

AGENDA
ANNUAL JOINT PERSIGO MEETING BETWEEN
CITY OF GRAND JUNCTION, CITY COUNCIL
MESA COUNTY, BOARD OF COUNTY COMMISSIONERS
CITY HALL AUDITORIUM
250 N. 5TH STREET
GRAND JUNCTION, COLORADO
WEDNESDAY, AUGUST 27, 2008, 6:00 P.M. to 7:30 P.M.

{DINNER FOR ELECTED OFFICIALS AND STAFF AT 5:30 P.M.
IN THE CITY HALL LUNCH ROOM}

- I. Persigo Wastewater Treatment Plant Budget – 2008 Revised and 2009 Proposed [Attachment](#)
- II. Other Business
- III. Adjournment

CITY OF GRAND JUNCTION WASTEWATER SERVICES DIVISION

BUDGET YEARS - REVISED 2008,
PROPOSED 2009

BUSINESS PLAN & SIGNIFICANT BUDGETARY ISSUES
2008 BUDGET REVISION
2009 PROPOSED BUDGET
BUDGET DEVELOPMENT WORKSHEET
PRIORITIZED LIST OF OPERATING CAPITAL
PRIORITIZED LIST OF MAJOR CAPITAL
REVENUE & EXPENSE SUMMARY



BUSINESS PLAN:**ORGANIZATION NUMBER: 62211 - 62223****DIVISION: WASTEWATER SERVICES DIVISION****HISTORICAL BACKGROUND**

The 201 Sewer System was created in 1979 by agreement between the City of Grand Junction and Mesa County, and later supplemented by an agreement in 1980. In these contracts, the City was given complete authority to manage the sewer system.

The sewer service area was defined in the late 1970's, during which time the Persigo Wastewater Treatment Plant was under design. The 201 Sewer Service area includes most of the urbanized area in the central part of the Grand Valley. During 1998, the City and County re-negotiated the 1980 agreement as concerns growth and joint policy-making decisions for the Persigo Sewer System.

SYSTEM EXPANSION, OPERATION and MAINTENANCE

The 201 Sewer System is developing within the urbanized region in the central part of the Grand Valley.

Septic system replacement is an expansion of sewer service into existing developed areas. New developments in areas within the 201 Sewer Service Area are required to provide sewer service if they are within 400 feet of an existing sewer system. Because of the expense of retrofitting sewers into existing developed areas, the City and County require new development to connect to sewer. In order to facilitate this process, the sewer system has reserved capital funds to extend trunk line sewers into developing areas under certain conditions.

When growth in the basin can ensure a timely payback to the sewer fund, the Trunk Line Extension Fund can be used to extend major sewer collection systems. Developers and builders constructing homes on lots pay the costs of these extensions. Extension decisions are predicated upon common agreement between the City and the County, whether enough development is occurring to ensure timely payback of invested funds, and if the development is occurring within the 201 Sewer Service areas.

IMPACT TO THE WASTEWATER SERVICES SEWER FUND

The Persigo Wastewater Plant is presently twenty-four years old and systems installed in 1984 are due for replacement. Yard piping, aeration, sludge blending, roofing, in-plant service roads, HVAC systems and influent flow metering have been replaced in recent years. These upgrades will continue and are budgeted in the Capital Plan. Because of an aging plant and the extreme operating environment, the portion of operating expense devoted to maintenance will increase.

Plant operation and maintenance (O&M) will focus on getting the most from resources purchased and consumed (manpower, chemicals, electrical power, natural gas, materials and supplies). Electrical and natural gas costs have increased dramatically over the last two years and it has become important to identify ways to augment or reduce usage. Electrical consumption has been of constant interest to operators at the plant. Plant improvements like the fine bubble aeration and lighting changes have reduced consumption of electrical power and further energy conservation measures are being evaluated.

Also related to plant capacity is the issue of storm flows and infiltration of groundwater into the sewer system. During 2004, the City implemented the Combined Sewer Elimination Project (CSEP) which eliminated over 90% of the stormwater flow contributions to the sanitary sewer collection system.

Infiltration from groundwater during the irrigation season, particularly from the Special Sanitation Districts, also affects plant capacity. During 2005, the City purchased new flow monitoring equipment for the purpose of monitoring all major interceptors. Data collected will be compared to population equivalent calculations to determine the extent of infiltration.

FRUITVALE SANITATION DISTRICT

Since 1959, the City of Grand Junction has provided treatment and other services to the Fruitvale Sanitation District. Pending approval of voters within the Fruitvale District, the district will be dissolved on January 1, 2009. Should this dissolution be approved, Persigo will assume all responsibilities associated with the operation of the Fruitvale system. The assumption is (at this time) that this responsibility will not require additional staffing or equipment as cleaning of their system was already being provided by Persigo as a contract service.

Regarding revenue, Fruitvale currently pays a backbone rate to the Persigo system. The reason for their reduced charge is that Fruitvale has assumed all responsibility associated with the operation of their collection system. The backbone rate was established to recover costs associated with transmission of the Fruitvale wastewater through the larger portions of the Persigo collection system (large interceptors) and treatment. The financial result of assuming total responsibility for this system is a revenue increase of approximately \$200,000 per year. This increase is the result of changing the current 48,000 Fruitvale EQU's from a 2009 backbone rate of \$10.64 per EQU, to a full service rate of \$14.98.

RATE REVIEW

In 2006, the City authorized Red Oak Consulting to review sewer rates and to complete an independent review of the Sewer Fund 10-year financial plan, its assumptions, the

adequacy of capital spending, and the allocation of rate revenue to the four areas of sewer service. Collection system operations and maintenance, collection capital, backbone operations and maintenance, and backbone capital have been adjusted to meet these recommendations. The next review will occur late in 2011.

The study recommended increasing plant investment fees to \$3,220 per EQU over time with annual rate adjustments of 2.5% per year. Plant investment fees for 2009 are scheduled to increase from \$2,500 per EQU to \$2,800 per EQU and monthly rates from \$14.60 to \$14.98 per EQU.

In general, budgeted capital expenditures have been modified in the years 1999 to 2009 to reflect annual inflation adjustments of 4%. In addition, incremental O&M costs associated with capital projects are also included in the projected O&M expenditures.

Specific recommendations for capital, not previously addressed, include the following:

- Trunk Line Extension Capital. Balances are reflected in the ending reserve in the Trunk Extension Capital Fund (903). These balances are available for use if approved by the City and the County.
- Plant Backbone Capital. Plant improvement/replacement budgets are increased by inflation and coupled with separate designated expenditures. Budgeted amounts in the ten-year projections appear to be adequate, based on past use.
- Other Backbone Capital. Interceptor replacement is budgeted for completion over a 20-year period and increased by the rate of inflation for the balance of the 10-year period.

FUND BALANCE

Fund balances in the Sewer Enterprise Fund are reserved for a number of capital and operating obligations. There are functions that are budgeted over the 10-year period, such as bond repayment, collection capital expenditures, Backbone Capital Expenditures and Trunk line Capital Expenditures. A portion of the fund balance is reserved each year for these purposes. The remaining, not reserved for debt repayment or capital, is designated as the Operation and Maintenance Expense Reserve Fund.

Minimum working capital is established at 10% of total operating expenses. Debt is excluded from this calculation because it is specifically reserved each year in the Fund Balance.

10 YEAR FUND STRATEGY

In summary, the Sewer Fund over the next 10 years is prepared to:

- Fund collection system replacements.
- Fund Trunk line expenses into developing areas within the 201 service area.
- Assist self-funded improvement districts to replace failing septic systems and subsidize the cost of construction by 30%.
- Resolve the problem of excessive infiltration into the sewer system by the special sanitation districts.
- Respond to increasing requests to amend the 201 Sewer Service Area as urbanization continues.

2008 Revision

Fund 902-62221-46851 – Plant Investment Revenue

Budget Amount: \$3,477,500

Revised Amount: \$2,500,000

The budget amount of \$3,477,500 was an incorrect entry into the budget system. This revision will not have any effect on the operation of the sewer system, as the correct amount of \$2,500,000 is projected in the long range financial plan.

Fund 902-62211-53990 – Overtime

Budget Amount: \$35,669

Revised Amount: \$25,669

Reduction: \$10,000

Historically when overtime at the treatment plant was required, plant staff would work overtime at a compensation rate of 1.5 times their normal hourly wage. During 2008, recent retirees have been used to fulfill the need for overtime, and are compensated at straight time or the normal operations wage. This has resulted in savings.

Fund 902-62211-61490 – Chemicals

Budget Amount: \$183,000

Revised Amount: \$208,250

Request Additional: \$25,250

The additional cost is the result of several price increases that occurred during 2008.

Fund 902-62211-62210 – General Repair & Maintenance

Budget Amount: \$180,756

Revised Amount: \$220,756

Request: \$40,000

The additional cost is the result of needed equipment repair.

Fund 902-62211-65308 – Electricity

Budget Amount: \$400,000

Revised Amount: \$435,000

Request: \$35,000

Additional funds are needed to cover electrical rate increase.

Trunk Line Extension 903-F09800

The 2008 Revised Budget includes \$200,000 in additional funds to complete a trunk line extension in conjunction with the 23 Road Sewer Improvement District. This trunk extension effort will all for service to roughly 370 acres located west of the Ridges Development.

Budget Amount: \$0

Revised Amount: \$200,000

Request: \$200,000

Special Projects 904-F27200

The 2008 Revised Budget of \$130,000 includes completion of the Sewer Basin study in conjunction with the City Comprehensive Plan effort. This effort includes evaluation of the existing service area and potential sewer service basins that are currently outside the 201 sewer service area, such as Whitewater, and areas north of I Road from 21 Road to 26 Road. Total cost for the basin study is estimated at \$120,000. Funds have also been carried forward for a Mixing Zone Study for the Persigo WWTP that was

included in the previous 2007 budget process. Total funds for special projects budgeted in the 2008 Revised budget is \$130,000.

Budget Amount: \$130,000

Revised Amount: \$130,000

Interceptor Rehabilitation 904-F10100

The 2008 Revised Budget of \$3,800,000 includes completion of the River Road Interceptor Rehabilitation project and several other interceptor sewer lining projects planned for late this year. Funds are being carried forward from the 2007 Revised budget to cover the remainder of cost for these projects.

Previously approved budget for this activity (2007 Revised) was \$4,255,000 that included other capital projects for interceptor sewer construction and rehabilitation, including completion of the Duck Pond Lift Station Elimination project, and rehabilitation of several interceptor sewer lines along the riverside parkway in the lower down town area. We do have adequate funds available in Fund 904 to complete this work. The ten year financial plan reflects this proposed increase for the 2008 revised budget.

Budget Amount: \$275,000

Revised Amount: \$3,800,000

Request: \$3,525,000 (2007 carry forward)

Sewer Line Replacements 905-F10200

2008 Revised budget of \$1,200,000 includes replacement of 4,800 lineal feet of aging sewer lines at various locations within the collection system. This effort also includes replacement of the aging Railhead Lift station. This revised budget includes fund carried forward from 2007 for projects not fully completed in 2007.

Budget Amount: \$750,000

Revised Amount: \$1,200,000

Request: \$450,000

Sewer Line Replacements Alley ID 905-F10300

2008 revised Budget of \$250,000 includes reconstruction of three alley sewer lines in conjunction with the 2008 Alley Improvement District project.

Budget Amount: \$200,000

Revised Amount: \$250,000

Request: \$50,000

Septic System Elimination Program (SSEP) 906-F48200

2008 Revised budget is proposed to be reduced from \$1.0 million to \$800,000 based on anticipated costs to close out two current improvement districts. We have less interest in SSEP now that the trouble neighborhoods have been addressed. Improvement districts are intended to be a grass roots neighborhood effort, with the City and County acting as facilitators. With no neighborhood input or inquiry we will not actively pursue an improvement district.

Budget Amount: \$1,000,000

Revised Amount: \$800,000

2009 Proposed Budget

Non-Personnel Operating

Fund 902-62211 through 62223

The 2009 Non-Personnel operating budget is being proposed to increase approximately 1.3% during 2009. The majority of the increase is due to price increases for chemicals and repair parts.

PROPOSED MAJOR CAPITAL EXPENDITURES

Aeration System Blower 904-62211-84300-30-FO6400

As a result of increased growth in the 201 service area, which results in increased flows at the treatment plant, an additional aeration blower is needed. This addition is consistent with the plant's original design. \$160,000

Persigo Equipment Pole Barn 904-62211-84300-30-FO6400

This requested pole barn will be used for equipment storage at the Persigo facility. Currently, lawn mowers, tractor & implements and several other pieces of equipment are stored outside. It is anticipated that storing existing equipment indoors will increase the equipment's life expectancy and increase reliability. Estimated cost is \$75,000

Methane Gas Compressor/Dryer 904-62211-84300-30-FO6400

During 2008, both (25 year old) anaerobic digester boilers were replaced with new, more efficient units. The boilers are used to heat the anaerobic digester contents using the methane gas produced in this process. In order for the new boilers to operate reliably, gas pressure will need to be increased. Cost of the compressor system is estimated at \$62,000

Used 12 Yard Dump 904-62211-84300-30-FO6400

The Persigo facility is equipped with two 12 yard dump trucks used to deliver biosolids to the Mesa County Composting Facility. During the times when one of the two trucks is in the shop for maintenance or repairs, the sludge processing operation falls behind, which has a very negative effect on the Aerobic Digestion process. During 2008, several long term repairs were required. This request is to purchase a 12 yard dump truck that is being traded in by the City of Grand Junction Fleet Division. This truck will

see minimum use but will enable the Persigo operation to perform essential functions. Estimated cost is \$12,000.

Aerobic Digester Air System Automation 904-62211-84300-30-FO6400

The aeration system being requested will allow air to only be fed as needed. Each basin will be retrofitted with meters that will measure optimum air feed quantities and reduce feed when additional air is not needed. The proposed system will make the necessary adjustments automatically, 24 hours per day. This installation will result in electrical savings and may possibly postpone additional capacity construction as a result of making the existing digesters more efficient. Estimated cost is \$250,000

Automation of Septic Disposal Site 904-62211-84300-30-FO6400

Currently, Persigo receives approximately 2.5 million gallons of wastewater at the septic disposal site annually. Licensed tank haulers are required to complete a manifest prior to discharging at the site. Information requested on the manifest includes type of waste, quantity, company disposing, etc. This information is collected by plant staff each week and used to manually calculate disposal fees. The new system being proposed will require each driver to use a card to access the site. Once access is granted, all disposal information regarding discharge quantity will input into the system automatically. Disposal fees will be generated, and a data base regarding historically use will be created. Cost of this system is \$140,000. Staff will request a disposal fee increase of \$0.016 per gallon, which will reimburse the sewer fund over a 5 year period at 4% interest.

Trunk Line Extension 903-F09800

2009 Budget includes \$400,000 for an anticipated trunk extension that would serve the area west of the Albertsons on the Redlands. This extension would be part of an anticipated sewer improvement district for the Red Mesa Heights/Canary Lane neighborhoods.

Special Projects 904-F27200

2009 Budget includes \$50,000 for completion the comprehensive plan and mixing zone study (if needed).

Interceptor Rehabilitation 904-F10100

2009 Budget of \$546,000 includes rehabilitation of interceptor sewers Pitkin Avenue and Patterson Road.

Sewer Line Replacements 905-F10200

2009 Budget of \$1,250,000 includes roughly 7,000 lineal feet of line replacements in the collection system that will include the Fruitvale Sanitation District in 2009. This special district is proposed to dissolve pending a vote of residents in the service area in November 2008. The lines are selected based on CCTV inspection reports that include a rating of condition, backup history, proximity to street overlay projects.

Sewer Line Replacements Alley ID 905-F10300

2009 Budget of \$350,000 includes reconstruction of four alley sewer lines in conjunction with the 2009 Alley Improvement District project

Septic System Elimination Program (SSEP) 906-F48200

Proposed budget for 2009 is \$1.5 million that includes three districts in the Redlands area.

WASTEWATER RATES AND POLICIES STUDY
CONSOLIDATED WASTEWATER FUND CASH FLOW

Line No.	Description	Ac	Budget					
			2007	2008	2009	2010	2011	2012
Consolidated Wastewater Fund Cash Flow								
Sources of Funds								
1	Wastewater Rate Revenue	902	\$6,844,348	\$7,389,325	\$7,977,839	\$8,360,914	\$8,758,109	\$9,170,074
2	Revenue from IPT, Lift Stations, Call-outs	902	208,397	213,297	218,197	223,096	227,995	232,897
3	Grease Revenue	902	51,300	52,506	53,712	54,918	56,124	57,331
4	Septic Revenue	902	175,698	179,829	183,960	188,091	192,221	196,354
5	Plant Investment Fee Revenue	904	2,050,000	2,500,000	2,800,000	3,100,000	3,400,000	3,700,000
6	Interfund Charges	902	76,946	78,870	80,841	82,862	84,934	87,057
7	Miscellaneous Revenue	Mult	0	0	0	0	0	0
8	Trunk Extension Fee Revenue	903	144,859	164,103	164,718	165,333	165,948	166,562
9	Trunk Extension Fee Revenue (County LIDs)	903	0	20,876	28,526	27,611	23,816	48,116
10	Bond and Loan Proceeds	Mult	0	0	0	0	0	0
	Special Assessment							
11	Customer Payments	906	844,628	510,389	321,074	306,529	290,704	259,322
12	County LIDs	906	0	0	0	123,282	114,807	598,446
13	Interfund Loan Receivable Payment	Mult	0	0	0	0	0	0
14	Interest Income	Mult	377,582	380,378	353,630	312,853	305,809	423,358
15	Total Sources of Funds		10,773,758	11,489,573	12,182,497	12,945,489	13,620,467	14,939,518
Uses of Funds								
16	Operation and Maintenance Expense (Table 7)	902	4,094,972	4,278,967	4,472,148	4,675,014	4,888,090	5,383,242
Capital Improvement Program (Table 6)								
17	Trunk Extension Projects	903	10,000	200,000	400,000		0	0
18	Plant Expansion Projects	904	0	0	500,000	7,600,000	0	0
19	Repair and Replacement Projects	902	2,166,844	7,660,930	3,285,705	3,124,300	3,204,353	3,961,001
20	Sewer Improvement Districts	906	490,699	800,000	1,500,000	1,515,415	1,352,467	1,352,467
21	Total Capital Improvement Program		2,667,543	8,660,930	5,685,705	12,239,715	4,556,820	5,313,468
22	Bond Issuance Costs and Reserve Deposits	Mult	0	0	0	0	0	0
23	Debt Service - Existing	902 & 904	1,176,339	1,177,343	1,172,525	1,177,050	1,175,589	1,173,306
24	Debt Service - New	Mult	0	0	0	0	0	0
25	Debt Issuance Expense - New	Mult	0	0	0	0	0	0
26	Total Uses of Funds		7,938,854	14,117,240	11,330,378	18,091,779	10,620,499	11,870,016
27	Increase / (Decrease) in Reserves		2,834,904	(2,627,667)	852,119	(5,146,290)	2,999,969	3,069,502
28	WasteWater Utility Beginning Balance		9,223,178	12,058,082	9,430,415	10,282,534	5,136,243	8,136,212
29	Wastewater Utility Ending Balance		\$12,058,082	\$9,430,415	\$10,282,534	\$5,136,243	\$8,136,212	\$11,205,713