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**AGENDA  
JOINT PERSIGO WORKSHOP  
CITY OF GRAND JUNCTION, CITY COUNCIL  
MESA COUNTY, BOARD OF COUNTY COMMISSIONERS  
MESA COUNTY MULTI PURPOSE ROOM, 1<sup>ST</sup> FLOOR ANNEX  
544 ROOD AVENUE  
GRAND JUNCTION, COLORADO  
THURSDAY, NOVEMBER 1, 2018  
3:30 PM**

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To become the most livable community west of the Rockies by 2025

- 1. Discussion Topics**
  - a. 2019 Recommended Budget
  - b. Internal Services Fee Study Report
- 2. Next Meeting Topics**
- 3. Other Business**



**JOINT PERSIGO MEETING  
CITY OF GRAND JUNCTION, CITY COUNCIL  
MESA COUNTY, BOARD OF COUNTY COMMISSIONERS**

**Item #1.a.**

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**Meeting Date:** November 1, 2018

**Presented By:** Pete Baier, Deputy Administrator of Operations, Randi Kim, Utilities Director, Dan Tonello, Wastewater Services Manager

**Department:** Public Works - Utilities

**Submitted By:** Randi Kim

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**Information**

**SUBJECT:**

2019 Recommended Budget

**RECOMMENDATION:**

This presentation and discussion is for informational purposes.

**EXECUTIVE SUMMARY:**

The Persigo Wastewater Treatment System is jointly owned by the City of Grand Junction and Mesa County. The City of Grand Junction manages and operates the system. The purpose of this meeting is to present the 2019 Recommended Budget for the Joint Persigo Wastewater system.

**BACKGROUND OR DETAILED INFORMATION:**

The Persigo Wastewater Treatment System is jointly owned by the City of Grand Junction and Mesa County. The City of Grand Junction manages and operates the system.

The Persigo Board meets on an annual basis to review the status of the overall system and the recommended budget for the Joint Persigo Wastewater system for the forthcoming fiscal year.

In addition to staff presentations, a consultant will present the Sewer Fund Internal Service Fee Final Report that was issued on October 12, 2018. At the direction of the Joint Persigo Board, the City solicited proposals from consultants to conduct a study to develop a methodology to calculate the cost of internal services provided by the City's

General Fund to the Persigo Wastewater Enterprise Fund. Raftelis Financial Consultants, Inc. was selected through a competitive procurement process by a selection committee comprised of City and County staff. The intent of the study was to develop a methodology that is designed to fairly identify and recover the cost of services provided and is consistent with accepted utility industry practices. The consultant will present findings and recommendations of this study.

**FISCAL IMPACT:**

Proposed 2019 Budget information is included in this presentation and discussion.

**SUGGESTED MOTION:**

N/A

**Attachments**

1. 2019 Recommended Persigo Budget - Nov 2018 Workshop

October 26, 2018

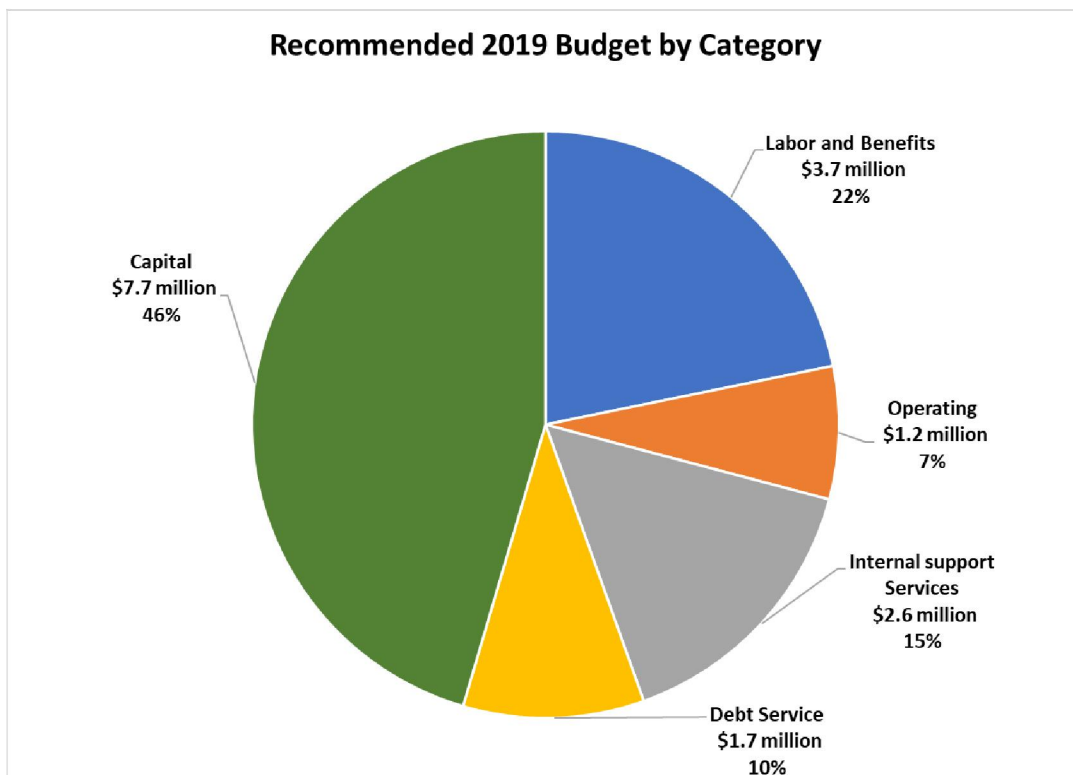
To the Honorable Members of Persigo Board:

It is my pleasure to present the Persigo recommended budget for 2019. The 2019 budget totals \$16.9 million, of which \$7.7 million is tied to Capital projects which have been planned for and are funded in the Wastewater Division’s Long Range Financial Plan. The proposed budget represents the allocation of resources needed to operate the system in a manner that is consistent with industry standards and to ensure that the system will meet our community’s needs well into the future.

During 2015, the Persigo Board approved the Wastewater Division’s Annual budget which included funds for the completion of a rate study to be performed by a third-party consultant. This study not only evaluated the current financial stability of the operation, but also looked at the long-term system needs which included:

- > Regulatory Compliance
- > Growth Related Capital Expenditures
- > System Maintenance
- > System Operations & Staffing

The proposed 2019 budget is consistent with all recommendations included in the 2015 rate study. Following is a graph representing the 2019 Recommended budget by category showing the emphasis on capital infrastructure investment.







There are two separate funds for the Persigo Wastewater operation. The first is the operating fund which acquires its revenue from monthly sewer fees which are used to finance the operation and maintenance of the treatment facility and the collection system. The second is the sewer capacity fund which utilizes revenue from plant investment fees to pay for growth related capital projects at the treatment facility and throughout the collection system. The projected combined ending fund balance for 2019 is \$20.2 million. These reserves are sufficient to cover the costs of one year of capital replacement costs and 25% of operations and maintenance cost (the target fund balance of \$6.1 million recommended by the 2015 rate study). In addition, reserves will fund a portion of future anticipated capital expansion costs estimated at \$40 million that will be required over the next 30 years.

### **Fiscal Responsibility**

The 2015 Rate study valued the Persigo treatment facility at \$188 million, and the sewage collection system at \$83 million for a total system value of \$271 million. The majority of this infrastructure operates in an extremely corrosive environment and requires significant ongoing maintenance and rehabilitation efforts.

Ongoing efforts for the preservation and maintenance of the system include a 30-year replacement schedule for all portions of the collection system which have currently exceeded the useful life. The collection system is comprised of approximately 577 miles of pipe of which approximately 200 miles is scheduled for replacement over the next 30 years. The proposed expenditure for this replacement effort for 2019 is \$2.7 million. In addition to sewer line replacements, the budget includes \$1.8 million to rehabilitate one of the main sewer interceptor pipeline. Also, engineering will be initiated to replace the Tiara Rado forcemain and eliminate up to three lift stations.

System expansion projects include the 23 Road Trunk Line extension project which was designed in 2018 and is scheduled to be constructed in 2019.

### **Treatment Plant Operations**

The Persigo Treatment Facility was designed during the late 1970's and went on line in 1984. Although this facility is over 30 years old, it is operating extremely well and is currently maintaining compliance with all regulatory requirements. Construction of the effluent diffuser project that will allow moving the effluent discharge from the Persigo Wash to the Colorado River to meet effluent limitations was initiated in 2018 and is scheduled to be complete by March 2019.

Other infrastructure improvement projects at the Persigo Treatment Facility include upgrading an aeration blower to a more energy efficient turbo blower, and installing a sludge drying bed to reduce the volume of biosolids and associated hauling and tipping costs at the Mesa County landfill. In addition, studies are proposed to address odor issues in the collection system and at the treatment plant, investigate the condition of plant structures, and update the 2005 Sewer Basin Study in coordination with the Comprehensive Plan update. The proposed expenditure for plant projects and studies is \$1.2 million.



## **Summary**

The Persigo system is operating very well and continues to be the benchmark for other municipalities regarding operation excellence and innovation. The highly-acclaimed and internationally-recognized biogas project continued to fuel 62 City and County vehicles in 2018. These innovations and many others that have been implemented over the years, would not have been possible without the continued support of the Persigo Board.

Respectfully submitted,

Dan Tonello, Wastewater Services Manager

Randi M. Kim, Utilities Director

Persigo Joint Sewer System 2019 Recommended Budget					2018 Adopted to 2018 Recommended	2018 Amended to 2019 Recommended
Line No.	Account	2018 Adopted	2018 Amended	2019 Recommended		
1	<b>Beginning Fund Balance:</b>	<b>21,238,417</b>	<b>21,238,417</b>	<b>20,045,153</b>		
2	<b>Revenue</b>					
3	Capital Proceeds	2,666,330	2,666,330	2,865,726	199,396	199,396
4	Charges for Service	13,415,947	13,415,947	13,544,525	128,578	128,578
5	Fines and Forfeitures	1,000	1,000	1,000	-	-
6	Interest	200,000	200,000	467,165	267,165	267,165
7	Interfund Revenue	196,144	196,144	165,000	(31,144)	(31,144)
8	Intergovernmental	50,112	50,112	16,023	(34,089)	(34,089)
9	Other	24,801	24,801	24,801	-	-
10	Transfers In	-	-	-	-	-
11	<b>Revenue Total</b>	<b>16,554,334</b>	<b>16,554,334</b>	<b>17,084,240</b>	<b>529,906</b>	<b>529,906</b>
12	<b>Expenditures</b>					
13	Labor and Benefits	3,618,759	3,603,759	3,725,488	106,729	121,729
14	Benefits	872,840	872,840	927,321	54,481	54,481
15	Full Time	2,546,169	2,531,169	2,627,632	81,463	96,463
16	Insurance	89,756	89,756	95,435	5,679	5,679
17	Other Compensation	14,495	14,495	3,645	(10,850)	(10,850)
18	Overtime	57,357	57,357	35,000	(22,357)	(22,357)
19	Seasonal	38,142	38,142	36,455	(1,687)	(1,687)
20	Operating	1,335,272	1,350,272	1,236,136	(99,136)	(114,136)
21	Charges and Fees	312,383	312,383	312,383	-	-
22	Contract Services	136,435	151,435	66,575	(69,860)	(84,860)
23	Equipment	10,000	10,000	16,600	6,600	6,600
24	Equipment Maintenance	11,000	11,000	11,000	-	-
25	Grants and Contributions	3,500	3,500	3,500	-	-
26	Operating Supplies	95,744	95,744	82,368	(13,376)	(13,376)
27	Professional Development	32,000	32,000	33,000	1,000	1,000
28	Repairs	440,750	440,750	440,750	-	-
29	System Maintenance	270,500	270,500	247,000	(23,500)	(23,500)
30	Uniforms and Gear	4,460	4,460	4,460	-	-
31	Utilities	18,500	18,500	18,500	-	-
32	Interfund Charges	2,392,011	2,392,011	2,564,441	172,430	172,430
33	Administrative Overhead	700,780	700,780	667,000	(33,780)	(33,780)
34	Facility	548,581	548,581	548,581	-	-
35	Fleet	263,205	263,205	280,042	16,837	16,837
36	Fuel Charges	35,470	35,470	46,269	10,799	10,799
37	Information Technology	257,768	257,768	285,100	27,332	27,332
38	Liability Insurance	57,244	57,244	86,094	28,850	28,850
39	Medical Programs	-	-	51,594	51,594	51,594
40	Utility Services	528,963	528,963	599,761	70,798	70,798
41	Debt Service	1,170,797	1,170,797	1,684,398	513,601	513,601
42	Interest Expense	230,797	230,797	194,398	(36,399)	(36,399)
43	Principal	940,000	940,000	1,490,000	550,000	550,000
44	Capital Outlay	9,230,759	9,230,759	7,685,100	(1,545,659)	(1,545,659)
45	Capital Equipment	-	-	100,000	100,000	100,000
46	Utility Systems	9,230,759	9,230,759	7,585,100	(1,645,659)	(1,645,659)
47	<b>Expenditure Total</b>	<b>17,747,598</b>	<b>17,747,598</b>	<b>16,895,563</b>	<b>(852,035)</b>	<b>(852,035)</b>
48	<b>Net Source (Use) of Funds</b>	<b>(1,193,264)</b>	<b>(1,193,264)</b>	<b>188,677</b>	<b>1,381,941</b>	<b>1,381,941</b>
49	<b>Ending Fund Balance:</b>	<b>20,045,153</b>	<b>20,045,153</b>	<b>20,233,830</b>	<b>1,381,941</b>	<b>1,381,941</b>



## 2019 Recommended Capital Project Descriptions Joint Sewer Fund

### JOINT SEWER FUND CAPITAL PROJECTS

- 1. Interceptor Repair and Replacement (F0015-F001500), \$1,800,000** – These projects involve repair and/or replacement of aging concrete/clay tile interceptors in the sewer backbone system. The majority of these projects are required due to internal corrosion in concrete lines and manholes and/or structural failure of clay tile lines. These lines are typically larger lines that receive flow from sub-basins in the collection system. Requested funding will be used to line both of the South Side Interceptors which run parallel to each other. Both lines are being proposed for rehabilitation during 2019 to reduce mobilization charges associated with equipment set-up. These interceptors are concrete and typically have a high concentration of hydrogen sulfide gas which has caused corrosion.
- 2. Sewer Line Replacement in Collections System (F0016), \$2,700,000 (\$3.19M planned for 2020)** – Funds are budgeted through 2029 to replace/rehabilitate existing mains within the 201 service area collection system. There is approximately 200 miles of pipe in the collection system that is beyond its design life. An aggressive 30-year replacement schedule was recommended in the 2015 independent rate study, and approved by the Persigo Board. The above requested funds are consistent with Board approval.
- 3. Sewer Line Replacement/Alley Reconstruction (F0017-F001706), \$285,000 (\$285K planned for 2020)** – Funds are budgeted to upgrade existing mains in alleys where the existing roadway surface is being replaced with concrete. In the majority of cases, the lines are in excess of 75 years old and constructed of clay tile. Prior to replacement, all lines are checked via the TV camera truck to verify the need for replacement. Lines will not be replaced if determined to be in serviceable condition with an expected remaining service life of 50 years. There are typically 20 alleys on the waiting list for alley improvement district petitions. The 2019 Funds will be used to replace older sewer lines under newly improved alley reconstruction. By doing so, this will reduce the likelihood of a new alley being dug up to facilitate a repair.
- 4. Lift Station Elimination (F1704), \$300,000 (\$2.5M planned for 2020)** - The 2019 requested funds will be used to design the sewer line that will allow for the elimination of the Ridges Lift Station. Assuming that the design will prove that the elimination is feasible, \$2.5 million is recommended for completion of this project during 2020.
- 5. Plant Backbone Improvements (F0010-F00100), \$515,100 (\$577K planned for 2020)** – These expenditures are associated with plant backbone improvements. The 2019 funds will be used for the purchase and installation of specialty equipment such as an additional blower for the aeration process, modification of the flow configuration in the disinfection unit, and several smaller plant projects.
- 6. Sludge Drying Pad (F0010-F00100), \$400,000** – The 2019 requested funds will be used to install a sludge drying pad at Persigo, and to purchase equipment to facilitate the drying of biosolids prior to landfill delivery. Currently Persigo produces 12,000 tons of biosolids per year, which are disposed of at the Mesa County Landfill. The biosolids are 13% by weight solids and 87% by weight water. Drying the biosolids prior to hauling will reduce the weight by approximately 85%, resulting in a disposal fee reduction of approximately \$200,000 per year.
- 7. Lab Equipment \$100,000** – This request is for the purchase of a new Laboratory Information Management System (LIMS) to replace the existing system, which is approximately 20 years old. The total purchase cost of the new system is \$200,000. This cost of which will be shared with the Water Division as they will also use the program to monitor and record all data associated with their Laboratory operation.
- 8. Plant Studies \$285,000** – This expenditure is proposed for the completion of three studies: An odor control study to identify sources of odor within the sewage collection and treatment system and recommend steps for its elimination. Estimate cost for this study is \$100,000. The second study is to complete an evaluation of existing key concrete structures at the Persigo treatment facility. This study will pinpoint any needed repairs, and will allow these repairs to be completed in a preventative manner rather than reacting to a potential failure. Estimated cost for this study is \$85,000. The third is an up-date to the 2005 Sewer Basin Study. The purpose of this study is to ensure that the long-

## 2019 Recommended Capital Project Descriptions Joint Sewer Fund

range expansion of the City/County sewer system is consistent with the Comprehensive Growth Plan. Estimated cost for this study is \$100,000.

9. **Plant/System Expansion, \$1,200,000** – These funds will be used for Phase II of the 23 Road Trunk Line extension.
10. **Tiara Rado Force Main Study \$100,000 (\$1M planned for 2020)** – Funds are being requested to design a parallel force main from the Tiara Rado lift station, under the Colorado River, to the River Road Interceptor east of the Persigo Treatment facility. The existing force main from the lift station is ductile iron and was installed during the 1980's. This pipe has failed in the past and has been repaired in a section that was not under the river. This parallel line will allow an alternative discharge option from the lift station. Once the new line is placed into service; the existing line can be inspected to determine if it can be rehabilitated to serve as a redundant pipeline or if the line should be taken out of service.



**JOINT PERSIGO MEETING  
CITY OF GRAND JUNCTION, CITY COUNCIL  
MESA COUNTY, BOARD OF COUNTY COMMISSIONERS**

**Item #1.b.**

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**Meeting Date:** November 1, 2018

**Presented By:** Andrew Rheem

**Department:** Public Works - Utilities

**Submitted By:** Randi Kim

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**Information**

**SUBJECT:**

Internal Services Fee Study Report

**RECOMMENDATION:**

This item is for the Persigo Board's review and discussion.

**EXECUTIVE SUMMARY:**

The purpose of this item is to review the Internal Service Fee Study conducted by Raftelis Financial Consultants, Inc.

**BACKGROUND OR DETAILED INFORMATION:**

The Persigo Board, made up of the Grand Junction City Council and Mesa County Commissioners, requested a study be conducted to determine the cost of services for the Persigo Sewer System. The results of the study are included in the attachment.

**FISCAL IMPACT:**

Details are outlined in the attached report.

**SUGGESTED MOTION:**

N/A

**Attachments**

1. City of Grand Junction CO Sewer Fund Internal Service Fee Final Report

CITY OF  
**Grand Junction**

**Sewer Fund Internal Service Fee**

Final Report / October 12, 2018



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October 12, 2018

Randi M. Kim, P.E.  
Utilities Director  
City of Grand Junction, CO  
333 West Ave, Building E  
Grand Junction, CO 81501

**Subject: Sewer Fund Internal Service Fee Report**

Dear Ms. Kim,

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to provide this Sewer Fund Internal Service Fee Report (Report) for the City of Grand Junction (City).

The major objectives of the study include the following:

- Develop an equitable cost allocation of General Fund services benefiting the Joint Sewer Operations Fund; and
- Provide a repeatable methodology that may be used to calculate the Joint Sewer Operation Fund internal service fee going forward.

The Report summarizes the key findings and recommendations related to the development of the Sewer Fund internal service fee.

It has been a pleasure working with you, and we thank you and the City staff for the support provided during the course of this study.

Sincerely,



**Andrew Rheem**  
*Manager*

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<b>APPENDIX B: SENSITIVITY ANALYSIS CALCULATIONS</b>

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# 1. Introduction and Overview

## 1.1. Background of the Study

In 2018, the City of Grand Junction (City) engaged Raftelis Financial Consultants, Inc. (Raftelis) to conduct an Internal Service Fee Study (Study). The purpose of the Study is to develop a methodology and calculation of the General Fund's internal services costs to be recovered from the Joint Sewer Operations Fund (Sewer Fund) through an internal service fee.

### 1.1.1. OBJECTIVES OF THE STUDY

The major objectives of the study include the following:

- Equitably recover the costs of the services provided by the City's General Fund; and
- Develop a repeatable methodology that may be administered annually by City staff between more comprehensive evaluations.

This internal service fee assessment was prepared for the Sewer Fund to determine the cost of internal governmental services received by the City's Sewer Fund. The governmental services that were evaluated were those that are budgeted and accounted for within the City's General Fund. By allocating indirect costs from the General Fund to the Sewer Fund, the City is able to efficiently recover costs incurred to provide governmental services in an equitable manner.

### 1.1.2. PERSIGO AGREEMENT

The City and Mesa County (County) entered into an Intergovernmental Agreement (IGA) in 1998 that defines the service area and goals of the Persigo Sewer System (Persigo System). The IGA states that "the City shall manage, operate, and maintain the Persigo System for the benefit of the current and future users of sewer service in the Persigo 201, according to sound utility practices and principals and, except as otherwise provided herein, without regard to whether or not current and future users of sewer service in the Persigo 201 are located within or without the boundaries of the City."

It is an acceptable and reasonable practice by governmental bodies (as well as similar jointly owned systems when one owner operates the facility) for the City's General Fund to allocate internal service costs from support services (such as, human resources, accounting, legal, executive leadership) to a component unit or enterprise fund. In this case, the Sewer Fund is provided vital and essential services by the City's General Fund in order to function effectively. Additionally, it may be more economical for City's General Fund departments to provide the function or service rather than maintaining additional stand-alone full-time staff and/or contracting separately with third party vendors to provide the same services.

### 1.1.3. CURRENT INTERNAL SERVICE FEE

The City's General Fund has historically charged the Sewer Fund a percentage of its annual user charge revenues to recover the costs of these internal services; in the 2018 budget this percentage increased from 2.9% to 5.2%. Other enterprise funds within the City were charged 7.5% of annual revenue to recover their respective share of the internal services as part of the 2018 budget process.

# 2. Study Findings and Recommendations

## 2.1. Key Definitions

The City recovers the costs of General Fund services benefiting the Sewer Fund in two distinct manners described below.

### 2.1.1. DIRECT COSTS

First, some costs are directly allocated to and budgeted for in the Sewer Fund. These costs include those related to Facilities, Fleet and Fuel, Information Technology, and Self-Insurance and are referred to as “Interfund Charges”. Since these costs are directly allocated to the Sewer Fund, they should be excluded from recovery within the internal service fee, described next. Raftelis did not evaluate those costs related to the Interfund Charges as they are allocated throughout City departments to fund shared City services and are updated annually. The City also allocates a portion of personnel-related costs to the Sewer Fund for select Public Works and Planning – Administration and Engineering Division staff as part of the budget. These costs are documented and referenced within the study analysis separately from the internal service costs. The Sewer Fund is also assessed a direct charge from the City’s Water Fund for utility billing purposes. This direct charge was excluded from the summary results as it is not a General Fund related cost and is already addressed within the budget process.

### 2.1.2. INDIRECT COSTS

Secondly, other costs associated with the general governmental indirect services that benefit the Sewer Fund are recovered through an internal service fee. In 2018, the Sewer Fund’s internal service fee was set to 5.2% of annual sewer service charge revenue. The equitable recovery of the costs related to indirect services is the focus of the study.

## 2.2. Summary Results

### 2.2.1. EXISTING CITY BUDGETING PRACTICES

The General Fund is the primary operating fund of the City. General Fund departments that have costs allocable to the Sewer Fund were identified based on an understanding of City operations and discussions with City management. These departments and/or cost centers are listed below.

- City Manager’s Office
- City Attorney
- Human Resources
- City Clerk
- Finance
- Community Development
- Public Works
- Fleet
- Communications Center

Each department and/or cost center was analyzed to determine the level of costs that equitably reflect the reasonable proportion of services provided to be allocated for recovery from the Sewer Fund within the internal



service fee. Table 2-1 summarizes our findings, presenting both the internal service fee allocation by department to the Sewer Fund, as well as an inventory of direct charges that are assessed to the Sewer Fund for reference. This summary provides a comprehensive look at City departments that provide valuable services to the Sewer Fund and the associated cost. This summary is based on adopted 2018 budget figures.

The total internal service fee allocation calculated for the Sewer Fund equals \$678,000, which equates to approximately 5.2% of budgeted fiscal year 2018 sewer service charge revenues.

**Table 2-1: 2018 Summary Sewer Fund Internal Service Fee Allocation**

<b>Line No.</b>	<b>Department/Division Name</b>	<b>Internal Service Fee Allocation</b>	<b>Direct Charges (3)</b>	<b>Total</b>
<b><u>Internal Service Fee Allocations</u></b>				
1	City Manager's Office	\$79,000	\$0	\$79,000
2	City Attorney	69,000	0	69,000
3	Human Resources	99,000	0	99,000
4	City Clerk	36,000	0	36,000
5	Finance	127,000	0	127,000
6	Fleet	12,000	0	12,000
7	Community Development	89,000	0	89,000
8	Public Works and Planning (1)	157,000	139,000	296,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	678,000	139,000	817,000
<b><u>Other Direct Allocations (2)</u></b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$678,000</b>	<b>\$1,258,600</b>	<b>\$1,936,600</b>
18	<i>2018 Budget Sewer Service Revenue</i>	<i>\$12,943,000</i>	<i>\$12,943,000</i>	<i>\$12,943,000</i>
19	<i>Total As % of Revenue</i>	<i>5.2%</i>	<i>9.7%</i>	<i>15.0%</i>

(1) \$139,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget.

(2) Direct allocation values from adopted 2018 Budget.

(3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

### **2.2.1.1. Sensitivity Analysis**

The Sewer Fund internal service fee calculation is based on industry standard approaches that rely on certain inputs and assumptions. The key drivers of this study include the full-time equivalent (FTE) count and direct time estimates by department. A sensitivity analysis was completed which determined the following regarding these key drivers:

1. Changes in the Sewer Fund, or City-wide, FTE count would have to significantly change to have a material impact on the internal service fee calculation.
2. Direct time estimates are subject to more variability on a year-to-year basis and have a more significant impact on the internal service fee calculation.
  - a) A 25% increase or decrease in estimated direct time results in a 0.6% change in the calculated internal service fee.

For purposes of the sensitivity analysis, all changes were assumed to happen in the same direction, but in practice changes could be multi-directional with impacts nullifying one another in part or in whole. The sensitivity analysis provides for a reasonable range of \$600,000 to \$750,000 based on the 2018 budget.

### **2.2.2. ALTERNATIVE DIRECT CHARGE BUDGETING**

As part of the analysis, one position within the Public Works Department, a Development Inspector, was identified who spends approximately 50% of his time on sewer related functions. The City may consider budgeting this position's time as a direct allocation to the Sewer Fund in the budget process similar to the practice for others within the Public Works Department. If this employee's costs would have been allocated to the Sewer Fund in the 2018 budget, the resulting indirect service fee would decrease from \$678,000 to \$636,000. Table 2-2 summarizes this adjusted internal service fee of \$636,000 resulting from the shift of the Development Inspector's labor costs to direct charges, but also highlights that the outcome is the same.

**Table 2-2: 2018 Summary Sewer Fund Internal Service Fee Allocation after Direct Charge Adjustment**

Line No.	Department/Division Name	Internal Service Fee Allocation	Direct Charges (3)	Total
<b><u>Internal Service Fee Allocations</u></b>				
1	City Manager's Office	\$79,000	\$0	\$79,000
2	City Attorney	69,000	0	69,000
3	Human Resources	99,000	0	99,000
4	City Clerk	36,000	0	36,000
5	Finance	127,000	0	127,000
6	Fleet	12,000	0	12,000
7	Community Development	89,000	0	89,000
8	Public Works and Planning (1)	115,000	181,000	296,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	636,000	181,000	817,000
<b><u>Other Direct Allocations (2)</u></b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$636,000</b>	<b>\$1,300,600</b>	<b>\$1,936,600</b>
18	2018 Budget Sewer Service Revenue	\$12,943,000	\$12,943,000	\$12,943,000
19	Total As % of Revenue	4.9%	10.0%	15.0%

(1) \$181,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget, including the Development Inspector's costs.

(2) Direct allocation values from adopted 2018 Budget.

(3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

### 2.3. 2019 Internal Service Fee Alternatives

The calculations presented in Table 2-1 and Table 2-2 summarize the internal service fee based on the City's adopted 2018 budget. The City is currently in the process of finalizing and adopting the City-wide 2019 budget. For purposes of setting the 2019 internal service fee, Raftelis recommends adjusting the calculated 2018 fee by an annual inflation factor. The ideal inflation factor recognizes cost increases specific to the Grand Junction region. The City's Human Resources Department currently utilizes the "Employers Council Planning Packet Survey" to project increases in City employee wages. A significant portion of the internal service fee is driven by labor costs, and therefore it is reasonable to apply this same index to inflate the 2018 internal service fee to 2019 dollars.

Specifically, the “Employers Council 2018 Planning Packet Survey – 2019 Pay Increase Projection Increase for Arizona, Colorado, Utah, and Wyoming” estimates Colorado western slope salary and pay range increases for 2019. The sum of these two factors total 4.8%<sup>1</sup> for 2019. Table 2-3 summarizes the 2019 internal service fee recommendations under each alternative after applying the 2019 inflationary adjustment of 4.8%. The two fee methodology alternatives presented differ based on how the City elects to budget for the Development Inspector position currently allocated to the Public Works Department. The City can continue to budget this position within the Public Works Department, or as recommended, directly allocate 50% of his time to the Sewer Fund.

**Table 2-3: Recommended 2019 Internal Service Fee Alternatives**

Line No.	Fee Methodology	Fee Based on 2018 Budget	Inflation Adjustment	Recommended 2019 Fee
1	No Change to Existing Budget Practice	\$678,000	4.8%	\$711,000
2	Direct Allocation of Development Inspector	\$636,000	4.8%	\$667,000

## 2.4. Recommended Implementation

Raftelis recommends the following implementation-related components of the study as part of the overall findings to be considered by the City:

1. While historically the Sewer Fund’s internal service fee is commonly stated as the percent of the budgeted Sewer Fund user charge revenues, Raftelis recommends the City use the allocated costs as the outcome of the methodology rather than the percent of the sewer user charges.
2. Raftelis recommends updating the comprehensive internal service fee methodology and analysis in conjunction with the update of the Sewer Fund rates and fees which is typically completed every five years. Certain triggers may warrant an off-cycle update to the internal service fee calculation in between the five-year Sewer Fund rates and fees study.
  - a. Examples of circumstances, or triggers, which may initiate an off-cycle review include:
    - i. Significant City department restructuring and/or reorganization affecting City departments and/or cost centers providing services to the Sewer Fund.
    - ii. Inclusion of a new utility service and/or elimination of an existing utility service which may materially affect indirect services provided by the General Fund departments to the Sewer Fund.
    - iii. Other significant changes to the budgeted expenses related to the General Fund cost centers included in the analysis.
3. Raftelis recommends inflating the internal service fee on an annual basis between the five-year comprehensive updates to recognize inflationary cost increases related to the General Fund services. The Employers Council publishes projected salary and pay range increases for the western slope of Colorado each year. This index would serve as a reasonable source to use as the annual inflation factor, as it is representative of the Grand Junction region and tracks average wage fluctuations, which is the main driver of the internal service fee.

<sup>1</sup> The Employers Council projects annual increases in wages specific to the Colorado western slope region. Projected wage increases are comprised of two factors: salary increases and pay range increases. Salary projections account for increases in pay related to experience and promotion increases. The estimated salary increase for 2019 is 3.0%. Pay range projections account for increases in pay ranges, or pay grades, for given positions. The estimated pay range increase for 2019 is 1.8%. The total of these two factors equates to a 4.8% projected wage increase for the Colorado western slope in 2019.

- a. The primary benefit of this option is to more efficiently administer the annual update and reduce fluctuations as the City's budget is developed, finalized and approved while adjusting the internal service fee annually.
  - b. The primary disadvantage is that no index is perfect and whichever one is chosen will not fully represent the underlying City costs intended to be recovered.
4. Alternative processes the City can consider for annual updates include:
- a. Update the resulting costs using the same methodology recommended with changes due to overall development of the City budget.
    - i. The primary benefit of this option is to maintain the equitable results achieved through the comprehensive updates in between comprehensive Sewer Fund rate and fee study updates.
    - ii. The primary disadvantage is due to the timing of the budget process, the internal service fee may fluctuate as the City's budget is being developed prior to approval.
      - 1. The Sewer Fund could consider an additional cash reserve or budgeted contingency to account for adjustments as the City's budget is finalized and approved.
  - b. Maintain the fixed cost calculated during each comprehensive update without modifying on an annual basis.
    - i. The primary benefit of this option is that the cost will be known and not subject to annual fluctuations and/or discourse between the City and the County as part of the Sewer Fund annual budget process.
    - ii. The primary disadvantages are that the allocated costs could be less equitable and not reflect the incurred cost of the services provided and could also result in more volatile cost and rate payer impacts when a comprehensive update is completed.

# 3. Methodology and Approach

## 3.1. General Fund Services

After identifying the departments that provide benefits to the Sewer Fund, the next step was to identify the types of services they provide to the Sewer Fund, and how the associated costs are recovered. The three types of services include:

1. Direct services provided to the Sewer Fund that are already included in the budget;
2. General fund indirect services that provide a City-wide benefit to all departments;
3. Direct services provided to the Sewer Fund that are not included in the budget and thus need to be recovered in the internal service fee.

Direct services provided to the Sewer Fund that are already accounted for in the Sewer Fund budget are excluded from recovery in the internal service fee calculation. Through this study, we confirmed that the allocated costs are limited to personnel-related costs and do not include non-personnel related operating costs or a proportion of Interfund Charges. These direct expenses are identified and summarized in Table 2-1 in order to gain a comprehensive understanding of all General Fund services allocated to and paid for by the Sewer Fund.

General Fund indirect services providing a benefit to the all City departments include services such as Human Resources and City Clerk. It is common practice among many governments to allocate General Fund services based on FTEs, operating budget, Commission resolutions, ordinances, meeting agenda items, or a combination of these. Based on discussions with department directors, the FTE ratio – total Sewer Fund FTEs / City-Wide FTEs – is a reasonable proxy for the City's General Services for allocating between funds. As detailed in the department allocation methodologies later in the report, most General Fund services are allocated based on the Sewer Fund FTE to City-Wide FTE ratio equal to 6.2%. This allocation approach recognizes that these costs are largely driven by the proportionate size of each department's personnel count. Table 3-1 details the FTE count for all City Funds.

**Table 3-1: City FTEs by Fund**

Line No.	Fund	Fund / Department Description	FTEs (1)	% Total
1	100	City Manager's Office	4.00	0.6%
2	100	City Attorney	5.00	0.8%
3	100	Human Resources	7.10	1.1%
4	100	City Clerk	4.00	0.6%
5	100	Finance	15.30	2.4%
6	100	Community Development	12.00	1.9%
7	100	Public Works and Planning	20.90	3.2%
8	100	Other General Fund Departments	369.90	57.3%
9	102	Visitor & Convention Bureau Fund	9.00	1.4%
10	103	Downtown Development Authority	2.00	0.3%
11	301	Water Fund	32.25	5.0%
12	302	Solid Waste Removal Fund	13.10	2.0%
13	305	Golf Course Fund	6.50	1.0%
14	308	Parking Authority Fund	1.20	0.2%
15	309	Ridges Irrigation Fund	1.15	0.2%
16	401	Information Technology Fund	21.55	3.3%
17	402	Fleet and Equipment Fund	13.20	2.0%
18	404	Self Insurance Fund	2.80	0.4%
19	405	Communications Center Fund	53.95	8.4%
20	406	Facilities Management Fund	8.00	1.2%
21	711	Downtown BID Fund	2.00	0.3%
22	<b>902</b>	<b>Joint Sewer Operations Fund</b>	<b>40.10</b>	<b>6.2%</b>
23		<b>Total</b>	<b>645.00</b>	<b>100.0%</b>

(1) FTEs by fund sourced from Position Control GL Distribution spreadsheet provided by City.

In addition to providing a benefit to the Sewer Fund, General Fund services that benefit each other should also be considered, as these services in turn also benefit the Sewer Fund to some degree. For example, a portion of the City Attorney Department's time benefits the Human Resource Department, which in turn benefits the Sewer Fund. These intergovernmental services are recognized as an addition to each Department's costs that are eligible for recovery from the Sewer Fund internal service fee. These costs are referred to as "Other General Fund Allocations" within the analysis and detailed calculation tables found in Appendix A. The approach to identify the estimated portion of time for department staff followed two methods.

1. Provide percent of time associated with support to other departments. Used to allocate:
  - a. City Manager's Office
  - b. City Attorney
  - c. Community Development
  - d. Public Works – Engineering
  - e. Public Works – Administration



2. Use FTEs as a proxy for the support provided. Used to allocate:
  - a. Human Recourses Department
  - b. Finance Department
  - c. City Clerk Department

Table 3-2 summarizes the intergovernmental General Fund department allocations determined based on discussions with Department leads.

**Table 3-2: Intergovernmental General Fund Allocations**

Line No.	Department	City					Comm. Dev.	PW - Eng.	PW - Admin
		Manager's Office	City Attorney	Human Resources	City Clerk	Finance			
1	City Manager's Office		0.0%	10.0%	5.0%	20.0%	8.0%	8.0%	0.0%
2	City Attorney	19.5%		19.5%	2.0%	5.0%	19.5%	19.5%	0.0%
3	Human Resources	0.6%	0.8%		0.6%	2.4%	1.9%	3.2%	0.0%
4	City Clerk	0.6%	0.8%	1.1%		2.4%	1.9%	3.2%	0.0%
5	Finance	0.6%	0.8%	1.1%	0.6%		1.9%	3.2%	0.0%
6	Community Development	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
7	Public Works - Engineering	0.1%	0.1%	0.0%	0.0%	0.2%	3.3%		
8	Public Works - Administration	0.1%	0.1%	0.0%	0.0%	0.2%	3.3%		

### 3.2. Cost Categories

The costs for direct services provided to the Sewer Fund that are not accounted for in the City's budgeting process are estimated and included in the calculation for recovery in the internal service fee. Examples of direct services include City Manager and City Attorney and support staff time. In these instances, estimates of the time and value of services provided to the Sewer Fund by department staff are intended to reflect an average or typical year tied to the goal to provide for an equitable and repeatable process as part of the annual budget process between more comprehensive reviews and updates.

The City tracks expenditures by department and division in three categories:

1. Labor and Benefits (personnel-related)
2. Operating Expenditures
3. Interfund Charges

For purposes of this study, the operating expenditures and interfund charges are trailing costs that are driven by Labor and Benefits expenses. For each department, the same total percentage of Labor and Benefits that is calculated to benefit the Sewer Fund is applied to the operating expenditures and interfund charges to recover in the internal service fee. Interfund charges are primarily related to each individual department's interfund charges for facilities, fleet and fuel, information technology, and self-insurance.

### 3.3. Department Documentation

The following sections detail each department's purpose as reported in the City's Budget Book and the methodology applied to calculate the department's cost allocations to the Sewer Fund's internal service fee. The methodology and approach were developed with the two major objectives of:

- Equitably recovering the costs of the services provided by the City's General Fund; and
- Developing a repeatable methodology that may be administered annually by City staff between more comprehensive evaluations.

The detailed calculations discussed for each department are included in Appendix A based on the adopted 2018 City budget. For simplicity purposes, each calculation is rounded to the nearest \$1,000 dollars and developed and included in the overall Study findings and recommendations.

#### 3.3.1. CITY MANAGER'S OFFICE

The City Manager's Office is responsible for carrying out the mission of the City Council as well as directing and coordinating all City services including those related to utilities. The department provides executive leadership to all departments and enterprises of the City. The City Manager reports to the Mayor and Council and responds to the needs of the public by proactively seeking public feedback. The department is responsible for the day-to-day administrative operation of the City. Responsibilities include:

- Supervise day-to-day operations of City departments and staff through department heads;
- Prepare, monitor, and execute the City budget, which includes submitting each year to the Council a proposed budget package with options and recommendations for its consideration and possible approval;
- Possess full understanding of Sewer Fund operations and assist with ad-hoc projects when needed;
- Review City Council agenda items related to the Sewer Fund; and
- Communications and outreach to public

Allocation Method: Sewer Fund specific activities above the general administration are estimated to take 80 hours of the City Manager and support staff's time each year. Assuming a 2,080-hour work year, 80/2,080 of the City Manager's Office Labor and Benefits costs were assumed to be sewer specific. The remaining Labor and Benefits costs were allocated to the Sewer Fund based on the Sewer Fund FTE to City-Wide FTE ratio.

The non-labor costs of the City Manager's Office were also allocated based on the same ratios used for Labor and Benefits, assuming trailing costs are driven by labor related activities.

#### 3.3.2. CITY ATTORNEY

The City Attorney's Office provides legal advice to the City Council, staff, and boards and commissions for the benefit of the Citizens of the City. General responsibilities include:

- Attendance at all City Council meetings;
- Drafting of ordinances and resolutions; and
- Review and consulting on contracts

Responsibilities that directly benefit the Sewer Fund include:

- Easements and land dedications;
- Development related work;
- Land use considerations;
- Persigo IGA contract issues;

- Notice Requirements;
- Discharge points/permits;
- Industrial Pretreatment Program (IPT) related activities;
- Code amendments and/or City Ordinances;
- Regulations such as fats, oils and greases (FOG);
- Environmental Protection Agency audits;
- Wastewater Policies & Standards;
- Biogas Project – Compressed Natural Gas (CNG); and
- Persigo Board meetings

Allocation Method: Over the course of the year, the City Attorney spends approximately 1 month, or 1/12<sup>th</sup> of his time on Sewer Fund specific activities. This estimate considers both general and Sewer Fund specific activities. Therefore, 1/12<sup>th</sup> of Labor and Benefit costs were allocated to the Sewer Fund for recovery in the internal service fee. Non-labor costs were also allocated based on the 1/12<sup>th</sup> ratio.

### **3.3.3.HUMAN RESOURCES**

The Human Resources (HR) Department ensures effective selection, development and retention of the City's work force, recruiting and hiring new employees, administering employee review and development programs and managing all of the City's benefit and insurance programs.

Allocation Method: HR staff costs were allocated to the Sewer Fund based on the Sewer Fund FTE to City-Wide FTE ratio. Non-labor costs were also allocated based on the FTE ratio.

### **3.3.4.CITY CLERK**

The City Clerk's Department is responsible for all City Council meetings and information, municipal elections, records management, and liquor licensing for the City.

Allocation Method: City Clerk staff costs were allocated to the Sewer Fund based on the Sewer Fund FTE to City-Wide FTE ratio. Non-labor costs were also allocated based on the FTE ratio.

### **3.3.5.FINANCE**

The Finance Department includes the following divisions in the General Fund:

- Finance Administration – provides oversight of all Finance divisions, as well as budget coordination and development, investment management, and debt management.
- Revenue – responsible for issuing sales tax licenses to all vendors within city limits, processing all sales tax revenue returns received from those vendors and enforcing sales tax compliance.
- Accounting and Payroll – provides services related to accounts payable, accounts receivable, payroll financing, annual financial reporting, cash management, fixed assets, general ledger account reconciliations, and year-end processing of W-2s and 1099's.
- Purchasing – responsible for the City's formal bid processes for the procurement of all goods and services more than \$5,000, cost control and monitoring of general purchasing within the City.
- City Warehouse – manages all inventory items for the City.

The Finance Department also includes three internal service funds, including Information Technology, Fleet, and Facilities. These internal service funds are directly allocated to all City departments and enterprise funds, including the Sewer Fund, for their proportionate share of benefits received. These Interfund Charges are therefore excluded from recovery in the internal service fee.

Allocation Method: Sewer Fund specific activities above the general administration are estimated to take approximately 44 hours of the Deputy Finance Director's time each year. These specific tasks include Fund Balance Investment Management (previously outsourced), CNG services, and Persigo Board Meetings. Assuming a 2,080-hour work year, 44/2,080 of the Deputy Finance Director's Labor and Benefits Costs were assumed to be sewer specific. The remaining Labor and Benefits costs within the Finance Administration, Revenue, Accounting and Payroll, Purchasing, and Warehouse Divisions were allocated to the Sewer Fund's internal service fee based on the Sewer Fund FTE to City-Wide FTE ratio.

The non-labor costs of the same Finance Divisions were also allocated based on the same ratios used for Labor and Benefits, assuming trailing costs are driven by labor related activities.

### **3.3.6. FLEET**

The Fleet Division is accounted for within the Finance Department. It provides cradle to grave asset management for City owned vehicles and equipment from purchases through replacement and disposal.

Allocation Method: Fleet expenditures are directly allocated to departments / funds throughout the City, including the Sewer Fund, through an allocation procedure performed by the Finance Department on an annual basis. The majority of fleet related costs allocable to the Sewer Fund are captured within this direct allocation and excluded from recovery in the Sewer Fund internal service fee.

One specific employee within the Fleet Division, an Automotive and Equipment Supervisor, provides Sewer Fund services that are not currently allocated to the Sewer Fund as part of the direct charge. He spends approximately 1 hour each day, or 1/8<sup>th</sup> of his time, on CNG services. Therefore, 1/8<sup>th</sup> of this employee's labor and benefit related costs are allocated for recovery in the Sewer Fund internal service fee. Non-labor costs in the Fleet Division are primarily vehicle related costs unrelated to the employee's CNG tasks, and thus are excluded from recovery within Sewer Fund internal service fee.

### **3.3.7. COMMUNITY DEVELOPMENT**

The Community Development Department works to guide and promote development. The Department reviews all new developments in the City, which includes a review of the wastewater system engineering and design.

Allocation Method: Three employees were identified within the Community Development Fund who provide Sewer Fund services. Two employees are Project Engineers, who spend approximately 15% and 20% of their time on wastewater system reviews. Additionally, a Principal Planner spends approximately 40 hours per year, or 40/2,080, attending Tuesday engineering meetings, Persigo Board meetings, and other miscellaneous sewer activities.

Each identified employee's estimated time spent on Sewer Fund related activities was applied to their fully loaded salary and benefit cost. The weighted average of these employee costs to the total Department's cost, or 5.5%, was used to allocate the Community Development Director's time to the Sewer Fund, recognizing his oversight role of employees which includes sewer-related activities.

The resulting sewer-related to total Labor and Benefits expense ratio for the Community Development Department was applied to non-labor costs for allocation to the Sewer Fund internal service fee.

### 3.3.8. PUBLIC WORKS AND PLANNING

The Public Works Department provides maintenance of the City's core transportation and stormwater infrastructure along with planning, design and oversight of most of the City's capital improvement program, including Sewer Fund related projects.

Allocation Method: The Public Works allocation to the Sewer Fund internal service fee was split into two steps, first to allocate engineering related costs, and next to capture the administration related costs.

#### Public Works Engineering:

- Certain employees within the Public Works Engineering Division, including a Construction Inspector, Engineering Specialist, and Sr. Engineering Technician, are directly allocated a portion of their Labor and Benefits related costs to the Sewer Fund to recognize the Sewer Fund specific engineering tasks they perform on an annual basis. The Labor and Benefits costs related to these employees is excluded from recovery within the internal service fee.
- Two additional employees within the Public Works Engineering Division were identified who provide Sewer Specific services, who's Labor and Benefits Costs were not being captured within the direct allocation to the Sewer Fund. These employees are a Development Inspector and Project Engineer, who spend approximately 50% and 20% of their time on sewer related tasks. The Labor and Benefits related to these employees was allocated to the Sewer Fund's internal service fee.
  - As noted within the recommendations section 2.2.2, the Development Inspector's sewer efforts warrant the consideration of the direct allocation of 50% of his time to the Sewer Fund as opposed to recovering these costs in the indirect service fee.
- The non-labor costs of the were allocated based on the weighted average of all Labor and Benefits related costs allocated to the Sewer Fund, both direct and indirect, or 9.1%.

#### Public Works Administration:

- Half of the Utilities Director's time is directly allocated from the Public Works Administration Division to the Sewer Fund, the other half being allocated to the City's Water and Irrigation Funds. Labor and Benefits related to this employee are therefore excluded from recovery in the Sewer Fund internal service fee.
- Labor and Benefits related costs within the Public Works Finance Division are related to 90% of the Public Works Director's Labor and Benefits expenses. The same weighted average ratio of 9.1% used for Public Works Engineering cost allocations was applied to the Public Works Director's time for recovery in the internal service fee. This is to capture oversight and administration related costs related to his time serving the Sewer Fund.
- The non-labor costs were allocated based on the weighted average of all Labor and Benefits related costs in the Public Works Administration Division allocated to the Sewer Fund, both direct and indirect, or 40.2%.

### 3.3.9. COMMUNICATIONS CENTER

The Grand Junction Regional Communications Center (GJRCC) is a 24 hour, 365 days per year operation, responsible for answering 911 and non-emergency calls. It is a division of the Police Department. The GJRCC receives after hours utility emergency calls, including those related to the Sewer Fund.

Allocation Method: The GJRCC tracks the calls, or billable instances, by User Agency. One of the User Agencies tracked is related to public works / public utilities. The average 5-year historical ratio of public works / public utilities related calls to total calls received, multiplied by 1/3 to approximate only sewer related calls while excluding water and public works, is applied to labor and non-labor related costs.

# 4. Sensitivity Analysis

## 4.1. Sensitivity Analysis Approach

As detailed in section 3 of the report, the internal service fee is intended to recover the cost of services provided by General Fund departments to the Sewer Fund. The two types of services that are incorporated by department into this fee include one of, or a combination of, the following two approaches:

1. Sewer Full Time Equivalent (FTE) to City-Wide FTE Ratio
  - For General Fund indirect services that provide a City-wide benefit to all departments
2. Direct Time Estimate
  - For direct services provided to the Sewer Fund that are not included in the budget and thus need to be recovered in the internal service fee

Based on this methodology, our findings provide for a Sewer Fund indirect fee, using the 2018 City budget, equal to \$678,000, or 5.2% of budgeted sewer service charge revenue. This sensitivity analysis was performed assuming no change to the City's existing direct charge budgeting practices. Page 1 of Appendix B summarizes the internal service fee calculation.

This section of the report assesses the sensitivity of the two cost allocation approaches to the overall internal service fee calculation. Pages 2 through 5 of Appendix B summarize the results of the following four sensitivity scenarios discussed in the balance of this section.

- Increase of 1 Sewer Fund FTE
- Increase of 15 City-wide FTEs
- Decrease of 25% of direct sewer specific time
- Increase of 25% of direct sewer specific time

### 4.1.1. SEWER FTE TO CITY-WIDE FTE RATIO

General fund services that provide a City-wide benefit are allocated to the Sewer Fund based on the ratio of Sewer Fund FTEs to City-wide FTEs. The 2018 budgeted FTE breakout, and resulting allocation factor to the Sewer Fund, are summarized in the Table 4-1:

**Table 4-1: FTE Breakout**

Line No.	Fund	2018 FTE Count	Allocation %
1	Sewer Fund	40	6.2%
2	All Other City Funds	605	93.8%
3	Total	645	100.0%

The sensitivity of additional FTEs to the Sewer Fund indirect service fee were calculated as follows:

- For every additional Sewer Fund FTE, assuming no other changes in total City-Wide FTEs the indirect service fee increases by approximately \$10,000, or 0.08% of budgeted revenues.

- For every additional 15 City-Wide FTEs, assuming no change in total Sewer Fund FTEs, the indirect service fee decreases by approximately \$6,000, or 0.05% of budgeted sewer service charge revenues

Pages 2 and 3 of Appendix B summarize these two FTE adjustment impacts to the calculated internal service fee as previously discussed.

#### **4.1.2. DIRECT TIME ESTIMATE**

Direct services provided by the General Fund that are not accounted for in the budget are captured and included in the Sewer Fund internal service fee based on an estimate of City staff time spent on sewer specific activities. These estimates were developed based on interviews Raftelis held with Department managers and includes sewer specific time for the City Manager, City Attorney, Finance, Community Development and Public Works and Planning Departments. To assess the sensitivity of the direct time estimate assumptions, Raftelis assessed the impact of a 25% increase, or decrease, in estimated time as follows:

- For every 25% change in the applied direct hours, the indirect service fee increases, or decreases, by approximately \$75,000, or 0.6% of budgeted revenues.

Pages 4 and 5 of Appendix B summarize the impact of an increase or decrease of 25% in direct time estimates to the calculated internal service fee as previously discussed.

## **4.2. Sensitivity Analysis Conclusions**

The sensitivity analysis calculations show the following:

1. Changes in the Sewer Fund, or City-wide, FTE count would have to significantly change to have a material impact on the internal service fee calculation.
2. Direct time estimates are subject to more variability on a year-to-year basis and have a more significant impact on the internal service fee calculation.
  - a) 25% increase or decrease in estimated direct time results in a 0.6% change in the calculated internal service fee.

For purposes of the sensitivity analysis, all changes were assumed to happen in the same direction, but in practice changes could be multi-directional with impacts nullifying one another in part or in whole. The sensitivity analysis provides for a range of \$600,000 to \$750,000 translating to approximately 4.7% to 5.8% of 2018 budgeted sewer user charge revenues as a reasonable range.



APPENDIX A:  
**DETAILED DEPARTMENT  
ALLOCATION CALCULATIONS**

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 FY 2018 Internal Service Fee Summary

<b>Internal Service Fee Summary</b>
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Line No.	Department/Division Name	Internal Service Fee Allocation	Direct Charges (3)	Total
<b><u>Internal Service Fee Allocations</u></b>				
1	City Manager's Office	\$79,000	\$0	\$79,000
2	City Attorney	69,000	0	69,000
3	Human Resources	99,000	0	99,000
4	City Clerk	36,000	0	36,000
5	Finance	127,000	0	127,000
6	Fleet	12,000	0	12,000
7	Community Development	89,000	0	89,000
8	Public Works and Planning (1)	157,000	139,000	296,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	678,000	139,000	817,000
<b><u>Other Direct Allocations (2)</u></b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$678,000</b>	<b>\$1,258,600</b>	<b>\$1,936,600</b>
18	2018 Budget Sewer Service Revenue	<b>\$12,943,000</b>	<b>\$12,943,000</b>	<b>\$12,943,000</b>
19	Total As % of Revenue	5.2%	9.7%	15.0%

(1) \$139,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget.

(2) Direct allocation values from adopted 2018 Budget.

(3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

**City of Grand Junction, CO**  
**Joint Sewer Operations Fund 902**  
**Internal Service Fee Assessment**

<b>Full Time Equivalentents (FTEs) by Fund / Department</b>
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Line No.	Fund	Fund / Department Description	FTEs (1)	% Total
1	100	City Manager's Office	4.00	0.6%
2	100	City Attorney	5.00	0.8%
3	100	Human Resources	7.10	1.1%
4	100	City Clerk	4.00	0.6%
5	100	Finance	15.30	2.4%
6	100	Community Development	12.00	1.9%
7	100	Public Works and Planning	20.90	3.2%
8	100	Other General Fund Departments	369.90	57.3%
9	102	Visitor & Convention Bureau Fund	9.00	1.4%
10	103	Downtown Development Authority	2.00	0.3%
11	301	Water Fund	32.25	5.0%
12	302	Solid Waste Removal Fund	13.10	2.0%
13	305	Golf Course Fund	6.50	1.0%
14	308	Parking Authority Fund	1.20	0.2%
15	309	Ridges Irrigation Fund	1.15	0.2%
16	401	Information Technology Fund	21.55	3.3%
17	402	Fleet and Equipment Fund	13.20	2.0%
18	404	Self Insurance Fund	2.80	0.4%
19	405	Communications Center Fund	53.95	8.4%
20	406	Facilities Management Fund	8.00	1.2%
21	711	Downtown BID Fund	2.00	0.3%
22	<b>902</b>	<b>Joint Sewer Operations Fund</b>	<b>40.10</b>	<b>6.2%</b>
23		<b>Total</b>	<b>645.00</b>	<b>100.0%</b>

*(1) FTEs by fund sourced from Position Control GL Distribution spreadsheet provided by City.*

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

Inter-Department Allocations - General Fund

Allocation Approach: General Fund departments do not charge other General Fund departments for services rendered. In order to ensure the Sewer indirect service fee fully recovers costs, the table below allocates services between General Fund departments. These allocated costs flow through and are added to each department's budgeted expenses. The approach to identify the estimated portion of time for department staff followed two methods - a) estimate by department heads of percent of time associated with support to other departments; b) use FTEs as a proxy for the support provided.

<b>% Allocation to Other General Fund Departments</b>										
Line No.	Department	Total Department Budget	City Manager's Office	City Attorney	Human Resources	City Clerk	Finance	Community Development	Public Works - Engineering	Public Works - Admin
1	City Manager's Office	\$704,885		0.0%	10.0%	5.0%	20.0%	8.0%	8.0%	0.0%
2	City Attorney	\$797,677	19.5%		19.5%	2.0%	5.0%	19.5%	19.5%	0.0%
3	Human Resources	\$1,349,032	0.6%	0.8%		0.6%	2.4%	1.9%	3.2%	0.0%
4	City Clerk	\$511,847	0.6%	0.8%	1.1%		2.4%	1.9%	3.2%	0.0%
5	Finance	\$1,798,704	0.6%	0.8%	1.1%	0.6%		1.9%	3.2%	0.0%
6	Community Development	\$1,300,659	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
7	Public Works - Engineering	\$1,573,015	0.1%	0.1%	0.0%	0.0%	0.2%	3.3%		
8	Public Works - Administration	\$210,795	0.1%	0.1%	0.0%	0.0%	0.2%	3.3%		

<b>\$ Allocation to Other General Fund Departments</b>									
Line No.	Department	City Manager's Office	City Attorney	Human Resources	City Clerk	Finance	Community Development	Public Works - Engineering	Public Works - Admin
1	City Manager's Office	\$0	\$0	\$70,489	\$35,244	\$140,977	\$56,391	\$56,391	\$0
2	City Attorney	155,547	0	155,547	15,954	39,884	155,547	155,547	0
3	Human Resources	8,366	10,458	0	8,366	32,000	25,098	43,713	0
4	City Clerk	3,174	3,968	5,634	0	12,141	9,523	16,585	0
5	Finance	11,155	13,943	19,800	11,155	0	33,464	58,284	0
6	Community Development	0	0	0	0	0	0	0	0
7	Public Works - Engineering	1,380	1,380	0	690	3,450	51,744	0	0
8	Public Works - Administration	185	185	0	92	462	6,934	0	0
9	<b>Total Allocated</b>	<b>\$179,807</b>	<b>\$29,934</b>	<b>\$251,469</b>	<b>\$71,501</b>	<b>\$228,914</b>	<b>\$338,701</b>	<b>\$330,520</b>	<b>\$0</b>

**City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment**

**City Manager's Office Department**

**Allocation Approach:**

Based on inquiries with Mr. Greg Caton, City Manager, his office is tasked with understanding and assisting the Joint Sewer Operations Fund at any time throughout the year. There are inevitably specific sewer related tasks each year that require attention in addition to general activities. An estimate for the sewer specific time per year is 80 hours. Assuming 2,080 hours in the work year, 80/2,080 of the City Manager's Office personnel and trailing operating and interfund charges are assigned directly to the Sewer Fund for recovery in the indirect service fee. The remaining costs of the department are allocated based on the Sewer Fund FTE to City-Wide FTE ratio.

Allocation Factor: Estimated time and FTE Ratio  
 Allocation % 6.2%

Total Internal Service Fee Allocation: \$79,000  
 Total Direct Expense Allocation: 0  
 Total Wastewater Allocation: \$79,000

**Internal Service Fee Calculation - City Manager's Office Department**

Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total
1	120	City Manager's Office Labor and Benefits	\$475,477	\$18,000	\$0	\$457,477	6.2%	\$28,000	\$46,000	\$429,035	\$475,035
2	120	City Manager's Office Operating	112,650	4,000	0	108,650	6.2%	7,000	11,000	101,895	112,895
3	120	City Manager's Office Interfund Charges	116,758	4,000	0	112,758	6.2%	7,000	11,000	105,748	116,748
4	Other General Fund Allocations		179,807	0	0	179,807	6.2%	11,000	11,000	168,628	179,628
5	Total		<u>\$884,692</u>	<u>\$26,000</u>	<u>\$0</u>	<u>\$858,692</u>		<u>\$53,000</u>	<u>\$79,000</u>	<u>\$805,307</u>	<u>\$884,307</u>

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

**City Attorney Department**

Allocation Approach: Based on inquiries with Mr. John Shafer, City Attorney, he along with his colleagues in the City Attorney's office provide valuable services to the Sewer Fund. The services provided are more than the typical City Department due to the separate Board meeting, rate and fee ordinances, IPT, and land use related activities. Mr. Shaver estimates that the sewer related tasks, both direct and indirect, total to approximately 1-month of the Attorney's Office total time. The City's Attorney's Office personnel, operations, and indirect costs are therefor allocated 1/12, or 8.3% to the Sewer Fund.

Allocation Factor:	Estimated Time
Allocation %	8.3%
Total Internal Service Fee Allocation:	\$69,000
Total Direct Expense Allocation:	0
Total Wastewater Allocation:	\$69,000

Internal Service Fee Calculation - City Attorney Department											
Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total
1	130 City Attorney	Labor and Benefits	\$692,160	\$0	\$0	\$692,160	8.3%	\$58,000	\$58,000	\$634,480	\$692,480
2	130 City Attorney	Operating	43,400	0	0	43,400	8.3%	4,000	4,000	39,783	43,783
3	130 City Attorney	Interfund Charges	62,117	0	0	62,117	8.3%	5,000	5,000	56,941	61,941
4	Other General Fund Allocations		29,934	0	0	29,934	8.3%	2,000	2,000	27,439	29,439
5	Total		\$827,611	\$0	\$0	\$827,611		\$69,000	\$69,000	\$758,643	\$827,643

**City of Grand Junction, CO**  
**Joint Sewer Operations Fund 902**  
**Internal Service Fee Assessment**

**Human Resources Department**

Allocation Approach: Based on inquiries with Claudia Hazelhurst, HR Director, the Joint Sewer Operations Fund requires a similar effort compared to other departments and additional sewer specific services are not typically provided. Thus, the Sewer Fund FTE to City-Wide FTE ratio is appropriate for allocating Department costs.

Allocation Factor:	FTE Ratio
Allocation %	6.2%
Total Internal Service Fee Allocation:	\$99,000
Total Direct Expense Allocation:	0
Total Wastewater Allocation:	\$99,000

Internal Service Fee Calculation - Human Resources Department											
Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total
1	140	Human Resources Labor and Benefits	\$790,035	\$0	\$0	\$790,035	6.2%	\$49,000	\$49,000	\$740,918	\$789,918
2	140	Human Resources Operating	345,050	0	0	345,050	6.2%	21,000	21,000	323,598	344,598
3	140	Human Resources Interfund Charges	213,947	0	0	213,947	6.2%	13,000	13,000	200,646	213,646
4	Other General Fund Allocations		251,469	0	0	251,469	6.2%	16,000	16,000	235,835	251,835
5	Total		\$1,600,501	\$0	\$0	\$1,600,501		\$99,000	\$99,000	\$1,500,997	\$1,599,997



**City of Grand Junction, CO**  
**Joint Sewer Operations Fund 902**  
**Internal Service Fee Assessment**

**City Clerk Department**

Allocation Approach: The City Clerk Department benefits all departments within the City. Thus, the Sewer Fund FTE to City-Wide FTE ratio is appropriate.

Allocation Factor:	FTE Ratio
Allocation %	<b>6.2%</b>

Total Internal Service Fee Allocation:	\$36,000
Total Direct Expense Allocation:	0
Total Wastewater Allocation:	\$36,000

Internal Service Fee Calculation - City Clerk Department											
Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total
1	160	City Clerk Labor and Benefits	\$474,736	\$0	\$0	\$474,736	6.2%	\$30,000	\$30,000	\$445,221	\$475,221
2	160	City Clerk Operating	19,500	0	0	19,500	6.2%	1,000	1,000	18,288	19,288
3	160	City Clerk Interfund Charges	17,611	0	0	17,611	6.2%	1,000	1,000	16,516	17,516
4	Other General Fund Allocations		71,501	0	0	71,501	6.2%	4,000	4,000	67,056	71,056
5	Total		\$583,348	\$0	\$0	\$583,348		\$36,000	\$36,000	\$547,081	\$583,081

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

**Finance Department**

Allocation Approach: Based on inquiries with Ms. Jodi Romero, Finance Director and Mr. Jay Valentine, Deputy Finance Director, sewer related tasks generally require effort in proportion with it's City-Wide FTE ratio. Mr. Valentine identified some sewer specific tasks that should be directly recovered within the internal service fee. Mr. Valentine identified 44 hours of sewer specific work that he provides to the Sewer Fund. Mr. Valentino also identified an Automotive and Equipment Supervisor who's time is allocated to the 402-250 Fleet Fund, but spends 1/8th of his time on Biogas CNG related work that benefits the Sewer Fund.

Allocation Factor:	Estimated Time and FTE Ratio - City-Wide
Allocation %	<b>6.2%</b>

Total Internal Service Fee Allocation:	\$127,000
Total Direct Expense Allocation:	0
Total Wastewater Allocation:	\$127,000

Identification of Personnel Costs Benefiting Joint Sewer Operations Fund within the Finance Department Divisions Below						
Line No.	Position Title	Dept	Dept Description	2018 Adopted Budget	Wastewater Fund Specific	Wastewater Specific
1	Deputy Finance Director	01-170	Finance Administration	\$142,195	2.1%	\$3,000
2	Total			\$142,195		\$3,000

Internal Service Fee Calculation - Finance Department											
Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total
1	170	Finance Administration	\$474,736	\$3,000	\$0	\$471,736	6.2%	\$29,000	\$32,000	\$442,408	\$474,408
2	170	Finance Administration	19,500	0	0	19,500	6.2%	1,000	1,000	18,288	19,288
3	170	Finance Administration	17,611	0	0	17,611	6.2%	1,000	1,000	16,516	17,516
4	200	Revenue	163,288	0	0	163,288	6.2%	10,000	10,000	153,136	163,136
5	200	Revenue	20,490	0	0	20,490	6.2%	1,000	1,000	19,216	20,216
6	200	Revenue	72,005	0	0	72,005	6.2%	4,000	4,000	67,528	71,528
7	210	Accounting and Payroll	407,696	0	0	407,696	6.2%	25,000	25,000	382,349	407,349
8	210	Accounting and Payroll	57,248	0	0	57,248	6.2%	4,000	4,000	53,689	57,689
9	210	Accounting and Payroll	191,425	0	0	191,425	6.2%	12,000	12,000	179,524	191,524
10	230	Purchasing	236,300	0	0	236,300	6.2%	15,000	15,000	221,609	236,609
11	230	Purchasing	6,100	0	0	6,100	6.2%	0	0	5,721	5,721
12	230	Purchasing	22,130	0	0	22,130	6.2%	1,000	1,000	20,754	21,754
13	240	Warehouse	56,064	0	0	56,064	6.2%	3,000	3,000	52,578	55,578
14	240	Warehouse	13,700	0	0	13,700	6.2%	1,000	1,000	12,848	13,848
15	240	Warehouse	40,411	0	0	40,411	6.2%	3,000	3,000	37,899	40,899
16		Other General Fund Allocations	228,914	0	0	228,914	6.2%	14,000	14,000	214,683	228,683
17	Total		\$2,027,618	\$3,000	\$0	\$2,024,618		\$124,000	\$127,000	\$1,898,747	\$2,025,747

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

**Fleet**

Allocation Approach:

The Fleet Division's costs are primarily allocated to City funds through a direct charge proportionate to their share of benefits received related to asset management for City owned vehicles and equipment. There is a specific employee, an Automotive and Equipment Supervisor, who's Labor and Benefit costs are accounted for in the Fleet Division, who performs specific Sewer Fund activities. Approximately 1 hour each day, or 1/8th of his time, is spent monitoring the Compressed Natural Gas (CNG) process at the Persigo Plant. This is not accounted for in the Sewer Fund's direct allocation for Fleet services, and is therefore included in the internal service fee allocation. Operating and interfund related costs in the Fleet division were excluded from recovery, as these costs are unrelated to the CNG tasks being accounted for.

Allocation Factor:	Estimated Time
Total Personnel Costs Allocated to WW:	\$12,000
Total Personnel Costs:	1,106,662
Operating & Interfund Charges Allocation %	1.1%
Total Internal Service Fee Allocation:	\$12,000
Total Direct Expense Allocation:	0
Total Wastewater Allocation:	\$12,000

**Personnel Costs Directly Allocated to Wastewater from Fleet**

Line No.	Position Title	Dept	Dept Description	2018 Adopted Budget	Wastewater Fund 902	Direct
					Allocation %	Wastewater Allocation
1	Automotive and Equip Supervisor	01-230	Admin/Fleet	\$99,392	12.5%	12,000
2	Total			\$99,392		\$12,000

**Internal Service Fee Calculation - Fleet**

Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total		
									Wastewater	Total Other	Total
1	250 Fleet	Labor and Benefits	\$1,106,662	\$12,000	\$0	\$1,094,662	0.0%	\$0	\$12,000	\$1,094,662	\$1,106,662
2	250 Fleet	Operating	2,128,844	0	0	2,128,844	1.1%	23,000	23,000	2,105,760	2,128,760
3	250 Fleet	Interfund Charges	190,500	0	0	190,500	1.1%	2,000	2,000	188,434	190,434
4	Total		\$3,426,006	\$12,000	\$0	\$3,414,006		\$25,000	\$37,000	\$3,388,856	\$3,425,856

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

**Community Development Department**

Allocation Approach:

Based on inquiries with Mr. David Thornton and Mr. Rick Dorris, sewer tasks performed by specific Community Development Department staff were identified. Estimates for the percent of total time for these employees was developed and allocated to the Sewer Fund for recovery in the internal service fee. The Community Development Director costs are allocated to the Sewer Fund based on the ratio of total direct sewer time identified to total department time for department employees. Trailing operating and interfund charges are captured at the overall ratio of sewer related to total department personnel expenses.

Allocation Factor: Estimated Time  
 Allocation % 5.4%

Total Internal Service Fee Allocation: \$89,000  
 Total Direct Expense Allocation: 0  
 Total Wastewater Allocation: \$89,000

Identification of Personnel Costs Benefiting Joint Sewer Operations Fund							
Line No.	Position Title	Dept	Dept Description	2018 Adopted Budget	Wastewater Fund Specific	Wastewater Specific	Wastewater %
1	Community Development Director	01-610	Admin/Community Development	\$150,521	5.4%	\$8,000	
2	Principal Planner	01-610	Admin/Community Development	113,318	1.9%	2,000	
3	Project Engineer	01-610	Admin/Community Development	107,581	20.0%	22,000	
4	Project Engineer	01-610	Admin/Community Development	107,581	15.0%	16,000	
5	Total					\$48,000	5.4%

Internal Service Fee Calculation - Community Development Department												
Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total	
1	310	Community Development	Labor and Benefits	\$884,185	\$48,000	\$0	\$836,185	0.0%	\$0	\$48,000	\$836,185	\$884,185
2	310	Community Development	Operating	66,950	0	0	66,950	5.4%	4,000	4,000	63,315	67,315
3	310	Community Development	Interfund Charges	349,524	0	0	349,524	5.4%	19,000	19,000	330,549	349,549
4		Other General Fund Allocations		338,701	0	0	338,701	5.4%	18,000	18,000	320,314	338,314
5	Total			\$1,639,360	\$48,000	\$0	\$1,591,360		\$41,000	\$89,000	\$1,550,364	\$1,639,364

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

**Public Works and Planning Department - Division 330 - Engineering**

Allocation Approach: Based on inquiries with Mr. Trent Prall, Public Works Director, there are certain positions within the Public Works Department, Engineering Division, that are directly allocated to the Sewer Fund, and thus should be excluded from recovery within the internal service fee. However, there are also specific positions within the Public Works Engineering division benefiting the Sewer Fund that are not directly allocated. These costs should be captured in the internal service fee, along with trailing operating and interfund charges.

Allocation Factor:	Estimated Time
Total Direct & Indirect Personnel Costs Allocated to WW:	\$121,000
Total Direct & Indirect Personnel Costs:	1,329,060
Operating & Interfund Charges Allocation %	<b>9.1%</b>
Total Internal Service Fee Allocation:	\$121,000
Total Direct Expense Allocation:	57,000
Total Wastewater Allocation:	\$178,000

Personnel Costs Directly Allocated to Sewer Fund from Public Works Engineering						
Line No.	Position Title	Dept	Dept Description	2018 Adopted Budget	Wastewater Fund 902 Direct Allocation %	Direct Wastewater Allocation
1	Construction Inspector	06-620	PW&P/Engineer	80,844	5.0%	\$4,000
2	Engineering Specialist	06-620	PW&P/Engineer	98,542	30.0%	30,000
3	Sr. Engineering Technician	06-620	PW&P/Engineer	91,345	25.0%	23,000
4	Total			\$270,731		\$57,000

Identification of Additional Personnel Costs Benefiting Sewer Fund						
Line No.	Position Title	Dept	Dept Description	2018 Adopted Budget	Wastewater Fund Specific	Wastewater Specific
1	Development Inspector	06-620	PW&P/Engineer	\$84,500	50.0%	\$42,000
2	Project Engineer	06-620	PW&P/Engineer	107,581	20.0%	22,000
3	Total					\$64,000

Internal Service Fee Calculation - Public Works Engineering											
Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total
1	330 Engineering	Labor and Benefits	\$1,272,060	\$64,000	\$0	\$1,208,060	0.0%	\$0	\$64,000	\$1,208,060	\$1,272,060
2	330 Engineering	Operating	101,125	0	0	101,125	9.1%	9,000	9,000	91,918	100,918
3	330 Engineering	Interfund Charges	199,830	0	0	199,830	9.1%	18,000	18,000	181,637	199,637
4	Other General Fund Allocations		330,520	0	0	330,520	9.1%	30,000	30,000	300,429	330,429
5	Total		\$1,903,535	\$64,000	\$0	\$1,839,535		\$57,000	\$121,000	\$1,782,044	\$1,903,044

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

**Public Works and Planning Department - Division 600 - Administration**

Allocation Approach:

Based on inquiries with Mr. Trent Prall, Public Works Director, there are positions and operations within the Public Works Administration Division (600) and Engineering Division (330) that benefit the wastewater utility. The tables below address the Administration Division Sewer Fund allocations. A portion of the Public Works Administration personnel costs are directly allocated to the Sewer Fund and therefor should not be recovered within the internal service fee. The first table below identifies these directly allocated personnel costs. A portion of the Public Works Administration labor and benefits costs are allocated to the Sewer Fund internal service fee to recognize the oversight provided by the Public Works Director. The non-labor costs were allocated based on the weighted average of all labor and benefits related costs in the Public Works Administration Division allocated to the Sewer Fund, both direct and indirect.

Allocation Factor:	Estimated Time
Total Direct & Indirect Personnel Costs Allocated to Sewer:	\$96,000
Total Direct & Indirect Personnel Costs:	238,903
Operating & Interfund Charges Allocation %	<b>40.2%</b>
Total Internal Service Fee Allocation:	\$36,000
Total Direct Expense Allocation:	82,000
Total Wastewater Allocation:	\$118,000

Personnel Costs Directly Allocated to Wastewater from Public Works Administration						
Line No.	Position Title	Dept	Dept Description	2018 Adopted Budget	Wastewater Fund 902 Direct Allocation %	Direct Wastewater Allocation
1	Utilities Director	06-600	PW&P Admin	163,068	50.0%	82,000
2	Total			\$163,068		\$82,000

Internal Service Fee Calculation - Public Works Administration												
Line No.	Level 2	Account Classification1	2018 Adopted Budget	Wastewater Fund Specific	Exclude from Wastewater Allocation	Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total	
1	300	Public Works/Planning Admin	Labor and Benefits	\$156,903	0	\$0	\$156,903	9.1%	\$14,000	\$14,000	\$142,618	\$156,618
2	300	Public Works/Planning Admin	Operating	0	0	0	0	40.2%	0	0	0	0
3	300	Public Works/Planning Admin	Interfund Charges	53,892	0	0	53,892	40.2%	22,000	22,000	32,236	54,236
4		Other General Fund Allocations		0	0	0	40.2%	0	0	0	0	0
5	Total			\$210,795	\$0	\$0	\$210,795		\$36,000	\$36,000	\$174,854	\$210,854

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 Internal Service Fee Assessment

**Communications Center Department (Fund 405)**

Allocation Approach: Based on inquiries with Paula Creasy, Communications Center Manager, the Communications Center handles all after hour sewer related emergency calls. The Communications Center handles calls for 23 City agencies, and tracks the number of calls by agency. Sewer related calls are tracked in aggregate with public works and utilities. A sewer allocation factor of 1/3 was used to allocated these calls to sewer specific, recognizing that a portion are water or public works related. The ratio of sewer related calls to total calls received will be used to allocate costs to the Sewer Fund for recovery in the internal service fee.

Allocation Factor:	WW Call Ratio
Allocation %	0.2%
Total Internal Service Fee Allocation:	\$10,000
Total Direct Expense Allocation:	0
Total Wastewater Allocation:	\$10,000

**Historical Communications Call Center Breakout by Agency**

Line No.	Year	Total Calls	Public Works and Utilities Calls	Wastewater Portion	Wastewater Call Allocation	Wastewater %
1	2013	135,205	943	33.3%	314	0.2%
2	2014	144,803	545	33.3%	182	0.1%
3	2015	156,771	644	33.3%	215	0.1%
4	2016	157,213	574	33.3%	191	0.1%
5	2017	157,618	684	33.3%	228	0.1%
6	Total	751,610	3,390		1,130	0.2%

**Internal Service Fee Calculation - Communications Center**

Line No.	Level 2	Account Classification1	2018 Adopted Budget	Exclude from		Total General Allocable	General WW Allocation %	General WW Allocation	Total Wastewater	Total Other	Total
				Wastewater Fund Specific	Wastewater Allocation						
1	430	Communications Center Labor and Benefits	\$4,593,197	\$0	\$0	\$4,593,197	0.2%	\$7,000	\$7,000	\$4,586,291	\$4,593,291
2	430	Communications Center Operating	463,672	0	0	463,672	0.2%	1,000	1,000	462,975	463,975
3	430	Communications Center Interfund Charges	1,336,349	0	0	1,336,349	0.2%	2,000	2,000	1,334,340	1,336,340
		Other General Fund Allocations	251,469	0	0						
4	Total		\$6,644,687	\$0	\$0	\$6,393,218		\$10,000	\$10,000	\$6,383,606	\$6,393,606



APPENDIX B:  
**SENSITIVITY ANALYSIS  
CALCULATIONS**

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 FY 2018 Internal Service Fee Summary - Sensitivity Analysis

Internal Service Fee Summary				
Line No.	Department/Division Name	Internal Service Fee Allocation	Direct Charges (3)	Total
<b>Internal Service Fee Allocations</b>				
1	City Manager's Office	\$79,000	\$0	\$79,000
2	City Attorney	69,000	0	69,000
3	Human Resources	99,000	0	99,000
4	City Clerk	36,000	0	36,000
5	Finance	127,000	0	127,000
6	Fleet	12,000	0	12,000
7	Community Development	89,000	0	89,000
8	Public Works and Planning (1)	157,000	139,000	296,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	678,000	139,000	817,000
<b>Other Direct Allocations (2)</b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$678,000</b>	<b>\$1,258,600</b>	<b>\$1,936,600</b>
18	2018 Budget Sewer Service Revenue	\$12,943,000	\$12,943,000	\$12,943,000
19	Total As % of Revenue	5.2%	9.7%	15.0%

(1) \$139,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget.  
 (2) Direct allocation values from adopted 2018 Budget.  
 (3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

Sensitivity Analysis Inputs			
Line No.	FTEs	Values	Sewer %
<b>Existing FTEs</b>			
1	2018 FTEs		
2	Sewer	40.1	6.22%
3	City Wide	645.0	
<b>Adjustments to FTEs</b>			
4	Sewer Add / (Subtract)	0	
5	City Wide Add / (Subtract)	0	
6	Adjusted Sewer	40.1	6.22%
7	Adjusted City Wide	645.0	
<b>Direct Allocation Variance % Change</b>			
8	Direct Time Adjustment	0.0%	
<b>Sensitivity Results</b>			
9	Original Fee Calculation	\$678,000	
10	Adjusted Fee Calculation	\$678,000	
11	Difference	\$0	0.00%

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 FY 2018 Internal Service Fee Summary - Sensitivity Analysis

Internal Service Fee Summary				
Line No.	Department/Division Name	Internal Service Fee Allocation	Direct Charges (3)	Total
<b>Internal Service Fee Allocations</b>				
1	City Manager's Office	\$80,000	\$0	\$80,000
2	City Attorney	69,000	0	69,000
3	Human Resources	102,000	0	102,000
4	City Clerk	37,000	0	37,000
5	Finance	132,000	0	132,000
6	Fleet	12,000	0	12,000
7	Community Development	89,000	0	89,000
8	Public Works and Planning (1)	157,000	139,000	296,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	688,000	139,000	827,000
<b>Other Direct Allocations (2)</b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$688,000</b>	<b>\$1,258,600</b>	<b>\$1,946,600</b>
18	2018 Budget Sewer Service Revenue	\$12,943,000	\$12,943,000	\$12,943,000
19	Total As % of Revenue	5.3%	9.7%	15.0%

(1) \$139,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget.

(2) Direct allocation values from adopted 2018 Budget.

(3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

Sensitivity Analysis Inputs			
Line No.	FTEs	Values	Sewer %
<b>Existing FTEs</b>			
1	2018 FTEs		
2	Sewer	40.1	6.22%
3	City Wide	645.0	
<b>Adjustments to FTEs</b>			
4	Sewer Add / (Subtract)	1	
5	City Wide Add / (Subtract)	0	
6	Adjusted Sewer	41.1	6.36%
7	Adjusted City Wide	646.0	
<b>Direct Allocation Variance % Change</b>			
8	Direct Time Adjustment	0.0%	
<b>Sensitivity Results</b>			
9	Original Fee Calculation	\$678,000	
10	Adjusted Fee Calculation	\$688,000	
11	Difference	\$10,000	0.08%

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 FY 2018 Internal Service Fee Summary - Sensitivity Analysis

Internal Service Fee Summary				
Line No.	Department/Division Name	Internal Service Fee Allocation	Direct Charges (3)	Total
<b>Internal Service Fee Allocations</b>				
1	City Manager's Office	\$79,000	\$0	\$79,000
2	City Attorney	69,000	0	69,000
3	Human Resources	97,000	0	97,000
4	City Clerk	35,000	0	35,000
5	Finance	124,000	0	124,000
6	Fleet	12,000	0	12,000
7	Community Development	89,000	0	89,000
8	Public Works and Planning (1)	157,000	139,000	296,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	672,000	139,000	811,000
<b>Other Direct Allocations (2)</b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$672,000</b>	<b>\$1,258,600</b>	<b>\$1,930,600</b>
18	2018 Budget Sewer Service Revenue	\$12,943,000	\$12,943,000	\$12,943,000
19	Total As % of Revenue	5.2%	9.7%	14.9%

(1) \$139,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget.

(2) Direct allocation values from adopted 2018 Budget.

(3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

Sensitivity Analysis Inputs			
Line No.	FTEs	Values	Sewer %
<b>Existing FTEs</b>			
1	2018 FTEs		
2	Sewer	40.1	6.22%
3	City Wide	645.0	
<b>Adjustments to FTEs</b>			
4	Sewer Add / (Subtract)	0	
5	City Wide Add / (Subtract)	15	
6	Adjusted Sewer	40.1	6.08%
7	Adjusted City Wide	660.0	
<b>Direct Allocation Variance % Change</b>			
8	Direct Time Adjustment	0.0%	
<b>Sensitivity Results</b>			
9	Original Fee Calculation	\$678,000	
10	Adjusted Fee Calculation	\$672,000	
11	Difference	(\$6,000)	-0.05%

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 FY 2018 Internal Service Fee Summary - Sensitivity Analysis

Internal Service Fee Summary				
Line No.	Department/Division Name	Internal Service Fee Allocation	Direct Charges (3)	Total
<b>Internal Service Fee Allocations</b>				
1	City Manager's Office	\$74,000	\$0	\$74,000
2	City Attorney	52,000	0	52,000
3	Human Resources	99,000	0	99,000
4	City Clerk	36,000	0	36,000
5	Finance	126,000	0	126,000
6	Fleet	12,000	0	12,000
7	Community Development	67,000	0	67,000
8	Public Works and Planning (1)	131,000	139,000	270,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	607,000	139,000	746,000
<b>Other Direct Allocations (2)</b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$607,000</b>	<b>\$1,258,600</b>	<b>\$1,865,600</b>
18	2018 Budget Sewer Service Revenue	\$12,943,000	\$12,943,000	\$12,943,000
19	Total As % of Revenue	4.7%	9.7%	14.4%

(1) \$139,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget.

(2) Direct allocation values from adopted 2018 Budget.

(3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

Sensitivity Analysis Inputs			
Line No.	FTEs	Values	Sewer %
<b>Existing FTEs</b>			
1	2018 FTEs		
2	Sewer	40.1	6.22%
3	City Wide	645.0	
<b>Adjustments to FTEs</b>			
4	Sewer Add / (Subtract)	0	
5	City Wide Add / (Subtract)	0	
6	Adjusted Sewer	40.1	6.22%
7	Adjusted City Wide	645.0	
<b>Direct Allocation Variance % Change</b>			
8	Direct Time Adjustment	-25.0%	
<b>Sensitivity Results</b>			
9	Original Fee Calculation	\$678,000	
10	Adjusted Fee Calculation	\$607,000	
11	Difference	(\$71,000)	-0.55%

City of Grand Junction, CO  
 Joint Sewer Operations Fund 902  
 FY 2018 Internal Service Fee Summary - Sensitivity Analysis

Internal Service Fee Summary				
Line No.	Department/Division Name	Internal Service Fee Allocation	Direct Charges (3)	Total
<b>Internal Service Fee Allocations</b>				
1	City Manager's Office	\$87,000	\$0	\$87,000
2	City Attorney	86,000	0	86,000
3	Human Resources	99,000	0	99,000
4	City Clerk	36,000	0	36,000
5	Finance	128,000	0	128,000
6	Fleet	12,000	0	12,000
7	Community Development	112,000	0	112,000
8	Public Works and Planning (1)	183,000	139,000	322,000
9	Communications Center	10,000	0	10,000
10	Subtotal - City Departments	753,000	139,000	892,000
<b>Other Direct Allocations (2)</b>				
11	Facility	0	548,581	548,581
12	Fleet	0	259,717	259,717
13	Fuel	0	34,971	34,971
14	IT	0	219,087	219,087
15	Liability	0	57,244	57,244
16	Subtotal - Other Direct Allocations	0	1,119,600	1,119,600
17	<b>Total</b>	<b>\$753,000</b>	<b>\$1,258,600</b>	<b>\$2,011,600</b>
18	2018 Budget Sewer Service Revenue	\$12,943,000	\$12,943,000	\$12,943,000
19	Total As % of Revenue	5.8%	9.7%	15.5%

(1) \$139,000 reflects Public Works and Planning staff labor and benefit costs directly allocated to the Sewer Fund as part of the budget.  
 (2) Direct allocation values from adopted 2018 Budget.  
 (3) The Sewer Fund is also assessed a direct charge from the City's Water Fund for utility billing purposes. This direct charge was excluded from the summary as it does not involve the General Fund. The 2018 budgeted billing costs for the Sewer Fund total \$529,000.

Sensitivity Analysis Inputs			
Line No.	FTEs	Values	Sewer %
<b>Existing FTEs</b>			
1	2018 FTEs		
2	Sewer	40.1	6.22%
3	City Wide	645.0	
<b>Adjustments to FTEs</b>			
4	Sewer Add / (Subtract)	0	
5	City Wide Add / (Subtract)	0	
6	Adjusted Sewer	40.1	6.22%
7	Adjusted City Wide	645.0	
<b>Direct Allocation Variance % Change</b>			
8	Direct Time Adjustment	25.0%	
<b>Sensitivity Results</b>			
9	Original Fee Calculation	\$678,000	
10	Adjusted Fee Calculation	\$753,000	
11	Difference	\$75,000	0.58%