

GRAND JUNCTION/MESA COUNTY, COLORADO
PERSIGO WASH WASTEWATER TREATMENT PLANT
May 19, 1981

It is requested that the Mesa County Commissioners establish policy on the following items:

A. SERVICE AREA

Many requests for service to areas outside of the "201" area (especially north of I-70 between 20 and 24 Roads) are being received. A condition of the grant to construct the Persigo Wash Plant will be to identify the area to be served, estimate the amount of sewage to be generated in that area, and to explain how that additional capacity will be provided at the new plant.

The new plant is designed to serve only the area identified in the "201" plan. It is my recommendation that service to areas outside of the "201" boundary be held to an absolute minimum and that the area be clearly identified.

*THORNTON
6/11*

B. SANITATION DISTRICTS

The intent of the City and County jointly building a regional treatment plant is to prevent a proliferation of sanitation districts. The sanitation district may be an attractive (and perhaps the only) way for a developer or group of property owners to construct a local collection system.

It is my recommendation that the County Commissioners discourage sanitation districts and assist in the construction of collection systems by such methods of capital cost recovery agreements with property owners and developers.

delay

*recover front
end costs thru
tap fees*

*Patterson's
handbook -
at Comm's
5/19/81 meeting*

*Stank ⁰²
file
"8"*

C. Plant Investment Fees \$500 to \$750

GRAND JUNCTION, LA COUNTY, COLORADO
 PERSIGO WASH WASTEWATER TREATMENT PLANT
 CONSTRUCTION COST SUMMARY
 May 4, 1981

	Grant Eligible Cost Schedule A	Grant Eligible Cost Schedule B	Ineligible Cost	Total Cost
Operations Building	\$ 741,100	-	-	\$ 741,100
Headworks	955,900	-	\$ 30,000	985,900
Raw Sewage Pump Station	911,900	-	30,000	941,900
Primary Clarifiers	551,200	-	200,000	751,200
Primary Sludge P.S.	345,800	-	75,000	420,800
Aeration Basins	3,103,400	-	-	3,103,400
Final Clarifiers	893,000	-	-	893,000
Chlorine Contact Unit	472,200	-	-	472,200
Chlorine/Dechlorination Unit	336,200	-	-	336,200
Anaerobic Digesters & Control Unit	1,339,000	-	-	1,339,000
Sludge Processing Unit & Aerobic Digesters	-	3,550,400	30,000	3,580,400
Sludge Beds	-	-	677,000	677,000
Site Work	640,000	-	-	640,000
Yard Piping	1,158,900	-	-	1,158,900
Site Electrical	335,600	20,000	-	355,600
Flow Equalization	50,000	-	-	50,000
Controls & Instr.	680,000	68,000	-	748,000
Site Dewatering	250,000	-	-	250,000
Landscaping	-	200,000	-	200,000
	\$12,764,200	\$3,838,400	\$1,042,000	\$17,644,600
Const. Contingencies (5%)				882,230
Step III Engineering				930,000
Soils testing				60,000
Local Administration				15,000
				\$ 19,531,830

*Other
 Cont*

GRAND JUNCTION/MESA COUNTY, COLORADO
 PERSIGO WASH WASTEWATER TREATMENT PLANT
 PROGRAM COST ANALYSIS
 May 19, 1981

I. PERSIGO WASH PLANT	<u>TOTAL EST. COST</u>	<u>GRANT</u>	<u>LOCAL</u>
A. Schedule A	14,000,000	10,500,000	3,500,000
B. Schedule B	4,500,000	2,250,000 (1)	2,250,000
C. Ineligible Items	<u>1,500,000</u>		<u>1,500,000</u>
Subtotal A	20,000,000	12,750,000	7,250,000
 II. PROJ. UNDER CONSTRUCTION	 <u>7,308,548</u>	 <u>5,481,411</u>	 <u>1,827,137</u>
Subtotal B	27,308,548	18,231,411	9,077,137
 III. FUTURE PROJECTS	 <u>2,510,000</u>	 <u>1,255,000⁽¹⁾</u>	 <u>1,255,000</u>
Total A (2)	29,818,548	19,481,411	10,332,137
Total B (3)	29,818,548	15,976,411	13,837,137

*ok 6.2 bonds
 + 3% interest
 oil shale
 Short 1.3 - 5 mill*

Notes: (1) 50% EPA Grant if New Funds Available in 1982
 (2) With Four Additional 50% EPA Grants
 (3) Without Any Additional EPA Grants

GRAND JUNCTION/MESA COUNTY, COLORADO
PERSIGO WASH WASTEWATER TREATMENT PLANT

May 19, 1981

RECOMMENDATIONS:

- (1) Ask EPA for advance approval of both schedule A and B in anticipation of additional EPA grant funds in 1982.
- (2) Take bids on Persigo Wash plant including schedule A, schedule B and grant ineligible items. Delay notice to proceed on schedule B if EPA does not give advance approval.
- (3) Evaluate cost of immediate construction of schedule B as ineligible items versus cost of delayed construction with and without additional EPA grant.
- (4) Apply for EPA grants for schedule B (if construction delayed) and for Tiara Rado, Goat Draw, and Scenic School Interceptors.
- § (5) Increase plant investment fee immediately from \$500 per EQU to \$750 per EQU.
- (6) Follow monthly service fee schedule as projected in bonding report beginning in 1982.

derived two
years ago raised
up to \$20 million

Price increase
to 30 million

→ immediately
First of the year

FINANCIAL STATEMENTS OF THE CITY OF GRAND JUNCTION, COLORADO

JOINT SEWER SYSTEM

CONSOLIDATED PROJECTIONS

	Equivalent Dwelling Units(1)	Required Service Charge(2)	Service Charge Revenues	Tap Fees(3)	Gross Joint Sys. Revenues	O&M Costs	Net Joint Sys. Revenues	O&M Reserve Fund(4)	Total Available for Debt Service	Net Debt Service(5)	Coverage	Excess After Carryover(6)
1981	23,765	5.40	1,539,972	300,000	1,839,972	872,119	967,853	300,000	1,267,853	770,826	1.64x	197,027
1982	24,953	6.10	1,826,560	300,000	2,126,560	959,331	1,167,229	300,000	1,467,229	832,139	1.76x	355,090
1983	26,200	6.75	2,122,200	300,000	2,422,200	1,370,639(7)	1,051,561	300,000	1,351,561	833,872	1.62x	217,689
1984	27,510	6.95	2,294,334	250,800	2,545,134	1,507,703	1,037,431	300,000	1,337,431	829,940	1.61x	207,491
1985	28,660	7.15	2,459,028	250,800	2,709,828	1,658,473	1,051,355	300,000	1,351,355	830,440	1.63x	220,915
1986	29,857	7.30	2,615,473	250,800	2,866,273	1,824,320	1,041,953	300,000	1,341,953	834,934	1.61x	207,019
1987	31,105	7.50	2,799,450	250,800	3,050,250	2,006,752	1,043,498	300,000	1,343,498	833,264	1.61x	210,234
1988	32,405	7.70	2,994,222	250,800	3,245,022	2,207,428	1,037,594	300,000	1,337,594	830,435	1.61x	207,159
1989	33,759	7.95	3,220,609	250,800	3,471,409	2,428,170	1,043,239	300,000	1,343,239	831,658	1.62x	211,581
1990	35,170	8.40	3,545,136	174,000	3,719,136	2,670,988	1,048,148	300,000	1,348,148	831,659	1.62x	216,489
1991	36,189	8.75	3,799,845	174,000	3,973,845	2,938,056	1,035,789	300,000	1,335,789	831,645	1.61x	204,144
1992	37,237	9.20	4,110,965	174,000	4,284,965	3,231,895	1,053,070	300,000	1,353,070	833,800	1.62x	219,270
1993	38,316	9.65	4,436,993	174,000	4,610,993	3,555,085	1,055,908	300,000	1,355,908	833,942	1.63x	221,966
1994	39,426	10.10	4,778,431	174,000	4,952,431	3,910,593	1,041,838	300,000	1,341,838	832,012	1.61x	209,826
1995	40,569	10.65	5,184,718	174,000	5,358,718	4,301,652	1,057,066	300,000	1,357,066	832,812	1.63x	224,254
2000	46,796	13.90	7,805,573	174,000	7,979,573	6,927,854	1,051,719	300,000	1,351,719	832,837	1.62x	218,819
2005	53,980	18.60	12,048,336	174,000	12,222,336	11,157,378	1,064,958	300,000	1,364,958	1,731,137(8)	1.64x	233,821

III - 11

- (1) Growth rates in equivalent dwelling units forecast on population growth; projections assume a 5% growth rate through 1983; a 4.18% growth rate through 1989; and a 2.9% growth rate through 2005.
- (2) User charge increases are planned to insure net revenues, including the O&M reserve carry forward, cover debt service by at least 1.6 times.
- (3) In 1979, tap fees for the City of Grand Junction's sewer system totaled \$579,000. Conservative estimates are made here and projected proportionate to the growth rates used for total equivalent dwelling units. No increase in tap fees are assumed.
- (4) The O&M reserve fund is capitalized from bond proceeds and maintained to meet any extraordinary O&M expense or an unexpected drop off in tap fees. It is intended to be replenished annually by increased user charges as necessary and carried forward to be accounted in the net system revenues available to pay debt service.
- (5) Net Debt Service is the principal and interest on the bonds plus any required deposits to the debt service reserve fund and less any earnings on the debt service reserve fund. The debt service reserve fund will grow to \$900,000 by 1990. The estimated interest rate on the bonds is 9.6743%.
- (6) Excess is the net system revenues less debt service and less carry forward of the O&M reserve fund.
- (7) O&M costs in 1983 are increased significantly due to completion of the new treatment facility being built with the proceeds of the bonds.
- (8) Final maturity will be paid in part by amount of debt service reserve fund, \$820,000.