based on the size of the residential home. For non-residential water service, the City charges a water impact fee based on the size of the water meter placed in service. While no change in the application methodology is proposed, this study updates the demand coefficients or EDUs for each category of service based on the most recently available information from the City.
3. The capital costs included in the proposed water impact fees are based on: i) the cost of certain existing water system assets with capacity available to serve new development; ii) planned capital improvements that upgrade existing water system assets, a portion of which

are available to serve growth; and iii) planned capital improvements that provide additional capacity to serve future growth. The cost of such capacity is allocated between existing and future customers based on the estimated benefit or proportionate share assigned to such customers predicated on the intent of the expenditures, level of service assumptions, the existing and future capacity needs of the System. The proposed fees also include a five percent (5%) allowance to recover administrative costs as allowable by Montana's enabling impact fee legislation.

4. The CIP for the water system does not include any further expansion of the capacity of existing water supply and treatment facilities, but does include: i) projects which upgrade the existing water supply and treatment facilities that benefit both existing and future customers; and ii) improvements that expand the water transmission system or upgrade existing transmission assets, a portion of which are available to serve growth. In keeping with Montana State Law a proportionate share of these costs was assigned to new development and was included in the calculation of the proposed water impact fees.
5. In accordance with the provisions of Montana State Law and case law pertaining to impact fees, the fees can only be used to pay for growth-related projects or to pay for growth-related debt service. The City could use water impact fee receipts either to: i) pay directly for the costs of projects allocable to growth such that the need for borrowing external funds to finance the identified water system capital program is reduced; or ii) apply the impact fees toward the expansion-related component of the City's debt service payments for the water system. Table ES-1, on the following page, contains a summary of existing and proposed water impact fees.

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Table ES-1

City of Bozeman, Montana  
Water Impact Fee Study

Summary of Calculated Costs Per Gallon and Proposed Water Impact Fees

PROPOSED APPLICATION METHODOLOGY

Water Impact Fee - Residential

Line No.	Treatment Component Square Feet of Living Area	Water Plant Fee per Unit	Calculated Cost per Gallon	Less Debt Service Credit	Calculated Cost per Gallon With Debt Service Credit	Gallons per Day per EDU	EDU Factor	Water Plant Impact Fee per Unit Without Admin Allowance	Administration Allowance	Water Plant Impact Fee per Unit With Admin Allowance
1	1400 or Less	\$1,118.48	\$5.37	(\$0.83)	\$4.54	222	0.70	\$705.06	5.0%	\$740.00
2	1401 - 1600	1,432.91	5.37	(0.83)	4.54	222	0.89	896.44	5.0%	941.00
3	1601 - 1800	1,714.85	5.37	(0.83)	4.54	222	0.94	946.80	5.0%	994.00
4	1801 - 2000	1,965.46	5.37	(0.83)	4.54	222	1.00	1,007.24	5.0%	1,057.00
5	2001 - 2200	2,192.87	5.37	(0.83)	4.54	222	1.07	1,077.74	5.0%	1,131.00
6	2201 - 2400	2,399.40	5.37	(0.83)	4.54	222	1.13	1,138.18	5.0%	1,195.00
7	2401 - 2600	2,583.88	5.37	(0.83)	4.54	222	1.19	1,198.61	5.0%	1,258.00
8	2601 - 2800	2,757.91	5.37	(0.83)	4.54	222	1.21	1,218.75	5.0%	1,279.00
9	2801 - 3000	2,920.35	5.37	(0.83)	4.54	222	1.27	1,279.19	5.0%	1,343.00
10	3001 or More	3,018.97	5.37	(0.83)	4.54	222	1.35	1,359.77	5.0%	1,427.00
11	Group Quarters per person	1,085.99	5.37	(0.83)	4.54	222	0.45	453.26	5.0%	475.00
	<b>Transmission Component</b>	<b>Transmission System Fee per Net Acre of Development</b>	<b>Calculated Cost per Gallon</b>	<b>Less Debt Service Credit</b>	<b>Calculated Cost Calculated Cost per Gallon With Debt Service Credit</b>	<b>Gallons per Day per EDU</b>	<b>EDU Factor</b>	<b>Transmission System Impact Fee Without Admin Allowance</b>	<b>Administration Allowance</b>	<b>Transmission System Impact Fee per Unit With Admin Allowance</b>
12	1400 or Less	\$4,224.47	\$7.20	(\$0.20)	\$6.99	222	0.70	\$1,086.70	5.0%	\$1,141.00
13	1401 - 1600	4,224.47	7.20	(0.20)	6.99	222	0.89	1,381.66	5.0%	1,450.00
14	1601 - 1800	4,224.47	7.20	(0.20)	6.99	222	0.94	1,459.28	5.0%	1,532.00
15	1801 - 2000	4,224.47	7.20	(0.20)	6.99	222	1.00	1,552.43	5.0%	1,630.00
16	2001 - 2200	4,224.47	7.20	(0.20)	6.99	222	1.07	1,661.10	5.0%	1,744.00
17	2201 - 2400	4,224.47	7.20	(0.20)	6.99	222	1.13	1,754.24	5.0%	1,841.00
18	2401 - 2600	4,224.47	7.20	(0.20)	6.99	222	1.19	1,847.39	5.0%	1,939.00
19	2601 - 2800	4,224.47	7.20	(0.20)	6.99	222	1.21	1,878.44	5.0%	1,972.00
20	2801 - 3000	4,224.47	7.20	(0.20)	6.99	222	1.27	1,971.58	5.0%	2,070.00
21	3001 or More	4,224.47	7.20	(0.20)	6.99	222	1.35	2,095.78	5.0%	2,200.00
22	Group Quarters per person	4,224.47	7.20	(0.20)	6.99	222	0.45	698.59	5.0%	733.00
	<b>Combined</b>	<b>Total Existing Fee for One Acre</b>	<b>Calculated Cost per Gallon</b>	<b>Less Debt Service Credit</b>	<b>Calculated Cost Calculated Cost per Gallon With Debt Service Credit</b>	<b>Gallons per Day per EDU</b>	<b>EDU Factor</b>	<b>Total Proposed Fee Without Admin Allowance</b>	<b>Administration Allowance</b>	<b>Total Proposed Fee per Unit With Admin Allowance</b>
23	1400 or Less	\$5,342.95	\$12.56	(\$1.03)	\$11.53	222	0.70	\$1,791.76	5.0%	\$1,881.00
24	1401 - 1600	5,657.38	12.56	(1.03)	11.53	222	0.89	2,278.10	5.0%	2,391.00
25	1601 - 1800	5,939.32	12.56	(1.03)	11.53	222	0.94	2,406.08	5.0%	2,526.00
26	1801 - 2000	6,189.93	12.56	(1.03)	11.53	222	1.00	2,559.66	5.0%	2,687.00
27	2001 - 2200	6,417.34	12.56	(1.03)	11.53	222	1.07	2,738.84	5.0%	2,875.00
28	2201 - 2400	6,623.87	12.56	(1.03)	11.53	222	1.13	2,892.42	5.0%	3,036.00
29	2401 - 2600	6,808.35	12.56	(1.03)	11.53	222	1.19	3,046.00	5.0%	3,197.00
30	2601 - 2800	6,982.38	12.56	(1.03)	11.53	222	1.21	3,097.19	5.0%	3,251.00
31	2801 - 3000	7,144.82	12.56	(1.03)	11.53	222	1.27	3,250.77	5.0%	3,413.00
32	3001 or More	7,243.44	12.56	(1.03)	11.53	222	1.35	3,455.54	5.0%	3,627.00
33	Group Quarters per person	5,310.46	12.56	(1.03)	11.53	222	0.45	1,151.85	5.0%	1,208.00

**Table ES-1**  
**City of Bozeman, Montana**  
**Water Impact Fee Study**

**Summary of Calculated Costs Per Gallon and Proposed Water Impact Fees**

**Water Impact Fee - Nonresidential**

Line No.	Meter Size	Exiting Fee	Proposed Rate Calculation				
			Rated Maximum Capacity (gpm)	Meter Equivalent Factor	Impact Fee Without Admin Allowance	Administration Allowance	Impact Fee With Admin Allowance
<b>Treatment Component</b>		Per Meter Size					
34	0.75-inch	\$2,305.42	30	1.50	\$1,510.85	5.0%	\$1,586.00
35	1-inch	5,302.34	50	2.50	2,518.09	5.0%	2,643.00
36	1.5-inch	11,527.08	100	5.00	5,036.18	5.0%	5,287.00
37	2-inch	21,440.26	160	8.00	8,057.88	5.0%	8,460.00
38	3-inch	45,878.60	300	15.00	15,108.53	5.0%	15,863.00
39	Above 3-inch	Calculated					Calculated
<b>Transmission Component</b>		Per Net Acre	Rated Maximum Capacity (gpm)	Meter Equivalent Factor	Impact Fee Without Admin Allowance	Administration Allowance	Impact Fee With Admin Allowance
40	0.75-inch	\$4,224.47	30	1.50	\$2,328.64	5.0%	\$2,445.00
41	1-inch	4,224.47	50	2.50	3,881.07	5.0%	4,075.00
42	1.5-inch	4,224.47	100	5.00	7,762.13	5.0%	8,150.00
43	2-inch	4,224.47	160	8.00	12,419.41	5.0%	13,040.00
44	3-inch	4,224.47	300	15.00	23,286.40	5.0%	24,450.00
45	Above 3-inch	Calculated					Calculated
<b>Combined</b>		Total Existing Fee for One Acre	Rated Maximum Capacity (gpm)	Meter Equivalent Factor	Impact Fee Without Admin Allowance	Administration Allowance	Impact Fee With Admin Allowance
46	0.75-inch	\$6,529.89	30	1.50	\$3,839.49	5.0%	\$4,031.00
47	1-inch	9,526.81	50	2.50	6,399.16	5.0%	6,718.00
48	1.5-inch	15,751.55	100	5.00	12,798.31	5.0%	13,437.00
49	2-inch	25,664.73	160	8.00	20,477.30	5.0%	21,500.00
50	3-inch	50,103.07	300	15.00	38,394.93	5.0%	40,313.00
51	Above 3-inch	Calculated					Calculated

# **SECTION 1**

## **INTRODUCTION**

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# CITY OF BOZEMAN, MONTANA

## WATER IMPACT FEE STUDY

### SECTION 1: INTRODUCTION

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#### GENERAL

The City of Bozeman, Montana (the "City") owns and operates a water utility system (the "System") within its service area boundaries. The City has historically used impact fees to fund a portion of the expansion-related capital costs for the System. The City last reviewed its water impact fees in 2012. Since Montana's enabling impact fee legislation requires a review and update of impact fees at least every five (5) years, the City commissioned impact fee reviews in 2017.

#### CRITERIA FOR WATER IMPACT FEES

The purpose of an impact fee is to assign, to the extent practical, growth-related capital costs to those new customers responsible for such additional costs. To the extent population growth and associated development require identifiable capital costs to provide utility service, modern capital funding practices suggest the assignment of such costs to those new residents or system users responsible for those costs rather than the existing customer base. Generally, this practice is labeled as "growth paying its own way" to avoid burdening existing users with the cost of facility expansion.

Within the State of Montana, Title 7, Chapter 6, Part 16 of the Montana Code Annotated (the "Code" or the "MCA") authorizes the use of impact fees for utilities owned by local governments. According to the Code, a valid impact fee, among other things, must meet the following requirements:

1. The calculation of the impact fee must be based on the proportionate share of the cost of infrastructure improvements necessary to serve new development;
2. Provide for recognition of other available funding sources such as grants;
3. The fee cannot include the cost of correcting existing System deficiencies;
4. The fee may not include expenses related to the operation and maintenance of the facility;
5. New development may not be held to a higher level of service standard than existing users unless there is a funding mechanism in place for the existing users to make improvements that match the higher level of service.
6. The City must deposit the impact fees in a special proprietary fund and monies held in this fund prior to expenditure must be invested with all interest accruing to the fund to ensure that the fees collected are used only for the lawful purposes established in the Code.

7. The City must collect the impact fees in accordance with an impact fee ordinance or resolution that establishes the method for developing and applying the fee and makes such information available to the public upon request. In addition, the ordinance or resolution should also explicitly restrict the use of the fees collected.

Based on the criteria above, we believe that the proposed water impact fees recommended herein, which are set forth in the Executive Summary and in Section 2, are in compliance with the Code and as such: i) include only the proportionate share of the estimated capital cost of facilities necessary to serve new development, ii) do not reflect costs associated with renewal and replacement of any existing capital assets to cure existing System deficiencies, iii) do not include any costs of operation and maintenance of any facilities; and iv) recognize other funding sources such as grants used by the City to construct certain water capital facilities.

### **ESTABLISHMENT OF NEED AND SUPPORTING DOCUMENTATION**

The City of Bozeman currently owns and operates two water production facilities: i) the Sourdough Water Treatment Plant (the "Sourdough WTP"), which has a current permitted capacity of 22 million gallons per day (MGD) expressed on a maximum day basis, and ii) the Lyman Spring chemical treatment facility, which is capable of treating a peak 2,600 gallons per minute or 3.744 MGD. The water distribution system consists of 288 miles of water mains, 4 finished water storage reservoirs, 2 pumping or booster stations, 22 pressure-regulating facilities, and 2,448 fire hydrants. Since the water production and transmission facilities are interconnected and serve an overall system need, the proposed water impact fees represent a single service area.

Water impact fees charged by utility providers in Montana are based on the requirements of Title 7, Chapter 6, Part 16 of the Montana Code. Figure 1-1 presents the specific documentation that will allow the City of Bozeman to update the water impact fee in compliance with Montana State Law.

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**Figure 1-1**  
**Water Impact Fee Study**  
**Compliance with Montana Enabling Impact Fee Legislation**  
**(Section 7-6-1602 MCA)**  
**Water System**

Section Reference	Documentation Item	Document(s)	Page or Section
(1)	for each public facility for which an impact fee is imposed, the governmental agency must prepare and approve a service area report.	Water Impact Fee Study Service Area Report	
(2)	The service area report is a written analysis that must:		
(2)(a)	describe existing conditions of the facility.	Water Facility Plan Update for Bozeman dated July 2017	Chapter 1: Existing System
(2)(b)	establish level of service standards.	Water Facility Plan Update for Bozeman dated July 2017	Chapter 3: Water Use Characterization, Pages 23 to 25
		Water Impact Fee Study Service Area Report	Section 2: Development of Water Impact Fees, Level of Service Requirements, Page 2-3
(2)(c)	forecast future additional needs for service for a defined period of time.	Water Facility Plan Update for Bozeman dated July 2017	Chapter 9: Future System Evaluation
(2)(d)	identify capital improvements necessary to meet future needs for service.	Water Facility Plan Update for Bozeman dated July 2017	Chapter 10: Recommended Improvements
		CIP	Water-related projects
		Water Impact Fee Study Service Area Report	Section 2: Development of Water Impact Fees, Tables 2-2 to 2-4
(2)(e)	identify those capital improvements needed for continued operation and maintenance of the facility.	Water Facility Plan Update for Bozeman dated July 2017	Chapter 10: Recommended Improvements
		CIP	Water-related projects
(2)(f)	make a determination as to whether one service area or more than one service area is necessary to establish a correlation between impact fees and benefits.	Water Impact Fee Study Service Area Report	Executive Summary and Recommendations, Page ES-1
(2)(g)	make a determination as to whether one service area or more than one service area for transportation facilities is needed to established a correlation between impact fees and benefits.	Not Applicable for Water Impact Fees	Not Applicable for Water Impact Fees

*(Table continues on following page)*

**Figure 1-1 (cont.)**  
**Water Impact Fee Study**  
**Compliance with Montana Enabling Impact Fee Legislation**  
**(Section 7-6-1602 MCA)**  
**Water System**

Section Reference	Documentation Item	Document(s)	Page or Section
(2)(h)	establish the methodology and time period over which the governmental entity will assign the proportionate share of capital costs for expansion of the facility to provide service to new development within each service area.	CIP	Water-related improvements in the CIP
		Water Impact Fee Study Service Area Report	Section 2: Development of Water Impact Fees
(2)(i)	establish the methodology that the governmental entity will use to exclude operations and maintenance costs and correction of existing deficiencies from the impact fee.	Water Facility Plan Update for Bozeman dated July 2017	Chapter 10: Recommended Improvements
		Water Impact Fee Study Service Area Report	Section 2: Development of Water Impact Fees
(2)(j)	establishes the amount of the impact fee that will be imposed for each unit of increased service demand.	Water Impact Fee Study Service Area Report	Table ES-1; Section 2: Development of Water Impact Fee, Table 2-5
(2)(k)	has a component of the budget of the governmental entity that: (i) schedules construction of public facility capital improvements to serve projected growth. (ii) projects costs of the capital improvements. (iii) allocates collected impact fees for construction of the capital improvements. (iv) covers at least a 5-year period and is reviewed and updated at least every 2 years.	CIP	Water-related improvements for the CIP
		Water Impact Fee Study Service Area Report	Section 2: Development of Water Impact Fees
(3)	The service area report is a written analysis that must contain documentation of sources and methodology used for purposes of subsection (2) and must document how each impact fee meets the requirements of subsection (7).	Water Impact Fee Study Service Area Report	All Sections
(4)	The service area report that supports adoption and calculation of an impact fee must be available to the public upon request.	Water Impact Fee Study Service Area Report	All documents will be made available at City offices

*(Table continues on following page)*

**Figure 1-1 (cont.)**  
**Water Impact Fee Study**  
**Compliance with Montana Enabling Impact Fee Legislation**  
**(Section 7-6-1602 MCA)**  
**Water System**

Section Reference	Documentation Item	Document(s)	Page or Section
(5)	The amount of each impact fee imposed must be based upon the actual cost of public facility expansion or improvements or reasonable estimates of the cost to be incurred by the governmental entity as a result of new development. The calculation of each impact fee must be in accordance with generally accepted accounting principles.	Water Impact Fee Study Service Area Report	Section 2: Development of Water Impact Fees, Table 2-5
(6)	The ordinance or resolution adopting the impact fee must include a time schedule for periodically updating the documentation required under subsection (2).	Updated Water Impact Fee Resolution	To be determined
(7)	An impact fee must meet the following requirements: (a) The amount of the impact fee must be reasonably related to and reasonable attributable to the development's share of the cost of infrastructure improvements made necessary by the new development. (b) The impact fees imposed may not exceed a proportionate share of the costs incurred or to be incurred by the governmental entity in accommodating the development. The following factors must be considered in determining a proportionate share of public facilities capital improvements costs: (i) the need for public facilities capital improvements required to serve new development; and (ii) consideration of payments for system improvements reasonable/ anticipated to be made by or as a result of development in the form of user fees, taxes, and other available sources of funding the system improvements. (c) Costs for correction of existing deficiencies in a public facility may not be included in the impact fee. (d) New development may not be held to a higher level of service than existing users unless there is a mechanism in place for the existing users to make improvements to the existing system to match the higher level of service. (e) Impact fees may not include expenses for operations and maintenance of the facility.	Water Impact Fee Study Service Area Report	All Sections



## **SECTION 2**

# **DEVELOPMENT OF WATER SYSTEM IMPACT FEES**



**CITY OF BOZEMAN, MONTANA**

**WATER IMPACT FEE  
SERVICE AREA REPORT**

**SECTION 2: DEVELOPMENT OF WATER IMPACT FEES**

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**INTRODUCTION**

This section of the report summarizes the basis for the development of the City's proposed water impact fees. Included in this section is a presentation of the existing impact fees for providing service to new water customers, a discussion of the methodology used to develop the proposed water impact fees, and a comparison of the proposed fees with those of other neighboring jurisdictions.

**EXISTING WATER IMPACT FEES**

Resolution No. 4421 (the "Water Impact Fee Resolution"), which was adopted by the City Commission on January 10, 2012, established water impact fees for the City based on a formal water impact fee review. Section 2.06.1700(L) of the City's Code of Ordinances enables the City to adjust the water impact fees annually to reflect the effects of inflation on those costs for improvements set forth in the water impact fee study. On January 1 of each year unless and until the water impact fee study is revised or replaced, the water impact fee is adjusted by multiplying such amount by one plus the value of the Construction Cost Index published by *Engineering News-Record* in the first December edition of the current year. The adjusted water impact fees automatically become effective immediately upon calculation by the City without additional action by the City Commission.

The current water impact fees are summarized as follows:

<b>Existing Residential Water Impact Fees</b>		
<u>Square Feet of Living Area</u>	<u>Water Plant Fee Per Unit</u>	<u>Transmission System Fee Per Net Acre of Development</u>
1400 or Less	\$1,118.48	\$4,224.47
1401 to 1600	1,432.91	4,224.47
1601 to 1800	1,714.85	4,224.47
1801 to 2000	1,965.46	4,224.47
2001 to 2200	2,192.87	4,224.47
2201 to 2400	2,399.40	4,224.47
2401 to 2600	2,583.88	4,224.47
2601 to 2800	2,757.91	4,224.47
2801 to 3000	2,920.35	4,224.47
3001 or More	3,018.97	4,224.47
Group Quarters Per Person	1,085.99	4,224.47

**(Remainder of page left intentionally left blank)**

### **Existing Nonresidential Water Impact Fees**

<u>Meter Size</u>	<u>Water Plant Fee Per Meter</u>	<u>Transmission System Fee Per Net Acre of Development</u>
0.75-inch	\$2,305.42	\$4,224.47
1-inch	5,302.34	4,224.47
1.5-inch	11,527.08	4,224.47
2-inch	21,440.26	4,224.47
3-inch	45,878.60	4,224.47

### **IMPACT FEE DEVELOPMENT METHODS**

There are several different methods generally recognized for the calculation of impact fees. The calculation is dependent on the type of charge being calculated (e.g., water, wastewater, police services, transportation, etc.); the cost and engineering data available; and the availability of other local data such as household and population projections, current levels of service, and other related items. There are two general methods for calculating impact fees: i) the improvements-driven method and ii) the standards-driven method. Both methods have been utilized in the development of impact fees for local governments.

The improvements-driven method, which is generally used for water and wastewater impact fees, is an approach that utilizes a specific list of planned capital improvements over a period of time. The fee corresponds to the level of capital improvements, which have been identified in the capital improvements element of a local government's comprehensive land use / community plan or the master plan or capital improvement plan of the utility. The standards-driven method utilizes an estimated or theoretical cost of the improvements for incremental development typically based on historical estimates. For example, the standards-driven method for a transportation impact fee would consider the estimated cost of a mile of a new road by the trip capacity of a mile of road to establish the cost per trip. The primary difference between the two methodologies is how the capital costs are calculated; however, both methods meet the requirements of the Section 7-6-1602(5) of the Code requiring that impact fees be based on the actual cost of the improvements or reasonable estimates of such costs. The development of water and wastewater impact fees is typically based on the improvements-driven method, whereby the cost of capital facilities are allocated between current and future users based on reasonable and defensible data and estimates of facility utilization. The improvements-driven method is used by utility systems because this method works well in conjunction with the capital planning process of the utility business.

The impact fees proposed in this report are based on the improvements-driven method using the capital costs and needs as documented in the City's asset records and CIP. The method also recognizes the embedded cost of existing unused capacity that is available from the City's existing utility plant which is currently in service, as well as planned investments in water treatment and transmission assets that provide additional water system capacity.

### **DESIGN OF WATER IMPACT FEES**

The approach to designing water impact fees includes two significant components. These two components are: i) the level of service to be apportioned to the applicants that request system

capacity; and ii) the associated amount of capital cost to be recovered from a new applicant requesting service. Both of these items are related to the level of the water impact fee expressed on an equivalent dwelling unit (EDU) basis, which represents the average capacity required to service a typical individually-metered single family residential account.

**LEVEL OF SERVICE REQUIREMENTS**

In the evaluation of the capital facility needs for providing water and wastewater utility services, it is critical that a level of service (LOS) standard is established. The level of service is an indicator of the extent or degree of service provided to a specific customer. Level of service indicates the capacity per unit of demand for each public facility. Essentially, the level of service standard is established in order to ensure that adequate facility capacity will be provided for future development.

For water and wastewater service, the level of service that is commonly used in the industry is the amount of capacity (service) allocable to each EDU expressed as the average amount of usage (gallons) on a daily basis. The level of service generally represents the amount of capacity attributable to an EDU, whether or not such capacity is actually used (commonly referred to as "readiness to serve"). As previously mentioned, an EDU is representative of the average capacity required to service a typical individually metered single-family residential account. This class of users represents the largest amount of customers served by a public utility such as the City's and generally has the lowest level of usage requirements for a specifically metered account. Several alternative methods are used to apply the EDU concept to non-single family residential uses including business attributes linked to the demand for water and wastewater service, fixture counts, and meter size equivalency factors.

Pursuant to Montana State Law, in the calculation of water impact fees, new development may not be held to a higher level of service standard than existing users. Accordingly, the following levels of service standards were assumed for calculating the proposed impact fees based on actual historical information for existing users as provided by City staff and as contained in the City's Water Facility Plan Update dated July 2017:

**Derivation of Water Level of Service  
Utilized in Water Impact Fee Calculations**

	Amount
Single-Unit Residential Per Capita Water Use	
During Summer [1]	90.8 gpd
Persons Per Household [2]	2.24
Level of Service Per Water EDU With No	
Allowance for Non-Revenue Water	204 gpd
Allowance for Non-Revenue Water [3]	9%
Recognized Level of Service Per Water EDU	<u>222 gpd</u>

[1] Amounts shown on page 25 of Water Facility Plan Update dated July 2017.

[2] Persons per household for 2012 to 2016 as published by U.S. Census (census.gov).

[3] Average historical non-revenue water percentage as reported in Water Facility Plan Update dated July 2017. Non-revenue water of 15% or less is considered acceptable by utility industry standards.

EDU = equivalent dwelling unit

gpd = gallons per day – average daily flow basis

## EXISTING PLANT-IN-SERVICE

In the determination of the impact fee associated with the servicing of future customers, any constructed capacity in existing treatment and transmission facilities that is available to serve future growth was considered in developing the proposed impact fees. Since this capacity was constructed and is available to serve the near-term growth of the utility system, it is appropriate to recognize the capacity cost of such facilities. In order to evaluate the availability of the existing utility plant-in-service to meet or provide for near-term future capacity needs, it was necessary to categorize the existing utility facilities by specific utility purpose (e.g., treatment, conveyance, etc.). Categorizing the investment in existing facilities helps to identify those assets that should be included in the determination of the impact fees.

The cost categories are based on the utility purpose of the assets and the service that such assets provide. The following is a summary of the cost categories for the utility facilities identified in this report.

Facility Categories	
Water Service	Other Plant
Supply	General Plant (Equipment, Vehicles, etc.)
Treatment	
Transmission	
Distribution	
Fire Hydrants	
Meters and Services	

It was necessary to organize the utility plant into these cost categories so that system-wide capacity costs are identified such that a proper fee can be developed. System-wide capacity costs are those costs incurred to provide capacity needed to serve new growth and development and do not include: i) site improvements and facilities that are planned and designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project, such as fire hydrants or meters and services; and ii) routine and periodic maintenance expenditures, personnel training, and other operating costs. Therefore, the costs of onsite facilities which serve a specific development or customer are not considered as "System-wide" costs that are proportionately allocable to all users. Onsite facilities such as water distribution and wastewater collection lines, meters and services, local lift stations, and fire hydrants are usually paid for and donated by a developer as part of the City's utility extension program (a contribution of the facilities). The cost of such facilities is not included in the impact fee calculation. Additionally, assets with short service lives that are replaced on a recurring basis are also not be included, since these assets generally benefit the existing customers of the System. An example of this utility plant would be assets commonly referred to as "general plant" and would include vehicles, equipment, and other related assets.

The City provided PRMG with reported utility plant asset information through June 30, 2017 (the most recently completed fiscal year at the time of this analysis) that served as the basis of the functionalization of the existing utility plant-in-service. Appendix A at the end of this report provides the functionalization analysis of the existing utility plant-in-service for the System. The functionalized existing utility plant-in-service as shown in Appendix A represents the original installed cost of such assets (gross book value) when placed into service and represents all assets

in service as of June 30, 2017 that were provided by the City and detailed in the utility asset records. This information represents the most current information available relative to the plant-in-service to serve the existing and near-term future customer base of the utility system. The assets represent "installed costs" and have not been restated to account for any fair market value adjustments which would reflect current costs (would essentially assume that assets were replaced with identical materials). If an asset had been replaced by the City as of June 30, 2017 and is now in service, such assets were considered since they are physically in-service and represent the capital cost actually being incurred by the City to provide service to future development (this also recognized that the asset that was replaced is retired and no longer in service and was assumed to not be included in the fixed asset register provided to PRMG).

A summary of the categorization of the existing utility plant-in-service in Appendix A is shown as follows:

<b>Summary of Water Utility System Existing Assets (Gross Utility Plant) [1]</b>		
<u>Function</u>	<u>Amount</u>	<u>Percent</u>
Supply	\$8,901,401	3.8%
Treatment	40,463,874	17.2%
Transmission / Storage / Master Pumping	71,689,435	30.4%
Distribution / Collection [2]	110,703,253	46.9%
Meters / Services / Hydrants [2]	413,244	0.2%
General Plant [2]	3,671,798	1.6%
<b>Total Gross Utility Plant In Service [3]</b>	<b>\$235,843,006</b>	<b>100.0%</b>

[1] Amounts shown derived from utility asset records as of June 30, 2017 that were provided by the City as shown in Appendix A.

[2] These assets are not included in the water impact fee.

[3] Construction work-in-progress was not recognized since the projects have not yet been completed and placed into service by the District and the corresponding existing assets, if any, that would be retired or improved were not removed from the fixed asset register.

In order to determine the amount of existing water supply / treatment plant assets with capacity available to meet future growth, it is necessary to estimate the amount of unused capacity in such facilities. Table 2-1 at the end of this section provides an estimate of the unused capacity and the allocated water supply and treatment plant costs available to meet future needs. This estimate for water capacity and the allocation of existing plant to future growth was based on: i) the permitted design capacity of the respective utility plant facilities; ii) the recognition of adjustments to present the facility capacity on an average daily demand / flow basis to be consistent with the assumed level of service requirements (dependable daily capacity); and iii) actual use of such facilities as experienced by the System service area through the Fiscal Year 2017. Based on this analysis, it was estimated that the existing water supply and treatment plant facilities had the following available capacity to meet future needs:

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**Summary of Water Plant Capacity Available to Meet Future Demand**

	Water Plants [1]
Total Permitted Capacity (Maximum Day - MGD)	25.744
Peaking Factor [2]	2.100
Plant Capacity Expressed on Average Daily Demand / Flow Basis	12.259
Less Existing Plant Utilization (ADF - MGD)	5.726
Net Available to Meet Future Service Area Needs	6.533
Estimated Percent of Total System Capacity	53.29%

MGD = Million Gallons Per Day  
ADF = Average Daily Flow

[1] Amounts derived from Table 2-1.

[2] The utilized peaking factors are based on a review of historical peaking relationships experienced by the System.

As shown above, it has been estimated that approximately 53.29% in existing water production and treatment utility assets is allocable to serve future development. The water production / treatment and wastewater treatment / disposal capacity costs in the impact fee calculations represent the average installed costs of existing capacity ("buy-in") as well as upgrades to such assets (reflected in the CIP), a portion of which benefit new development.

**ADDITIONAL CAPITAL INVESTMENT**

As with any utility, the City is continually in the process of updating and expanding the water and facilities to serve increasing demand; upgrade and improve service delivery and reliability; and meet new regulatory requirements. In order to develop an impact fee that is consistent with the capital costs of the System, the cost of the City's capital improvements that are anticipated to meet future needs are included in the proposed water impact fees. The City staff provided the most recent CIP, which outlines a number of capital improvements for the water system as shown in Table 2-2 at the end of this section. Generally, these improvements are for i) expansions of the System to meet new growth; ii) upgrades to existing assets which may benefit both current and future users of the System (e.g., a transmission line upgrade or improvements to increase reliability or comply with new regulatory requirements); and iii) replacement of assets that only benefit current users of the System. Of these three types of costs identified in the CIP, the cost associated with the replacement of assets is not included in the proposed impact fees as these costs are not associated with providing capacity for new development while the cost of system upgrades, which represent an enhanced level of service for all users, and the cost of system expansion that directly benefits new development are included in the proposed fees. Also, as required by Section 7-6-1601(1)(a) of the Code, all of the costs included in the fees have a useful life of at least ten (10) years.

Table 2-3 at the end of this section provides a functional summary of all planned water improvements and expansions for the System. Based on the functional categories previously discussed, this step helps to ensure that only system level facilities such as treatment and transmission facilities are included in the impact fee. Based on discussions with City staff and as shown on Table 2-3, approximately \$20.7 million of water supply and treatment capital projects and \$90.2 million of water storage, pumping, and transmission capital improvements have been considered in the determination of the proposed water impact fees. Table 2-4 shows the

allocation of functionalized CIP projects between existing users and future growth for the water system.

## **DESIGN OF WATER IMPACT FEE**

As shown on Table 2-5 at the end of this section, the proposed impact fee for the water system is \$2,687 per EDU. The costs included in the calculation of the fee reflect the proportionate share of capital costs that meet the demands of future customers as identified in the City's fixed asset records and CIP. The proposed charge is based on current estimates of capacity costs and is reasonably comparable with those of other Montana utilities.

The major assumptions relied upon in the development of the proposed water impact fees are as follows.

1. The existing water supply and treatment facilities have approximately 53.29% capacity available to serve new growth based on: i) the design capacity of the existing water treatment plant facilities; and ii) historical peak day to average daily flow relationships based on information provided by the City. Therefore, the proposed impact fee is based on the proportionate share of the existing plant capacity anticipated to serve new development at original cost to recoup the estimated buy-in costs of new development.
2. The capital costs identified in the City's CIP are incorporated into the calculation of the proposed impact fees as appropriate on a project-specific basis. Only the costs of those facilities considered to be allocable to growth are included in the fee. For capital expenditures, which are solely for the replacement of existing assets directly benefiting only existing customers or considered as an on-site cost (provide service to a local area such as a development that would normally be constructed and subsequently contributed to the City by a developer), such amounts are not reflected as an appropriate cost to be recovered from the application impact fees. A summary of capital improvement costs considered in the development of the water impact fees is shown in Table 2-4 at the end of this section.
3. For the capital costs identified as transmission system upgrades, which benefit both existing and future users, the total cost of such improvements is recognized in the fee analysis. Since the transmission function capacity is difficult to ascertain except at "build-out" conditions, the total existing assets plus the planned expansions are recognized and divided by total treatment plant capacity, thus estimating an average "buy-in" cost for new users for this component of the System.
4. The level of service for a water EDU is assumed to be 222 gallons per day (gpd) expressed on an average daily flow (ADF) basis based on: i) the single-unit residential per capita water use during summer months per the Water Facility Plan Update dated July 2017; ii) a 9% adjustment for non-revenue water based on the historical average as reported in the Water Facility Plan Update; and iii) the published 2.24 persons per household for the City per the United States Census.



5. For the development of the proposed impact fees, no existing or planned capital facility costs associated with distribution facilities have been included in the calculation of the charge. Additionally, capital costs included in the development of the proposed impact fee were reduced based upon amounts associated with grants received by the City and the anticipated retirement of certain existing assets. PRMG did not recognize water supply assets associated with acquiring water rights in the calculation of the proposed impact fees since the City has a separate "cash-in-lieu of water rights" fee that is utilized to acquire water rights.
6. In order to promote rational nexus provisions of the payment of the impact fees, a credit for an assumed level of debt (external capital) that is paid by utility rate revenues has been reflected in the determination of the fee. The calculation of the debt service credit is summarized on Table 2-6 at the end of this report. The purpose of the credit is to recognize that new growth will also pay monthly user charges (once such users become an active customer) which have a debt component included in the rates for service that is allocable to the construction of the growth-related projects. As such, it was assumed that a credit to the impact fee would be appropriate. It should be recognized that the impact fees are a pledged revenue for the repayment of debt and that the capacity of the existing facilities for which debt has been issued is essentially at full utilization and therefore fully-funded from existing users. Also the priority of use of the impact fees is to fund future capital improvements and thus limit the issuance of future debt (which also provides a benefit to the level of rates charged for monthly service). Additionally, all funds received from the water impact fees are applied toward water-related capital projects or expansion-related debt service requirements, thus providing rate benefit.

As shown on Table 2-5, the analysis utilizes estimated capital costs for the water supply/treatment/transmission system, EDU service requirements, and current fixed asset and plant capacity data for the water system. By designing the water impact fee to recover these costs, an attempt is made to design a fee on a reasonable basis in order to reflect the cost of capacity needed to meet the future growth of the water system. It should be noted that in the event the construction costs, capacity requirements, or utility service area materially change from what is reflected on Table 2-5, the water impact fee may need to be adjusted accordingly.

As shown on Table 2-5, the proposed water impact fee is recommended to be \$2,687 per EDU. Based on the capital facilities associated with the determination of the charge, the functional breakdown of the components of the rate are as follows:

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**Proposed Water Impact Fee Per EDU [\*]**

	Water Supply / Treatment	Water Transmission	Combined
Calculated Amount	\$1,007.24	\$1,597.43	
Administrative Allowance @ 5.0%	50.36	77.62	
	<u>\$1,057.60</u>	<u>\$1,630.05</u>	
Recommended Fee Per EDU (Rounded)	<u>\$1,057.00</u>	<u>\$1,630.00</u>	<u>\$2,687.00</u>
Level of Service / Capacity Allocation Per EDU	222	222	222
Cost Per Gallon of Capacity	<u>\$4.76</u>	<u>\$7.34</u>	<u>\$12.10</u>

[\*] Amounts derived from Table 2-5.

**EQUIVALENT DWELLING UNIT DETERMINATION METHODOLOGY**

The City currently provides water service to residential and non-residential properties of the system. For residential water service, the City charges a water treatment impact fee based on the size of the residential home. For non-residential service, the City charges a water treatment impact fee based on the size of the service meter. No changes to the application methodology are proposed, however, this study updates the demand coefficients or EDUs for each category of water service based on the most recently available information from the City. The existing impact fee for the transmission component is currently charged per acre which does not adequately reflect the demand for water transmission service. Therefore, PRMG recommends that the City apply the transmission component of the water impact fee per EDU.

The City provided historical water demands by size of residential homes for the most recent two (2) fiscal years. The average water demands over the period for each category of residential properties were compared to the average water demands for the typical residential dwelling unit, which includes residential homes between 1,801 to 2,000 square feet of living area. The following table summarizes the proposed EDUs per residential home based on recent data:

<b>Equivalent Residential Units by Square Feet of Living Area for City Water System</b>		
Lower Limit	Upper Limit	EDU Factor [1]
0	1,400	0.70
1,401	1,600	0.89
1,601	1,800	0.94
1,801	2,000	1.00
2,001	2,200	1.07
2,201	2,400	1.13
2,401	2,600	1.19
2,601	2,800	1.21
2,801	3,000	1.27
Above 3,000		1.35

[1] Amounts based on historical water demands provided by the City.

For non-residential properties, the City applies the water treatment impact fee on a per meter equivalent approach. Under this method, the impact fees for water service are based on rated meter capacity information published by AWWA (e.g., in the M6 manual entitled *Water Meters*). Based on an analysis of the non-residential service demands when compared to residential service, non-residential demands were 50% greater than the typical residential service. Therefore, the following table summarizes the proposed EDUs per non-residential meter sizes:

**Equivalent Non-residential Units by Meter Size  
for City Water System**

Meter Size	Rated Capacity (gallons per minute) [1]	EDU Factor [2]
3/4"	30	1.50
1"	50	2.50
1-1/2"	100	5.00
2"	160	8.00
3"	300	15.00

[1] Amounts based on water meter data published by AWWA.

[2] Amounts calculated by dividing the rated capacity (gallons per minute) for each meter size by the rated capacity for the smallest-sized 3/4" meter beginning at a factor of 1.50 since non-residential demands are approximately 50% greater than the typical residential service.

**PROPOSED WATER IMPACT FEE SCHEDULE**

Based on the proposed application methodology, the following water impact fees are proposed:

**Proposed Residential Water Impact Fees**

Square Feet of Living Area	Water Plant Fee Per Unit	Transmission System Fee Per Unit
1400 or Less	\$740.00	\$1,141.00
1401 to 1600	941.00	1,450.00
1601 to 1800	994.00	1,532.00
1801 to 2000	1,057.00	1,630.00
2001 to 2200	1,131.00	1,744.00
2201 to 2400	1,195.00	1,841.00
2401 to 2600	1,258.00	1,939.00
2601 to 2800	1,279.00	1,972.00
2801 to 3000	1,343.00	2,070.00
3001 or More	1,427.00	2,200.00
Group Quarters Per Person	475.00	733.00

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**Proposed Nonresidential Water Impact Fees**

Meter Size	Water Plant Fee Per Meter	Transmission System Fee Per Meter
0.75-inch	\$1,586.00	\$2,445.00
1-inch	2,643.00	4,075.00
1.5-inch	5,287.00	8,150.00
2-inch	8,460.00	13,040.00
3-inch	15,863.00	24,450.00
Above 3-inch	Calculated	Calculated

This schedule is also contained in Table ES at the beginning of this report.

**CONCLUSIONS AND RECOMMENDATIONS**

Based on our evaluation of the City's water impact fees, PRMG offers the following conclusions and recommendations:

1. Pursuant to the analysis discussed herein, PRMG is of the opinion that the proposed water impact fees are reasonable, are based on the requirements of Montana State Law, and reflect the City's capital cost of providing capacity based on the proposed level of service. As such, PRMG recommends that the City consider adjusting the existing water impact fee to \$2,687 per EDU.
2. Consistent with the practices of the City, PRMG recommends that the City continue to apply the water treatment portion of the residential impact fees based on the size of the residential home and non-residential impact fees based on the size of the service meter. For the transmission component of the water impact fees, PRMG recommends that the City charge such fees on a consistent basis with the treatment component, rather than on a per acre basis. The proposed schedule of water impact fees is shown in Table ES-1 at the beginning of this report.

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Table 2-1

City of Bozeman, Montana  
Water Impact Fee Study

Development of Existing Water Treatment Facility  
Capacity Available to Serve System Growth

Line No.	Description	Water System
	Existing Permitted Plant Capacity of System (MGD): [1]	
	<u>Water System</u>	
1	Sourdough Water Treatment Plant	22.000
	Lyman Creek Reservoir	
2	Peak Production - Gallons Per Minute (Per July 2017 Water Facility Plan Update)	2,600
3	Lyman Creek Reservoir Peak Production Capacity (MGD)	3.744
4	Total Production/Treatment	25.744
5	Peaking Factor [2]	2.100
6	Adjustment to Reflect Average Daily Flow of Plant Capacity	(13.485)
7	Existing Plant Capacity of System - Average Daily Flow Basis (MGD) [3]	12.259
8	Average Daily Flow [4]	5.726
9	Remaining Capacity (ADF)	6.533
10	Percent of Total Capacity Allocable to Growth	53.29%
	Capital Costs of Production/Treatment Facilities:	
11	Existing City-Owned Facility Costs [5]	\$ 49,365,275
12	Additional Costs [6]	20,196,880
13	Less Assumed Retirements [6]	(1,626,266)
14	Less Grant Funds and Other Contributions [7]	(2,154,753)
15	Total Capital Costs of Existing Facilities	65,781,136
16	Estimated Amount Allocable to Incremental Growth	\$ 35,055,215

MGD = Million Gallons Per Day

ADF = Average Daily Flow

Footnotes on following page.

**Table 2-1**

**City of Bozeman, Montana  
Water Impact Fee Study**

**Development of Existing Water Treatment Facility  
Capacity Available to Serve System Growth**

Footnotes:

- [1] For the water system, reflects current maximum day permitted capacity of water treatment facility as provided by the City.
- [2] The 2.1 peaking factor utilized for the water treatment plant was based on a review of peak-to-average day relationships as represented in the monthly operating reports for the water system plants.
- [3] Reflects capacity expressed on an average daily flow basis.
- [4] Average daily flow data calculated as follows:

**Water System:**

<u>Fiscal Year</u>	<u>Total Water Flow (MGD)</u>	<u>Peaking Factor</u>
2013	5.458	2.095
2014	5.214	2.155
2015	5.170	2.106
2016	5.464	2.137
2017	5.726	1.986
Five-Year Maximum	5.726	2.155
Five-Year Average	5.406	2.096
Peaking Factor to Use for Impact Fee Design		<u>2.100</u>

- [5] Derived from Appendix A, Line 742. Based on summary of utility asset records provided by the City.
- [6] Derived from Table 2-4, Line 14. Based on capital improvement program associated with upgrades, renewals and replacements of the water system.
- [7] Derived from Appendix A, Line 744.

Table 2-2

City of Bozeman, Montana  
Water Impact Fee Study

Multi-Year Estimated Capital Improvement Program Summary

Line No.	Project ID	Department	Description	Projected Fiscal Year Ending September 30,									
				Budgeted 2018	Adjustments	Adjusted 2018	2019	2020	2021	2022	2023	Unscheduled	Total
<b>WATER CAPITAL IMPROVEMENT PROGRAM</b>													
<b>Water Fund (Renewals, Replacements, and Upgrades)</b>													
1	PW04	Engineering	Property on Corner of Aspen and Rouse	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
2	W03	Engineering	Annual Water Pipe Replacement Program - Design	22,500	-	22,500	22,500	22,500	22,500	22,500	22,500	-	135,000
3	W04-18	Engineering	Water Pipe Replacement 2018	1,200,000	-	1,200,000	-	-	-	-	-	-	1,200,000
4	W04-19	Engineering	Water Pipe Replacement 2019	-	-	-	1,200,000	-	-	-	-	-	1,200,000
5	W04-20	Engineering	Water Pipe Replacement 2020	-	-	-	-	1,200,000	-	-	-	-	1,200,000
6	W04-21	Engineering	Water Pipe Replacement 2021	-	-	-	-	-	1,200,000	-	-	-	1,200,000
7	W04-22	Engineering	Water Pipe Replacement 2022	-	-	-	-	-	-	1,200,000	-	-	1,200,000
8	W04-23	Engineering	Water Pipe Replacement 2023	-	-	-	-	-	-	-	1,200,000	-	1,200,000
9	GF227	Finance	ERP Replacement "Sungard Replacement/Upgrade"	-	-	-	-	-	-	-	-	333,333	333,333
10	GIS03	GIS	Asset Management Software	-	-	-	-	50,000	-	-	-	-	50,000
11	GIS04	GIS	Aerial Photography	85,000	-	85,000	-	-	85,000	-	-	-	170,000
12	GIS05	GIS	LiDAR Data Collection Equipment	75,000	-	75,000	-	-	-	-	-	-	75,000
13	GIS06	GIS	GPS System Replacement	17,500	-	17,500	17,500	-	-	-	-	-	35,000
14	GIS08	GIS	Large Format Plotter - Replacement	-	-	-	20,000	-	-	-	-	-	20,000
15	GIS12	GIS	FME Server	-	-	-	20,000	-	-	-	-	-	20,000
16	GIS11	Pubworks Ad	Computer Replacements	15,200	-	15,200	49,048	45,369	30,125	59,231	52,291	-	251,264
17	PW04	Public Works	Public Works Shops Master Plan	-	-	-	20,000	-	-	-	-	-	20,000
18	PW05	Public Works	Public Works Shops Facility Construction	-	-	-	-	670,000	-	-	-	-	670,000
19	GIS13	SCADA	Vertical Asset Risk Assessment (Phase 2)	-	-	-	-	-	-	-	-	85,000	85,000
20	GIS14	SCADA	Vertical Asset Risk Assessment (Phase 1)	-	-	-	-	-	-	-	-	20,000	20,000
21	GIS14	SCADA	SCADA Upgrades and Improvements	-	-	-	-	-	-	2,100,000	-	-	2,100,000
22	GIS15	SCADA	SCADA Master Plan	150,000	-	150,000	-	-	-	-	-	-	150,000
23	GIS15	SCADA	GIS Field Vehicle Replacement	-	-	-	26,000	-	-	-	-	-	26,000
24	W66	SCADA	Meters, Transducers, and Communications (Replacement SCADA Radio and Strap On Flow Meter)	10,000	-	10,000	10,000	10,000	10,000	10,000	10,000	-	60,000
25	WC01	Water Conservation	Landscape Architect Medians and Boulevards	45,000	-	45,000	-	-	-	-	-	-	45,000
26	WC02	Water Conservation	Meter Software Subscription	60,000	-	60,000	36,000	36,000	36,000	36,000	36,000	-	240,000
27	WC03	Water Conservation	Municipal Watershed Data Collection	-	-	-	50,000	-	-	-	-	-	50,000
28	WC04	Water Conservation	Drought Tolerant Demonstration Garden	45,000	-	45,000	-	-	-	-	-	-	45,000
29	WIF39	Water Impact Fees	Sourdough Transmission Main – Phase 1	310,000	-	310,000	-	-	-	-	-	-	310,000
30	WIF40	Water Impact Fees	Sourdough Transmission Main – Phase 2	-	-	-	-	480,000	-	-	-	-	480,000
31	WIF45	Water Impact Fees	Debt Service for Borrowing - Transmission Main	-	-	-	-	-	30,000	30,000	30,000	380,000	470,000
32	W47	Water Ops	Replace #2647 - 1998 1/2 Ton Chevy Pickup	-	-	-	-	-	27,000	-	-	-	27,000
33	W49	Water Ops	Replace #3078 - 2002 1/2 Ton Chevy Pickup	-	-	-	-	-	-	27,000	-	-	27,000
34	W51	Water Ops	Replace #2529 - 1997 1 Ton Chevy Truck/Valve Truck	45,000	-	45,000	-	-	-	-	-	-	45,000
35	W68	Water Ops	Wheeled Excavator	-	-	-	-	-	-	-	-	151,000	151,000
36	W69	Water Ops	Water System Condition Assessment	100,000	-	100,000	-	100,000	-	100,000	-	-	300,000
37	W70	Water Ops	North 5038 Zone Feed - New Source of Supply	-	-	-	-	66,880	-	-	-	-	66,880
38	W71	Water Ops	PRV Phase 2 - Automation and Instrumentation Upgrades	-	-	-	-	-	-	6,710,000	-	-	6,710,000
39	W72	Water Ops	PRV Phase 1 - Mechanical and Structural Upgrades	-	-	-	1,750,000	-	-	-	-	-	1,750,000
40	W73	Water Ops	PRV Abandonments (Approximately 6 Sites)	-	-	-	-	-	-	-	-	510,106	510,106
41	W74	Water Ops	Pear St. Booster Station Upgrade	547,000	-	547,000	-	-	-	-	-	-	547,000
42	W75	Water Ops	Lead Service Line Replacement	200,000	-	200,000	200,000	-	-	-	-	-	400,000
43	W85	Water Ops	South University District 12 <sup>th</sup> Water Main	-	-	-	296,509	-	-	-	-	-	296,509
44	W56	WTP	WTP Facility R&R	40,000	-	40,000	-	40,000	40,000	40,000	40,000	-	240,000
45	W57	WTP	WTP Facility Engineering and Optimization	20,000	-	20,000	20,000	20,000	20,000	20,000	20,000	-	120,000
46	W58	WTP	Module Replace Fund	50,000	-	50,000	50,000	50,000	50,000	50,000	50,000	-	300,000
47	W59	WTP	Replace #1422 - 1992 Toyota Pickup	30,000	-	30,000	-	-	-	-	-	-	30,000
48	W62	WTP	Replace #3446 - WTP GMC Sierra Pickup	-	-	-	-	45,000	-	-	-	-	45,000
49	W63	WTP	Sourdough Watershed Fuel Reduction	-	-	-	400,000	-	-	-	-	-	400,000
50	W77	WTP	Control Server Replacement	25,000	-	25,000	-	-	-	-	-	-	25,000
51	W78	WTP	Hilltop Tank Inspection and Mixing System	-	-	-	130,000	-	-	-	-	-	130,000
52	W79	WTP	Hyalite Dam and Reservoir Optimization Improvements	-	-	-	-	-	4,000,000	-	-	-	4,000,000
53	W80	WTP	Watershed and Reservoir Optimization Study	150,000	-	150,000	-	-	-	-	-	-	150,000
54	W81	WTP	Communications Tower at the Sourdough Reservoir.	25,000	-	25,000	-	-	-	-	-	-	25,000
55	W82	WTP	Lyman Transmission Main Condition Assessment	150,000	-	150,000	-	-	-	-	-	-	150,000
56	W83	WTP	Sourdough Intake Improvements	-	-	-	-	-	-	-	-	2,000,000	2,000,000
57	W84	WTP	Sourdough Tank Inspection and Improvements	-	-	-	-	600,000	-	-	-	-	600,000

Table 2-2

City of Bozeman, Montana  
Water Impact Fee Study

Multi-Year Estimated Capital Improvement Program Summary

Line No.	Project ID	Department	Description	Projected Fiscal Year Ending September 30,								Total		
				Budgeted 2018	Adjustments	Adjusted 2018	2019	2020	2021	2022	2023		Unscheduled	
58	W86	WTP	Sourdough Diversion Cleanout	-	-	-	25,000	-	-	-	-	-	-	25,000
59	W87	WTP	Lyman Tank and Transmission Main Design	-	-	-	500,000	-	-	-	-	-	-	500,000
60	W88	WTP	Lyman Tank and Transmission Main Construction	-	-	-	-	-	10,000,000	-	-	-	-	10,000,000
61			Subtotal - Water Fund (Renewals, Replacements, and Upgrades)	\$ 3,517,200	\$ -	\$ 3,517,200	\$ 4,882,557	\$ 3,435,749	\$ 15,550,625	\$ 10,404,731	\$ 1,460,791	\$ 3,479,439	\$ -	\$ 42,731,092
			<b>Water Impact Fees (Growth Projects)</b>											
62	WIF05	Water Impact Fees	West Transmission Main - Phase 1 Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,006,293	\$ 28,006,293
63	WIF14	Water Impact Fees	Loan Debt Service - WTP 5.3MG Concrete Water Storage Reservoir	600,000	-	600,000	600,000	600,000	600,000	600,000	600,000	-	6,800,000	9,800,000
64	WIF21	Water Impact Fees	S 11th 12" Water Main Extension	-	-	-	136,010	-	-	-	-	-	-	136,010
65	WIF25	Water Impact Fees	Davis 12" Water Main and Valley Center 16" Water Main Extension	-	-	-	-	725,729	-	-	-	-	-	725,729
66	WIF27	Water Impact Fees	5126 West Sourdough Reservoir 1	-	-	-	-	-	-	-	-	-	9,757,500	9,757,500
67	WIF28	Water Impact Fees	5126 West Sourdough Reservoir 1 Siting	-	-	-	-	-	350,000	-	-	-	-	350,000
68	WIF30	Water Impact Fees	East Transmission Main	-	-	-	-	-	-	-	-	-	7,167,372	7,167,372
69	WIF31	Water Impact Fees	Groundwater Test Well	400,000	-	400,000	-	-	-	-	-	-	-	400,000
70	WIF32	Water Impact Fees	Groundwater Wellfield and Transmission Construction	-	-	-	-	-	8,000,000	-	-	-	-	8,000,000
71	WIF33	Water Impact Fees	Groundwater Wellfield and Transmission Main Design	-	-	-	500,000	-	-	-	-	-	-	500,000
72	WIF36	Water Impact Fees	West Transmission Main Planning Study	-	-	-	-	-	-	-	-	-	400,000	400,000
73	WIF37	Water Impact Fees	Sourdough Canyon Natural Storage - Planning and Design	-	-	-	-	150,000	-	-	-	-	350,000	500,000
74	WIF38	Water Impact Fees	Sourdough Canyon Natural Storage Construction	-	-	-	-	-	-	-	-	-	8,000,000	8,000,000
75	WIF39	Water Impact Fees	Sourdough Transmission Main - Phase 1	2,790,000	-	2,790,000	-	-	-	-	-	-	-	2,790,000
76	WIF40	Water Impact Fees	Sourdough Transmission Main - Phase 2	-	-	-	-	4,320,000	-	-	-	-	-	4,320,000
77	WIF41	Water Impact Fees	West Transmission Main - Phase 1 Design	-	-	-	-	-	-	-	-	-	2,907,235	2,907,235
78	WIF42	Water Impact Fees	West Transmission Main - Phases 2-5 Design and Construction	-	-	-	-	-	-	-	-	-	61,669,396	61,669,396
79	WIF43	Water Impact Fees	Debt Service for Borrowing - Wellfield	-	-	-	-	-	-	1,000,000	1,000,000	10,800,000	-	12,800,000
78	WIF45	Water Impact Fees	Debt Service for Borrowing - Transmission Main	-	-	-	-	-	305,000	305,000	305,000	3,445,000	-	4,360,000
79	WIF46	Water Impact Fees	Water Main Oversizing, Oak St and Ryun Sun Way	-	-	-	107,000	-	-	-	-	-	-	107,000
80	WIF47	Water Impact Fees	Graf and S. 27th Water Transmission Main Oversizing	-	-	-	-	150,000	-	-	-	-	-	150,000
80	WIF48	Water Impact Fees	4975 Southwest Reservoir 1	-	-	-	-	-	-	-	-	-	9,757,500	9,757,500
81			Subtotal - Water Impact Fees (Growth Projects)	\$ 3,790,000	\$ -	\$ 3,790,000	\$ 1,343,010	\$ 5,945,729	\$ 9,255,000	\$ 1,905,000	\$ 1,305,000	\$ 149,060,296	\$ -	\$ 172,604,035
82			<b>TOTAL WATER CAPITAL IMPROVEMENT PROGRAM</b>	<u>\$ 7,307,200</u>	<u>\$ -</u>	<u>\$ 7,307,200</u>	<u>\$ 6,225,567</u>	<u>\$ 9,381,478</u>	<u>\$ 24,805,625</u>	<u>\$ 12,309,731</u>	<u>\$ 2,765,791</u>	<u>\$ 152,539,735</u>	<u>\$ -</u>	<u>\$ 215,335,127</u>



Table 2-3

City of Bozeman, Montana  
Water Impact Fee Study

Summary of Capital Improvement Program By Plant Function

Line No.	Project ID	Project Description	Estimated Total Capital Cost [1]	Adjustments to	Adjustments to	Adjustments to	Adjustments to	Adjustments to	Net Amount For Future Expenditures	Allocation Reference	Functional Category		
				Remove General-Related Project Costs [2]	Remove Debt Service Placeholders [3]	Remove Project Costs Considered 100% Allocable to Existing Users	Remove Project Costs to Be Paid in Full By Developers	Remove Project Costs to Be Paid in Full By Grants			Supply and Treatment	Storage, Pumping, and Transmission	Distribution
<b>WATER CAPITAL IMPROVEMENT PROGRAM</b>													
<b>Water Fund (Renewals, Replacements, and Upgrades)</b>													
1	PW04	Property on Corner of Aspen and Rouse	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000	Distribution	\$0	\$0	\$100,000
2	W03	Annual Water Pipe Replacement Program- Design	135,000	0	0	0	0	0	135,000	W-TR-DistWeight	0	49,681	85,319
3	W04-18	Water Pipe Replacement 2018	1,200,000	0	0	0	0	0	1,200,000	W-TR-DistWeight	0	441,606	758,394
4	W04-19	Water Pipe Replacement 2019	1,200,000	0	0	0	0	0	1,200,000	W-TR-DistWeight	0	441,606	758,394
5	W04-20	Water Pipe Replacement 2020	1,200,000	0	0	0	0	0	1,200,000	W-TR-DistWeight	0	441,606	758,394
6	W04-21	Water Pipe Replacement 2021	1,200,000	0	0	0	0	0	1,200,000	W-TR-DistWeight	0	441,606	758,394
7	W04-22	Water Pipe Replacement 2022	1,200,000	0	0	0	0	0	1,200,000	W-TR-DistWeight	0	441,606	758,394
8	W04-23	Water Pipe Replacement 2023	1,200,000	0	0	0	0	0	1,200,000	W-TR-DistWeight	0	441,606	758,394
9	GF227	ERP Replacement "Sungard Replacement/Upgrade"	333,333	0	0	0	0	0	333,333	W-Assets	70,875	102,926	159,532
10	GIS03	Asset Management Software	50,000	0	0	0	0	0	50,000	W-Assets	10,631	15,439	23,930
11	GIS04	Aerial Photography	170,000	(170,000)	0	0	0	0	-	N/A	0	0	0
12	GIS05	LiDAR Data Collection Equipment	75,000	(75,000)	0	0	0	0	-	N/A	0	0	0
13	GIS06	GPS System Replacement	35,000	(35,000)	0	0	0	0	-	N/A	0	0	0
14	GIS08	Large Format Plotter - Replacement	20,000	(20,000)	0	0	0	0	-	N/A	0	0	0
15	GIS12	FME Server	20,000	(20,000)	0	0	0	0	-	N/A	0	0	0
16	GIS11	Computer Replacements	251,264	(251,264)	0	0	0	0	-	N/A	0	0	0
17	PW04	Public Works Shops Master Plan	20,000	(20,000)	0	0	0	0	-	N/A	0	0	0
18	PW05	Public Works Shops Facility Construction	670,000	0	0	0	0	0	670,000	Distribution	0	0	670,000
19	GIS13	Vertical Asset Risk Assessment (Phase 2)	85,000	(85,000)	0	0	0	0	-	N/A	0	0	0
20	GIS14	Vertical Asset Risk Assessment (Phase 1)	20,000	(20,000)	0	0	0	0	-	N/A	0	0	0
21	GIS14	SCADA Upgrades and Improvements	2,100,000	0	0	0	0	0	2,100,000	W-Assets	446,511	648,434	1,005,054
22	GIS15	SCADA Master Plan	150,000	(150,000)	0	0	0	0	-	N/A	0	0	0
23	GIS15	GIS Field Vehicle Replacement	26,000	(26,000)	0	0	0	0	-	N/A	0	0	0
24	W66	Meters, Transducers, and Communications (Replacement SCADA Radio and Strap On Flow Meter)	60,000	0	0	(60,000)	0	0	-	N/A	0	0	0
25	WC01	Landscape Architect Medians and Boulevards	45,000	(45,000)	0	0	0	0	-	N/A	0	0	0
26	WC02	Meter Software Subscription	240,000	0	0	0	0	0	240,000	Distribution	0	0	240,000
27	WC03	Municipal Watershed Data Collection	50,000	(50,000)	0	0	0	0	-	N/A	0	0	0
28	WC04	Drought Tolerant Demonstration Garden	45,000	(45,000)	0	0	0	0	-	N/A	0	0	0
29	WIF39	Sourdough Transmission Main – Phase 1	310,000	0	0	0	0	0	310,000	Transmission	0	310,000	0
30	WIF40	Sourdough Transmission Main – Phase 2	480,000	0	0	0	0	0	480,000	Transmission	0	480,000	0
31	WIF45	Debt Service for Borrowing- Transmission Main	470,000	0	(470,000)	0	0	0	-	N/A	0	0	0
32	W47	Replace #2647 - 1998 1/2 Ton Chevy Pickup	27,000	(27,000)	0	0	0	0	-	N/A	0	0	0
33	W49	Replace #3078 - 2002 1/2 Ton Chevy Pickup	27,000	(27,000)	0	0	0	0	-	N/A	0	0	0
34	W51	Replace #2529 - 1997 1 Ton Chevy Truck/Valve Truck	45,000	(45,000)	0	0	0	0	-	N/A	0	0	0
35	W68	Wheeled Excavator	151,000	(151,000)	0	0	0	0	-	N/A	0	0	0
36	W69	Water System Condition Assessment	300,000	(300,000)	0	0	0	0	-	N/A	0	0	0
37	W70	North 5038 Zone Feed - New Source of Supply	66,880	0	0	0	0	0	66,880	Treatment	66,880	0	0
38	W71	PRV Phase 2 - Automation and Instrumentation Upgrades	6,710,000	0	0	0	0	0	6,710,000	Transmission	0	6,710,000	0
39	W72	PRV Phase 1 - Mechanical and Structural Upgrades	1,750,000	0	0	0	0	0	1,750,000	Transmission	0	1,750,000	0
40	W73	PRV Abandonments (Approximately 6 Sites)	510,106	(510,106)	0	0	0	0	-	N/A	0	0	0
41	W74	Pear St. Booster Station Upgrade	547,000	0	0	0	0	0	547,000	Transmission	0	547,000	0
42	W75	Lead Service Line Replacement	400,000	0	0	0	0	0	400,000	Distribution	0	0	400,000
43	W85	South University District 12" Water Main	296,509	0	0	0	0	0	296,509	Transmission	0	296,509	0
44	W56	WTP Facility R&R	240,000	0	0	(240,000)	0	0	-	N/A	0	0	0
45	W57	WTP Facility Engineering and Optimization	120,000	(120,000)	0	0	0	0	-	N/A	0	0	0
46	W58	Module Replace Fund	300,000	0	0	(300,000)	0	0	-	N/A	0	0	0
47	W59	Replace #1422 - 1992 Toyota Pickup	30,000	(30,000)	0	0	0	0	-	N/A	0	0	0
48	W62	Replace #3446 - WTP GMC Sierra Pickup	45,000	(45,000)	0	0	0	0	-	N/A	0	0	0
49	W63	Sourdough Watershed Fuel Reduction	400,000	0	0	0	0	(400,000)	-	N/A	0	0	0
50	W77	Control Server Replacement	25,000	(25,000)	0	0	0	0	-	N/A	0	0	0

Table 2-3

City of Bozeman, Montana  
Water Impact Fee Study

Summary of Capital Improvement Program By Plant Function

Line No.	Project ID	Project Description	Estimated Total Capital Cost [1]	Adjustments to Remove General-Related Project Costs [2]	Adjustments to Remove Debt Service Placeholders [3]	Adjustments to Remove Project Costs Considered 100% Allocable to Existing Users	Adjustments to Remove Project Costs to Be Paid in Full By Developers	Adjustments to Remove Project Costs to Be Paid in Full By Grants	Net Amount For Future Expenditures	Allocation Reference	Functional Category		
											Supply and Treatment	Storage, Pumping, and Transmission	Distribution
51	W78	Hilltop Tank Inspection and Mixing System	130,000	0	0	0	0	0	130,000	Treatment	130,000	0	0
52	W79	Hyalite Dam and Reservoir Optimization Improvements	4,000,000	(4,000,000)	0	0	0	0	-	N/A	0	0	0
53	W80	Watershed and Reservoir Optimization Study	150,000	(150,000)	0	0	0	0	-	N/A	0	0	0
54	W81	Communications Tower at the Sourdough Reservoir.	25,000	(25,000)	0	0	0	0	-	N/A	0	0	0
55	W82	Lyman Transmission Main Condition Assessment	150,000	(150,000)	0	0	0	0	-	N/A	0	0	0
56	W83	Sourdough Intake Improvements	2,000,000	0	0	0	0	0	2,000,000	Treatment	2,000,000	0	0
57	W84	Sourdough Tank Inspection and Improvements	600,000	0	0	0	0	0	600,000	Treatment	600,000	0	0
58	W86	Sourdough Diversion Cleanout	25,000	(25,000)	0	0	0	0	-	N/A	0	0	0
59	W87	Lyman Tank and Transmission Main Design	500,000	0	0	0	0	0	500,000	Transmission	0	500,000	0
60	W88	Lyman Tank and Transmission Main Construction	10,000,000	0	0	0	0	0	10,000,000	Transmission	0	10,000,000	0
61		Subtotal - Water Fund (Renewals, Replacements, and Upgrades)	\$42,731,092	(\$6,642,370)	(\$470,000)	(\$600,000)	\$0	(\$400,000)	\$34,618,722		\$3,324,897	\$24,059,626	\$7,234,198
		<b>Water Impact Fees (Growth Projects)</b>											
62	WIF05	West Transmission Main- Phase 1 Construction	\$28,006,293	\$0	\$0	\$0	\$0	\$0	\$28,006,293	Transmission	\$0	\$28,006,293	\$0
63	WIF14	Loan Debt Service - WTP 5.3MG Concrete Water Storage Reservoir	9,800,000	0	(9,800,000)	0	0	0	-	N/A	0	0	0
64	WIF21	S 11th 12" Water Main Extension	136,010	0	0	0	0	0	136,010	Transmission	0	136,010	0
65	WIF25	Davis 12" Water Main and Valley Center 16" Water Main Extension	725,729	0	0	0	0	0	725,729	Transmission	0	725,729	0
66	WIF27	5126 West Sourdough Reservoir 1	9,757,500	0	0	0	0	0	9,757,500	Transmission	0	9,757,500	0
67	WIF28	5126 West Sourdough Reservoir 1 Siting	350,000	0	0	0	0	0	350,000	Transmission	0	350,000	0
68	WIF30	East Transmission Main	7,167,372	0	0	0	0	0	7,167,372	Transmission	0	7,167,372	0
69	WIF31	Groundwater Test Well	400,000	0	0	0	0	0	400,000	Treatment	400,000	0	0
70	WIF32	Groundwater Wellfield and Transmission Construction	8,000,000	0	0	0	0	0	8,000,000	Treatment	8,000,000	0	0
71	WIF33	Groundwater Wellfield and Transmission Main Design	500,000	0	0	0	0	0	500,000	Treatment	500,000	0	0
72	WIF36	West Transmission Main Planning Study	400,000	(400,000)	0	0	0	0	-	N/A	0	0	0
73	WIF37	Sourdough Canyon Natural Storage- Planning and Design	500,000	0	0	0	0	0	500,000	Treatment	500,000	0	0
74	WIF38	Sourdough Canyon Natural Storage Construction	8,000,000	0	0	0	0	0	8,000,000	Treatment	8,000,000	0	0
75	WIF39	Sourdough Transmission Main – Phase 1	2,790,000	0	0	0	0	0	2,790,000	Transmission	0	2,790,000	0
76	WIF40	Sourdough Transmission Main – Phase 2	4,320,000	0	0	0	0	0	4,320,000	Transmission	0	4,320,000	0
77	WIF41	West Transmission Main- Phase 1 Design	2,907,235	0	0	0	0	0	2,907,235	Transmission	0	2,907,235	0
78	WIF42	West Transmission Main- Phases 2-5 Design and Construction	61,669,396	0	0	0	(61,669,396)	0	-	N/A	0	0	0
79	WIF43	Debt Service for Borrowing- Wellfield	12,800,000	0	(12,800,000)	0	0	0	-	N/A	0	0	0
80	WIF45	Debt Service for Borrowing - Transmission Main	4,360,000	0	(4,360,000)	0	0	0	-	N/A	0	0	0
81	WIF46	Water Main Oversizing, Oak St and Ryun Sun Way	107,000	0	0	0	0	0	107,000	Transmission	0	107,000	0
82	WIF47	Graf and S. 27th Water Transmission Main Oversizing	150,000	0	0	0	0	0	150,000	Transmission	0	150,000	0
83	WIF48	4975 Southwest Reservoir 1	9,757,500	0	0	0	0	0	9,757,500	Transmission	0	9,757,500	0
84		Subtotal - Water Impact Fees (Growth Projects)	\$172,604,035	(\$400,000)	(\$26,960,000)	\$0	(\$61,669,396)	\$0	\$83,574,639		\$17,400,000	\$66,174,639	\$0
85		<b>TOTAL WATER CAPITAL IMPROVEMENT PROGRAM</b>	<b>\$215,335,127</b>	<b>(\$7,042,370)</b>	<b>(\$27,430,000)</b>	<b>(\$600,000)</b>	<b>(\$61,669,396)</b>	<b>(\$400,000)</b>	<b>\$118,193,361</b>		<b>\$20,724,897</b>	<b>\$90,234,265</b>	<b>\$7,234,198</b>

Footnotes:

- [1] Amounts reflect total cost as contained in the multi-year capital improvement program provided by the City.
- [2] Adjustments to exclude vehicles, equipment, studies, and items that might be classified as operating expenses.
- [3] The project costs anticipated to be financed with debt are reflected under other project ID's.

Table 2-4

City of Bozeman, Montana  
Water Impact Fee Study

Summary of Capital Improvement Program Recognized in Water System Impact Fees

Line No.	Project ID	Project Description	Adjusted Project Cost [1]	Project Status	Assumed Original In-Service Date [2]	Estimated Original Cost [3]	Amount Recognized [4]			Percent to Recognize for Expansion
							New Facilities / Upgrades [5]	Expansion	Future / Direct	
<b>WATER TREATMENT PROJECTS</b>										
<b>Water Fund (Renewals, Replacements, and Upgrades)</b>										
1	GF227	ERP Replacement "Sungard Replacement/Upgrade"	\$70,875	Upgrade	1999	\$38,534	\$70,875	\$0	\$0	0.00%
2	GIS03	Asset Management Software	10,631	New	N/A	N/A	10,631	0	0	0.00%
3	W70	North 5038 Zone Feed - New Source of Supply	66,880	New	N/A	N/A	66,880	0	0	0.00%
4	W78	Hilltop Tank Inspection and Mixing System	130,000	Upgrade	1948	16,091	130,000	0	0	0.00%
5	W83	Sourdough Intake Improvements	2,000,000	Upgrade	2002	1,186,281	2,000,000	0	0	0.00%
6	W84	Sourdough Tank Inspection and Improvements	600,000	Upgrade	1957	96,428	600,000	0	0	0.00%
7		Subtotal - Water Fund (Renewals, Replacements, and Upgrades)	\$3,324,897			\$1,626,266	\$2,796,880	\$0	\$0	0.00%
<b>Water Impact Fees (Growth Projects)</b>										
8	WIF31	Groundwater Test Well	\$400,000	New	N/A	N/A	\$400,000	0	0	0.00%
9	WIF32	Groundwater Wellfield and Transmission Construction	8,000,000	New	N/A	N/A	8,000,000	0	0	0.00%
10	WIF33	Groundwater Wellfield and Transmission Main Design	500,000	New	N/A	N/A	500,000	0	0	0.00%
11	WIF37	Sourdough Canyon Natural Storage - Planning and Design	500,000	New	N/A	N/A	500,000	0	0	0.00%
12	WIF38	Sourdough Canyon Natural Storage Construction	8,000,000	New	N/A	N/A	8,000,000	0	0	0.00%
13		Subtotal - Water Impact Fees (Growth Projects)	\$17,400,000			\$0	\$17,400,000	\$0	\$0	0.00%
14		Total Water Treatment Projects	\$20,724,897			\$1,626,266	\$20,196,880	\$0	\$0	0.00%
<b>WATER TRANSMISSION PROJECTS</b>										
<b>Water Fund (Renewals, Replacements, and Upgrades)</b>										
15	W03	Annual Water Pipe Replacement Program - Design	\$49,681	Replacement	1948	\$4,490	\$49,681	\$0	\$0	0.00%
16	W04-18	Water Pipe Replacement 2018	441,606	Replacement	1948	39,913	441,606	0	0	0.00%
17	W04-19	Water Pipe Replacement 2019	441,606	Replacement	1948	39,913	441,606	0	0	0.00%
18	W04-20	Water Pipe Replacement 2020	441,606	Replacement	1948	39,913	441,606	0	0	0.00%
19	W04-21	Water Pipe Replacement 2021	441,606	Replacement	1948	39,913	441,606	0	0	0.00%
20	W04-22	Water Pipe Replacement 2022	441,606	Replacement	1948	39,913	441,606	0	0	0.00%
21	W04-23	Water Pipe Replacement 2023	441,606	Replacement	1948	39,913	441,606	0	0	0.00%
22	GF227	ERP Replacement "Sungard Replacement/Upgrade"	102,926	Upgrade	1999	51,056	102,926	0	0	0.00%
23	GIS03	Asset Management Software	15,439	New	N/A	N/A	15,439	0	0	0.00%
24	GIS14	SCADA Upgrades and Improvements	648,434	Upgrade	2003	367,607	648,434	0	0	0.00%
25	WIF39	Sourdough Transmission Main – Phase 1	310,000	Reliability	N/A	N/A	310,000	0	0	0.00%
26	WIF40	Sourdough Transmission Main – Phase 2	480,000	Reliability	N/A	N/A	480,000	0	0	0.00%
27	W71	PRV Phase 2 - Automation and Instrumentation Upgrades	6,710,000	Upgrade	2008	4,495,053	6,710,000	0	0	0.00%
28	W72	PRV Phase 1 - Mechanical and Structural Upgrades	1,750,000	Upgrade	2008	1,172,331	1,750,000	0	0	0.00%
29	W74	Pear St. Booster Station Upgrade	547,000	Upgrade	1958	69,032	547,000	0	0	0.00%
30	W85	South University District 12" Water Main	296,509	New	N/A	N/A	296,509	0	0	0.00%
31	W87	Lyman Tank and Transmission Main Design	500,000	Upgrade	1988	171,792	500,000	0	0	0.00%
32	W88	Lyman Tank and Transmission Main Construction	10,000,000	Upgrade	1988	3,435,840	10,000,000	0	0	0.00%
33		Subtotal - Water Fund (Renewals, Replacements, and Upgrades)	\$24,059,626			\$10,006,677	\$20,593,509	\$0	\$0	0.00%

Table 2-4

City of Bozeman, Montana  
Water Impact Fee Study

**Summary of Capital Improvement Program Recognized in Water System Impact Fees**

Line No.	Project ID	Project Description	Adjusted Project Cost [1]	Project Status	Assumed Original In-Service Date [2]	Estimated Original Cost [3]	Amount Recognized [4]			Percent to Recognize for Expansion
							New Facilities / Upgrades [5]	Expansion	Future / Direct	
<b>Water Impact Fees (Growth Projects)</b>										
34	WIF05	West Transmission Main - Phase 1 Construction	\$28,006,293	New	N/A	N/A	0	\$28,006,293	\$0	100.00%
35	WIF21	S 11th 12" Water Main Extension	136,010	New	N/A	N/A	0	136,010	0	100.00%
36	WIF25	Davis 12" Water Main and Valley Center 16" Water Main Extension	725,729	New	N/A	N/A	0	725,729	0	100.00%
37	WIF27	5126 West Sourdough Reservoir 1	9,757,500	New	N/A	N/A	0	9,757,500	0	100.00%
38	WIF28	5126 West Sourdough Reservoir 1 Siting	350,000	New	N/A	N/A	0	350,000	0	100.00%
39	WIF30	East Transmission Main	7,167,372	New	N/A	N/A	0	7,167,372	0	100.00%
40	WIF39	Sourdough Transmission Main – Phase 1	2,790,000	New	N/A	N/A	0	2,790,000	0	100.00%
41	WIF40	Sourdough Transmission Main – Phase 2	4,320,000	New	N/A	N/A	0	4,320,000	0	100.00%
42	WIF41	West Transmission Main - Phase 1 Design	2,907,235	New	N/A	N/A	0	2,907,235	0	100.00%
43	WIF46	Water Main Oversizing, Oak St and Ryun Sun Way	107,000	New	N/A	N/A	0	107,000	0	100.00%
44	WIF47	Graf and S. 27th Water Transmission Main Oversizing	150,000	New	N/A	N/A	0	150,000	0	100.00%
45	WIF48	4975 Southwest Reservoir 1	9,757,500	New	N/A	N/A	0	9,757,500	0	100.00%
46		Subtotal - Water Impact Fees (Growth Projects)	\$66,174,639			\$0	\$0	\$66,174,639	\$0	100.00%
47		Total Water Transmission Projects	\$90,234,265			\$10,006,677	\$20,593,509	\$66,174,639	\$0	73.34%
48		TOTAL WATER PROJECTS	\$110,959,163			\$11,632,942	\$40,790,389	\$66,174,639	\$0	59.64%

Footnotes on following page.

Table 2-4

City of Bozeman, Montana  
Water Impact Fee Study

Summary of Capital Improvement Program Recognized in Water System Impact Fees

Footnotes:

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- [1] Amounts shown are derived from Table 2-3 and do not include any capital expenditures classified as distribution-related or collection-related.
- [2] Original in-service date is based on discussions with City staff regarding the approximate age of assets being upgraded or replaced.
- [3] Amount shown was determined by discounting the projected (replacement) cost by an inflationary factor as measured by the Engineering News-Record (ENR) Construction Cost Index applied to the estimated number of years in service.
- [4] For any replacement projects recognized in fee, amount derived by subtracting the estimated original cost from the new project cost (net asset addition).
- [5] Represents asset additions to be installed by the City that will upgrade and improve facilities. Such assets do not represent a replacement.

Note: With respect to capital projects associated with plant upgrades, the following were assumed:

**New** = Project designated for capacity expansion only.

**Upgrade** = Project designated to improve existing capacity facilities.

**Replacement** = Project which removes original asset from service but necessary for providing service to City customers.

**Relocate** = Project which removes original asset from service, and usually replaces it with an asset designated for capacity expansion.

**Redundancy** = Project which provides redundancy to existing capacity and not an increase in capacity to serve new growth.

**Reliability** = Project which provides additional reliability to existing capacity and not an increase in capacity to serve new growth.

**Future** = Reflects project which extends beyond the planning horizon in this report.

**System** = Project that benefits existing, expansion and future customers.

**Direct** = Reflects projects which directly relate to specific customer base and not System cost.

Table 2-5

City of Bozeman, Montana  
Water Impact Fee Study

Development of Water System Impact Fee

Line No.	Description	Amount
	Total Estimated Cost of Existing Water Production and Treatment Facilities:	
1	Existing Facilities [1]	\$ 49,365,275
2	Additional Costs Capitalized to Plant in Service [2]	20,196,880
3	Less Anticipated Retirements [3]	(1,626,266)
4	Less Grant Funds and Other Contributions [4]	(2,154,753)
5	Subtotal Water Production and Treatment Facilities	\$ 65,781,136
6	Estimated Capacity of Plants (MGD) - Average Daily Flow [5]	12.259
7	EDU Factor - GPD	222
8	Estimated EDUs to be Served by Existing Facilities	55,221
9	Percent Remaining Capacity of Existing Facilities [6]	53.29%
10	Allocation of Existing Facilities to Incremental Growth	\$ 35,055,215
11	Rate per EDU Allocable to Water Production/Treatment Facilities	\$ 1,191.24
12	Less Debt Service Credit	(184)
13	Adjusted Rate per EDU Allocable to Water Production/Treatment Facilities	\$ 1,007.24
14	Administrative Allowance @ 5.0%	\$ 50.36
15	Rate per EDU Associated with Existing Facilities with Administrative Allowance	\$ 1,057.60
16	Rounded Rate per EDU Associated with Existing Facilities with Administrative Allowance	\$ 1,057.00
17	Cost per Gallon Associated with Existing Facilities Without Administrative Allowance	\$ 5.37
18	Cost per Gallon Associated with Existing Facilities With Administrative Allowance	\$ 5.63
19	Cost per Gallon Associated with Existing Facilities Without Administrative Allowance Less Debt Service Credit	\$ 4.54
20	Cost per Gallon Associated with Existing Facilities With Administrative Allowance Less Debt Service Credit	\$ 4.76
	Major Transmission System: [7]	
21	Existing Facilities [8]	\$ 71,689,435
22	Additional Costs Capitalized to Plant in Service [9]	86,768,148
23	Less Anticipated Retirements [10]	(10,006,677)
24	Less Grant Funds and Other Contributions [4]	(60,239,398)
25	Total Major Transmission Facility Costs	\$ 88,211,509
26	Estimated Plant Capacity-Total Service Area (MGD) (Average Daily Flow) [11]	12.259
27	EDU Factor - GPD	222
28	Estimated EDUs served by Transmission Facilities [12]	55,221
29	Rate per EDU of Major Transmission Facilities	\$ 1,597.43
30	Less Debt Service Credit	(45)
31	Adjusted Rate per EDU Allocable to Major Transmission Facilities	\$ 1,552.43
32	Administrative Fee @ 0.0%	\$ 77.62
33	Rate per EDU Associated with Major Transmission Facilities with Administrative Allowance	\$ 1,630.05
34	Rounded Rate per EDU Associated with Major Transmission Facilities with Administrative Allowance	\$ 1,630.00
35	Cost per Gallon of Major Transmission Facilities Without Administrative Allowance	\$ 7.20
36	Cost per Gallon of Major Transmission Facilities With Administrative Allowance	\$ 7.56
37	Cost per Gallon of Major Transmission Facilities Without Administrative Allowance Less Debt Service Credit	\$ 6.99
38	Cost per Gallon of Major Transmission Facilities With Administrative Allowance Less Debt Service Credit	\$ 7.34
39	Combined Cost per Gallon Without Administrative Allowance	\$ 12.56
40	Combined Cost per Gallon With Administrative Allowance	\$ 13.19
41	Combined Cost per Gallon Without Administrative Allowance Less Debt Service Credit	\$ 11.53
42	Combined Cost per Gallon With Administrative Allowance Less Debt Service Credit	\$ 12.10
43	Combined Rate per EDU	\$ 2,687.00

MGD = Million-Gallons-per-Day  
EDU = Equivalent Dwelling Unit  
GPD = Gallons per Day

Footnotes on following page.

Table 2-5

City of Bozeman, Montana  
Water Impact Fee Study

Development of Water System Impact Fee

Footnotes:

- [1] Amount reflects estimated City-owned water production and treatment assets currently in service based on utility asset records provided by the City. Amounts derived from Appendix A, Line 742.
- [2] Amount shown derived from Table 2-4, Line 14; reflects recognized additions to the water production and treatment facilities where applicable.
- [3] Amount derived from Table 2-4, Line 14 and reflects estimated treatment utility asset retirements due to imposition of the capital improvement plan of the City's utility system.
- [4] Reflects adjustments for capital costs funded from contributed capital. Such costs were not included in the impact fee calculations.
- [5] Amount shown derived from Table 2-1, Line 7.
- [6] Amount shown derived from Table 2-1, Line 10.
- [7] Amounts do not include the estimated costs of retail on-site capital expenditures such as meters, hydrants, services, and on-site (local) distribution utility plant facilities or general plant assets (vehicles, equipment, etc.) or general transmission lines; such costs are: i) generally provided by the developer or owners of property which specifically benefit from such facilities; or ii) funded by a separate and distinct fee (e.g., meter installation charge).
- [8] Amount reflects cost of water transmission and storage utility plant in service based on utility asset records provided by the City. Amounts derived from Appendix A, Line 742.
- [9] Amount derived from Table 2-4, Line 47; reflects net recognized additions to the water transmission facilities where applicable.
- [10] Amount derived from Table 2-4, Line 47 and reflects estimated transmission utility asset retirements due to imposition of the capital improvement plan of the City's utility system.
- [11] Reflects total estimated plant capacity for the forecast period for the water service area based on capacity planning estimates. Amount calculated as follows:

	Amount
Existing Capacity - City (MGD-ADF)	12.259
Capacity to Be Added During Forecast Period: FY 2018 - 2023 (MGD-ADF)	0.000
Total Projected Capacity Needs	12.259

**Table 2-6**

**City of Bozeman, Montana  
Water Impact Fee Study**

**Calculation of Debt Service Credit - Water System**

Line No.		Fiscal Year 2017
1	Total Outstanding Debt Principal Allocable to Water System [1]	\$ 15,760,000
2	Total Gross Water Plant in Service [2]	\$ 235,843,006
3	Less Contributed and Grant-Funded Assets	<u>(162,576,464)</u>
4	Net Gross Water Plant in Service	\$ 73,266,542
	Existing Utility Plant Asset Allocation:	
	Supply and Treatment	
5	Reported Functional Assets [2]	\$ 49,365,275
6	Less Contributed and Grant-Funded Functional Assets [2]	<u>(2,154,753)</u>
7	Net Reported Functional Assets [2]	\$ 47,210,522
8	Percent of Net Gross Water Plant in Service	64.44%
	Transmission and Storage	
9	Reported Functional Assets [2]	\$ 71,689,435
10	Less Contributed and Grant-Funded Functional Assets [2]	<u>(60,239,398)</u>
11	Net Reported Functional Assets [2]	\$ 11,450,038
12	Percent of Net Gross Water Plant in Service	15.63%
	Allocated Debt Associated with Function:	
13	Supply and Treatment	\$ 10,155,220
14	Transmission	<u>2,462,960</u>
15	Total	\$ 12,618,180
16	Estimated Annual Average EDUs [3]	55,221
17	Rounded Debt Service Credit Expressed Per EDU (@ 222 gallons per day per EDU)	<u><u>\$229</u></u>
18	Debt Service Credit Per EDU - Supply and Treatment Component	\$184
19	Debt Service Credit Per EDU - Transmission Component	45

**Footnotes:**

- [1] Amount derived from Page 72 of City's Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017.
- [2] Amounts derived from Appendix A.
- [3] Based on relationship of total capacity of existing service area and the level of service assumed for a water system EDU.



**APPENDIX A**  
**CLASSIFICATION OF EXISTING**  
**WATER UTILITY SYSTEM ASSETS**

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City of Bozeman, Montana  
Water Impact Fee Study

Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adjustments [2]	Adj. Acq. Amt.	Water System					General Plant
										Supply	Treatment	Trans.	Distribution	Meters	
63	Lyman Reservoir	295810	IMP	Water Treatment Plant	PURCHASED	11/15/2002	18,468	-	18,468	18,468	-	-	-	-	-
64	Lyman Reservoir	295811	IMP	Water Treatment Plant	PURCHASED	12/15/2002	2,039	-	2,039	2,039	-	-	-	-	-
65	Lyman Reservoir	295812	IMP	Water Treatment Plant	PURCHASED	12/15/2002	2,974	-	2,974	2,974	-	-	-	-	-
66	Lyman Reservoir	295813	IMP	Water Treatment Plant	PURCHASED	12/15/2002	4,814	-	4,814	4,814	-	-	-	-	-
67	Lyman Reservoir	295814	IMP	Water Treatment Plant	PURCHASED	12/15/2002	476,583	-	476,583	476,583	-	-	-	-	-
68	Lyman Reservoir	295815	IMP	Water Treatment Plant	PURCHASED	12/15/2002	12,766	-	12,766	12,766	-	-	-	-	-
69	Lyman Reservoir	295816	IMP	Water Treatment Plant	PURCHASED	12/15/2002	2,511	-	2,511	2,511	-	-	-	-	-
70	Lyman Reservoir	295817	IMP	Water Treatment Plant	PURCHASED	1/15/2003	109,018	-	109,018	109,018	-	-	-	-	-
71	Lyman Reservoir	295818	IMP	Water Treatment Plant	PURCHASED	2/15/2003	1,906	-	1,906	1,906	-	-	-	-	-
72	Lyman Reservoir	295819	IMP	Water Treatment Plant	PURCHASED	2/15/2003	188,711	-	188,711	188,711	-	-	-	-	-
73	Lyman Reservoir	295820	IMP	Water Treatment Plant	PURCHASED	2/15/2003	24,560	-	24,560	24,560	-	-	-	-	-
74	Lyman Reservoir	295821	IMP	Water Treatment Plant	PURCHASED	3/15/2003	2,379	-	2,379	2,379	-	-	-	-	-
75	Lyman Reservoir	295822	IMP	Water Treatment Plant	PURCHASED	3/22/2003	8,285	-	8,285	8,285	-	-	-	-	-
76	Lyman Reservoir	295824	IMP	Water Treatment Plant	PURCHASED	4/15/2003	2,736	-	2,736	2,736	-	-	-	-	-
77	Lyman Reservoir	295825	IMP	Water Treatment Plant	PURCHASED	5/15/2003	2,129	-	2,129	2,129	-	-	-	-	-
78	Lyman Reservoir	295826	IMP	Water Treatment Plant	PURCHASED	5/15/2003	202,257	-	202,257	202,257	-	-	-	-	-
79	Lyman Reservoir	295827	IMP	Water Treatment Plant	PURCHASED	5/15/2003	13,401	-	13,401	13,401	-	-	-	-	-
80	Lyman Reservoir	295828	IMP	Water Treatment Plant	PURCHASED	6/15/2003	15,955	-	15,955	15,955	-	-	-	-	-
81	Lyman Reservoir	295829	IMP	Water Treatment Plant	PURCHASED	6/15/2003	3,302	-	3,302	3,302	-	-	-	-	-
82	Lyman Reservoir	295830	IMP	Water Treatment Plant	PURCHASED	6/15/2003	306,411	-	306,411	306,411	-	-	-	-	-
83	Lyman Reservoir	295831	IMP	Water Treatment Plant	PURCHASED	6/15/2003	2,272	-	2,272	2,272	-	-	-	-	-
84	Lyman Reservoir	295832	IMP	Water Treatment Plant	PURCHASED	7/28/2003	16,012	-	16,012	16,012	-	-	-	-	-
85	Lyman Reservoir	295833	IMP	Water Treatment Plant	PURCHASED	8/11/2003	11,598	-	11,598	11,598	-	-	-	-	-
86	Lyman Reservoir	295834	IMP	Water Treatment Plant	PURCHASED	8/31/2003	4,970	-	4,970	4,970	-	-	-	-	-
87	Lyman Reservoir	295836	IMP	Water Treatment Plant	PURCHASED	9/17/2003	35,649	-	35,649	35,649	-	-	-	-	-
88	Lyman Reservoir	295837	IMP	Water Treatment Plant	PURCHASED	10/15/2003	7,035	-	7,035	7,035	-	-	-	-	-
89	Lyman Reservoir	295838	IMP	Water Treatment Plant	PURCHASED	11/15/2003	59,754	-	59,754	59,754	-	-	-	-	-
90	Lyman Creek	295839	IMP	Water Treatment Plant	PURCHASED	12/15/2003	2,863	-	2,863	2,863	-	-	-	-	-
91	Lyman Reservoir	295840	IMP	Water Treatment Plant	PURCHASED	8/15/2003	1	-	1	1	-	-	-	-	-
92	Lyman Creek	295841	IMP	Water Treatment Plant	PURCHASED	8/15/2003	49,574	-	49,574	49,574	-	-	-	-	-
93	Lyman Creek	295842	IMP	Water Treatment Plant	PURCHASED	1/15/2005	30,169	-	30,169	30,169	-	-	-	-	-
94	Lyman Cr -> Hkm-Edsall:Mpe Mediation 5/3 & 8/2/06	295843	IMP	Water Treatment Plant	PURCHASED	8/18/2006	7,645	-	7,645	7,645	-	-	-	-	-
95	Lyman Creek Reservoir Settlement Agreement	295844	IMP	Water Treatment Plant	PURCHASED	1/31/2007	53,557	-	53,557	53,557	-	-	-	-	-
96	Hyalite Transmission Main	31930	IMP	Water Treatment Plant	PURCHASED	5/15/2003	36,608	-	36,608	-	-	36,608	-	-	-
97	Hyalite Main	31931	IMP	Water Treatment Plant	PURCHASED	4/24/2003	42,709	-	42,709	-	-	42,709	-	-	-
98	Hyalite Transmission Main	31932	IMP	Water Treatment Plant	PURCHASED	8/1/2003	6,251	-	6,251	-	-	6,251	-	-	-
99	Hyalite Transmission Main	31933	IMP	Water Treatment Plant	PURCHASED	9/18/2003	32,473	-	32,473	-	-	32,473	-	-	-
100	Hyalite Transmission Main	31934	IMP	Water Treatment Plant	PURCHASED	10/15/2003	32,872	-	32,872	-	-	32,872	-	-	-
101	Hyalite Transmission Main	31935	IMP	Water Treatment Plant	PURCHASED	11/15/2003	32,258	-	32,258	-	-	32,258	-	-	-
102	Hyalite Transmission	31936	IMP	Water Treatment Plant	PURCHASED	12/15/2003	47,661	-	47,661	-	-	47,661	-	-	-
103	Hyalite Transmission Main	31937	IMP	Water Treatment Plant	PURCHASED	1/15/2004	48,062	-	48,062	-	-	48,062	-	-	-
104	Hyalite Transmission Main	31938	IMP	Water Treatment Plant	PURCHASED	2/15/2004	48,145	-	48,145	-	-	48,145	-	-	-
105	Hyalite Main	31939	IMP	Water Treatment Plant	PURCHASED	3/29/2004	501	-	501	-	-	501	-	-	-
106	Hyalite Main	319310	IMP	Water Treatment Plant	PURCHASED	3/29/2004	47,536	-	47,536	-	-	47,536	-	-	-
107	Professional Engineering Services	319311	IMP	Water Treatment Plant	PURCHASED	4/21/2004	525	-	525	-	-	-	-	-	525
108	Professional Engineering Services	319312	IMP	Water Treatment Plant	PURCHASED	4/21/2004	643	-	643	-	-	-	-	-	643
109	Professional Engineering Services	319313	IMP	Water Treatment Plant	PURCHASED	5/26/2004	15,845	-	15,845	-	-	-	-	-	15,845
110	Professional Engineering Services	319314	IMP	Water Treatment Plant	PURCHASED	5/26/2004	8,593	-	8,593	-	-	-	-	-	8,593
111	Hyalite Transmission Main	319315	IMP	Water Treatment Plant	PURCHASED	6/15/2004	12,677	-	12,677	-	-	12,677	-	-	-
112	Hyalite Transmission Main	319317	IMP	Water Treatment Plant	PURCHASED	9/15/2004	6,172	-	6,172	-	-	6,172	-	-	-
113	Professional Engineering Services	319318	IMP	Water Treatment Plant	PURCHASED	12/29/2004	1,585	-	1,585	-	-	-	-	-	1,585
114	Hyalite Usfs Permit	319319	IMP	Water Treatment Plant	PURCHASED	2/15/2005	152	-	152	-	-	152	-	-	-
115	Hyalite Transmission Main	319320	IMP	Water Treatment Plant	PURCHASED	3/15/2005	23,169	-	23,169	-	-	23,169	-	-	-
116	Hyalite Transmission Main	319321	IMP	Water Treatment Plant	PURCHASED	4/15/2005	6,754	-	6,754	-	-	6,754	-	-	-
117	Hyalite Transmission Main	319322	IMP	Water Treatment Plant	PURCHASED	5/15/2005	64,415	-	64,415	-	-	64,415	-	-	-
118	Hyalite Transmission Main	319324	IMP	Water Treatment Plant	PURCHASED	5/15/2005	849,741	-	849,741	-	-	849,741	-	-	-
119	Hyalite Reservoir	319326	IMP	Water Treatment Plant	PURCHASED	6/15/2005	39,636	-	39,636	39,636	-	-	-	-	-
120	Hyalite Main	319327	IMP	Water Treatment Plant	PURCHASED	6/15/2005	852,444	-	852,444	-	-	852,444	-	-	-
121	Dlm Hyalite Prr#3 Constr Svcs Ending 7/19/05+1% Dor	319328	IMP	Water Treatment Plant	PURCHASED	7/31/2005	214,676	-	214,676	-	-	214,676	-	-	-
122	Hyalite Main:Constr Adm Svcs Thru 7/15/05 +1%Dor	319329	IMP	Water Treatment Plant	PURCHASED	7/31/2005	30,637	-	30,637	-	-	30,637	-	-	-
123	Hyalite Trans Main:Constr Admin Svcs Thru 5/18/07	319350	IMP	Water Treatment Plant	PURCHASED	5/18/2007	8,733	-	8,733	-	-	8,733	-	-	-
124	Portable Cabin(Garden Shed)	31940	IMP	Water Treatment Plant	PURCHASED	5/15/2003	7,948	-	7,948	-	-	-	-	-	7,948
125	Paving	31941	IMP	Water Treatment Plant	PURCHASED	5/15/2003	9,350	-	9,350	-	-	-	-	-	9,350
126	Lumber	31942	IMP	Water Treatment Plant	PURCHASED	6/15/2003	373	-	373	-	-	-	-	-	373

Appendix A

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Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adjustments [2]	Adj. Acq. Amt.	Water System					General Plant
										Supply	Treatment	Trans.	Distribution	Meters	
127	Range Shelter	31943	IMP	Water Treatment Plant	PURCHASED	5/15/2003	2,263	-	2,263	-	-	-	-	-	2,263
128	Range Shelter	31944	IMP	Water Treatment Plant	PURCHASED	5/15/2003	2,263	-	2,263	-	-	-	-	-	2,263
129	Range Shelter	31945	IMP	Water Treatment Plant	PURCHASED	5/15/2003	2,263	-	2,263	-	-	-	-	-	2,263
130	Range Shelter	31946	IMP	Water Treatment Plant	PURCHASED	5/15/2003	2,263	-	2,263	-	-	-	-	-	2,263
131	Sourdough Transmission Main	32121	IMP	Water Treatment Plant	PURCHASED	9/16/2003	58,117	-	58,117	-	-	58,117	-	-	-
132	Sourdough Reservoir	32122	IMP	Water Treatment Plant	PURCHASED	11/15/2003	12,176	-	12,176	12,176	-	-	-	-	-
133	Sourdough Transmission Main	32123	IMP	Water Treatment Plant	PURCHASED	12/15/2003	137,529	-	137,529	-	-	-	-	-	-
134	Sourdough Transmission Main	32124	IMP	Water Treatment Plant	PURCHASED	1/15/2004	214,598	-	214,598	-	-	214,598	-	-	-
135	Construction Services	32125	IMP	Water Treatment Plant	PURCHASED	3/18/2004	1,456	-	1,456	-	-	-	-	-	-
136	Construction Services	32126	IMP	Water Treatment Plant	PURCHASED	3/18/2004	144,102	-	144,102	-	-	144,102	-	-	-
137	Construction Services	32127	IMP	Water Treatment Plant	PURCHASED	4/7/2004	119,817	-	119,817	-	-	-	-	-	-
138	Professional Engineering Services	32129	IMP	Water Treatment Plant	PURCHASED	5/25/2004	70,325	-	70,325	-	70,325	-	-	-	-
139	Sourdough Transmission	321210	IMP	Water Treatment Plant	PURCHASED	6/15/2004	10,304	-	10,304	-	-	10,304	-	-	-
140	Usfs Permit	321212	IMP	Water Treatment Plant	PURCHASED	11/15/2004	4,142	-	4,142	-	4,142	-	-	-	-
141	Sourdough Transmission Line	321213	IMP	Water Treatment Plant	PURCHASED	1/15/2005	2,503	-	2,503	-	-	2,503	-	-	-
142	Sourdough Bypass	321214	IMP	Water Treatment Plant	PURCHASED	2/15/2005	2,000	-	2,000	-	-	2,000	-	-	-
143	Land Tract 6 Cos1103-Sourdough Plant Land:21 Acres	12210	LAN	Water Treatment Plant	PURCHASED	7/1/1998	1,095	-	1,095	-	1,095	-	-	-	-
144	Land Tract 6	12470	LAN	Water Operations	PURCHASED	7/1/1998	79,000	-	79,000	-	79,000	-	-	-	-
145	Row	319316	LAN	Water Treatment Plant	PURCHASED	7/15/2004	1,120	-	1,120	-	-	1,120	-	-	-
146	Hyalite Transmission Main	319323	LAN	Water Treatment Plant	PURCHASED	5/15/2005	27,303	-	27,303	-	-	27,303	-	-	-
147	Sourdough Improv:Wtr Rights-Nov Expds	31334	LAN	Water Operations	WTRRIGHTS	11/22/2010	1,785	-	1,785	1,785	-	-	-	-	-
148	Sourdough Improv:Wtr Rights-Dec Expds	31335	LAN	Water Operations	WTRRIGHTS	12/31/2010	1,863	-	1,863	1,863	-	-	-	-	-
149	Purchase Water Rights:100 Shares Middle Creek Wua	5081	LAN	Water Treatment Plant	WTRRIGHTS	12/1/2007	700,000	-	700,000	700,000	-	-	-	-	-
150	Middle Creek Water Users Assoc - 1St Of 2 Pmts	5082	LAN	Water Treatment Plant	WTRRIGHTS	8/22/2008	150,000	-	150,000	150,000	-	-	-	-	-
151	Middle Creek Water Users Assoc - 2Nd Of 2 Pmts	5083	LAN	Water Treatment Plant	WTRRIGHTS	1/7/2009	150,000	-	150,000	150,000	-	-	-	-	-
152	Middle Creek Water Users Assoc-50 Shares/50 Acres	5084	LAN	Water Treatment Plant	WTRRIGHTS	3/4/2010	300,000	-	300,000	300,000	-	-	-	-	-
153	Middle Creek Water Users Assoc-50 Shares/50 Acres	5085	LAN	Water Treatment Plant	WTRRIGHTS	8/10/2010	498,000	-	498,000	498,000	-	-	-	-	-
154	Middle Creek Water Users Assoc-10 Shares/10 Acres	5086	LAN	Water Treatment Plant	WTRRIGHTS	2/23/2015	55,000	-	55,000	55,000	-	-	-	-	-
155	Cisco	310238	M&E	Cisco Phone System	PURCHASED	9/15/2002	5	-	5	-	-	-	-	-	5
156	Cisco	310255	M&E	Cisco Phone System	PURCHASED	1/15/2003	230	-	230	-	-	-	-	-	230
157	Cisco	310295	M&E	Cisco Phone System	PURCHASED	2/15/2003	3	-	3	-	-	-	-	-	3
158	Cisco	3102112	M&E	Cisco Phone System	PURCHASED	5/15/2003	209	-	209	-	-	-	-	-	209
159	Software Upgrade	32128	M&E	Water Treatment Plant	PURCHASED	4/15/2004	5,000	-	5,000	-	-	-	-	-	5,000
160	Hte Click2Gov:Digital Certificate-Cx	332425	M&E	Hte Software	PURCHASED	12/1/2006	120	-	120	-	-	-	-	-	120
161	Hte Click2Gov:Core Module #20061445	332434	M&E	Hte Software	PURCHASED	12/1/2006	620	-	620	-	-	-	-	-	620
162	Hte Click2Gov:Cx Utility Billing	332441	M&E	Hte Software	PURCHASED	12/1/2006	1,390	-	1,390	-	-	-	-	-	1,390
163	Hte Click2Gov:Tax Billing Module (Sid Billing)	332450	M&E	Hte Software	PURCHASED	12/1/2006	1,938	-	1,938	-	-	-	-	-	1,938
164	Hte Click2Gov:Final Core Module Install	332467	M&E	Hte Software	PURCHASED	3/23/2007	300	-	300	-	-	-	-	-	300
165	Hte Click2Gov:Tax Ce Activation Installation	332478	M&E	Hte Software	PURCHASED	3/23/2007	163	-	163	-	-	-	-	-	163
166	Hte Click2Gov:Tax Billing+Collect Final Install	332486	M&E	Hte Software	PURCHASED	3/23/2007	225	-	225	-	-	-	-	-	225
167	Hte Click2Gov:Util Ce Activation Installation	332492	M&E	Hte Software	PURCHASED	3/23/2007	217	-	217	-	-	-	-	-	217
168	Hte Click2Gov:Util Cx Final Installation	332498	M&E	Hte Software	PURCHASED	3/23/2007	300	-	300	-	-	-	-	-	300
169	Server-Data Backup Managr:S14974.55 Split Citywide	3324143	M&E	Information Technology	PURCHASED	11/1/2007	599	-	599	-	-	-	-	-	599
170	P7-New As400 Software/Hardware	36141	M&E	City Hall:121 N.Rouse	PURCHASED	6/28/2011	5,187	-	5,187	-	-	-	-	-	5,187
171	Iseries+P7 V7Ri Os Upgrade:Sungard Srvr Operat Sys	36147	M&E	City Hall:121 N.Rouse	PURCHASED	6/6/2012	1,020	-	1,020	-	-	-	-	-	1,020
172	Water Management Software-Fathom Implement-June Ex	39920	M&E	Water Treatment Plant	PURCHASED	6/30/2017	12,000	-	12,000	-	-	-	-	-	12,000
173	Sludge Pump Wacker	13090	M&E	Water Treatment Plant	PURCHASED	7/1/1998	5,000	-	5,000	-	5,000	-	-	-	-
174	1991 Yack Trailer	13430	M&E	Water Treatment Plant	PURCHASED	6/30/2012	0	-	0	-	-	-	-	-	0
175	New Holland Mower	26300	M&E	Water Treatment Plant	PURCHASED	7/1/1998	19,540	-	19,540	-	-	-	-	-	19,540
176	1999 Utility Trailer	26940	M&E	Water Operations	PURCHASED	6/30/2012	0	-	0	-	-	-	-	-	0
177	Max Iv Multi-Purpose Vehicle	31750	M&E	Water Treatment Plant	PURCHASED	9/15/2002	8,818	-	8,818	-	-	-	-	-	8,818
178	Install Of Generator @ Shops (Water Plant Portion)	33331	M&E	Water Operations	PURCHASED	8/21/2006	5,357	-	5,357	-	5,357	-	-	-	-
179	Water Plant Sourdough Bypass Generator(Cement Pad)	33770	M&E	Water Treatment Plant	PURCHASED	9/12/2006	245	-	245	-	-	245	-	-	-
180	Water Plant Generator Switch	33771	M&E	Water Treatment Plant	PURCHASED	11/1/2006	1,529	-	1,529	-	-	1,529	-	-	-
181	Wtr Plnt Sourdough Bypass Gnrtr:Sd35 Standby Gnrtr	33772	M&E	Water Treatment Plant	PURCHASED	11/1/2006	16,187	-	16,187	-	-	16,187	-	-	-
182	Water Plant Generator-Wire Installation	33773	M&E	Water Treatment Plant	PURCHASED	12/2/2006	2,040	-	2,040	-	-	2,040	-	-	-
183	Wtr Plnt Gnrtr:Add Ground Rod & Oil Pan Heater	33774	M&E	Water Treatment Plant	PURCHASED	12/20/2006	189	-	189	-	-	189	-	-	-
184	Wtr Plnt Gnrtr:Inspection Fees Due To Install	33775	M&E	Water Treatment Plant	PURCHASED	12/12/2006	145	-	145	-	-	145	-	-	-
185	Wtr Plnt Gnrtr:Connect Bypass Gnrtr To Scada	33776	M&E	Water Treatment Plant	PURCHASED	1/1/2007	172	-	172	-	-	172	-	-	-
186	Wtr Plnt Gnrtr:Add Bypass Gnrtr To Scada	33777	M&E	Water Treatment Plant	PURCHASED	1/1/2007	298	-	298	-	-	298	-	-	-
187	Wtr Plnt Gnrtr:Concrete Pad @ Existing Tank Bldg	33778	M&E	Water Treatment Plant	PURCHASED	1/11/2007	2,205	-	2,205	-	-	2,205	-	-	-
188	Stainless Steel Wow Water Station-Jan Expds	37090	M&E	City Shops	PURCHASED	1/31/2014	8,298	-	8,298	-	-	8,298	-	-	-
189	Stainless Steel Wow Water Station-April Expds	37091	M&E	City Shops	PURCHASED	4/30/2014	8,357	-	8,357	-	-	8,357	-	-	-
190	Genie Awp-205 (Personnel Lift)	37430	M&E	Water Treatment Plant	PURCHASED	9/26/2014	6,875	-	6,875	-	-	-	-	-	6,875

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Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adj. Acq. Amt.	Water System					General Plant	
									Adjustments [2]	Supply	Treatment	Trans.	Distribution		Meters
191	Sealed Block Self-Retracting Lifeline Equipment	38400	M&E	Wastewater Plant	PURCHASED	8/2/2016	12,543	-	12,543	-	-	-	-	-	12,543
192	1992 Toyota Pickup	14220	VEH	Water Treatment Plant	PURCHASED	6/30/2012	0	-	0	-	-	-	-	-	0
193	2008 White Ford F250 4X4 Diesel	34260	VEH	Water Treatment Plant	PURCHASED	4/1/2008	29,085	-	29,085	-	-	-	-	-	29,085
194	Plow For White For F250 4X4 Diesel	34261	VEH	Water Treatment Plant	PURCHASED	4/1/2008	5,616	-	5,616	-	-	-	-	-	5,616
195	2008 Gmc Sierra 1500 4X4 Truck (White)	34460	VEH	Water Treatment Plant	PURCHASED	7/10/2008	18,660	-	18,660	-	-	-	-	-	18,660
196	2011 Gmc Canyon Ext Cab	36050	VEH	Water Treatment Plant	PURCHASED	5/17/2011	19,947	-	19,947	-	-	-	-	-	19,947
197	2014 Jeep Patriot Wagon/Red-Wtp	37220	VEH	Water Treatment Plant	PURCHASED	6/9/2014	21,750	-	21,750	-	-	-	-	-	21,750
198	2016 Ford 1 Ton Flatbed Truck (White)	38200	VEH	Water Treatment Plant	PURCHASED	6/22/2016	30,553	-	30,553	-	-	-	-	-	30,553
199	2016 Ford 1 Ton Flatbed Truck (White) Asscessories	38201	VEH	Water Treatment Plant	PURCHASED	5/16/2016	3,625	-	3,625	-	-	-	-	-	3,625
200	2016 Ford 1 Ton Flatbed Truck (White) Assc June	38202	VEH	Water Treatment Plant	PURCHASED	6/22/2016	5,973	-	5,973	-	-	-	-	-	5,973
201	Prof Building Remodel Srvc Thru 3/25/16-Mar Expds	262057	BLD	Professional Building	PURCHASED	3/25/2016	5,281	-	5,281	-	-	-	-	-	5,281
202	Prof Building Remodel Srvc Thru 4/05/16-Apr Expds	262059	BLD	Professional Building	PURCHASED	4/5/2016	736	-	736	-	-	-	-	-	736
203	Prof Building Remodel Srvc -May Expds	262063	BLD	Professional Building	PURCHASED	5/13/2016	38,560	-	38,560	-	-	-	-	-	38,560
204	Prof Building Remodel Srvc -June Expds Fy16	262065	BLD	Professional Building	PURCHASED	6/25/2016	33,651	-	33,651	-	-	-	-	-	33,651
205	Prof Building Remodel Srvc:Retainage:Fy16	262068	BLD	Professional Building	PURCHASED	6/30/2016	4,930	-	4,930	-	-	-	-	-	4,930
206	Prof Building Remodel Srvc -Oct Expds Fy17	262070	BLD	Professional Building	PURCHASED	10/1/2016	1,799	-	1,799	-	-	-	-	-	1,799
207	Prof Bldg Upgrade Phase 1	262074	BLD	Professional Building	PURCHASED	1/1/2017	115	-	115	-	-	-	-	-	115
208	City Shops Paving Project:August Expds	29212	BLD	City Shops	PURCHASED	8/31/2016	71,931	-	71,931	-	-	-	-	-	71,931
209	City Shops Paving Project:September Expds	29216	BLD	City Shops	PURCHASED	9/1/2016	7,155	-	7,155	-	-	-	-	-	7,155
210	Sports Complex Building November Expds	32285	BLD	Parks	PURCHASED	11/3/2009	6,484	-	6,484	-	-	-	-	-	6,484
211	Pole Building-Water/Sewer/Streets	32622	BLD	City Shops-Lower Yard	PURCHASED	6/15/2004	17,191	-	17,191	-	-	-	-	-	17,191
212	Pole Building-Water/Sewer/Streets	32624	BLD	City Shops-Lower Yard	PURCHASED	7/15/2004	2,397	-	2,397	-	-	-	-	-	2,397
213	Pole Bldg-Water/Sewer/Streets(Heater):March Expd'S	32625	BLD	City Shops-Lower Yard	PURCHASED	3/18/2010	6,216	-	6,216	-	-	-	-	-	6,216
214	Pole Bldg-Water/Sewer/Streets(Heater):May Expd'S	32627	BLD	City Shops-Lower Yard	PURCHASED	5/1/2010	3,000	-	3,000	-	-	-	-	-	3,000
215	Pole Bldg-Water/Sewer/Streets(Heater):July Expd'S	32629	BLD	City Shops-Lower Yard	PURCHASED	7/27/2010	2,821	-	2,821	-	-	-	-	-	2,821
216	New Shops Bldg:Arch Svcs-Lower Yards 3/1-4/30	34420	BLD	City Shops-Lower Yard	PURCHASED	5/7/2008	6,000	-	6,000	-	-	-	-	-	6,000
217	New Shops Bldg:Arch Svcs 1/1-5/31/08	34422	BLD	City Shops-Lower Yard	PURCHASED	6/2/2008	160	-	160	-	-	-	-	-	160
218	New Shops Bldg:Arch Svcs-Lower Yards 5/1-6/30/08	34424	BLD	City Shops-Lower Yard	PURCHASED	6/30/2008	16,782	-	16,782	-	-	-	-	-	16,782
219	New Shops Bldg:Arch Svcs 1/1-6/30/08	34426	BLD	City Shops-Lower Yard	PURCHASED	6/30/2008	620	-	620	-	-	-	-	-	620
220	New Shops Bldg:Topo Mapping & Civil-Imp Plans 8/2	34428	BLD	City Shops-Lower Yard	PURCHASED	8/1/2008	1,542	-	1,542	-	-	-	-	-	1,542
221	New Shops Bldg:Topography Work	344210	BLD	City Shops-Lower Yard	PURCHASED	9/12/2008	2,444	-	2,444	-	-	-	-	-	2,444
222	Shops Remodel:Arch Svcs Thru 4/30/11-April Expds	344214	BLD	City Shops-Lower Yard	PURCHASED	4/30/2011	2,800	-	2,800	-	-	-	-	-	2,800
223	New Shops Bldg:Plan Check Fees & Bid Request-May	344219	BLD	City Shops-Lower Yard	PURCHASED	5/15/2011	148	-	148	-	-	-	-	-	148
224	Shops Remodel:Arch Svcs Thru 6/30/11-June Expds	344224	BLD	City Shops-Lower Yard	PURCHASED	6/30/2011	1,006	-	1,006	-	-	-	-	-	1,006
225	New Shops Bldg:Walker Const-Lwr Yards Pmt#1-July	344229	BLD	City Shops-Lower Yard	PURCHASED	7/11/2011	4,000	-	4,000	-	-	-	-	-	4,000
226	Shops Remodel:Arch Svcs Pmt#5 & Walker Const Pmt#2	344234	BLD	City Shops-Lower Yard	PURCHASED	8/24/2011	13,062	-	13,062	-	-	-	-	-	13,062
227	Shops Remodel:Arch Svcs Pmt#6 & Walker Const Pmt#3	344239	BLD	City Shops-Lower Yard	PURCHASED	9/1/2011	10,376	-	10,376	-	-	-	-	-	10,376
228	Shops Remodel:Walker Const Pmt#4-Oct Expds	344244	BLD	City Shops-Lower Yard	PURCHASED	10/1/2011	22,542	-	22,542	-	-	-	-	-	22,542
229	Shops Remodel:Archtrl Srvc 9/01-10/30-Nov Expds	344249	BLD	City Shops-Lower Yard	PURCHASED	11/1/2011	447	-	447	-	-	-	-	-	447
230	Shops Remodel:Walker Const Pmt#5-Final-Dec Expds	344254	BLD	City Shops-Lower Yard	PURCHASED	12/1/2011	5,586	-	5,586	-	-	-	-	-	5,586
231	Shops Remodel:Walker Const Pmt#5-Jan Expds	344259	BLD	City Shops-Lower Yard	PURCHASED	1/1/2012	2,081	-	2,081	-	-	-	-	-	2,081
232	Shops Remodel:Fire Door Closures & Occupd Sign	344264	BLD	City Shops-Lower Yard	PURCHASED	2/28/2012	565	-	565	-	-	-	-	-	565
233	Shops Remodel:Prep & Paint Doors-March Expds	344269	BLD	City Shops-Lower Yard	PURCHASED	3/1/2012	409	-	409	-	-	-	-	-	409
234	Shops Remodel:A/C Install	344272	BLD	City Shops-Lower Yard	PURCHASED	4/23/2012	3,680	-	3,680	-	-	-	-	-	3,680
235	Shops Remodel:Install Furnace-April Expds	344275	BLD	City Shops-Lower Yard	PURCHASED	4/27/2012	1,475	-	1,475	-	-	-	-	-	1,475
236	Shops Remodel:Install Heater-May Expds	344280	BLD	City Shops-Lower Yard	PURCHASED	5/23/2012	541	-	541	-	-	-	-	-	541
237	Laurel Glen Annex	36210	BLD	Laurel Glen	PURCHASED	12/1/2011	2,132	-	2,132	-	-	-	-	-	2,132
238	Laurel Glen Annex-January Expds	36212	BLD	Laurel Glen	PURCHASED	1/1/2012	4,584	-	4,584	-	-	-	-	-	4,584
239	Laurel Glen Annex-February Expds	36214	BLD	Laurel Glen	PURCHASED	2/7/2012	953	-	953	-	-	-	-	-	953
240	Laurel Glen Annex-July Expds	36216	BLD	Laurel Glen	PURCHASED	7/31/2012	8,000	-	8,000	-	-	-	-	-	8,000
241	Laurel Glen Annex-Sept Expds	36218	BLD	Laurel Glen	PURCHASED	9/19/2012	475	-	475	-	-	-	-	-	475
242	Laurel Glen Annex-December Expds	362110	BLD	Laurel Glen	PURCHASED	12/21/2012	110	-	110	-	-	-	-	-	110
243	Laurel Glen Annex-January Expds	362112	BLD	Laurel Glen	PURCHASED	1/22/2013	15,347	-	15,347	-	-	-	-	-	15,347
244	Laurel Glen Annex-February Expds	362114	BLD	Laurel Glen	PURCHASED	2/26/2013	11,632	-	11,632	-	-	-	-	-	11,632
245	Laurel Glen Annex-April Expds	362116	BLD	Laurel Glen	PURCHASED	4/23/2013	941	-	941	-	-	-	-	-	941
246	Laurel Glen Annex-June Expds	362118	BLD	Laurel Glen	PURCHASED	6/30/2013	5,170	-	5,170	-	-	-	-	-	5,170
247	Laurel Glen Annex-Oct Expds	362120	BLD	Laurel Glen	PURCHASED	10/7/2013	315	-	315	-	-	-	-	-	315
248	Bozeman Creek House-(Wtp Employee House)	5140	BLD	Water Treatment Plant	PURCHASED	7/1/1998	45,322	-	45,322	-	-	45,322	-	-	-
249	Bozeman Creek Other	5150	BLD	Water Operations	PURCHASED	7/1/1998	26,419	-	26,419	-	-	26,419	-	-	-
250	City Garage	5160	BLD	Water Operations	PURCHASED	7/1/1998	65,000	-	65,000	-	-	-	-	-	65,000
251	Water Tower & Lines Sid	11060	IMP	Special Improv District	PURCHASED	7/1/1998	14,454	-	14,454	-	-	-	14,454	-	-
252	Highland Blvd Water Line	12570	IMP	Water Operations	PURCHASED	7/1/1998	14,000	-	14,000	-	-	-	-	14,000	-
253	Sid 656 Burrup Water Main	15710	IMP	Special Improv District	PURCHASED	9/7/1993	270,635	-	270,635	-	-	-	-	270,635	-
254	Sid 629 Water University	20140	IMP	Special Improv District	PURCHASED	7/1/1998	42,338	-	42,338	-	-	-	-	42,338	-

City of Bozeman, Montana  
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Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adj. Adjustments [2]	Adj. Acq. Amt.	Water System					General Plant
										Supply	Treatment	Trans.	Distribution	Meters	
255	Sid 646 Water & Sewer N. 7Th Avenue	22850	IMP	Special Improv District	PURCHASED	7/30/1984	159,705	-	159,705	-	-	-	159,705	-	-
256	Oak Street Water Trunk	24160	IMP	Water Operations	PURCHASED	7/1/1998	417,450	-	417,450	-	-	417,450	-	-	-
257	Bozeman Creek Water Supply	24170	IMP	Water Operations	PURCHASED	7/1/1998	433,589	-	433,589	433,589	-	-	-	-	-
258	Garfield Water Trunk	24180	IMP	Water Operations	PURCHASED	7/1/1998	165,984	-	165,984	-	-	165,984	-	-	-
259	Kagy Blvd Water System	24200	IMP	Water Operations	PURCHASED	7/1/1998	22,898	-	22,898	-	-	-	22,898	-	-
260	Water Trunk Line @ Oak Street	25590	IMP	Water Operations	PURCHASED	7/1/1998	322,433	-	322,433	-	-	322,433	-	-	-
261	Water Line Improvements	27040	IMP	Water Operations	PURCHASED	7/1/1998	212,898	-	212,898	-	-	-	212,898	-	-
262	Wtr Renovations Survey 7/28/2006--75%	27042	IMP	Water Operations	PURCHASED	8/1/2006	9,575	-	9,575	-	-	-	-	-	9,575
263	Wtr Renovations Survey 4/28/2006	27043	IMP	Water Operations	PURCHASED	5/1/2006	14,363	-	14,363	-	-	-	-	-	14,363
264	Wtr Renovations Survey 5/19/2006--30%	27044	IMP	Water Operations	PURCHASED	6/1/2006	47,876	-	47,876	-	-	-	-	-	47,876
265	Wtr Renovations Pjet - Mapping Svcs Thru 8/25/06	27045	IMP	Water Operations	PURCHASED	8/25/2006	14,363	-	14,363	-	-	-	-	-	14,363
266	Wtr Renovations Pjet - Surveying Svcs Thru 9/8/06	27046	IMP	Water Operations	PURCHASED	9/8/2006	9,575	-	9,575	-	-	-	-	-	9,575
267	Wtr Renovations Pjet:Surveying Svcs Thru 12/29/06	27047	IMP	Water Operations	PURCHASED	1/1/2007	5,739	-	5,739	-	-	-	-	-	5,739
268	Wtr Renovations Pjet:Survey Prof Svcs Thru 2/9/07	27048	IMP	Water Operations	PURCHASED	2/9/2007	2,071	-	2,071	-	-	-	-	-	2,071
269	Wtr Renovations Pjet:Deq Review Fees	27049	IMP	Water Operations	PURCHASED	3/22/2007	600	-	600	-	-	-	-	-	600
270	Wtr Renovations Pjet:Surveying Svcs Thru 5/11/07	270410	IMP	Water Operations	PURCHASED	5/11/2007	16,192	-	16,192	-	-	-	-	-	16,192
271	Wtr Renovations Proj:1% Grt (Chief) 6/25-7/25/07	270411	IMP	Water Operations	PURCHASED	7/1/2007	2,971	-	2,971	-	-	1,094	1,878	-	-
272	Wtr Renovations Proj:Constr Svcs 6/25-7/25 (Chief)	270412	IMP	Water Operations	PURCHASED	7/1/2007	294,176	-	294,176	-	-	108,258	185,918	-	-
273	Wtr Renovations Proj:1% Grt (Chief) 7/25-8/25/07	270413	IMP	Water Operations	PURCHASED	8/25/2007	2,305	-	2,305	-	-	848	1,457	-	-
274	Wtr Renovations Proj:Constr Svcs 7/25-8/25 (Chief)	270414	IMP	Water Operations	PURCHASED	8/25/2007	228,242	-	228,242	-	-	83,994	144,248	-	-
275	Wtr Renovations Proj:Constr Svcs 8/25-9/25 (Chief)	270415	IMP	Water Operations	PURCHASED	9/30/2007	143,958	-	143,958	-	-	52,977	90,981	-	-
276	Wtr Renovations Proj:1% Grt (Chief) Thru 9/25/07	270416	IMP	Water Operations	PURCHASED	9/30/2007	1,454	-	1,454	-	-	535	919	-	-
277	Sid 665 Northwest Water Line	27400	IMP	Special Improv District	PURCHASED	6/10/1999	887,014	-	887,014	-	-	-	887,014	-	-
278	Sid 665 Northwest Water Line	27401	IMP	Special Improv District	PURCHASED	6/1/2000	42,302	-	42,302	-	-	-	42,302	-	-
279	Sid 665 Northwest Water Line	27402	IMP	Special Improv District	PURCHASED	6/21/2000	2,633	-	2,633	-	-	-	2,633	-	-
280	07 Wtr Renovations Reimb:111 S Church Sorenson	320816	IMP	Water Operations	PURCHASED	5/27/2008	241	-	241	-	-	89	152	-	-
281	Water Renovations Project (Lamme):July Expds	320825	IMP	Water Operations	PURCHASED	7/31/2009	58,449	-	58,449	-	-	21,510	36,940	-	-
282	Water Renovations Project:July Expds	320826	IMP	Water Operations	PURCHASED	7/31/2009	66,611	-	66,611	-	-	24,513	42,098	-	-
283	Water Renovations Project:August Expds	320827	IMP	Water Operations	PURCHASED	8/31/2009	129,988	-	129,988	-	-	47,836	82,151	-	-
284	Water Renovations Project:September Expds	320828	IMP	Water Operations	PURCHASED	9/15/2009	44,632	-	44,632	-	-	16,425	28,207	-	-
285	Water Renovations Project:September Expds	320829	IMP	Water Operations	PURCHASED	9/30/2009	206,798	-	206,798	-	-	76,103	130,695	-	-
286	Water Renovations Project:October Expds	320830	IMP	Water Operations	PURCHASED	10/31/2009	212,163	-	212,163	-	-	78,077	134,086	-	-
287	Water Renovations Project:November Expds	320831	IMP	Water Operations	PURCHASED	11/6/2009	74,610	-	74,610	-	-	27,457	47,153	-	-
288	Water Renovations Project:November Expds	320832	IMP	Water Operations	PURCHASED	11/12/2009	33,063	-	33,063	-	-	12,167	20,896	-	-
289	Water Renovations Project:January Expds	320834	IMP	Water Operations	PURCHASED	1/18/2010	40,759	-	40,759	-	-	15,000	25,760	-	-
290	Water Renovations Project:February Expds	320835	IMP	Water Operations	PURCHASED	2/19/2010	8,000	-	8,000	-	-	2,944	5,056	-	-
291	Lamme Water Replacement Final	320836	IMP	Water Operations	PURCHASED	10/31/2010	33,582	-	33,582	-	-	12,358	21,224	-	-
292	Water Renovations Project:October Expds	320837	IMP	Water Operations	PURCHASED	10/22/2010	1,515	-	1,515	-	-	557	957	-	-
293	2011 Water Renovations Project:January Expds	320838	IMP	Water Operations	PURCHASED	1/31/2011	1,860	-	1,860	-	-	685	1,176	-	-
294	2011 Water Renovations Project:March Expds	320839	IMP	Water Operations	PURCHASED	3/27/2011	880	-	880	-	-	324	556	-	-
295	2011 Water Renovations Project:April Expds	320840	IMP	Water Operations	PURCHASED	4/26/2011	180	-	180	-	-	66	114	-	-
296	2011 Water Renovations Project:July Expds	320841	IMP	Water Operations	PURCHASED	7/30/2011	243,352	-	243,352	-	-	89,555	153,797	-	-
297	2011 Water Renovations Project:August Expds	320842	IMP	Water Operations	PURCHASED	8/30/2011	275,620	-	275,620	-	-	101,430	174,190	-	-
298	2011 Water Renovations Project:September Expds	320843	IMP	Water Operations	PURCHASED	9/30/2011	337,564	-	337,564	-	-	124,225	213,339	-	-
299	2011 Water Renovations Project:October Expds	320844	IMP	Water Operations	PURCHASED	10/1/2011	673	-	673	-	-	248	425	-	-
300	2011 Water Renovations Project:January Expds	320845	IMP	Water Operations	PURCHASED	1/27/2012	19,444	-	19,444	-	-	7,155	12,288	-	-
301	2012 Water Renovations Project:March Expds	320846	IMP	Water Operations	PURCHASED	3/30/2012	12,182	-	12,182	-	-	4,483	7,699	-	-
302	2011 Water Renovations-Bond Prints	320847	IMP	Water Operations	PURCHASED	4/12/2012	77	-	77	-	-	28	49	-	-
303	2012 Water Renovations Svcs Thru 4/28/12	320848	IMP	Water Operations	PURCHASED	4/28/2012	5,148	-	5,148	-	-	1,895	3,254	-	-
304	2012 Water Renovations Svcs Thru 6/1/12	320849	IMP	Water Operations	PURCHASED	5/31/2012	19,697	-	19,697	-	-	7,248	12,448	-	-
305	2012 Water Renovations Project:June Expds	320850	IMP	Water Operations	PURCHASED	6/18/2012	1,072	-	1,072	-	-	394	677	-	-
306	2012 Water Renovations Project:June Expds	320851	IMP	Water Operations	PURCHASED	6/29/2012	7,109	-	7,109	-	-	2,616	4,493	-	-
307	2011 Water Renovations Project:July Expds	320852	IMP	Water Operations	PURCHASED	7/31/2012	53,262	-	53,262	-	-	19,601	33,661	-	-
308	2012 Water Renovations Project:July Expds	320853	IMP	Water Operations	PURCHASED	7/27/2012	5,874	-	5,874	-	-	2,162	3,712	-	-
309	2012 Water Renovations Project:August Expds	320854	IMP	Water Operations	PURCHASED	8/28/2012	136,728	-	136,728	-	-	50,317	86,412	-	-
310	Water Renovations Retainage Thru 6/30/12	320855	IMP	Water Operations	PURCHASED	6/29/2012	46,462	-	46,462	-	-	17,098	29,364	-	-
311	2012 Water Renovations Project:August Expds	320856	IMP	Water Operations	PURCHASED	9/28/2012	14,775	-	14,775	-	-	5,437	9,338	-	-
312	2012 Water Renovations Project:October Expds	320857	IMP	Water Operations	PURCHASED	10/1/2012	104,391	-	104,391	-	-	38,416	65,975	-	-
313	2012 Water Renovations Project:November Expds	320858	IMP	Water Operations	PURCHASED	11/1/2012	137,496	-	137,496	-	-	50,599	86,897	-	-
314	2013 Water Renovations Project:March Expds	320859	IMP	Water Operations	PURCHASED	3/14/2013	2,814	-	2,814	-	-	1,035	1,778	-	-
315	2013 Water Renovations Project:April Expds	320860	IMP	Water Operations	PURCHASED	4/1/2013	152	-	152	-	-	56	96	-	-
316	2013 Water Renovations Project:May Expds	320861	IMP	Water Operations	PURCHASED	5/31/2013	204,885	-	204,885	-	-	75,399	129,486	-	-
317	2013 Water Renovations Project:June Expds	320862	IMP	Water Operations	PURCHASED	6/30/2013	86,299	-	86,299	-	-	31,759	54,541	-	-
318	2012 Water Renovation Retainage Thru 6/30/13	320863	IMP	Water Operations	PURCHASED	6/30/2013	24,469	-	24,469	-	-	9,005	15,464	-	-

City of Bozeman, Montana  
Water Impact Fee StudyClassification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adjustments [2]	Adj. Acq. Amt.	Water System					General Plant
										Supply	Treatment	Trans.	Distribution	Meters	
319	2013 Water Renovation Retainage Thru 6/30/13	320864	IMP	Water Operations	PURCHASED	6/30/2013	10,783	-	10,783	-	-	3,968	6,815	-	-
320	2013 Water Renovations Project:July Expds	320865	IMP	Water Operations	PURCHASED	7/30/2013	233,947	-	233,947	-	-	86,094	147,853	-	-
321	2013 Water Renovations Project:August Expds	320866	IMP	Water Operations	PURCHASED	8/29/2013	258,058	-	258,058	-	-	94,967	163,091	-	-
322	2013 Water Renovations Project:Feb Expds	320867	IMP	Water Operations	PURCHASED	2/1/2014	253,286	-	253,286	-	-	93,211	160,076	-	-
323	2013 Water Renovations Project:March Expds	320868	IMP	Water Operations	PURCHASED	3/3/2014	1,378	-	1,378	-	-	507	871	-	-
324	2012 Water Renovations Project:Final	320869	IMP	Water Operations	PURCHASED	6/30/2014	19,000	-	19,000	-	-	6,992	12,008	-	-
325	2014 Water Renovations Project:June Expds	320870	IMP	Water Operations	PURCHASED	6/30/2014	59,001	-	59,001	-	-	21,713	37,288	-	-
326	Water Renovations Retainage Thru 6/30/14	320871	IMP	Water Operations	PURCHASED	6/30/2014	3,105	-	3,105	-	-	1,143	1,963	-	-
327	2014 Water Renovations Project:July Expds	320872	IMP	Water Operations	PURCHASED	7/31/2014	135,832	-	135,832	-	-	49,987	85,845	-	-
328	2014 Water Renovations Project:August Expds	320873	IMP	Water Operations	PURCHASED	8/30/2014	180,779	-	180,779	-	-	66,528	114,251	-	-
329	2014 Water Renovations Project:October Expds	320874	IMP	Water Operations	PURCHASED	10/31/2014	188,949	-	188,949	-	-	69,534	119,415	-	-
330	2014 Water Renovations Project:May Expds	320875	IMP	Water Operations	PURCHASED	5/28/2015	2,263	-	2,263	-	-	833	1,430	-	-
331	2015 Water Renovations Project:June Fy15 Expds	320876	IMP	Water Operations	PURCHASED	6/16/2015	200	-	200	-	-	74	126	-	-
332	2015 Water Renovations Project:Oct Fy16 Expds	320877	IMP	Water Operations	PURCHASED	10/23/2015	164,298	-	164,298	-	-	60,463	103,836	-	-
333	2015 Water Renovations Project:Dec Fy16 Expds	320880	IMP	Water Operations	PURCHASED	12/21/2015	17,936	-	17,936	-	-	6,601	11,335	-	-
334	2015 Water Renovations Project:April Fy16 Expds	320881	IMP	Water Operations	PURCHASED	4/21/2016	1,521	-	1,521	-	-	560	961	-	-
335	2015 Water Renovations Project:May Fy16 Expds	320882	IMP	Water Operations	PURCHASED	5/6/2016	182,058	-	182,058	-	-	66,998	115,060	-	-
336	2015 Water Renovations Project:June Fy16 Expds	320883	IMP	Water Operations	PURCHASED	6/30/2016	271,243	-	271,243	-	-	99,819	171,424	-	-
337	2015 Water Renovations Project:Retainage:Fy16	320884	IMP	Water Operations	PURCHASED	6/30/2016	36,216	-	36,216	-	-	13,328	22,888	-	-
338	2015 Water Renovations Project:July Fy17 Expds	320885	IMP	Water Operations	PURCHASED	7/29/2016	202,006	-	202,006	-	-	74,339	127,666	-	-
339	2015 Water Renovations Storm Mansion Damage Rpr	320886	IMP	Water Operations	PURCHASED	9/30/2016	586	-	586	-	-	216	370	-	-
340	2015 Water Renovations Project:Oct Fy17 Expds	320887	IMP	Water Treatment Plant	PURCHASED	10/31/2016	960	-	960	-	-	353	607	-	-
341	2015 Water Renovations Project:Nov Fy17 Expds	320888	IMP	Water Operations	PURCHASED	11/30/2016	2,810	-	2,810	-	-	1,034	1,776	-	-
342	2015 Water Renovations Project:March Fy17 Expds	320889	IMP	Water Operations	PURCHASED	3/7/2017	268,323	-	268,323	-	-	98,744	169,578	-	-
343	2015 Water Renovations Project:April Fy17 Expds	320890	IMP	Water Operations	PURCHASED	4/1/2017	2,811	-	2,811	-	-	1,034	1,777	-	-
344	2015 Water Renovations Project:May Fy17 Expds	320891	IMP	Water Operations	PURCHASED	5/31/2017	362	-	362	-	-	133	229	-	-
345	Fy80-06 Private Water Infr:Developer Contributions	34070	IMP	Water Operations	CONTRIBUTION	6/30/2007	106,493,385	-	106,493,385	-	-	39,190,118	67,303,267	-	-
346	Fy07 Private Water Infr:Developer Contributions	34071	IMP	Water Operations	CONTRIBUTION	6/30/2007	12,411,654	-	12,411,654	-	-	4,567,553	7,844,101	-	-
347	Fy08 Private Water Infr:Developer Contributions	34072	IMP	Water Operations	CONTRIBUTION	6/30/2008	14,773,289	-	14,773,289	-	-	5,436,647	9,336,642	-	-
348	Fy09 Private Water Infr:Developer Contributions	34073	IMP	Water Operations	CONTRIBUTION	6/30/2009	2,871,535	-	2,871,535	-	-	1,056,740	1,814,796	-	-
349	Fy10 Private Water Infr:Developer Contributions	34074	IMP	Water Operations	CONTRIBUTION	6/30/2010	2,365,634	-	2,365,634	-	-	870,566	1,495,068	-	-
350	Fy11 Private Water Infr:Developer Contributions	34075	IMP	Water Operations	CONTRIBUTION	6/30/2011	3,019,860	-	3,019,860	-	-	1,111,324	1,908,536	-	-
351	Fy12 Private Water Infr:Developer Contributions	34076	IMP	Water Operations	CONTRIBUTION	6/30/2012	564,404	-	564,404	-	-	207,703	356,700	-	-
352	Fy13 Private Water Infr:Developer Contributions	34077	IMP	Water Operations	CONTRIBUTION	6/30/2013	156,123	-	156,123	-	-	57,454	98,669	-	-
353	Fy14 Private Water Infr:Developer Contributions	34078	IMP	Water Operations	CONTRIBUTION	6/30/2014	3,137,978	-	3,137,978	-	-	1,154,792	1,983,186	-	-
354	Fy15 Private Water Infr:Developer Contributions	34079	IMP	Water Operations	CONTRIBUTION	6/30/2015	4,305,327	-	4,305,327	-	-	1,584,383	2,720,944	-	-
355	Fy16 Private Water Infr:Developer Contributions	340710	IMP	Water Operations	CONTRIBUTION	6/30/2016	5,178,425	-	5,178,425	-	-	1,905,687	3,272,738	-	-
356	Fy17 Private Water Infr:Developer Contributions	340711	IMP	Water Operations	CONTRIBUTION	6/30/2017	3,240,003	-	3,240,003	-	-	1,192,338	2,047,665	-	-
357	Water/Sewer Adjstmt @ Babcock & Kagy-City/S Share	34281	IMP	Water Operations	PURCHASED	5/30/2008	26,072	-	26,072	-	-	9,595	16,477	-	-
358	Water/Sewer Adjstmt @ 19Th & Main-City/S Share	34282	IMP	Water Operations	PURCHASED	6/1/2008	14,739	-	14,739	-	-	5,424	9,315	-	-
359	S.19Th & College Relocate+Betterment:City Share	34283	IMP	Water Operations	PURCHASED	6/2/2008	81,905	-	81,905	-	-	81,905	-	-	-
360	S.19Th & College Relocate+Betterment:City Share	34284	IMP	Water Operations	PURCHASED	6/19/2009	39,131	-	39,131	-	-	39,131	-	-	-
361	Concrete Retaining Wall & Drain Improv @ Shops	34575	IMP	City Shops	PURCHASED	1/1/2009	7,457	-	7,457	-	-	-	-	-	7,457
362	Laurel Glen Annex Irrgtn-June Fy15 Expds	362122	IMP	Laurel Glen	PURCHASED	6/30/2015	19,504	-	19,504	-	-	-	19,504	-	-
363	6" Neptune Water Meter@Covered Wagon Trailer Crt	36350	IMP	Water Operations	PURCHASED	4/2/2012	7,880	-	7,880	-	-	-	-	7,880	-
364	2015 Mt Fiber Optic Proj Sept Expds	36927	IMP	Water Operations	PURCHASED	9/30/2015	92,107	-	92,107	-	-	-	-	-	92,107
365	2015 Mt Fiber Optic Proj Oct Expds	36928	IMP	Engineering	PURCHASED	10/30/2015	4,848	-	4,848	-	-	-	-	-	4,848
366	College-Main->S 19Th-Mdot Highway Project	37130	IMP	Street Department	PURCHASED	1/1/2014	21,884	-	21,884	-	-	21,884	-	-	-
367	Sid 718 - E Story Street Water Replacement	37281	IMP	Special Improv District	PURCHASED	5/6/2014	1,080	-	1,080	-	-	-	1,080	-	-
368	Baxter/Davis Intersection Deq Water Review Fees	373616	IMP	Street Department	PURCHASED	1/1/2016	834	-	834	-	-	-	-	-	834
369	Baxter/7Th To 19Th Improvement Fy17 Deq Permit Fee	373633	IMP	Water Operations	PURCHASED	4/30/2017	1,267	-	1,267	-	-	-	-	-	1,267
370	Cds Storm Drain Unit Separator	37641	IMP	City Shops	PURCHASED	3/1/2015	2,333	-	2,333	-	-	-	-	-	2,333
371	Durston/Cottnwd Utility Extension:March Expds Fy17	378218	IMP	Water Operations	PURCHASED	3/31/2017	710	-	710	-	-	-	-	-	710
372	Durston/Cottnwd Improvement:June Expds	378221	IMP	Street Department	PURCHASED	6/1/2017	280	-	280	-	-	-	-	-	280
373	Sid732:N Wallace Ave Water:August Expds Fy17	38177	IMP	Special Improv District	PURCHASED	8/18/2016	22,950	-	22,950	-	-	-	22,950	-	-
374	Sid732:N Wallace Ave Water:Septmbr Expds Fy17	381711	IMP	Special Improv District	PURCHASED	9/8/2016	1,894	-	1,894	-	-	-	1,894	-	-
375	Sid732:N Wallace Ave Water:Novembr Expds Fy17	381714	IMP	Special Improv District	PURCHASED	11/1/2016	103	-	103	-	-	-	103	-	-
376	Rouse-Oak To Storymill Rd (Water/Sewer)City Share	38640	IMP	Water Operations	PURCHASED	8/31/2016	32,064	-	32,064	-	-	32,064	-	-	-
377	Kagy Interim Improvements-June Fy17	39775	IMP	Water Operations	PURCHASED	6/30/2017	173,618	-	173,618	-	-	-	-	-	173,618
378	Sid739:Olive & Church Recenstretn Prj-Fy17-June Exp	39912	IMP	Special Improv District	PURCHASED	6/1/2017	14,722	-	14,722	-	-	-	14,722	-	-
379	Sid739:Olive & Church Recenstretn Prj-Fy17-June Exp	399110	IMP	Special Improv District	PURCHASED	6/30/2017	50,147	-	50,147	-	-	-	50,147	-	-
380	Sid 568 Water Main	4340	IMP	Special Improv District	PURCHASED	7/1/1998	85,918	-	85,918	-	-	-	85,918	-	-
381	Sid 582 Water Main West Koch	4460	IMP	Special Improv District	PURCHASED	7/1/1998	89,527	-	89,527	-	-	-	89,527	-	-
382	Sid 591 Water North Rouse & North 7Th	4520	IMP	Special Improv District	PURCHASED	7/1/1998	440,000	-	440,000	-	-	-	440,000	-	-

Appendix A

City of Bozeman, Montana  
Water Impact Fee Study

Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adj. Acq. Amt.	Water System					General Plant	
									Adjustments [2]	Supply	Treatment	Trans.	Distribution		Meters
383	Sid 600 Water Figgins 4Th	4610	IMP	Special Improv District	PURCHASED	7/1/1998	90,425	-	90,425	-	-	-	90,425	-	-
384	Sid 603 Water Graf'S First	4640	IMP	Special Improv District	PURCHASED	7/1/1998	94,134	-	94,134	-	-	-	94,134	-	-
385	Sid 610 Water Westridge	4710	IMP	Special Improv District	PURCHASED	7/1/1998	66,003	-	66,003	-	-	-	66,003	-	-
386	Sid 414 New Hyalite	5830	IMP	Special Improv District	PURCHASED	7/1/1998	184,033	-	184,033	-	-	-	184,033	-	-
387	Sid 437 Park Manor	5860	IMP	Special Improv District	PURCHASED	7/1/1998	76,060	-	76,060	-	-	-	76,060	-	-
388	Sid 502 West Side	5960	IMP	Special Improv District	PURCHASED	7/1/1998	632,577	-	632,577	-	-	-	632,577	-	-
389	Sid 511 Thompson & Univ	5990	IMP	Special Improv District	PURCHASED	7/1/1998	165,744	-	165,744	-	-	-	165,744	-	-
390	Sid 526 Graf-Figgins	6020	IMP	Special Improv District	PURCHASED	7/1/1998	76,814	-	76,814	-	-	-	76,814	-	-
391	Sid 528 Graf-Figgins	6030	IMP	Special Improv District	PURCHASED	7/1/1998	58,366	-	58,366	-	-	-	58,366	-	-
392	Sid 532 Remington Addition	6050	IMP	Special Improv District	PURCHASED	7/1/1998	53,671	-	53,671	-	-	-	53,671	-	-
393	Sid 534 Water Mains Kmart	6070	IMP	Special Improv District	PURCHASED	7/7/1998	41,926	-	41,926	-	-	-	41,926	-	-
394	Sid 550 Water Main Graf-Figgins	6080	IMP	Special Improv District	PURCHASED	7/1/1998	67,524	-	67,524	-	-	-	67,524	-	-
395	Sid 576 Water North 22Nd	6110	IMP	Special Improv District	PURCHASED	7/1/1998	22,748	-	22,748	-	-	-	22,748	-	-
396	Sid 578 North 19Th	6120	IMP	Special Improv District	PURCHASED	7/1/1998	29,012	-	29,012	-	-	-	29,012	-	-
397	Sid 619 Water Mains Lea Drive	6130	IMP	Special Improv District	PURCHASED	7/1/1998	19,301	-	19,301	-	-	-	19,301	-	-
398	Sid 622 Valley Unit	6150	IMP	Special Improv District	PURCHASED	7/1/1998	366,727	-	366,727	-	-	-	366,727	-	-
399	Sid 624 Valley Unit	6160	IMP	Special Improv District	PURCHASED	7/1/1998	525,011	-	525,011	-	-	-	525,011	-	-
400	Lyman Creek Reservoir	11540	IMP	Water Operations	PURCHASED	7/1/1998	710,636	-	710,636	710,636	-	-	-	-	-
401	Lyman Creek Reservoir	12970	IMP	Water Operations	PURCHASED	7/1/1998	324,690	-	324,690	324,690	-	-	-	-	-
402	Highland Blvd	14550	IMP	Water Operations	PURCHASED	7/1/1998	100,284	-	100,284	-	-	100,284	-	-	-
403	Water System Expansion	15260	IMP	Water Operations	PURCHASED	7/1/1998	59,093	-	59,093	-	-	59,093	-	-	-
404	Water System Improvements	20780	IMP	Water Operations	PURCHASED	7/1/1998	36,340	-	36,340	-	36,340	-	-	-	-
405	Reservoir Supply Main	24150	IMP	Water Operations	PURCHASED	7/1/1998	467,936	-	467,936	467,936	-	-	-	-	-
406	2 Mg Tank	24520	IMP	Water Treatment Plant	PURCHASED	7/1/1998	567,838	-	567,838	567,838	-	-	-	-	-
407	Sourdough Improvements-Connection Bldg	31330	IMP	Water Treatment Plant	PURCHASED	6/30/2002	444,544	-	444,544	-	-	-	-	-	444,544
408	Sourdough Improv:(1) 24" Linessal Water Valve	31331	IMP	Water Operations	PURCHASED	5/12/2009	5,101	-	5,101	-	-	5,101	-	-	-
409	Sourdough Improv:(2) Hymax Couplers	31332	IMP	Water Operations	PURCHASED	5/15/2009	2,055	-	2,055	-	-	2,055	-	-	-
410	Sourdough Improv:Install Water Valve @ Sourdgh Rd	31333	IMP	Water Operations	PURCHASED	5/25/2009	19,750	-	19,750	-	-	19,750	-	-	-
411	West Babcock Water Main	31340	IMP	Water Operations	PURCHASED	6/30/2002	39,500	-	39,500	-	-	39,500	-	-	-
412	Water Renovations Project	32080	IMP	Water Operations	PURCHASED	10/2/2002	44,692	-	44,692	-	-	16,447	28,245	-	-
413	Water Renovations Project	32081	IMP	Water Operations	PURCHASED	10/2/2002	31,530	-	31,530	-	-	11,603	19,927	-	-
414	Water Renovations Project	32082	IMP	Water Operations	PURCHASED	9/4/2002	138,416	-	138,416	-	-	50,938	87,478	-	-
415	Water Renovations Project	32083	IMP	Water Operations	PURCHASED	8/27/2002	1,398	-	1,398	-	-	515	884	-	-
416	Water Renovations Project	32084	IMP	Water Operations	PURCHASED	10/8/2002	108,655	-	108,655	-	-	39,986	68,669	-	-
417	Water Renovations Project	32085	IMP	Water Operations	PURCHASED	10/22/2002	171,603	-	171,603	-	-	63,151	108,452	-	-
418	Water Renovations Project	32086	IMP	Water Operations	PURCHASED	1/14/2003	166,808	-	166,808	-	-	61,386	105,422	-	-
419	Water Renovations Project	32087	IMP	Water Operations	PURCHASED	1/21/2003	6,919	-	6,919	-	-	2,546	4,373	-	-
420	Water Renovations Project	32088	IMP	Water Operations	PURCHASED	12/3/2002	11,197	-	11,197	-	-	4,121	7,076	-	-
421	Water Renovations Project	32089	IMP	Water Operations	PURCHASED	9/19/2003	382	-	382	-	-	141	241	-	-
422	Water Renovations Project	320810	IMP	Water Operations	PURCHASED	10/15/2003	254	-	254	-	-	93	160	-	-
423	Water Renovation Project	320811	IMP	Water Operations	PURCHASED	11/15/2003	269	-	269	-	-	99	170	-	-
424	Water Renovations Project	320812	IMP	Water Operations	PURCHASED	12/15/2003	14,865	-	14,865	-	-	5,470	9,395	-	-
425	Wtr Renovations Proj:Svcs For 6/18-6/25/07	320813	IMP	Water Operations	PURCHASED	6/25/2007	243,176	-	243,176	-	-	89,490	153,686	-	-
426	Wtr Renovations Proj:Svcs For 6/18-6/25/07 (1%Grt)	320814	IMP	Water Operations	PURCHASED	6/25/2007	2,456	-	2,456	-	-	904	1,552	-	-
427	Wtr Renovations Proj:115 S Church Backup	320815	IMP	Water Operations	PURCHASED	1/31/2008	248	-	248	-	-	91	157	-	-
428	08 Lamme Water Replacement Project-Deq Review Fees	320817	IMP	Water Operations	PURCHASED	6/27/2008	2,032	-	2,032	-	-	-	2,032	-	-
429	Wtr Renovations Proj:Survey Svcs Thru 9/27/08	320818	IMP	Water Operations	PURCHASED	9/27/2008	6,490	-	6,490	-	-	-	6,490	-	-
430	Lamme Wtr Rplcmt Const Sept (Net Pacific Steel S)	320819	IMP	Water Operations	PURCHASED	9/30/2008	194,708	-	194,708	-	-	71,654	123,054	-	-
431	Lamme Water Replacement Constr Thru 9/30/08 1%Grt	320820	IMP	Water Operations	PURCHASED	9/30/2008	1,975	-	1,975	-	-	727	1,248	-	-
432	Lamme Wtr Rplcmt Const Oct (Net Pacific Steel S)	320821	IMP	Water Operations	PURCHASED	10/31/2008	281,588	-	281,588	-	-	103,626	177,962	-	-
433	Lamme Water Replacement Constr Thru 10/31/08 1%Grt	320822	IMP	Water Operations	PURCHASED	10/31/2008	2,855	-	2,855	-	-	1,051	1,804	-	-
434	2009 Water Renovations:Plan Review Fees	320823	IMP	Water Operations	PURCHASED	4/16/2009	2,902	-	2,902	-	-	-	2,902	-	-
435	2009 Water Renovations Project:Xerox Bond Prints	320824	IMP	Water Operations	PURCHASED	4/20/2009	504	-	504	-	-	-	504	-	-
436	Sourdough Creek Station	32120	IMP	Water Operations	PURCHASED	6/15/2003	2,911	-	2,911	-	-	2,911	-	-	-
437	Sourdough Transmission Main	321211	IMP	Water Treatment Plant	PURCHASED	10/15/2004	4,110	-	4,110	-	-	4,110	-	-	-
438	Distribution System	5180	IMP	Water Operations	PURCHASED	7/1/1998	1,262,113	-	1,262,113	-	-	464,464	797,649	-	-
439	Lyman Creek Intake	5200	IMP	Water Operations	PURCHASED	7/1/1998	50,362	-	50,362	-	-	50,362	-	-	-
440	Lyman Creek 18" Main	5210	IMP	Water Operations	PURCHASED	7/1/1998	60,798	-	60,798	-	-	60,798	-	-	-
441	Bozeman Creek Intake Main	5230	IMP	Water Operations	PURCHASED	7/1/1998	117,721	-	117,721	117,721	-	-	-	-	-
442	Bozeman Creek	5240	IMP	Water Operations	PURCHASED	7/1/1998	86,756	-	86,756	86,756	-	-	-	-	-
443	Middle Creek Transmission	5260	IMP	Water Operations	PURCHASED	7/1/1998	610,887	-	610,887	-	-	610,887	-	-	-
444	Presediment Basin	5270	IMP	Water Operations	PURCHASED	7/1/1998	122,782	-	122,782	122,782	-	-	-	-	-
445	South Basin	5280	IMP	Water Operations	PURCHASED	7/1/1998	214,101	-	214,101	214,101	-	-	-	-	-
446	Bozeman Creek Access	21530	LAN	Water Operations	PURCHASED	7/1/1998	5,000	-	5,000	5,000	-	-	-	-	-



City of Bozeman, Montana  
Water Impact Fee StudyClassification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adj. Acq. Amt.	Water System					General Plant	
									Adjustments [2]	Supply	Treatment	Trans.	Distribution		Meters
447	N Rouse Property:Ph 2 -May Expds	39693	LAN	City Shops	PURCHASED	5/19/2017	3,909	-	3,909	-	-	-	-	-	3,909
448	N Rouse Property:Ph 1 -June Expds	39694	LAN	City Shops	PURCHASED	6/1/2017	2,500	-	2,500	-	-	-	-	-	2,500
449	1804 N Rouse / Mdt Property Stpp 86-1(44)-June Exp	39752	LAN	City Shops	PURCHASED	6/30/2017	292,500	-	292,500	-	-	-	-	-	292,500
450	Bozeman Creek	5040	LAN	Water Operations	PURCHASED	7/1/1998	26,500	-	26,500	26,500	-	-	-	-	-
451	Middle Creek	5050	LAN	Water Operations	PURCHASED	7/1/1998	22,500	-	22,500	-	-	-	-	-	-
452	Water Rights - Contracts 52A6	15830	LAN	Water Operations	WTRRIGHTS	7/1/1998	3,600	-	3,600	3,600	-	-	-	-	-
453	Water Rights - Bozeman Creek	5060	LAN	Water Operations	WTRRIGHTS	7/1/1998	64,179	-	64,179	64,179	-	-	-	-	-
454	Water Rights - Lyman Creek	5070	LAN	Water Operations	WTRRIGHTS	7/1/1998	21,699	-	21,699	-	-	-	-	-	-
455	Water Rights - Middle Creek - Hylite Reservoir	5080	LAN	Water Operations	WTRRIGHTS	7/1/1998	171,516	-	171,516	171,516	-	-	-	-	-
456	Water Rights - Sapain Ferris	5090	LAN	Water Operations	WTRRIGHTS	7/1/1998	2,500	-	2,500	-	-	-	-	-	-
457	Wonderware Scada Software-Dec	125878	M&E	Water Treatment Plant	PURCHASED	12/16/2014	8,646	-	8,646	-	-	-	-	-	8,646
458	Accounting Software	26253	M&E	Hte Software	PURCHASED	12/1/1998	24,800	-	24,800	-	-	-	-	-	24,800
459	Cisco	310239	M&E	Cisco Phone System	PURCHASED	9/15/2002	5	-	5	-	-	-	-	-	5
460	Cisco	310256	M&E	Cisco Phone System	PURCHASED	1/15/2003	230	-	230	-	-	-	-	-	230
461	Cisco	310296	M&E	Cisco Phone System	PURCHASED	2/15/2003	3	-	3	-	-	-	-	-	3
462	Cisco	3102113	M&E	Cisco Phone System	PURCHASED	5/15/2003	209	-	209	-	-	-	-	-	209
463	Hte Click2Gov:Digital Certificate-Cx	332426	M&E	Hte Software	PURCHASED	12/1/2006	120	-	120	-	-	-	-	-	120
464	Hte Click2Gov:Core Module #20061445	332435	M&E	Hte Software	PURCHASED	12/1/2006	620	-	620	-	-	-	-	-	620
465	Hte Click2Gov:Cx Utility Billing	332442	M&E	Hte Software	PURCHASED	12/1/2006	1,390	-	1,390	-	-	-	-	-	1,390
466	Hte Click2Gov:Tax Billing Module (Sid Billing)	332451	M&E	Hte Software	PURCHASED	12/1/2006	1,938	-	1,938	-	-	-	-	-	1,938
467	Hte Click2Gov:Final Core Module Install	332468	M&E	Hte Software	PURCHASED	3/23/2007	300	-	300	-	-	-	-	-	300
468	Hte Click2Gov:Tax Ce Activation Installation	332479	M&E	Hte Software	PURCHASED	3/23/2007	163	-	163	-	-	-	-	-	163
469	Hte Click2Gov:Tax Billing+Collect Final Install	332487	M&E	Hte Software	PURCHASED	3/23/2007	225	-	225	-	-	-	-	-	225
470	Hte Click2Gov:Util Ce Activation Installation	332493	M&E	Hte Software	PURCHASED	3/23/2007	217	-	217	-	-	-	-	-	217
471	Hte Click2Gov:Util Cx Final Installation	332499	M&E	Hte Software	PURCHASED	3/23/2007	300	-	300	-	-	-	-	-	300
472	Server-Data Backup Managr.\$14974.55 Split Citywide	3324144	M&E	Information Technology	PURCHASED	11/1/2007	599	-	599	-	-	-	-	-	599
473	Cityworks Work Order Lic-Azteca Work Orders Pmt#1	3324151	M&E	Geographic Info Systems	PURCHASED	11/28/2007	12,833	-	12,833	-	-	6,417	6,417	-	-
474	Work Order Arc-Gis License:Water Portion #97189	3324160	M&E	Geographic Info Systems	PURCHASED	2/1/2008	4,250	-	4,250	-	-	2,125	2,125	-	-
475	Work Order 2-Day Training Kick-Off Meeting-Azteca	3324164	M&E	Geographic Info Systems	PURCHASED	3/1/2008	1,800	-	1,800	-	-	900	900	-	-
476	Ctywrks Database Config Task2,2A,3,4 Remote Install	3324179	M&E	Geographic Info Systems	PURCHASED	4/2/2008	12,075	-	12,075	-	-	6,038	6,038	-	-
477	Ctywrks Database Config Task 5,6,7 Remote Install	3324180	M&E	Geographic Info Systems	PURCHASED	4/17/2008	7,550	-	7,550	-	-	3,775	3,775	-	-
478	Cityworks Site License Startup:Azteca Sys:July Exp	3324229	M&E	Geographic Info Systems	PURCHASED	7/10/2013	8,435	-	8,435	-	-	4,218	4,218	-	-
479	Add'L (2)Arc-Gis Licenses-Water Portion	3324233	M&E	Geographic Info Systems	PURCHASED	9/5/2013	3,943	-	3,943	-	-	1,971	1,971	-	-
480	Meter Reading Device (Backup For Fa#3745)	33581	M&E	Water Operations	PURCHASED	10/2/2006	19,925	-	19,925	-	-	-	-	19,925	-
481	P7-New As400 Software/Hardware	36142	M&E	City Hall:121 N.Rouse	PURCHASED	6/28/2011	5,187	-	5,187	-	-	-	-	-	5,187
482	Iseries+P7 V7Ri Os Upgrade:Sungard Srvr Operat Sys	36148	M&E	City Hall:121 N.Rouse	PURCHASED	6/6/2012	1,020	-	1,020	-	-	-	-	-	1,020
483	Meter Reading Receiver(It Room @ City Shops)	36690	M&E	City Shops	PURCHASED	5/21/2013	11,533	-	11,533	-	-	-	-	11,533	-
484	Meter Reading Receiver(Kenyon Drive Water Tank)	36700	M&E	Water Tank	PURCHASED	5/21/2013	11,533	-	11,533	-	-	-	-	11,533	-
485	Meter Reading Receiver(Fire Station 1)	36710	M&E	Fire Station #1	PURCHASED	5/21/2013	11,533	-	11,533	-	-	-	-	11,533	-
486	Meter Reading Receiver(911 Equipment Room)	36720	M&E	Fire Station #3	PURCHASED	5/21/2013	11,533	-	11,533	-	-	-	-	11,533	-
487	Meter Reading Receiver(Laurel Glen Annex)	36730	M&E	Laurel Glen	PURCHASED	5/21/2013	11,533	-	11,533	-	-	-	-	11,533	-
488	Meter Reading Receiver(Nelson Story Towers Msu)	37290	M&E	Water Operations	PURCHASED	8/4/2014	8,856	-	8,856	-	-	-	-	8,856	-
489	Neptune Meter Reading Device	37450	M&E	City Shops	PURCHASED	10/21/2014	6,000	-	6,000	-	-	-	-	6,000	-
490	Ivr (Integrated Voice Recognition Software)	37510	M&E	Finance Department	PURCHASED	11/14/2014	6,219	-	6,219	-	-	-	-	-	6,219
491	Ivr (Integrated Voice Recognition Software)June 15	37514	M&E	Finance Department	PURCHASED	6/30/2015	7,542	-	7,542	-	-	-	-	-	7,542
492	Ivr (Integrated Voice Recognitn Software)Aug Fy16	37516	M&E	Finance Department	PURCHASED	8/1/2015	3,117	-	3,117	-	-	-	-	-	3,117
493	Ivr (Integrated Voice Recognitn Software)Oct Fy16	37518	M&E	Finance Department	PURCHASED	10/27/2015	779	-	779	-	-	-	-	-	779
494	R900 Gateway Meter V3 (Loyal Gardens Lift Station)	38230	M&E	Water Operations	PURCHASED	3/25/2016	10,651	-	10,651	-	-	-	-	10,651	-
495	Dell Cto Storage(Water)	39831	M&E	Information Technology	PURCHASED	5/23/2017	2,300	-	2,300	-	-	-	-	-	2,300
496	Copier	32666	M&E	City Shops-Veh Maint	PURCHASED	10/15/2004	956	-	956	-	-	-	-	-	956
497	Savin C9145 Photocopier-Dec Expds	36046	M&E	City Shops	PURCHASED	12/21/2010	1,046	-	1,046	-	-	-	-	-	1,046
498	Roller	11100	M&E	Water Operations	PURCHASED	7/1/1998	4,395	-	4,395	-	-	-	-	-	4,395
499	Generator On Truck#1118	12140	M&E	Laurel Glen	PURCHASED	7/1/1998	3,612	-	3,612	-	-	-	-	-	3,612
500	Compactor	13130	M&E	Water Operations	PURCHASED	7/1/1998	2,938	-	2,938	-	-	-	-	-	2,938
501	Air Compressor	15880	M&E	Water Operations	PURCHASED	7/1/1998	6,500	-	6,500	-	-	-	-	-	6,500
502	1995 John Deere Backhoe	17720	M&E	Water Operations	PURCHASED	7/1/1998	62,173	-	62,173	-	-	-	-	-	62,173
503	Trench Box	18050	M&E	Water Operations	PURCHASED	7/1/1998	5,335	-	5,335	-	-	-	-	-	5,335
504	1997 Titan Flatbed Trailer	25320	M&E	Water Operations	PURCHASED	7/1/1998	7,180	-	7,180	-	-	-	-	-	7,180
505	Backhoe Bucket - Loader Is #1872 Streets	25580	M&E	Street Department	PURCHASED	7/1/1998	6,662	-	6,662	-	-	-	-	-	6,662
506	4" Pressure Relief Valve Singer:Drawing Pr-B-1216B	27041	M&E	Water Operations	PURCHASED	4/12/2006	15,640	-	15,640	-	-	-	-	-	15,640
507	Ground Heater	31150	M&E	Water Operations	PURCHASED	6/13/2002	7,838	-	7,838	-	-	-	-	-	7,838
508	Elec Gate @ Lower Yard/Veh Maint (Tag Fell Off)	31211	M&E	Water Operations	PURCHASED	6/25/2002	2,797	-	2,797	-	-	-	-	-	2,797
509	Radio Read Water Meter System	31321	M&E	Water Operations	PURCHASED	8/15/2002	18,387	-	18,387	-	-	-	-	18,387	-
510	Radio Read Water Meter System	31324	M&E	Water Operations	PURCHASED	10/15/2002	10,550	-	10,550	-	-	-	-	10,550	-

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## Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adj. Acq. Amt.	Water System					General Plant	
									Adjustments [2]	Supply	Treatment	Trans.	Distribution		Meters
511	Radio Read Water Meter System	31326	M&E	Water Operations	PURCHASED	11/15/2002	2,387	-	2,387	-	-	-	-	2,387	-
512	Radio Read Water Meter System	31328	M&E	Water Operations	PURCHASED	11/15/2002	74,120	-	74,120	-	-	-	-	74,120	-
513	Radio Read Water Meter System	31329	M&E	Water Operations	PURCHASED	11/15/2002	5,540	-	5,540	-	-	-	-	5,540	-
514	Radio Read Water Meter System	313213	M&E	Water Operations	PURCHASED	12/15/2002	11,720	-	11,720	-	-	-	-	11,720	-
515	Radio Read Water Meter System	313215	M&E	Water Operations	PURCHASED	1/15/2003	18,123	-	18,123	-	-	-	-	18,123	-
516	Radio Read Water Meter System	313217	M&E	Water Operations	PURCHASED	2/15/2003	9,812	-	9,812	-	-	-	-	9,812	-
517	Radio Read Water Meter System	313219	M&E	Water Operations	PURCHASED	3/15/2003	21,797	-	21,797	-	-	-	-	21,797	-
518	Radio Read Water Meter System	313221	M&E	Water Operations	PURCHASED	4/15/2003	71,576	-	71,576	-	-	-	-	71,576	-
519	Radio Read Water Meter System	313223	M&E	Water Operations	PURCHASED	5/15/2003	37,706	-	37,706	-	-	-	-	37,706	-
520	Radio Read Water Meter System	313225	M&E	Water Operations	PURCHASED	6/15/2003	6,575	-	6,575	-	-	-	-	6,575	-
521	Radio Read Water Meter System	313227	M&E	Water Operations	PURCHASED	8/6/2003	9,151	-	9,151	-	-	-	-	9,151	-
522	Radio Read Water Meter System	313229	M&E	Water Operations	PURCHASED	9/3/2003	4,825	-	4,825	-	-	-	-	4,825	-
523	2003 Sterling Dump Truck	31570	M&E	Water Operations	PURCHASED	5/15/2003	58,450	-	58,450	-	-	-	-	-	58,450
524	Radio/Strobe Sterling Dump Truck	31572	M&E	Water Operations	PURCHASED	6/15/2003	3,797	-	3,797	-	-	-	-	-	3,797
525	Electric Gate At Shops On Rouse (Tag Fell Off)	31661	M&E	Street Department	PURCHASED	7/15/2002	2,759	-	2,759	-	-	-	-	-	2,759
526	Cat Backhoe	32930	M&E	Water Operations	PURCHASED	6/15/2005	90,199	-	90,199	-	-	-	-	-	90,199
527	Generator-Water Tower Radio Building	33090	M&E	Water Tank	PURCHASED	5/13/2005	19,782	-	19,782	-	-	-	-	-	19,782
528	Generac Standby Generator System At Shops Complex	33330	M&E	Water Operations	PURCHASED	11/9/2005	0	-	0	-	-	-	-	-	-
529	Install Of Generator @ Shops (Water Ops Portions)	33332	M&E	Water Operations	PURCHASED	8/21/2006	5,357	-	5,357	-	-	-	-	-	5,357
530	Water Valve Exercisor-Spin Doctor G2 Boom	33380	M&E	Water Operations	PURCHASED	6/19/2006	6,137	-	6,137	-	-	-	-	-	6,137
531	Correlator Leak Detector	33590	M&E	Water Operations	PURCHASED	12/1/2006	20,050	-	20,050	-	-	-	-	-	20,050
532	Bagella Asphalt Recycling Machine:Portable Plant	33661	M&E	Street Department	PURCHASED	5/1/2007	16,873	-	16,873	-	-	-	-	-	16,873
533	Impactor:Ley Ground Jack Hammer	34140	M&E	Water Operations	PURCHASED	1/15/2008	4,673	-	4,673	-	-	-	-	-	4,673
534	Cat Backhoe 430E	34190	M&E	Water Operations	PURCHASED	3/20/2008	90,871	-	90,871	-	-	-	-	-	90,871
535	Cat Backhoe 430E - Compactor	34191	M&E	Water Operations	PURCHASED	8/22/2008	6,155	-	6,155	-	-	-	-	-	6,155
536	Trailer:Water Ops(Dehri/H2O Tanks/Vacuum Blower)	34780	M&E	Water Operations	PURCHASED	1/1/2009	40,680	-	40,680	-	-	-	-	-	40,680
537	Super C Guillotine Pipe Saw & Blade	34880	M&E	Water Operations	PURCHASED	4/24/2009	9,450	-	9,450	-	-	-	-	-	9,450
538	1977 Mueller Drilling Machine	3520	M&E	Water Operations	PURCHASED	7/1/1998	5,122	-	5,122	-	-	-	-	-	5,122
539	Mini General:Water Fill Station @ Lwr Yard-Nov Exp	35750	M&E	Water Operations	PURCHASED	11/19/2009	26,119	-	26,119	-	-	-	-	-	26,119
540	Boring Tool & Kit	36390	M&E	Water Operations	PURCHASED	7/26/2012	3,635	-	3,635	-	-	-	-	-	3,635
541	2012 Cat Backhoe	36490	M&E	Water Operations	PURCHASED	9/14/2012	92,393	-	92,393	-	-	-	-	-	92,393
542	Hitachi Mini Excavator:24"Bucket&Clamp Kit	36631	M&E	Wastewater Operation	PURCHASED	4/15/2013	21,622	-	21,622	-	-	-	-	-	21,622
543	Towmaster Tilt-Bed Trailer For Mini Excavator	36761	M&E	Water Operations	PURCHASED	6/11/2013	3,328	-	3,328	-	-	-	-	-	3,328
544	Pressure Washer @ Shop Complex	37054	M&E	City Shops	PURCHASED	2/1/2014	1,066	-	1,066	-	-	-	-	-	1,066
545	Trimble Geo 7X Range Finder	37260	M&E	Geographic Info Systems	PURCHASED	7/30/2014	3,472	-	3,472	-	-	-	-	-	3,472
546	Leak Correlator W/Headset & Listening Stick	37270	M&E	Water Operations	PURCHASED	7/2/2014	31,100	-	31,100	-	-	-	-	-	31,100
547	Mueller Cl-12 Tapping Machine	37330	M&E	Water Operations	PURCHASED	8/28/2014	18,470	-	18,470	-	-	-	-	-	18,470
548	Light Plant/Tower 50/50 Wtr/Swr	37750	M&E	Water Operations	PURCHASED	6/23/2015	3,682	-	3,682	-	-	-	-	-	3,682
549	4" Model 5823 Pump From Industrial Systems	5121	M&E	Water Operations	PURCHASED	2/10/2006	8,709	-	8,709	-	-	-	-	-	8,709
550	1997 Chevy 1 Ton Truck	25290	VEH	Laurel Glen	PURCHASED	7/1/1998	23,358	-	23,358	-	-	-	-	-	23,358
551	1998 Chevy 1/2 Ton Truck	26470	VEH	Water Operations	PURCHASED	7/1/1998	19,083	-	19,083	-	-	-	-	-	19,083
552	2002 Chevy Silverado 4Wd Truck (Radio & Toolbox)	30780	VEH	Water Operations	PURCHASED	12/15/2001	2,811	-	2,811	-	-	-	-	-	2,811
553	2002 Chevy Silverado 4Wd Truck	30781	VEH	Water Operations	PURCHASED	12/15/2001	17,366	-	17,366	-	-	-	-	-	17,366
554	Sideboards Sterling Dump Truck	31571	VEH	Water Operations	PURCHASED	6/15/2003	756	-	756	-	-	-	-	-	756
555	Running Boards	32322	VEH	Wastewater Operation	PURCHASED	7/15/2004	466	-	466	-	-	-	-	-	466
556	2006 Gmc Sierra Truck For Water Dept 50%-Fund600	33440	VEH	Water Operations	PURCHASED	3/8/2006	9,595	-	9,595	-	-	-	-	-	9,595
557	Strobe Lights For Water Truck 50%-Fund600	33441	VEH	Water Operations	PURCHASED	3/21/2006	1,355	-	1,355	-	-	-	-	-	1,355
558	2006 Gmc Sierra 3500 (White - 1 Ton)	33610	VEH	Water Operations	PURCHASED	10/5/2006	25,129	-	25,129	-	-	-	-	-	25,129
559	2008 White Gmc Sierra 3500 Hd	34020	VEH	Water Operations	PURCHASED	11/13/2007	28,991	-	28,991	-	-	-	-	-	28,991
560	Flatbed For 2008 White Gmc Sierra 3500 Hd (#3402)	34021	VEH	Water Operations	PURCHASED	12/31/2007	9,825	-	9,825	-	-	-	-	-	9,825
561	2009 Gmc Sierra 2500Hd Truck:White 3/4 Ton Ext Cab	34930	VEH	Water Operations	PURCHASED	5/8/2009	25,897	-	25,897	-	-	-	-	-	25,897
562	2009 Gmc Sierra 2500Hd Truck:(2)Led Tx Light Bars	34931	VEH	Water Operations	PURCHASED	6/2/2009	4,698	-	4,698	-	-	-	-	-	4,698
563	2009 Gmc Sierra 2500Hd Truck:Aluminum Tool Box	34932	VEH	Water Operations	PURCHASED	6/15/2009	550	-	550	-	-	-	-	-	550
564	2011 Gmc Sierra-Meter Van	36060	VEH	Water Operations	PURCHASED	5/17/2011	25,506	-	25,506	-	-	-	-	-	25,506
565	2011 Gmc Sierra-Meter Van-July Expds	36061	VEH	Water Operations	PURCHASED	7/22/2011	9,552	-	9,552	-	-	-	-	-	9,552
566	2013 Gmc Sierra	36620	VEH	Wastewater Operation	PURCHASED	4/15/2013	28,783	-	28,783	-	-	-	-	-	28,783
567	13 Gmc Sierra:9' 6"X96" Flatbed W/Alum Tool Boxes	36621	VEH	Water Operations	PURCHASED	6/27/2013	13,360	-	13,360	-	-	-	-	-	13,360
568	2015 Gmc Sierra 1500 (White)	37800	VEH	Water Operations	PURCHASED	7/13/2015	27,553	-	27,553	-	-	-	-	-	27,553
569	2015 Gmc Sierra 1500 (White)Accessories	37801	VEH	Water Operations	PURCHASED	8/1/2015	3,611	-	3,611	-	-	-	-	-	3,611
570	2016 Ford F150 Truck	38310	VEH	Water Operations	PURCHASED	8/2/2016	28,132	-	28,132	-	-	-	-	-	28,132
571	2016 Ford F150 Truck Accessories	38311	VEH	Water Operations	PURCHASED	12/8/2016	8,059	-	8,059	-	-	-	-	-	8,059
572	2016 Ford F150 Truck	38320	VEH	Water Operations	PURCHASED	8/2/2016	28,132	-	28,132	-	-	-	-	-	28,132
573	2016 Ford F150 Truck Moto Trbo 45W Mobile Radio	38321	VEH	Water Operations	PURCHASED	1/19/2017	795	-	795	-	-	-	-	-	795
574	Sid 604 Sewer Graf'S First	4650	IMP	Special Improv District	PURCHASED	7/1/1998	81,661	-	81,661	-	-	-	81,661	-	-



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Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adjustments [2]	Adj. Acq. Amt.	Water System					General Plant
										Supply	Treatment	Trans.	Distribution	Meters	
639	Wtp Upgrade:February Expds	125868	BLD	Water Treatment Plant	PURCHASED	2/28/2014	237,279	-	237,279	-	237,279	-	-	-	-
640	Wtp Upgrade:March Expds	125869	BLD	Water Treatment Plant	PURCHASED	3/29/2014	774,530	-	774,530	-	774,530	-	-	-	-
641	Wtp Upgrade:April Expds	125870	BLD	Water Treatment Plant	PURCHASED	4/30/2014	249,820	-	249,820	-	249,820	-	-	-	-
642	Wtp Upgrade:May Expds Fy14	125871	BLD	Water Treatment Plant	PURCHASED	5/14/2014	173,936	-	173,936	-	173,936	-	-	-	-
643	Wtp Upgrade:June Expds	125872	BLD	Water Treatment Plant	PURCHASED	6/30/2014	359,882	-	359,882	-	359,882	-	-	-	-
644	Wtp Construction Retainage Thru 6/30/14	125873	BLD	Water Treatment Plant	PURCHASED	6/30/2014	136,106	-	136,106	-	136,106	-	-	-	-
645	Wtp Upgrade:July Expds	125874	BLD	Water Treatment Plant	PURCHASED	7/31/2014	109,267	-	109,267	-	109,267	-	-	-	-
646	Wtp Upgrade:September Expds	125875	BLD	Water Treatment Plant	PURCHASED	9/9/2014	85,026	-	85,026	-	85,026	-	-	-	-
647	Wtp Upgrade:November Expds	125876	BLD	Water Treatment Plant	PURCHASED	11/21/2014	190,820	-	190,820	-	190,820	-	-	-	-
648	Wtp Upgrade:December Expds	125877	BLD	Water Treatment Plant	PURCHASED	12/12/2014	34,578	-	34,578	-	34,578	-	-	-	-
649	Wtp Upgrade:January Expds	125882	BLD	Water Treatment Plant	PURCHASED	1/7/2015	67,059	-	67,059	-	67,059	-	-	-	-
650	Wtp Upgrade:Wonderware/Scada:May Expds Fy14	125883	BLD	Water Treatment Plant	PURCHASED	5/14/2014	6,736	-	6,736	-	6,736	-	-	-	-
651	Wtp Upgrade:Wonderware/Scada:October Expds Fy14	125884	BLD	Water Treatment Plant	PURCHASED	10/31/2013	7,968	-	7,968	-	7,968	-	-	-	-
652	Wtp Upgrade:February Expds	125885	BLD	Water Treatment Plant	PURCHASED	2/1/2015	43,313	-	43,313	-	43,313	-	-	-	-
653	Wtp Upgrade Svcs:Const:April Expds	125887	BLD	Water Treatment Plant	PURCHASED	4/8/2015	19,827	-	19,827	-	19,827	-	-	-	-
654	Wtp Upgrade Svcs:Const:May Expds	125888	BLD	Water Treatment Plant	PURCHASED	5/18/2015	22,157	-	22,157	-	22,157	-	-	-	-
655	Wtp Upgrade Svcs:Const:July Fy16 Expds	125889	BLD	Water Treatment Plant	PURCHASED	7/30/2015	2,587	-	2,587	-	2,587	-	-	-	-
656	Wtp Upgrade Svcs:Const:Aug Fy16 Expds	125890	BLD	Water Treatment Plant	PURCHASED	8/30/2015	4,941	-	4,941	-	4,941	-	-	-	-
657	Wtp Upgrade Svcs:Const:Sept Fy16 Expds	125891	BLD	Water Treatment Plant	PURCHASED	9/30/2015	1,894	-	1,894	-	1,894	-	-	-	-
658	Wtp Upgrade Svcs:Const:Nov Fy16 Expds	125893	BLD	Water Treatment Plant	PURCHASED	11/30/2015	932	-	932	-	932	-	-	-	-
659	Wtp Upgrade Svcs:Const:Dec Fy16 Expds	125894	BLD	Water Treatment Plant	PURCHASED	12/26/2015	8,317	-	8,317	-	8,317	-	-	-	-
660	Wtp Upgrade Svcs:Const:March Fy16 Expds	125895	BLD	Water Treatment Plant	PURCHASED	3/25/2016	274,825	-	274,825	-	274,825	-	-	-	-
661	Wtp Upgrade Svcs:Const:May Fy16 Expds	125896	BLD	Water Treatment Plant	PURCHASED	5/25/2016	5,379	-	5,379	-	5,379	-	-	-	-
662	Wtp Upgrade Svcs:Const:June Fy16 Expds	125897	BLD	Water Treatment Plant	PURCHASED	6/30/2016	791	-	791	-	791	-	-	-	-
663	Wtp Upgrade Svcs:Const:July Fy17 Expds	125898	BLD	Water Treatment Plant	PURCHASED	7/31/2016	706	-	706	-	706	-	-	-	-
664	Wtp Upgrade Svcs:Const:Sept Fy17 Expds	125899	BLD	Water Treatment Plant	PURCHASED	9/30/2016	1,063	-	1,063	-	1,063	-	-	-	-
665	Wtp Upgrade Svcs:Const:Jan Fy17 Expds	1258100	BLD	Water Treatment Plant	PURCHASED	1/10/2017	1,135	-	1,135	-	1,135	-	-	-	-
666	Wtp Upgrade Svcs:Const:Feb Fy17 Expds	1258101	BLD	Water Treatment Plant	PURCHASED	2/28/2017	236	-	236	-	236	-	-	-	-
667	Wtp Upgrade Svcs:Const:May Fy17 Expds	1258102	BLD	Water Treatment Plant	PURCHASED	5/1/2017	953	-	953	-	953	-	-	-	-
668	Wtp Upgrade:Sept Expds	125848	IMP	Water Treatment Plant	PURCHASED	9/30/2012	16,120	-	16,120	-	16,120	-	-	-	-
669	Wtp Upgrade:Scada Software:December Expds	125851	M&E	Water Treatment Plant	PURCHASED	12/28/2012	52,484	-	52,484	-	52,484	-	-	-	-
670	Wonderware Scada Software-Dec	125879	M&E	Water Treatment Plant	PURCHASED	12/16/2014	8,646	-	8,646	-	2,882	-	2,882	-	-
671	Sourdough Water Storage Tank Proj Reservoir-Sept	37950	IMP	Water Tank	PURCHASED	9/17/2015	40,573	-	40,573	-	40,573	-	-	-	-
672	Sourdough Water Storage Tank Proj Reservoir-Nov	37951	IMP	Water Tank	PURCHASED	11/20/2015	25,504	-	25,504	-	25,504	-	-	-	-
673	Sourdough Water Storage Tank Proj Reservoir-May	37952	IMP	Water Tank	PURCHASED	5/31/2016	140,270	-	140,270	-	140,270	-	-	-	-
674	Sourdough Water Storage Tank Proj Reservoir-Sept	37953	IMP	Water Tank	PURCHASED	9/30/2016	38,255	-	38,255	-	38,255	-	-	-	-
675	Sourdough Water Storage Tank Proj Reservoir-Sept	37954	IMP	Water Tank	PURCHASED	9/30/2016	51,007	-	51,007	-	51,007	-	-	-	-
676	Sourdough Water Storage Tank Proj Reservoir-Feb	37955	IMP	Water Tank	PURCHASED	2/20/2017	60,821	-	60,821	-	60,821	-	-	-	-
677	Sourdough Water Storage Tank Proj Reservoir-May	37957	IMP	Water Tank	PURCHASED	5/31/2017	896,937	-	896,937	-	896,937	-	-	-	-
678	Sourdough Water Storage Tank Proj Reservoir-June	37958	IMP	Water Tank	PURCHASED	6/30/2017	791,056	-	791,056	-	791,056	-	-	-	-
679	Sourdough Wtr Storage Tank Proj-Retainage Fy17	37959	IMP	Water Tank	PURCHASED	6/30/2017	84,166	-	84,166	-	84,166	-	-	-	-
680	Lyman Creek Reservoir Improvements:June Expds	295892	IMP	Water Treatment Plant	PURCHASED	6/29/2012	790	-	790	790	-	-	-	-	-
681	Lyman Creek Reservoir Improvements:July Expds	295893	IMP	Water Treatment Plant	PURCHASED	7/12/2012	8,950	-	8,950	8,950	-	-	-	-	-
682	Lyman Creek Improv Design Svcs Thru 12/14/07	295845	IMP	Water Treatment Plant	PURCHASED	12/14/2007	5,343	-	5,343	5,343	-	-	-	-	-
683	Lyman Creek Improv Design Svcs Thru 2/8/08	295846	IMP	Water Treatment Plant	PURCHASED	2/8/2008	21,371	-	21,371	21,371	-	-	-	-	-
684	Lyman Creek Improv Design Svcs Thru 2/22/08	295847	IMP	Water Treatment Plant	PURCHASED	2/22/2008	2,033	-	2,033	2,033	-	-	-	-	-
685	Lyman Creek Reservoir Improvements Thru 3/21/08	295848	IMP	Water Treatment Plant	PURCHASED	3/21/2008	21,371	-	21,371	21,371	-	-	-	-	-
686	Lyman Creek Reservoir Liner (Improv Thru 3/21/08)	295849	IMP	Water Treatment Plant	PURCHASED	3/27/2008	5,284	-	5,284	5,284	-	-	-	-	-
687	Lyman Creek Improv Design Svcs Thru 4/18/08	295850	IMP	Water Treatment Plant	PURCHASED	4/18/2008	16,028	-	16,028	16,028	-	-	-	-	-
688	Lyman Creek Reservoir Design Svcs Thru 5/2/08	295851	IMP	Water Treatment Plant	PURCHASED	5/2/2008	509	-	509	509	-	-	-	-	-
689	Lyman Creek Reservoir Design Svcs Thru 5/16/08	295852	IMP	Water Treatment Plant	PURCHASED	5/16/2008	10,685	-	10,685	10,685	-	-	-	-	-
690	Lyman Creek Reservoir Improvements Thru 8/22/08	295853	IMP	Water Treatment Plant	PURCHASED	9/8/2008	602	-	602	602	-	-	-	-	-
691	Lyman Creek Reservoir Improvements Thru 8/22/08	295854	IMP	Water Treatment Plant	PURCHASED	9/8/2008	32,056	-	32,056	32,056	-	-	-	-	-
692	Lyman Creek Reservoir Improvements Thru 10/3/08	295855	IMP	Water Treatment Plant	PURCHASED	10/20/2008	1,965	-	1,965	1,965	-	-	-	-	-
693	Lyman Creek Reservoir Improvements Thru 11/28/08	295856	IMP	Water Treatment Plant	PURCHASED	11/30/2008	15,343	-	15,343	15,343	-	-	-	-	-
694	Lyman Creek Reservoir Improvements Thru 11/28/08	295857	IMP	Water Treatment Plant	PURCHASED	11/30/2008	1,186	-	1,186	1,186	-	-	-	-	-
695	Lyman Creek Reservoir Improvements Thru 11/28/08	295858	IMP	Water Treatment Plant	PURCHASED	11/30/2008	17,306	-	17,306	17,306	-	-	-	-	-
696	Lyman Creek Improv:Const Svcs Thru 11/25/08 Pmt#1	295859	IMP	Water Treatment Plant	PURCHASED	1/21/2009	25,275	-	25,275	25,275	-	-	-	-	-
697	Lyman Creek Improv:1%Grt (Dyk) Pmt#1 Thru 11/25/08	295860	IMP	Water Treatment Plant	PURCHASED	1/21/2009	255	-	255	-	-	-	-	-	-
698	Lyman Creek Reservoir Improvements Thru 02/06/09	295861	IMP	Water Treatment Plant	PURCHASED	2/26/2009	647	-	647	647	-	-	-	-	-
699	Lyman Creek Reservoir Improvements Thru 02/06/09	295862	IMP	Water Treatment Plant	PURCHASED	2/26/2009	5,051	-	5,051	5,051	-	-	-	-	-
700	Lyman Creek Reservoir Improvements Thru 02/06/09	295863	IMP	Water Treatment Plant	PURCHASED	2/26/2009	36,590	-	36,590	36,590	-	-	-	-	-
701	Lyman Reservoir:Legal 4001/Bid Ad Sourdough Tank	295864	IMP	Water Treatment Plant	PURCHASED	3/1/2009	77	-	77	77	-	-	-	-	-
702	Lyman Creek Improv:Const Admin Thru 3/27/09	295865	IMP	Water Treatment Plant	PURCHASED	3/27/2009	1,901	-	1,901	1,901	-	-	-	-	-

Appendix A

City of Bozeman, Montana  
Water Impact Fee Study

Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adjustments [2]	Adj. Acq. Amt.	Water System					General Plant	
										Supply	Treatment	Trans.	Distribution	Meters		
703	Lyman Creek Improv:Design Svcs Thru 3/27/09	295866	IMP	Water Treatment Plant	PURCHASED	3/27/2009	36,590	-	36,590	36,590	-	-	-	-	-	
704	Lyman Creek Discharge Permit App & Review Fees	295867	IMP	Water Treatment Plant	PURCHASED	4/7/2009	2,000	-	2,000	2,000	-	-	-	-	-	
705	Lyman Creek Plan & Spec Deq Review Fees	295868	IMP	Water Treatment Plant	PURCHASED	4/15/2009	1,800	-	1,800	1,800	-	-	-	-	-	
706	Lyman Creek Improv Design Svcs Thru 4/17/09	295869	IMP	Water Treatment Plant	PURCHASED	4/17/2009	820	-	820	820	-	-	-	-	-	
707	Lyman Creek Improv Design Svcs Thru 4/17/09	295870	IMP	Water Treatment Plant	PURCHASED	4/30/2009	9,148	-	9,148	9,148	-	-	-	-	-	
708	Lyman Creek Improv Design Svcs Thru 5/01/09	295871	IMP	Water Treatment Plant	PURCHASED	5/14/2009	2,073	-	2,073	2,073	-	-	-	-	-	
709	Lyman Creek Improv Design Svcs Thru 5/29/09	295872	IMP	Water Treatment Plant	PURCHASED	5/29/2009	1,566	-	1,566	1,566	-	-	-	-	-	
710	Lyman Creek Improv Design Svcs Thru 5/29/09	295873	IMP	Water Treatment Plant	PURCHASED	5/29/2009	9,148	-	9,148	9,148	-	-	-	-	-	
711	Lyman Creek Improv:Invitation To Bid Legal Ad	295874	IMP	Water Treatment Plant	PURCHASED	6/15/2009	180	-	180	180	-	-	-	-	-	
712	Lyman Creek Improv:Const Admin Thru 6/26/09	295875	IMP	Water Treatment Plant	PURCHASED	6/26/2009	5,455	-	5,455	5,455	-	-	-	-	-	
713	Lyman Creek Improv:Design Svcs Thru 6/26/09	295876	IMP	Water Treatment Plant	PURCHASED	6/26/2009	8,498	-	8,498	8,498	-	-	-	-	-	
714	Lyman Creek:Discharge Permit App & Review Fees	295877	IMP	Water Treatment Plant	PURCHASED	6/30/2009	950	-	950	950	-	-	-	-	-	
715	Lyman Creek Improv:Const Svcs Thru 06/30/09 Pmt#2	295878	IMP	Water Treatment Plant	PURCHASED	6/30/2009	77,951	-	77,951	77,951	-	-	-	-	-	
716	Lyman Creek Improv:1%Grt (Dyk) Pmt#2 Thru 06/30/09	295879	IMP	Water Treatment Plant	PURCHASED	6/30/2009	787	-	787	787	-	-	-	-	-	
717	Lyman Creek Reservoir Improvements:July Expds	295880	IMP	Water Treatment Plant	PURCHASED	7/24/2009	3,851	-	3,851	3,851	-	-	-	-	-	
718	Lyman Creek Reservoir Improvements:September Expds	295881	IMP	Water Treatment Plant	PURCHASED	9/30/2009	7,521	-	7,521	7,521	-	-	-	-	-	
719	Lyman Creek Reservoir Improvements:October Expds	295882	IMP	Water Treatment Plant	PURCHASED	10/28/2009	158,178	-	158,178	158,178	-	-	-	-	-	
720	Lyman Creek Reservoir Improvements:November Expds	295883	IMP	Water Treatment Plant	PURCHASED	11/27/2009	20,902	-	20,902	20,902	-	-	-	-	-	
721	Lyman Creek Reservoir Improvements:December Expds	295884	IMP	Water Treatment Plant	PURCHASED	12/18/2009	117,684	-	117,684	117,684	-	-	-	-	-	
722	Lyman Creek Reservoir Improvements:January Expds	295885	IMP	Water Treatment Plant	PURCHASED	1/22/2010	12,713	-	12,713	12,713	-	-	-	-	-	
723	Lyman Creek Reservoir Improvements:April Expds	295886	IMP	Water Treatment Plant	PURCHASED	4/16/2010	69,280	-	69,280	69,280	-	-	-	-	-	
724	Lyman Creek Reservoir Improvements:June Expds	295887	IMP	Water Treatment Plant	PURCHASED	6/22/2010	10,298	-	10,298	10,298	-	-	-	-	-	
725	Lyman Creek Reservoir Improvements:July Expds	295888	IMP	Water Treatment Plant	PURCHASED	7/26/2010	47,202	-	47,202	47,202	-	-	-	-	-	
726	Lyman Creek Reservoir Improvements:Aug Expds	295889	IMP	Water Treatment Plant	PURCHASED	8/4/2010	5,488	-	5,488	5,488	-	-	-	-	-	
727	Lyman Creek Reservoir Improvements:June Expds	295890	IMP	Water Treatment Plant	PURCHASED	6/30/2011	4,119	-	4,119	4,119	-	-	-	-	-	
728	Lyman Creek Reservoir Improvements:October Expds	295891	IMP	Water Treatment Plant	PURCHASED	10/28/2011	471	-	471	471	-	-	-	-	-	
729	West Babcock St Water Main Instll:#Ifer-1402	31341	IMP	Water Operations	PURCHASED	4/1/2015	22,105	-	22,105	-	-	22,105	-	-	-	
730	Impact Fee Credits-Water Dave Cecich Ifer0103	31350	IMP	Water Operations	PURCHASED	7/1/2001	91,410	-	91,410	-	-	-	-	-	91,410	
731	Impact Fee Credits-School District #7 Ifer0102	31351	IMP	Water Operations	PURCHASED	7/1/2001	13,980	-	13,980	-	-	-	-	-	13,980	
732	Impact Fee Credits-David Jarret Ifer0003	31352	IMP	Water Operations	PURCHASED	7/1/2001	31,148	-	31,148	-	-	-	-	-	31,148	
733	Impact Fee Credits-Sandan Llc Ifer0105	31353	IMP	Water Operations	PURCHASED	7/1/2001	33,280	-	33,280	-	-	-	-	-	33,280	
734	S.11Th Water Main Oversiz Imp Crdts Elg Ifer0508	31354	IMP	Water Operations	PURCHASED	1/1/2006	26,453	-	26,453	-	-	-	-	-	26,453	
735	Graf Water Impact Fee Credit/Graf Corridor	31355	IMP	Water Operations	PURCHASED	9/9/2016	25,903	-	25,903	-	-	-	-	-	25,903	
736	Public Water Improv:Oversizing-Huffine+Cottonwood	34280	IMP	Water Operations	PURCHASED	9/19/2007	136,241	-	136,241	-	-	136,241	-	-	-	
737	Street Improvements Fy12-September Expds	36189	IMP	Street Department	PURCHASED	9/30/2011	20,065	-	20,065	-	-	-	-	-	20,065	
738	Graf Extension Construction-June Fy17	38656	IMP	Street Department	PURCHASED	6/30/2017	279,894	-	279,894	-	-	-	-	-	279,894	
739	TOTAL SYSTEM ASSETS - CURRENTLY REPORTED							\$ 235,843,006	\$ -	\$ 235,843,006	\$ 8,901,401	\$ 40,463,874	\$ 71,689,435	\$ 110,703,253	\$ 413,244	\$ 3,671,798
740	ALLOCATION OF OTHER DEVELOPER CONTRIBUTIONS									-	-	-	-	-	-	
741	ALLOCATION OF INDIRECT PLANT									-	-	-	-	-	-	
742	TOTAL ASSETS FOR IMPACT FEE DETERMINATION							\$ 235,843,006	\$ -	\$ 235,843,006	\$ 8,901,401	\$ 40,463,874	\$ 71,689,435	\$ 110,703,253	\$ 413,244	\$ 3,671,798
743										100.00%	3.77%	17.16%	30.40%	46.94%	0.18%	1.56%
	TOTAL ASSETS CONSIDERED AS DONATIONS / CONTRIBUTIONS / WATER RIGHTS FUNDED THROUGH OTHER FEES [3]									\$ 162,576,464	\$ 2,120,142	\$ 34,611	\$ 60,239,398	\$ 100,182,313	\$ -	\$ -
								CONTRIBUTION GRANT								
								WTRRIGHTS								

Appendix A

City of Bozeman, Montana  
Water Impact Fee Study

Classification of Existing Water Utility System Assets [1]

Line No.	Description	Asset ID	Type	Location	Acquired	Acquired Date	Asset Cost	Adjustments [2]	Adj. Acq. Amt.	Water System					General Plant	
										Supply	Treatment	Trans.	Distribution	Meters		
Footnotes:																
[1]	Amounts shown are derived from fixed asset records provided by the City; amounts reported as of June 30, 2017. Amounts are classified to plant functions based on: i) fixed asset description and cost center / location; ii) relevance of fixed asset; and iii) ratemaking judgment.															
[2]	Adjustments to remove asset repairs, assets no longer in service, assets not applicable to the water utility, and assets applicable to future capacity expansions.															
[3]	The City reported the following grant receipts in addition to the grant-funded assets shown in the "Acquired" column.															
	U.S. Environmental Protection Agency Grants:															
	Water Plant Security Grant															
						2004	\$34,611		\$ 34,611	\$ -	\$ 34,611	\$ -	\$ -	\$ -	\$ -	
						2006	1,622,312		1,622,312	-	-	1,622,312	-	-	-	
						2007	279,944		279,944	-	-	279,944	-	-	-	
							<u>\$1,936,867</u>		<u>\$ 1,936,867</u>	<u>\$ -</u>	<u>\$ 34,611</u>	<u>\$ 1,902,256</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	