# AGENDA 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 MONDAY, JULY 31, 2006, 7:00 P.M. to 9:00 P.M.

1.	7:00 p.m.	Variance Requests	<u>Attach 1</u>
2.	7:40 p.m.	Nutting Boundary Adjustment Request	<u>Attach 2</u>
3.	7:45 p.m.	Report on Temporary Modification Studies	<u>Attach 3</u>
4	7:55 p.m.	Report on Septic System Elimination Program	<u>Attach 4</u>
5.	8:10 p.m.	Summary Report and Discussion of Rate Study Findings	<u>Attach 5</u>
6.	8:45 p.m.	Other Business	
7.	9:00 p.m.	Adjournment.	

## **CITY OF GRAND JUNCTION**

CITY COUNCIL AGENDA								
Subject	Re	Request for Variance to Sewer Construction						
Meeting Date	Jul	y 31, 20	006					
Date Prepared	July 13, 2006					File #		
Author	Greg Trainor				Utility Manager			
Presenter Name	Gre	eg Trair	nor		Utility Manager			
Report results back to Council	No Yes		When					
<b>Citizen Presentation</b>		Yes	Х	No	Name			

## Summary:

Monument Road development requests dry line sewer and deferral of the sewer construction requirement.

Budget: N/A

Attachment: June 2003 Staff Report on "variances."

### Action Requested/Recommendation:

Two adjacent property owners on Monument Road have requested that they be allowed to subdivide their property and defer connection to sewer until sanitary sewer facilities are constructed.

### Variance Request:

Two adjacent owners of property, located at 2476 Monument Road (David Fricke) and 2454 Monument Road (Steve Reimer), have requested that they be allowed to subdivide their property, construct septic systems, install dry line service connections, and agree to connect to sewer sometime in the future when it is constructed. Both are within the 201 Sewer Service Area boundary. Both would prefer low density development of 2-acres per dwelling unit.

The issues before City Council and the Board of County Commissioners are:

- 1. City Council/ Board of County Commissioner decision on a variance from the wastewater Regulations that require new development to be constructed to sanitary sewer at the time of development; and
- 2. A subsequent decision by the City Council, upon recommendation by the Planning Commission, to allow a variance from the Zoning and Development Code that all lots and uses be served by a sewer system connected to a public wastewater treatment facility.

Generally, variances are considered when there is a failed septic system and the use is within 400 feet of an existing sewer. Conditions that need to be met to support a variance from the Wastewater Regulations are:

Low likelihood of an improvement district being created because of lack of neighborhood interest;

Sewer line is in a location with grades that would preclude it servicing other properties;

The location of the closest sewer is in a different drainage basin;

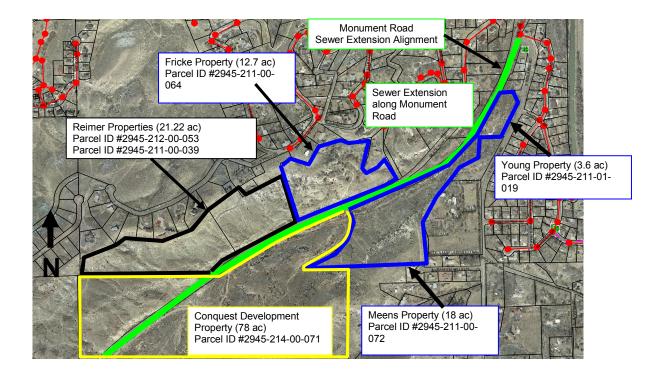
The installation of a pump station is disproportional to the costs of participating in a future improvement district.

The Persigo policy makers have allowed variances to the sewer construction requirement on two occasions: a two-lot subdivision on Buffalo Court where sewer was some distance away and for the Ken Scissors property near Little Park Road.

In the latter case, the undeveloped Scissors property was adjacent to a future sewer improvement district in a developed area that had been studied as part of the SSEP Program. Scissors was required to install septic systems, to install dry line sewers, and to agree to participate in the future improvement district when it was proposed. In the Scissors case, the connection to sanitary sewer was a reasonable certainty as there were existing residential uses that would pay for future sewer construction.

### **Background Information:**

Sewer service necessary to serve these properties would consist of 5,800 feet of 8-inch sanitary sewer at an estimated cost of \$754,000. The sewer line would run in Monument Road, from the intersection of South Redlands Road and Monument Road, west to the mid-point of the Reimer property.



Between 67 units to 267 units could be served by a sewer line in Monument Road, depending upon the density proposed or allowed. Zoning would allow .5 to 2 acres per dwelling unit. Because of topographical considerations, both property owners are considering one dwelling unit for each 2-acres. The unit costs for sewer to each of the lots would be \$11,300 in today's costs.

Wastewater Regulations in the municipal code require all development within the 201 sewer service area boundary to be connected to the sewer system.

Sewer <u>within *developing areas*</u> is paid by the developer and constructed at the time of subdivision or development approval. If sewer is extended for the benefit of other properties, a sewer reimbursement agreement is provided to the developer to recover fees from future development.

Sewer <u>within *developed areas*</u> needs to be provided whenever practical, if an existing septic system fails and is within 400 feet of an existing sewer, and/or there is an expansion of an existing use. Currently, installation of sewer in developed areas is done via an improvement district and is typified by the current septic system elimination program (SSEP), managed by the City of Grand Junction.

#### **Recommendation:**

It is staff's recommendation that this variance request be denied. The criteria necessary for a variance cannot be met.

This request is not the result of a failed septic system, but new development. Sewer can be built in Monument Road. It would be at grades that would serve others. There are future potential customers in the basin that could connect to this sewer if it were constructed.

The Reimer and Fricke property is limited by topography as to the number of future users. It appears that the request is based on economic considerations. At one unit per two acres, the unit cost would be \$11,200 in today's costs at full development Unlike the Scissors variance, there are few existing homes that would be required to connect to a future sewer line and the potential for future users is limited; thus, increasing the unit costs for sewer.

If the current developer (s) are not required to construct the sewer, then who? The next developer? The one after that?

### **Options for the Persigo policy makers:**

### Deny the variance request.

The property owners would then know what the economics of their project were and could adjust their plans accordingly. They could either construct the sewer, investing \$754,000, and recapturing the costs when, and if, future development occurred. Or wait for future development.

### Grant the variance.

The potential for cheap sewer in the basin is limited because of economics: a long sewer and a narrow development corridor surrounded by public land.

Once a variance is granted to one developer, then future development would request the same consideration. Under a grant of variances, a future sewer line would not be constructed until septics began to fail in the area. A limited number of homeowners would then be forced to pay very high unit costs for sewer construction, with the Persigo system paying 1/3 of the construction cost under the SSEP program, assuming there would be enough positive petitioners for an improvement district. SSEP was clearly not designed to construct in such an instance.

The variance decision is a determination between who pays for new development: landowners benefited or Persigo sewer customers not benefited.

# **CITY OF GRAND JUNCTION**

Joint Persigo Meeting									
Subject	Sev	Sewer Variance Policy: procedures							
Meeting Date	July 10, 2003								
Date Prepared	Prepared June 25, 2003					File #			
Author	Gre	eg Traii	nor		Utility	Jtility Manager			
Presenter Name	Mark Relph				Public Works Director				
Report results back to Council	х	No		Yes	When				
<b>Citizen Presentation</b>		Yes	Х	No	Name				
X Workshop	Formal Agend				la	Consent	Individual Consideration		

### Summary:

Amendment to the Wastewater Regulations, Section 4, <u>System Expansion</u>; (b) Types of system expansion; (2) Developed Areas.

### Budget:

N/A

### Action Requested/Recommendation:

Amend portions of Section 4 of the Wastewater Regulations by Joint Resolution of the City Council and Board of County Commissioners.

### Attachments:

Draft Joint Resolution amending portions of Section 4.

## **Background Information:**

The Wastewater Regulations outline circumstances in "Developed Areas" of the 201 Sewer Service Area (Section 4,(b)(2)b) where residential units on failed septic systems and within 400 feet of a sewer, and existing non-residential uses which are expanded or redeveloped need to be placed on sewer. This insures that all property within the 201 Sewer Service Area boundary are sewered.

Amendments to Section 4, (b)(2)b will add the words "**residential or**" added prior to the words "nonresidential use..." so that this Section can be inclusive of not only <u>nonresidential uses</u> that are expanded or redeveloped but also <u>residential uses</u> that are expanded or redeveloped but also <u>residential uses</u> that are expanded or redeveloped. There have been recent situations where existing developed

residential lots within the 201 Sewer Service Area have subdivided. These subdivisions are considered "redevelopment" for the purposes of this Section of the Regulations. This is also outlined as an amendment to the Regulations.

At the Joint Persigo Meeting on April 24, 2003 the City Council and the Board of County Commissioners asked that sewer variance criteria be drafted and that <u>residential</u> <u>redevelopment</u> be included. No other changes were directed.

Last week County Manager, Bob Jasper, expressed his desire that Mesa County participate in the decision making process for dealing with exceptions to the sewer policy that properties within the 201 Sewer Service Area boundary be sewered.

By way of background and explanation, the existing Wastewater Regulations outline in Rule 4.7, of the same Section 4, variance procedures for dealing with failed septic systems on existing residential lots, or expansion or redevelopment of nonresidential uses ( and soon to be added "residential" uses) where "construction of sewer is impracticable" and "adequate treatment facilities exist , or that a failed septic can be repaired." The current Wastewater Regulations delegate the administrative review and management of this Section 4 to the "manager," that being the City Council, City Manager, or the Public Works and Utility Director.

The proposed amendments to Rule 4.7 of the Regulations describe examples of what is meant by "construction of sewer is impracticable," "adequate treatment facilities exist," and that a "failed septic can be repaired " and examples of criteria that is used in making variance decisions.

Chapter Two of the City's\_Zoning and Development Code will also have to be amended to insure that both regulations reflect the same policy matter. Section 2.16, Variances, will be amended to include a new section dealing specifically with a variances to the requirement that all lots and uses must be served by a sewer system connected to a public wastewater treatment facility.

#### Attach 2 Boundary Adjustment Request CITY OF GRAND JUNCTION

CITY COUNCIL AGENDA							
Subject	201 Boundary Change Request-No Action Requested						
Meeting Date	July 31, 2006						
Date Prepared	July 21, 2006				File #		
Author	Greg Trainor				Utility Manager		
Presenter Name	Gre	eg Trair	nor		Utility Manager		
Report results back to Council	No Yes		When				
Citizen Presentation		Yes		No	Name		

### Summary:

201 Boundary change request by Dave Nutting; 290 Little Park Road

### **Budget:**

N/A

### Attachment:

Statistics and map

### Action Requested/Recommendation:

No action or discussion requested. This is a report item.

### **Background Information:**

Dave Nutting, 290 Little Park Road, requested a change to the 201 sewer service boundary to include his property into the 201 boundary, allowing him to eventually be served by sewer.

Staff recommended to Mr. Nutting that, since most of this area was removed from the 201 in 1999 and a further area removed in 2005, it did not seem to be timely to bring the question before the policy makers again, since nothing had changed significantly since then.

It was recommended that this area wait for discussion for inclusion until the adjacent "Rosevale South (R30)" sewer improvement district came closer to formation and construction. At that time, the lower Little Park Road area could consider, <u>as a group</u>, whether to request inclusion and pay for the sewer extension of \$346,700 and also determine if this extension could be included into the Rosevale South sewer improvement district.

July 13, 2006

Dave Nutting 290 Little Park Road

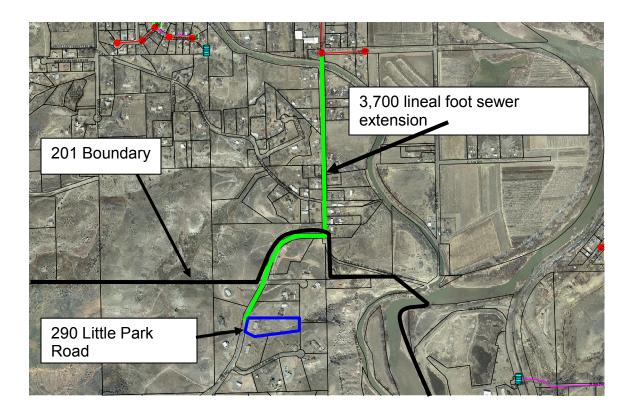
Extend sewer line 3,700 feet along Rose Vale Road and Little Park Road.

Estimated cost \$130 per lineal foot.

\$130/lf x 3,700 lf = \$481,000

There are 27 properties that could potentially benefit from this sewer extension. The City would pay for 30% of the estimated cost through SSEP that would be \$144,300.

At the discounted rate the cost per lot for the 27 properties would be \$12,470.



#### Attach 3 Temporary Modification Studies CITY OF GRAND JUNCTION

CITY COUNCIL AGENDA							
Subject	Persigo Wash Temporary Modification Update						
Meeting Date	July 31, 2006						
Date Prepared	July 11, 2006					File #	
Author	Eile	een Lis <sup>-</sup>	t		Environmental Regulatory Coord.		
Presenter Name	Gre	eg Traiı	nor		Utility Manager		
Report results back to Council	X No Yes		When				
Citizen Presentation		Yes	Х	No	Name		

**Summary:** A temporary modification (variance) of water quality standards on Persigo Wash was issued by the State in 2001 and expires in 2008. The variance was provided so studies could be performed to determine the proper discharge limits and future outfall location of the Persigo Wastewater Treatment Facility. Staff will provide an update about the work and engineering studies performed.

## Budget: 2006 budget is \$37,000

### Action Requested/Recommendation: None

Attachments: Staff Report, Persigo Wash Temporary Modification update July 2006

Background Information: see attached Staff Report

- Staff continues to evaluate the feasibility of the discharge options provided by the State based on work studies and engineering reports.
- Studies confirm that fish continue to thrive in Persigo Wash despite current effluent quality and degraded background water quality from agricultural runoff.
- In-depth analytical monitoring of the treatment plant effluent is underway to gauge compliance with the future discharge options.
- Preliminary results indicate the treatment plant would be able to meet most of the future stringent discharge limits.
- Upgrades to the treatment plant may be necessary to meet stringent ammonia limitations and to also maintain treatment plant capacity into the future. In the revised financial plan for the Persigo system, as part of the 5-year rate study, estimated capital costs are included.
- Studies are also underway to determine if the treatment plant would be able to meet future toxicity and temperature standards.

# Persigo Wash Temporary Modification update - July 2006

Persigo Wash is the receiving stream for the discharge from the Persigo Wastewater Treatment Facility. Persigo Wash discharges into the Colorado River about 900 feet downstream of the treatment facility discharge point. The Colorado River is designated as critical aquatic habitat for Threatened and Endangered (T&E) fish species under the Endangered Species Act.

In 2000 the Colorado Water Quality Control Division proposed setting stringent water quality stream standards on Persigo Wash to protect resident aquatic species. The City of Grand Junction objected to this proposal as there was no evidence that the wastewater treatment plant discharge was adversely affecting aquatic life in Persigo Wash. Persigo Wash also serves to drain groundwater from surrounding agricultural irrigated fields and is highly contaminated with salt and selenium. In fact, the City believes its discharges improve water quality conditions in Persigo Wash.

Due to these objections, the Colorado Water Quality Control Commission granted the City a temporary modification (variance) of eleven stream standards on Persigo Wash which expires in December, 2008. The purpose of the temporary modification is to allow time for the City and others to perform studies on Persigo Wash and the Colorado River. The outcome of the studies will determine the final discharge limits placed on the treatment facility, which in turn will dictate the necessary levels of treatment for the wastewater plant and resulting costs to ratepayers.

The Colorado Water Quality Control Division indicates that four treatment plant discharge options are available for treatment plant discharge into Endangered Species Act critical aquatic habitat. The discharge options are:

- Stringent discharge limits set to Persigo Wash stream water quality standards;
- Relocation of the discharge into the Colorado River;
- Pursue site-specific limits that are protective for all fish, including T&E species; or
- Relocate the discharge out of T&E aquatic habitat.

Staff continues to evaluate the feasibility of the discharge options provided by the State based on work studies and engineering reports. The studies confirm that fish continue to thrive in Persigo Wash despite the degraded background water quality from agricultural runoff. In-depth analytical monitoring of the treatment plant effluent is underway to gauge compliance with the future discharge options.

Preliminary results indicate the treatment plant would be able to meet most of the future stringent discharge limits. However, upgrades to the treatment plant may be necessary to meet stringent ammonia limitations and to also maintain treatment plant capacity into

the future. In the revised financial plan for the Persigo system, as part of the 5-year rate study, estimated capital costs are included.

Studies are also underway to determine if the treatment plant would be able to meet future toxicity and temperature standards.

#### Attach 4 Septic System Elimination Program CITY OF GRAND JUNCTION

CITY COUNCIL AGENDA									
Subject	Se	Septic System Elimination Program Report							
Meeting Date	July 31, 2006								
Date Prepared	July 21, 2006					File #			
Author	Bret Guillory				Utility Engineer				
Presenter Name	Gre	eg Trair	nor		Utility Manager				
Report results back to Council	No Yes		When						
<b>Citizen Presentation</b>		Yes		No	Name				

## Summary:

To date the Septic System Elimination Program has held initial meetings for 24 separate districts. We have completed design, received bids, and constructed 19 districts. Two districts are currently being designed. Only five have failed to move forward to construction. Total allocated to the program to date is \$8,707,967 to construct 21.1 miles of sewer lines benefiting 1,076 properties.



## Attachment:

Sewer Improvement District Map

Skyway Sewer ID

### Action Requested/Recommendation:

Report and discussion regarding the Septic System Elimination Program;

### Background:

On May 3, 2000, the Grand Junction City Council and the Mesa County Board of County Commissioners determined it was in the best interests of the community and the sewer system to establish a program to provide incentives to property owners to join together and create improvements districts to eliminate these septic systems and to write down the cost per lot for sewer infrastructure. The program is called the <u>Septic</u> <u>System Elimination Program</u>.

The program utilizes the creation of improvement districts to assist homeowners in financing improvements.

**Past Success.** Since its inception, the program has funded \$8,707,967 worth of improvements in 19 separate districts benefiting 1076 properties. Funding has been

through the Persigo sewer system's existing fund balance and a \$4,518,946 loan through the Colorado Water Resources and Power Development Authority.

		Length of		
Description	# of lots benefitted	main constucted	Year	Cost
27 Rd / Marsh Lane	7	1,300	2000	\$ 83,188
Northfield Estates #2	50	7,315	2001	\$ 401,477
Columbine	67	6,378	2001	\$ 492,428
Appleton	34	3,542	2001	\$ 349,867
Manzana	8.88	498	2001	\$ 49,037
Monument Meadows	13	973	2001	\$ 60,818
Country Club Park #2	64	7,400	2001	\$ 577,742
West Scenic	14	1,303	2002	\$ 91,298
Redlands Village South	118	9,822	2002	\$ 742,186
Redlands Village NW	172	15,030	2003	\$ 1,147,531
Redlands Village NE	39	3,200	2003	\$ 288,896
Skyway	219	29,092	2003	\$ 2,151,364
North Terrace	14	1,261	2003	\$ 79,407
26.5 Road	9	1,192	2003	\$ 95,349
Music Lane	21	2,583	2004	\$ 161,317
Mesa Grande/Sayre Dr	63	5,702	2005	\$ 462,492
26 Rd & F 1/2 Rd	11	1,095	2005	\$ 125,530
Reed Mesa	147	13,194	2005	\$ 1,308,521
Appleton #3	4	540	2005	\$ 39,519
Totals	1076	111,420		\$ 8,707,967

# Current Success

The following projects benefit 50 properties and are in the design phase. Estimate cost of these two districts is \$542,800.

		Length of	Construction phase cost		Total
Description	# of lots benefitted	main required	2006		Project
Palace Verdes	24	1,820	\$ 219,000	\$	252,800
Bluffs	26	2,127	\$ 252,000	\$	290,000
Totals	50	3,947	\$ 471,000	\$	542,800

## Future Success?

Pending initial neighborhood meetings to be held in 2007, the City may be starting design on another three (3) districts to benefit an additional 67 homes provided a majority of those residents are interested. Throughout the year the City will receive bids from contractors on those projects, a formal petition will be created with actual costs to install the sewer, and the three districts will decide individually whether the installation of sewers is appropriate for their area at this time. If approved construction could start in fall of 2007.



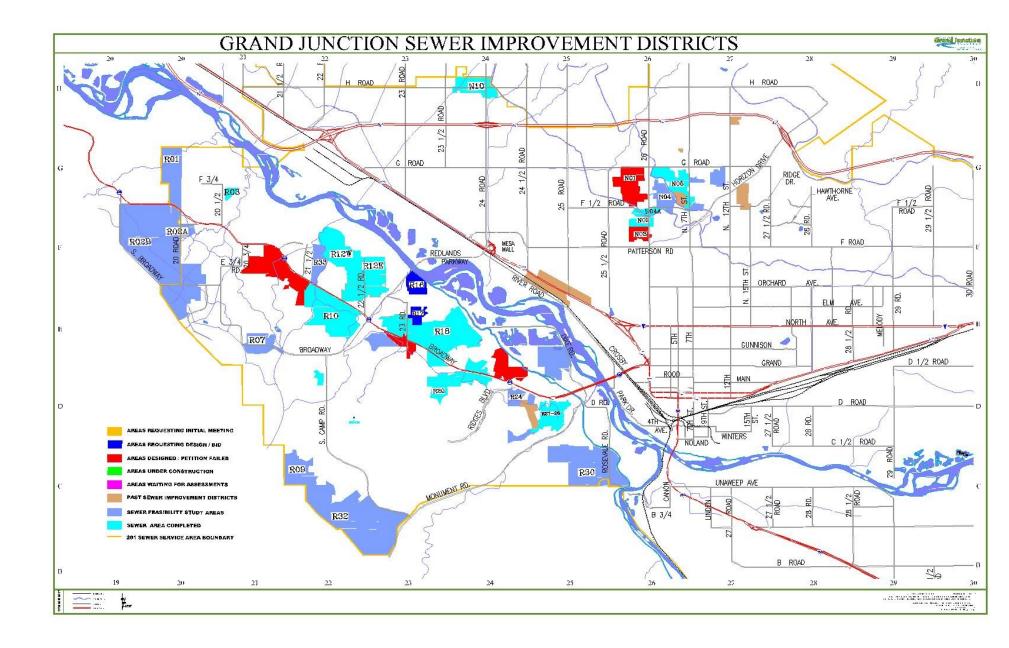
City staff has again at least "got on the list" with the Colorado Water Resources and Power Development Authority for potential loan funding of the projects above this by no means, requires the City/County to move forward, only leaves the option open should this funding option be needed.

<u>Attached Map.</u> The attached map color codes and identifies the various districts and what stage in the SSEP process they are at.

## Project Benefits;

The project **improves water quality** by eliminating septic systems from disposing household sewage into the soils surrounding beneficiaries homes and eventually into the groundwater and ultimately into the Colorado River. By removing those contaminating flows from the local groundwaters and treating them at the wastewater treatment plant, the pollution carrying capacity of the river, as calculated using total maximum daily loads (TMDLs), should increase.

The project also helps **improve public health** by eliminating the opportunity for continuation of septic system leach field failures. Leach field failures generally either surface on the ground surrounding the house or else backing up into the house and spilling sewage within the home, thus causing risks to the health of not only the occupants of the home but also neighbors.



## Attach 5 Rate Study Findings

CITY OF GRAND JUNCTI	ON
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CITY COUNCIL AGENDA								
Subject	Wa	stewate	er R	ate Stu	dy			
Meeting Date	July 31, 2006							
Date Prepared	July 21, 2006				File #			
Author	Greg Trainor				Utility Manager			
Presenter Name	Greg Trainor John Gallagher			er	Utility Manager Red Oak Consulting			
Report results back to Council	No Yes		When					
<b>Citizen Presentation</b>		Yes		No	Name			

## Summary:

Report on the Wastewater Rate Study; Recommendations on rates and plant investment fees.

## Budget:

Increase plant investment fees from \$2,000 per EQU to \$3,220 per EQU. Maintain the current rate increase of 2.5% for 2007. The full service rate will increase from \$13.90 per EQU to \$14.25 per EQU.

Fund growth-related plant expansions between 2007-2015.

Increase collection system capital replacements between 2007-2015.

## Action Requested/Recommendation:

Report and discussion of the Wastewater Rate Study findings; This is intended to be a summary review of the findings of the rate study with further details and decisions to be made during the annual budget review process in the Fall of 2006.

The proposed plant investment fee of \$3,220 will be reviewed with the building and development community prior to implementing the increased rate.

## Background Information:

Per the requirements of the 1998 "Persigo Agreement," the Manager of the Persigo System will undertake a sewer rate study, every five years, to determine the sufficiency of the monthly sewer rate and the plant investment fees. In addition, the Manager includes in this rate review an "audit" of the financial policies of the sewer system.

Red Oak Consulting was commissioned by the City of Grand Junction to complete this rate and policy review. During this study period, one of the main objectives was to review the capital improvement needs of the Persigo System and insure that

appropriate and sufficient plant investment fees were being assessed to adequately fund new capacity to the sewer system caused by new growth.

Within the sewer system, as will as with all municipal utilities, there is capacity of the system to collect and treat wastes. A portion of the capacity is used by existing customers. Operation, maintenance, and capital replacements of the existing capacity are paid by existing customers via their monthly sewer rate. In addition, new growth causes a need for the sewer system to be enlarged and new capacity added. That cost is paid by new development in the form of plant investment fees.

As part of the review of plant investment fees, the long-range financial plan of the sewer system was modified to insure that development-funded plant investment fees are being used for new capacity only and not to fund replacements of existing capacity or normal system operations and maintenance.

#### The Study findings and recommendations are summarized below:

Red Oak Consulting reviewed the Persigo System's long range financial plan to assess the System's financial health. Red Oak finds the System to be financially healthy as indicated by its adequate operating and capital reserves and its strong debt service coverage. The System has several challenges over the next 10 years that will require careful financial planning:

Plant improvements in 2009-10 to meet anticipated regulatory requirements.
Increasing infrastructure replacement requirements.
Provision for full operating and capital needs associated with dissolution of the Special Sanitation Districts.

Red Oak recommends that wastewater service rates should be increased 2.5% in 2007 to provide sufficient revenue to meet annual revenue requirements and position the Persigo System for future financial challenges. The monthly <u>Full Service</u> rate, which was scheduled to increase 2.5% in 2007, will remain at that percentage increase level for 2007. The monthly rate will increase from \$13.90 per EQU to \$14.25 per EQU.

Red Oak further projects the already-scheduled increases of 2.5% per year should remain in the current long-term financial plan for the period 2008-2015. These annual 2.5% increases in wastewater service rates will be needed to meet revenue requirements, maintain adequate debt service coverage, and provide sufficient reserves. Red Oak recommends that the City continue to annually update its financial plan to verify that such increases are necessary.

Plant Investment fees are recommended to increase from the already-scheduled \$2,000 per EQU (Single-family equivalent unit) in 2007 to \$3,220 per EQU in 2007, for a \$1,220 increase. These plant investment fees will continue to be reviewed periodically.

The plant investment fees of \$3,220 per EQU will support growth-related plant expansions of \$11,400,000 for the study period, SSEP-related debt service of \$5,872,958 for the study period, and River Road Interceptor improvements during the study period; 2007 through 2015