



AGENDA

Wednesday, October 27, 2021
5:00 PM

JOINT BUDGET AND CITY/COUNTY WORKSHOP MESA COUNTY BOARD OF COMMISSIONERS & CITY OF GRAND JUNCTION – CITY COUNCIL

Mesa County Old Courthouse Building • 544 Rood Avenue • Grand Junction, CO
Commissioners Board Room, Floor 3A

1. Welcome & Introductions
2. Joint Budget Workshop | Persigo
3. City/County Workshop Discussion Topics
 - a. 29 Road Update (Scott Mai, County Public Works Director & Trent Prall, City Public Works Director)
4. Other Business
5. Adjourn



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

Item #1.a.

Meeting Date: October 27, 2021
Presented By: Randi Kim, Utilities Director
Department: Utilities
Submitted By: Randi Kim

Information

SUBJECT:

2022 Recommended Persigo Budget

RECOMMENDATION:

This presentation and discussion is for informational purposes.

EXECUTIVE SUMMARY:

The City of Grand Junction manages, operates, and maintains the Persigo Wastewater System for the benefit of users of sewer service in the Persigo 201 Service Area. The City and Mesa County participate jointly as the Persigo Board to provide policy direction for operation and maintenance of the system. The purpose of this meeting is to present the 2022 Recommended Budget for the Persigo Wastewater System.

BACKGROUND OR DETAILED INFORMATION:

The Persigo Board meets on an annual basis to review the status of the overall system and the recommended budget for the Persigo Wastewater System for the forthcoming fiscal year. The purpose of this meeting is to present the 2022 Recommended Budget for the Persigo Wastewater System.

FISCAL IMPACT:

Recommended 2022 Budget information is included in this presentation.

SUGGESTED MOTION:

Attachments

1. 2021 Persigo Joint Sewer System Budget Transmittal Final Letter 102121

2. 2022 Joint Sewer Fund Budget
3. 2022 Joint Sewer Fund Capital Descriptions
4. 2022 Joint Sewer Ten Year Capital Plan

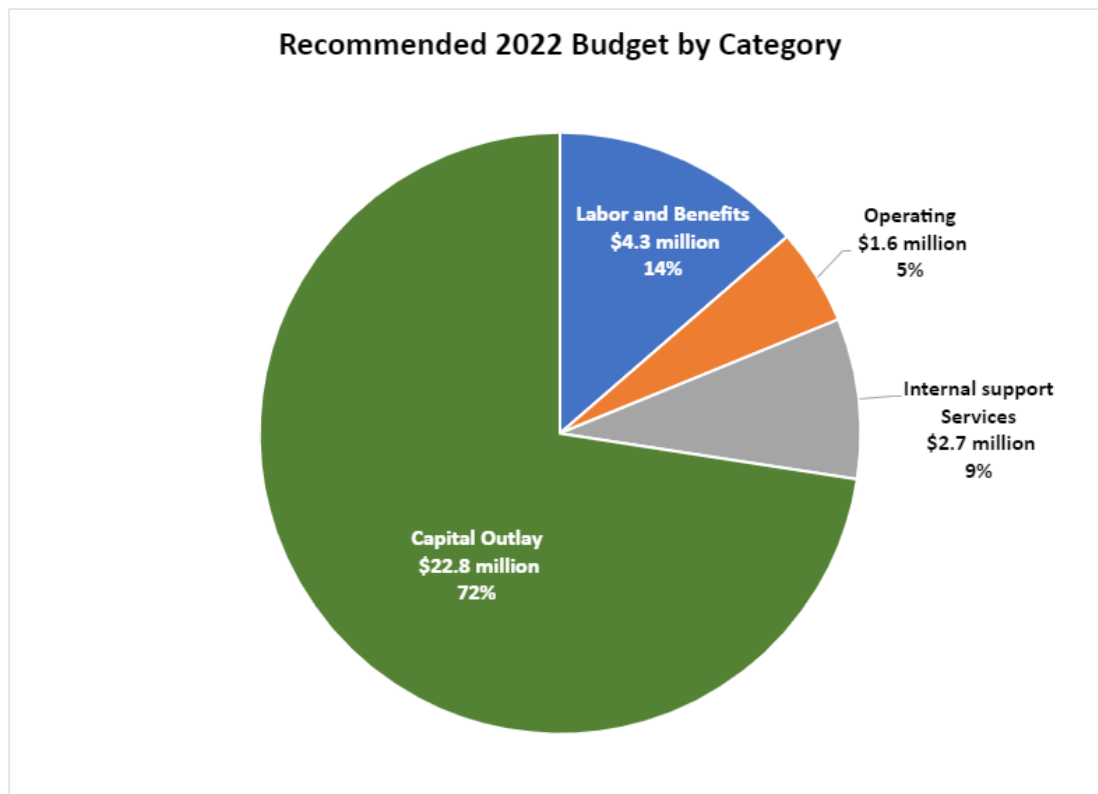
October 21, 2021

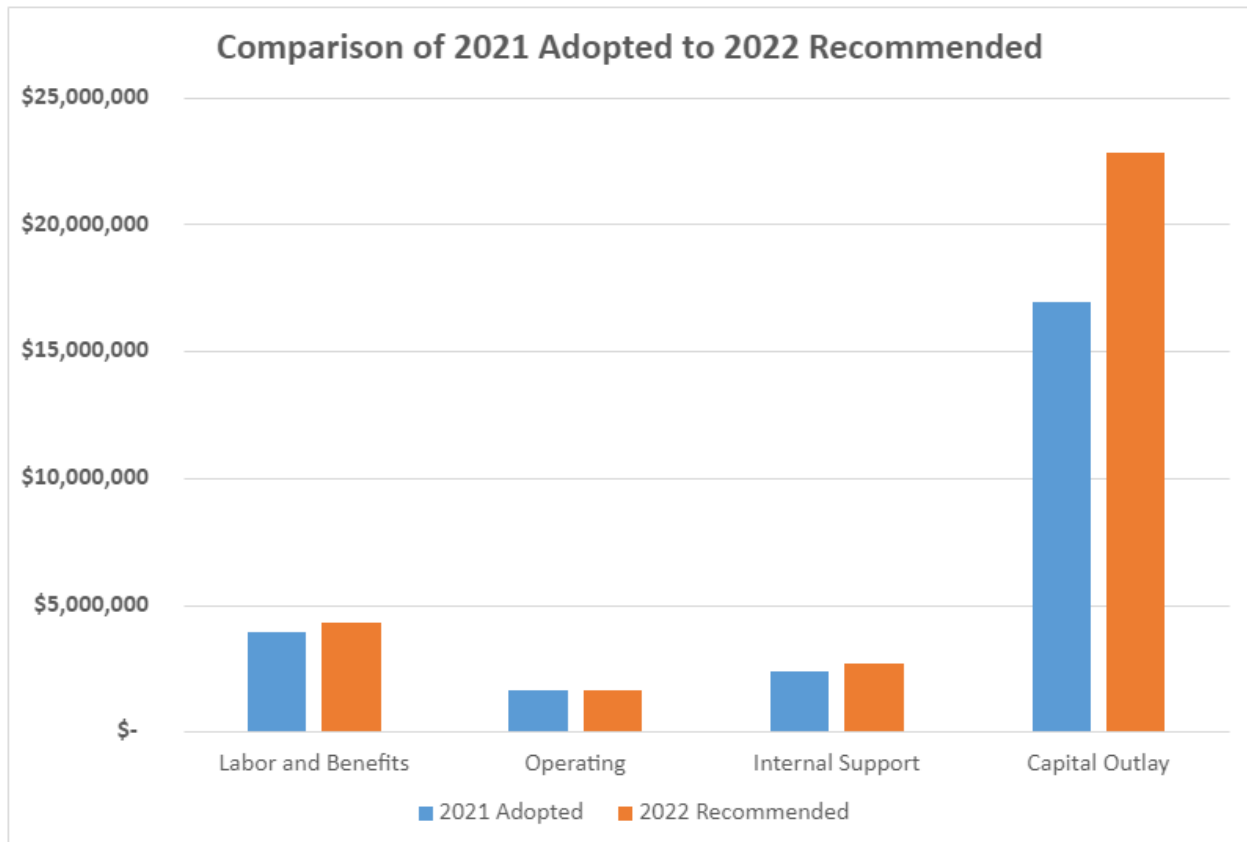
To the Honorable Members of Persigo Board:

It is our pleasure to present the Recommended Persigo Budget for 2022. The 2022 budget totals \$32.1 million, of which \$22.8 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.

In 2015, the Persigo Board approved the Wastewater Division's annual budget and a rate study performed by a third-party consultant to ensure revenue sufficiency and financial stability of the operation. The 2022 Recommended Budget is consistent with financial recommendations included in the 2015 rate study. The 2022 Recommended Budget also incorporates recommendations presented in the 2020 Comprehensive Wastewater Basin and Wastewater Treatment Facilities Master Plan.

The following graphs represent the 2022 Recommended Budget by category showing the emphasis on capital infrastructure investment as well as a comparison to the 2021 Adopted Budget.





The combined funds for the Joint Persigo Sewer System are managed in two separate accounting funds: the operating fund and the sewer capacity fund. The first account funds operation and maintenance of the sewer collection and treatment system and planned infrastructure replacement and improvements. The second account receives revenue from plant investment fees that are accumulated for future expansion of the treatment system. The projected ending fund balance for the combined funds is \$22.5 million. This is well above the reserve target of \$6.8 million, which represents a combination of one year of capital replacement costs for sewer mains and 30 percent of operations and maintenance cost, as recommended by the 2015 rate study. The remaining balance of \$15.7 million will continue to be reserved for future replacement and expansion projects.

Infrastructure Maintenance – Maintenance of the City’s wastewater infrastructure assets is critical to delivering high quality, reliable wastewater treatment to return clean water to the Colorado River. The focus of the Utilities’ asset management program will be to increase preventative maintenance activities and reduce the amount of corrective or reactive maintenance activities that may cause an interruption to service such as sewer backup. The 2022 Recommended Budget includes funding for lease of two specialty sewer trucks that are equipped

with advanced technology video equipment for inspecting the condition of sewer lines. This lease arrangement will increase the reliability of the inspection equipment thereby allowing crews to complete a greater number of sewer inspections in support of the asset management program, acceptance of new infrastructure associated with development projects, and responding to customer complaints. The 2022 Recommended Budget also includes funding for repair or replacement of HVAC, electrical and processing equipment at the wastewater treatment plant that has reached its useful life.

The 2022 Recommended Budget includes two new Wastewater positions: a Wastewater Improvement Coordinator and a Wastewater Project Manager. The Wastewater Improvement Coordinator will be responsible for planning, conducting outreach, and implementing sewer improvement districts to facilitate the septic elimination program. There are currently 1,550 septic systems in service within the Persigo 201 Service Boundary. The objective of the program is to connect these properties to the sewer system thereby eliminating potential threats to the health of the community and ecosystems. The Wastewater Project Manager will be responsible for planning and managing the implementation of wastewater projects identified in the 2020 Wastewater Master Plan to provide service to meet future growth of the City.

Sustainability – The Persigo wastewater treatment system continues to operate in compliance with permit requirements and returns clean water to the Colorado River. The Persigo wastewater treatment contributes to the community's sustainability goals by producing renewal biogas that fuels 69 City and County vehicles and operating solar arrays that offsets the facility's energy demands. The 2022 Recommended Budget includes funding to explore the feasibility of additional sustainability projects such as sewer heat recovery and reclaimed water projects.

Infrastructure Rehabilitation and Replacement – The 2022 Recommended Budget includes \$22.8 million in capital investment recommended in the 2020 Comprehensive Wastewater Basin and Wastewater Treatment Facilities Master Plan. Capital projects for the collection system include \$3.7 million for ongoing replacement/rehabilitation of sewer mains and to address capacity deficiencies in the sewer system, \$5.0 million to install a parallel forcemain to replace the Tiara Rado forcemain, \$5.0 million to eliminate/replace lift stations, \$50,000 for specialty collection system equipment, and \$250,000 to revitalize the incentive program for sewer improvement districts to eliminate septic tanks. Wastewater treatment plant projects include \$1.3 million for ongoing asset rehabilitation/replacements projects, \$3.6 million to implement odor control improvements, and \$225,000 for developing a plan to improve process control and instrumentation systems.

Future Wastewater Treatment System Expansion – The existing wastewater treatment plant capacity is 12.5 million gallons a day. In 2019, the plant reached 80 percent of its capacity and master planning for expansion was initiated as required by permit. Expansion of the wastewater treatment plant will need to be commence by 2028 based on current growth projections. The 2022 Recommended Budget include \$3.6 million to complete detailed engineering design and permitting for wastewater treatment plant rehabilitation/expansion to be completed over the next 5 years.



In summary, the budget represents the allocation of resources to achieve the City and County joint goal of providing sewer service to all properties within the 201 Service Area for the benefit of public health and protection of the environment in a sustainable and fiscally responsible manner.

Respectfully submitted,

A blue ink signature of Kurt Carson, written in a cursive style.

Kurt Carson, P.E.
Wastewater Services Manager

A black ink signature of Randi Kim, written in a cursive style.

Randi Kim, P.E.
Utilities Director

A black ink signature of Greg Caton, written in a cursive style.

Greg Caton, ICMA-CM
City Manager

**Persigo Joint Sewer System
2022 Recommended Budget
October 27, 2021**

Line No.	Account	2021 Adopted	2021 Amended	2022 Recommended
1	Beginning Fund Balance:	24,942,847	34,818,702	35,489,470
2	Revenue			
3	Capital Proceeds	\$ 3,293,550	\$ 4,053,600	\$ 3,392,350
4	Charges for Service	14,311,493	14,987,979	15,243,668
5	Fines and Forfeitures	1,000	1,000	1,000
6	Interest	190,839	271,700	271,700
7	Interfund Revenue	162,106	162,106	174,154
8	Other	33,750	33,750	-
9	Revenue Total	\$ 17,992,738	\$ 19,510,135	\$ 19,082,872
10	Expenditures			
11	Labor and Benefits	\$ 3,925,699	\$ 3,925,699	\$ 4,296,930
12	Full Time	2,716,205	2,716,205	3,026,173
13	Seasonal	54,932	54,932	50,491
14	Overtime	63,704	63,704	78,400
15	Benefits	1,019,231	1,019,231	1,057,256
16	Insurance	64,895	64,895	78,240
17	Other Compensation	6,732	6,732	6,370
18	Operating	1,604,770	1,677,930	1,627,912
19	Charges and Fees	422,140	422,140	370,550
20	Contract Services	79,621	244,281	79,193
21	Equipment	140,071	48,571	153,718
22	Equipment Maintenance	9,985	9,985	-
23	Grants and Contributions	3,883	3,883	3,900
24	Operating Supplies	83,682	83,682	94,491
25	Professional Development	45,129	45,129	59,010
26	Repairs	575,919	575,919	432,340
27	System Maintenance	218,278	218,278	408,330
28	Uniforms and Gear	7,352	7,352	7,700
29	Utilities	18,710	18,710	18,680
30	Internal Support	2,385,757	2,385,757	2,710,858
31	Administrative Overhead	713,809	713,809	746,644
32	Facility	555,115	555,115	568,381
33	Fleet	245,974	245,974	330,560
34	Fuel Charges	38,244	38,244	44,575
35	Information Technology	300,414	300,414	357,473
36	Liability Insurance	80,047	80,047	84,049
37	Utility Services	452,154	452,154	579,176
38	Debt Service	597,802	597,802	595,749
39	Interest Expense	117,802	117,802	75,749
40	Principal	480,000	480,000	520,000
41	Capital Outlay	16,945,000	10,252,179	22,839,500
42	Capital Equipment	5,000	5,000	67,500
43	Utility Systems	16,940,000	10,247,179	22,772,000
44	Expenditure Total	\$ 25,459,028	\$ 18,839,367	\$ 32,070,949
45	Net Source (Use) of Funds	\$ (7,466,290)	\$ 670,768	\$ (12,988,077)
46	Ending Fund Balance:	\$ 17,476,557	\$ 35,489,470	\$ 22,501,393

2022 Recommended Capital Project Descriptions October 27, 2021

JOINT SEWER OPERATIONS FUND

1. **Collection System Equipment, \$50,000 (\$50K planned in 2023)** – These funds are recommended to purchase specialty equipment needed to efficiently operate and maintain the sewer collection system. Funds in 2022-2024 are planned for upgrading to cellular telemetry across all 26 lift stations.
2. **Laboratory Equipment, \$67,500** – Replacement of obsolete flow injection analysis instrument with discrete analyzer for nutrient analysis required per Colorado Regulation 85. Discrete analyzers are the current technology used for this type of analysis and will improve the laboratory detection capability, reduce instrument maintenance, reduce costs for consumables, reduce waste, and reduce run times with advanced automation.
3. **Lift Station Elimination/Rehabilitation, \$5,000,000 (\$92K planned in 2023)** – The 2022 requested funds will be used to replace the Ridges #1 Lift Station. This lift station has surpassed its design life and it is recommended to be replaced due to existing deficiencies regarding their condition, capacity, and long-term reliability. Design of the new Power Road Lift station and associated sewer pipelines was completed in 2021 and construction will be completed in 2022. Funding planned for 2022 and beyond also include implementation of predictive and preventative maintenance programs for the 26 lift stations in the collection system.
4. **Odor Control Improvements, \$3,600,000 (\$600,000 Planned in 2023)** – Design of odor control improvements for the wastewater treatment plant and the sewer collection system was completed in 2021. The recommended funds for 2022 are for construction of odor control improvements.
5. **Parallel Tiara Rado Force Main Under Colorado River, \$5,000,000** – Design of a new force main for the Tiara Rado Lift Station was completed in 2021 and necessary easements were obtained. Recommended 2022 funds are to construct the parallel force main from the Tiara Rado lift station, under the Colorado River, to the River Road Interceptor east of the Persigo Wastewater Treatment Plant.
6. **Persigo Plant Studies, \$225,000** – Funds budgeted in 2022 are to complete a SCADA Improvement Plan. This plan will provide a detailed implementation approach for the replacement and investments needed for the process network, instrumentation, communication, and control systems at the Persigo Wastewater Treatment Plant and for remote assets in the collection system such as lift stations, chemicals tanks and odor treatment processes.
7. **Sewer Capacity Projects, \$100,000 (\$814K Planned in 2023)** - The Wastewater Basin Masterplan identified several capacity deficiencies in the sewer collection system under current and future flows. Funds budgeted in 2022 are to conduct a detailed technical evaluation of the improvements needed in the Central Grand Valley Basin, a flow balance structure on the Riverside interceptors, and upsizing of the Grand Valley By-products lift station and associated forcemain and gravity sewers.
8. **Sewer Improvement Districts, \$250,000 (\$1M Planned in 2023)** – In 2000, the City and the County passed a joint resolution establishing the septic system elimination program to provide incentives

2022 Recommended Capital Project Descriptions October 27, 2021

to property owners to eliminate septic systems. There are still approximately 1,550 properties that remain on septic systems within the Persigo 201 sewer boundary. The program has not yet achieved the goal of eliminating septic systems and making available connection to the sewer system to all properties within the service area. One small sewer improvement district was completed in 2020. Previously, the last sewer improvement district was completed in 2010. Recommended funding for 2022 is to revitalize the incentive program by targeting completion of existing and new sewer improvement districts over the next 17 years as recommended in the 2020 Wastewater Basin Study Update.

9. **Sewer Line Replacement/Rehabilitation, \$3,696,000 (\$3.67M Planned in 2023)**– Funds are budgeted to replace/rehabilitate existing sewer mains within the Persigo 201 service area collection system. 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. Since 2015, 30 miles of pipe have been replaced and 170 miles of pipe have been identified for replacement based on pipe materials. Annual condition assessments are conducted to prioritize replacements based on condition.
10. **Wastewater Treatment Plant Rehabilitation/Expansion Projects, \$3,551,000 (\$15,979,000 Planned in 2023)** – This funding will be used for detailed engineering design and permitting of wastewater treatment units that will require rehabilitation to address aging infrastructure or operational deficiencies over the next 5 years. Since the plant is currently at 80 percent capacity and will require expansion in the next 8 years, design plans will consider future expansion needs in selection of the rehabilitation or replacement option. Infrastructure assets that will be addressed in the next 5 years include aeration, solids dewatering, ultraviolet disinfection, solids/grit screening, and the electrical conduit system.
11. **Wastewater Treatment Plant Improvements and Asset Replacement, \$1,300,000 (\$700K planned in 2023)** – These expenditures are associated with wastewater treatment plant improvements and replacement of aging infrastructure. The funds planned for 2022 will be used for rehabilitation of aerators in the Flow Equalization Basin and the rehabilitation of existing UV disinfection banks as well as miscellaneous rehabilitation/replacement projects.

Ref			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Five Year TOTAL	Ten Year TOTAL
Line #	Fund	Title	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2021-2025	2021-2030
Sewer Fund														
1	Joint Sewer	Collection System Equipment	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	150,000	150,000
2	Joint Sewer	Laboratory Equipment	67,500	-	-	-	-	-	-	-	-	-	67,500	67,500
3	Joint Sewer	Lift Station Elimination/Rehabilitation	5,000,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	5,368,000	5,828,000
4	Joint Sewer	Odor Control Improvements	3,600,000	600,000	150,000	-	-	-	-	-	-	-	4,350,000	4,350,000
5	Joint Sewer	Parallel Tiara Rado Force Main Under Colorado River	5,000,000	-	-	-	-	-	-	-	-	-	5,000,000	5,000,000
6	Joint Sewer	Persigo Plant Studies	225,000	-	-	350,000	665,000	100,000	-	200,000	-	350,000	1,240,000	1,890,000
7	Joint Sewer	Sewer Capacity Projects - Central Grand Valley Basin	100,000	814,000	2,984,000	2,984,000	-	-	-	-	-	-	6,882,000	6,882,000
8	Joint Sewer	Sewer Capacity Projects - Goat Wash Sewer Basin (GW-1)	-	-	-	-	-	-	-	-	160,000	1,411,000	-	1,571,000
9	Joint Sewer	Sewer Capacity Projects - Orchard Mesa Sewer Basin (OM-1)	-	-	1,988,000	7,403,000	-	-	-	-	-	-	9,391,000	9,391,000
10	Joint Sewer	Sewer Capacity Projects - Orchard Mesa Sewer Basin (OM-2)	-	-	-	400,000	3,503,000	-	-	-	-	-	3,903,000	3,903,000
11	Joint Sewer	Sewer Capacity Projects - Orchard Mesa Sewer Basin (OM-3)	-	-	-	-	210,000	1,894,000	-	-	-	-	210,000	2,104,000
12	Joint Sewer	Sewer Capacity Projects - Orchard Mesa Sewer Basin (OM-4)	-	-	-	-	-	-	625,000	-	-	-	-	625,000
13	Joint Sewer	Sewer Capacity Projects - Orchard Mesa Sewer Basin (OM-5)	-	-	-	-	-	-	543,000	-	-	-	-	543,000
14	Joint Sewer	Sewer Capacity Projects - River Road North Sewer Basin	-	-	-	-	-	-	175,000	1,539,000	-	-	-	1,714,000
15	Joint Sewer	Sewer Improvement Districts	250,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	4,250,000	9,250,000
16	Joint Sewer	Sewer Line Replacements/Rehabilitation	3,696,000	3,696,000	3,696,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	\$ 20,088,000	\$ 42,588,000
17	Joint Sewer	Wastewater Treatment Plant Expansion Projects	3,551,000	15,979,000	17,792,000	10,986,000	7,627,000	14,225,000	15,995,000	13,378,000	10,204,000	6,969,000	55,935,000	116,706,000
18	Joint Sewer	Wastewater Treatment Plant Imp and Asset Replace	1,300,000	700,000	700,000	736,000	773,000	812,000	852,000	895,000	940,000	1,000,000	4,209,000	8,708,000
19	Sewer Fund Total		\$ 22,839,500	\$ 22,931,000	\$ 28,452,000	\$ 28,451,000	\$ 18,370,000	\$ 22,623,000	\$ 23,782,000	\$ 21,604,000	\$ 16,896,000	\$ 15,322,000	\$ 121,043,500	\$ 221,270,500