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November 12, 1980

Mr. Charles W. Bates  
Assistant Vice President and Trust Officer  
First National Bank  
5th and Main  
Grand Junction, Colorado 81502

Re: Mesa County Sewer Refunding Bonds, Series 1980B  
and  
City of Grand Junction Sewer Refunding Revenue  
Bonds, Series 1978A

Dear Mr. Bates:

Mesa County and the City of Grand Junction have agreed to operate a Joint Sewer System. The County is issuing the Series 1980B Bonds to refund the City's Series 1978A Bonds in order to remove the prior lien on the City's Sewer revenues and the pledge of City sales tax to the sewer system.

The sewer portion of the Sinking Fund created in accord with the City's 1978 Bond Ordinance and the Federal Securities Purchase Agreement dated May 11, 1978 between the City and Zions First National Bank, Salt Lake City, Utah, will now become the Bond Reserve Fund for the County's Series 1980A and 1980B Bonds. The \$80,000 par value U.S. Treasury Bonds acquired in the sewer portion of the Sinking Fund prior to November 15, 1980 will be transferred to the new Refunding Escrow account at your Bank created by the Series 1980B Bonds. The \$20,000 par value U.S. Treasury Bonds purchased on November 15, 1980 will be the first accumulation of the new Reserve Fund. The semiannual purchases beyond November 15, 1980 required under the May 11, 1978 Agreement will continue to be made on the same dates and in the same amounts as described on Schedule T provided in connection with the City's 1978 Issue. The City will now transfer amounts to you for those semiannual purchases as are detailed on the Bond Reserve Accumulation Fund schedule attached. The interest and principal payments on the City's Series 1978A Bonds will now be made from the new Escrow Account.

A draft copy of the Escrow Agreement is enclosed for your review. Please advise me of any changes you require.

Sincerely,

BOETTCHER & COMPANY

*Stephen B. Clark*  
Stephen B. Clark  
Special Partner

SBC/ph

Enclosure

cc: Mr. John Tasker

File  
County Sewer  
Denver  
Boulder  
The Broadmoor  
Cherry Creek  
Colorado Springs  
Durango  
Fort Collins  
Grand Junction  
Greeley  
Longmont  
Pueblo  
Villa Italia  
Albuquerque  
Boise  
Casper  
Houston  
Kansas City  
New York  
Phoenix  
Salt Lake City

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New York Stock Exchange, Inc.  
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Midwest Stock Exchange, Inc.  
Pacific Stock Exchange, Inc.  
Chicago Board Options Exchange, Inc.

No dealer, salesman, or other person has been authorized to give any information or to make any representation with respect to the Bonds which is not contained in this Official Statement, and, if given or made, such information or representation must not be relied upon at or after the date hereof as having been authorized by the City of Grand Junction, by Mesa County, by the Districts, or by the Underwriters. Neither the delivery of this Official Statement nor any sale made after any such delivery shall under any circumstances create any implication that there has been no change in the affairs of the City or the County since the date of this Official Statement. The information set forth herein, while obtained from sources which are believed to be reliable, is not guaranteed as to accuracy or completeness by the Underwriters. So far as statements made herein involve matters of opinion or estimates, whether or not expressly stated as such, they are not to be considered as representations of fact.

The prices at which the Bonds are offered to the public may vary from the initial public offering prices appearing on the Cover Page hereof. In addition, the Underwriters may allow concessions or discounts from such initial public offering prices to dealers and others, and the Underwriters may engage in transactions intended to stabilize the prices of the Bonds at a level above that which might otherwise prevail in the open market in order to facilitate their distribution. Such stabilizing, if commenced, may be discontinued at any time.

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## INTRODUCTION

### Generally

This Official Statement, including its Cover Page and Appendices, provides information in connection with the offering by Mesa County, Colorado (the "County"), of its \$7,420,000 Sewer Improvement Revenue Bonds, Series 1980A, (the "Series 1980A Bonds") and \$805,000 Sewer Refunding Revenue Bonds, Series 1980B (the "Series 1980B Bonds") (collectively, "the Bonds"), dated November 1, 1980. The Bonds are to be special and limited revenue obligations of the County, issued pursuant to part 4 of article 20 of title 30, and part 2 of article 1 of title 29, Colorado Revised Statutes 1973, as amended, for the purpose of discharging certain obligations of the City of Grand Junction, Colorado (the "City") incurred in connection with the sewer system operated by the City (the "City System"), and defraying in part the costs of extensions and improvements (the "Project") to a joint sewer system (the "Joint System") which is to include the present City System as well as other property and facilities. The principal of and interest on the Bonds are to be paid from Joint System revenues (the "Joint Revenues"), after payment of costs of operation and maintenance. The Joint Revenues are to be obtained from the treatment of sewage pursuant to certain intergovernmental contracts between the City and the County (the "Agreement"), and between the City and certain special districts located within the County (see "THE DISTRICTS" and "THE BONDS - Security.") The Bonds will also be payable from, but not secured by any lien upon, any other funds of the County legally available therefor.

### Plan and Purpose of Financing

The issuance of the Bonds is intended to accomplish three primary purposes: (1) to provide local government funds, pursuant to a Grant Agreement with the United States Environmental Protection Agency ("EPA") in an amount equal to 25% of the estimated cost of construction of the Project which is to include new sewage treatment facilities as well as interceptor sewers; (2) through the execution of the Agreement and related documents, to combine the City System with other facilities to form the Joint System, and to operate the Joint System as a regional sewage treatment system, thereby promoting economies of scale and more efficient service and making funds available from the EPA for use along with the net proceeds of the Series 1980A Bonds, in the construction of the Project; and (3) the discharge of \$1,080,000 principal amount of Sewer Refunding Revenue Bonds of the City, Series 1978A (the "1978A Issue"), which were issued in connection with the City System and are secured by a lien upon the net revenues of the City System and upon certain Sales Tax revenues of the City, in order to allow the City to discharge the lien of the 1978A Issue upon its Sales Tax revenues and Sewer revenues and to subject the revenues of the City Sewer System to a new lien for the benefit of the holders of the Bonds.

## RISK FACTORS

Prospective purchasers of the Bonds should give particular attention to the following factors, among others referred to herein:

1. The Bonds are not general obligations of the City or the County, but rather represent special and limited revenue obligations of the County secured solely by the net revenues of the Joint System after payment of costs of operation and maintenance of the Joint System. See "THE BONDS - Security." The County may, at its option, pay the Bonds from any other legally available funds, but has not covenanted and will not covenant to do so. However, service charges of the Joint System will be imposed at flat rates, based on the cost, per equivalent unit, of operation and maintenance of the Joint System and payment of debt service in connection therewith. As such, revenues will not be dependent upon the amount of use of the Sewer System or upon the amount of water consumption by customers, and are therefore not expected to be affected by factors such as drought or water conservation efforts.

2. The financial statements concerning the City Sewer System and the City Water and Sewer Systems appearing herein and in the Appendices hereto do not purport to represent the operating history of the Joint System. The Joint System, as such, has no operating history.

3. The successful completion of the entire Project is dependent upon the availability of both Series 1980A Bond proceeds and grant funds from the EPA. See "USE OF PROCEEDS - Series 1980A Bonds." As of this date \$6,490,500 of grant funds have been received by the City and/or the County for use in the Project. Receipt of the full amount of the EPA Grant will be contingent upon continued compliance by the County, the City and the Districts with the substantial conditions and restrictions imposed under the Grant Agreement.

## THE BONDS

### Description of the Bonds

The Bonds are to be issued in two Series, one of which Series will be designated "Mesa County, Colorado, Sewer Improvement Revenue Bonds, Series 1980A," and the other of which will be designated "Mesa County, Colorado, Sewer Refunding Revenue Bonds, Series 1980B." The designation of two Series of Bonds refers only to the use of the proceeds thereof. The security for both Series is to be the same. The Bonds will bear semiannual interest coupons payable May 1 and November 1, with the first interest coupon falling due on May 1, 1981. The Bonds are to mature, and are subject to the other terms and provisions summarized on the Cover Page hereof. Neither the Bonds nor the proceedings authorizing the same will contain any provision for registration as to principal, interest, or either.

## Redemption

Optional Redemption. Bonds of both Series maturing in the years 1996 through 2005, inclusive, are redeemable in advance of their maturity at the option of the County on November 1, 1995, and on any interest payment date thereafter, in inverse order of maturity and by lot within any one maturity, upon payment of par plus accrued interest only to the redemption date.

Mandatory Redemption. In addition, the Bonds maturing on November 1, 2000, November 1, 2003 and November 1, 2005 are subject to mandatory Sinking Fund redemption by lot on November 1, 1996 and on each November 1, thereafter, to and including November 1, 2005, in the following years and amounts:

<u>November 1</u>	<u>Amount - Series A</u>	<u>Amount - Series B</u>
1996	\$ 340,000	\$35,000
1997	365,000	40,000
1998	395,000	45,000
1999	415,000	55,000
2000*	445,000	65,000
2001	570,000	60,000
2002	615,000	65,000
2003*	670,000	70,000
2004	725,000	75,000
2005*	1,110,000	90,000

\*Stated maturity of unredeemed Bonds.

Both optional and mandatory redemptions of Bonds are to be made upon not less than thirty (30) days' published notice in the manner provided in the Bond Resolution pursuant to which the Bonds are authorized and issued.

## Authority for Issuance

The Bonds are to be issued pursuant to the terms of part 4 of article 20 of title 30 and part 2 of article 1 of title 29, Colorado Revised Statutes 1973, as amended (the "Act"), and a Resolution (the "Bond Resolution") to be passed by the Board of County Commissioners (the "Board") prior to the delivery of the Bonds to the purchasers. The Bond Resolution will provide generally for the terms, maturities and coupon interest rates of the Bonds, as well as the actual form of Bond to be issued by the County.

## Security

The Series 1980A and 1980B Bonds are secured by the same pledge of revenue. The Bond Resolution provides that the Bonds are special and limited revenue obligations of the County, secured by a first (but not necessarily exclusively first) lien upon the net income to be derived from the operation of the Joint

System, which is to be set aside and credited to the "Series 1980A and B Sewer Refunding and Improvement Revenue Fund" (the "Sewer Revenue Fund"), and that the holders of the Bonds may not look for payment to any general or other fund of the County, except the special funds provided for in the Bond Resolution. The net income of the Joint System includes the Joint Revenues less the costs of operation and maintenance of the Joint System. The "Joint Revenues" are defined to include all revenues and charges for connection to and use of the Joint System from whatever sources derived, including but not limited to tap fees, plant investment fees and sewer user charges, but excluding surcharges or add-ons imposed by the City, the County or the Districts for services or facilities provided by other than the Joint System.

#### Flow of Funds

While the Bonds are outstanding, the Joint Revenues are subject to application to certain special funds created by the Bond Resolution as follows:

1. Operation and Maintenance Expenses. As a first charge on the Sewer Revenue Fund, there are required to be credited to the Sewer System Facilities Operation and Maintenance Fund (the "Operation and Maintenance Fund") sufficient moneys to pay operation and maintenance expenses of the Joint System as they become due and payable.

2. Bond Retirement Fund. Secondly, and subject to the payment of operation and maintenance expenses, from any monies remaining in the Sewer Revenue Fund, there are to be credited to the Series 1980A and B Sewer Refunding and Improvement Revenue Interest and Bond Retirement Fund ("Bond Retirement Fund") moneys, as follows:

a) Monthly amounts in equal monthly installments sufficient to pay the next maturing installment of interest on the Bonds;

b) Monthly amounts in equal monthly installments sufficient to pay the next maturing installment of principal of the Bonds including outstanding sinking fund installments.

3. Bond Reserve Fund. Thirdly, and subject to the required payments into the Operation and Maintenance Fund and the Bond Retirement Fund, there are to be credited to the Series 1980A and B Sewer Refunding and Improvement Revenue Bonds Reserve Fund ("Bond Reserve Fund") semi-annual deposits from Joint Revenues. The Bond Reserve Fund is created by the Bond Resolution by utilizing \$120,000 of reserve fund monies deposited in connection with the outstanding 1978A Issue of the City, by utilizing \$20,000 par value 8 1/4% U.S. Treasury Bonds maturing May 15, 2005, callable May 15, 2000, held as a "sinking fund" for the City's 1978A Issue in accordance with the Federal Securities



Purchase Agreement dated May 11, 1978 between the City and Zions First National Bank, Salt Lake City (the "Sinking Fund Agreement"), and by deposit of \$80,000 of the Series 1980A Bond proceeds. The semiannual deposits from Joint Revenues are to be sufficient, when combined with earnings on the initial and subsequent deposits to the Bond Reserve Fund, to purchase the next installment on the remaining sewer portion \$680,000 par value U.S. Treasury Bonds required under the Sinking Fund Agreement. (To the extent that the Bond Reserve Fund is funded with securities purchased under the Federal Securities Purchase Agreement their market value may be less than their par amounts.) No payments into the Bond Reserve Fund are contemplated after 1990, and in 1991 and thereafter the earnings from such fund may be used to pay debt service requirements on the Bonds. The monies in the Bond Reserve Fund are to be accumulated and maintained as a continuing reserve to be used to prevent deficiencies in the payment of the bond requirements of the Bonds and all outstanding parity bonds resulting from the failure to deposit into the Bond Retirement Fund sufficient funds to pay such bond requirements as the same accrue. In the event the Reserve Fund is used for such purposes, the County covenants to replenish the amounts so used from available revenues within a period of 36 months. If additional parity lien bonds are issued, the Bond Reserve Fund is required to be increased to an amount equal to the resulting combined average annual debt service.

4. Operation and Maintenance Expense Reserve Fund. Fourth, a fund known as "Series 1980A and B Sewer Refunding and Improvement Revenue Bonds Operation and Maintenance Expense Reserve Fund" ("O & M Expense Reserve Fund") is created by the Bond Resolution and funded in the amount of \$278,988 from proceeds of the Series 1980A Bonds and in the amount of \$21,011 from proceeds of the Series 1980B Bonds. Amounts in the O & M Expense Reserve Fund are to be available as a reserve to meet unanticipated operation and maintenance expenses or to meet any deficiencies in the payments required to be made to the Bond Retirement Fund or Bond Reserve Fund as may accrue, for example, from a drop-off in tap fees or plant investment fees. In the event the Operation and Maintenance Reserve Fund is used for such purpose the County covenants to replenish the amounts so used from available revenues within a period of one year.

5. Additional Subordinate Securities. Fifth, and subject to the foregoing provisions, moneys remaining in the Sewer Revenue Fund may be used for the payment of additional subordinate securities payable from the pledged Joint Revenues.

6. Use of Remaining Revenues. After all of the required payments above have been made, then any remaining revenues in the Sewer Revenue Fund may be used for any one or any combination of lawful purposes as the Board may determine.

## Certain Covenants of the Bond Resolution

1. Rate Maintenance. The Bond Resolution contains a rate maintenance covenant, in which the County covenants that it will charge against every purchaser of services reasonable and just rates, fees and charges adequate to meet all requirements of the Bond Resolution, and which shall be at a minimum sufficient to produce gross revenues annually to pay operation and maintenance expenses, and 120 percent of both the principal of and interest on the Bonds payable annually and equal to 150 percent of both the principal of and interest on the Bonds payable annually less the amount on deposit in the Operation and Maintenance Reserve Fund.

2. Additional Bonds and Other Securities. The Bond Resolution permits the issuance of additional bonds and other securities, subject to specific requirements. Securities having a claim to the pledged revenues superior to the Bonds are not permitted to be issued under the Bond Resolution. Securities having a claim upon the pledged revenues equal to or on a parity with the Bonds may be issued if the following conditions are met:

Absence of Default. At the time of adoption of the Resolution authorizing such additional securities, the County shall not have defaulted in making any of the payments required by the Bond Resolution during the twelve calendar months immediately preceding the issuance of such additional securities, or if none of the Bonds have been issued and outstanding for a period of at least twelve months, for the longest period any of the Bonds have been issued and outstanding.

Historic Earnings Test. The Joint Revenues derived in the fiscal year immediately preceding the date of issuance of the proposed parity securities, shall have been at least sufficient to pay

a) An amount equal to the operations and maintenance expenses of the sewer system for such fiscal year, and, in addition,

b) An amount equal to 130 percent of the average combined annual principal and interest requirements to be paid in any one fiscal year of the outstanding bonds and any other outstanding parity securities of the County and the bonds or other securities proposed to be issued as well as an amount equal to 150 percent of the average combined annual principal and interest requirements to be paid during any one fiscal year of the outstanding Bonds and any other outstanding parity securities of the County and the bonds or other securities proposed to be issued less the amount of the Operation and Maintenance Reserve Fund (excluding any other reserves).

Consideration of Additional Expenses and Earnings. In determining whether additional parity bonds or other parity

securities may be issued, the expenses and revenues referred to above are subject to adjustment to take into account foreseeable charges in the costs of operation or rate structure of the Joint System.

Certain Parity Securities Not Subject to Earnings Tests.

The Bond Resolution permits the issuance of additional bonds or other securities in an amount not exceeding 5% of the original principal amount of the Bonds without meeting the earnings tests set forth above, provided that such additional bonds or other securities are issued within the period commencing with the delivery of the Bonds and ending six months after the estimated Project completion date of July 1, 1983, and are issued for the purpose of completing the Project.

3. Periodic Independent Rate Study. The Bond Resolution provides that not more than three years from the date of delivery of the Bonds and not less than once every succeeding five years therefrom until the Bonds are paid, the Manager of the Joint System will cause an independent professional engineer to prepare an analysis of the rates, fees and charges used in the provision of sewer service by the Joint System. Such analysis is to compare the schedule of rates, fees, and charges and the Joint Revenues therefrom by the Joint System to the historical and projected operation and maintenance expenses and the annual principal and interest requirements of the outstanding Bonds and any other outstanding parity securities, and based on such comparison propose, if necessary, changes to the rates, fees and charges in order to insure proper compliance with the covenants and requirements stipulated herein.

4. Bondholders' Remedies. The Bond Resolution provides that each holder of any Bond is to be entitled to all privileges, rights and remedies provided or permitted in the Bond Resolution and as otherwise provided or permitted by law or in equity or by other statutes, subject to the applicable provisions concerning the Joint Revenues and the proceeds of the Bonds. Certain specific remedies are provided for in the Bond Resolution, including the appointment of a receiver or operating trustee for the Joint System. The holders of the Bonds may not compel the levying of any tax or foreclose on any part of the Joint System. Neither the Joint System nor any other property of the County, the City, or the Districts (other than the Joint Revenues) is pledged or mortgaged to secure payment of the Bonds. In addition, in the event of default in the payment of principal or interest on the Bonds, there is no acceleration of maturity of principal of the Bonds.

In addition to provisions of the Bond Resolution, Section 30-20-409, Colorado Revised Statutes 1973, as amended, provides that, subject to any contractual limitations binding upon the holders of the Bonds, the holders of the Bonds have the cumulative rights and powers, in addition to any other remedy, for the equal benefit and protection of all holders of the Bonds:

a) To enforce their rights against the County, the Board and any of its officers, agents and employees by mandamus or other suit, actions or proceeding in law or equity and to compel them to carry out their statutory duties and those arising from the Bond Resolution;

b) To require the County or the Board to account as if trustees of an express trust;

c) To bring suit upon the Bonds.

The rights of the Bondholders may be subject to the exercise, in certain exceptional circumstances, of the police power of the State of Colorado and its political subdivisions, and to the exercise by the United States of those powers vested in it under the federal Constitution. The Federal Bankruptcy Code, 11 U.S.C. §§101 et. seq., provides that no lien resulting from an agreement creating a security interest which is entered into before the commencement of proceedings under the Bankruptcy Code is enforceable on property acquired after the commencement of proceedings. Because of such provision, which has not been judicially construed, it could be arguable that the pledge of funds and revenues securing the Bonds would not be enforceable once bankruptcy proceedings had been initiated.

Bankruptcy proceedings or the exercise of the police power of the State of Colorado or its political subdivisions, if initiated, could subject the holders of the Bonds to judicial discretion and interpretation of their rights in bankruptcy or otherwise, and consequently may entail risks of delay, limitation, or modification of their rights.

Amendments. The Bond Resolution may be amended or modified in the respects and according to the procedure provided therein, which in most cases requires the consent of the holders of 66% of the Bonds outstanding for substantive amendments.

SCHEDULE OF DEBT SERVICE REQUIREMENTS TO MATURITY

Mesa County, Colorado

Series 1980 A and Series 1980 B Bonds

	Series 1980 A		Series 1980 B		Combined Total Debt Service	Bond Reserve Fund Contributions (Earnings) (2)	Net Debt Service
	Principal	Interest (1)	Principal	Interest (1)			
1981		\$691,618	\$ 5,000	\$74,264	\$765,882	\$26,043	\$791,925
1982	\$45,000	691,618	10,000	74,264	815,882	27,356	843,238
1983	40,000	688,558	10,000	73,924	812,482	28,050	840,532
1984	65,000	685,758	10,000	73,224	833,982	28,537	862,519
1985	65,000	681,078	10,000	72,504	828,582	23,587	852,169
1986	65,000	676,268	10,000	71,764	823,032	28,481	851,513
1987	65,000	671,328	10,000	71,004	817,332	27,731	845,063
1988	90,000	666,258	10,000	70,224	836,482	26,362	862,844
1989	90,000	659,058	10,000	69,424	828,482	29,606	858,088
1990	90,000	651,688	10,000	68,604	820,282	27,206	847,488
1991	205,000	644,118	20,000	67,764	936,882	( 74,250 )	862,632
1992	225,000	626,488	25,000	66,044	942,532	( 74,250 )	868,282
1993	225,000	606,688	25,000	63,844	920,532	( 74,250 )	846,282
1994	250,000	586,438	25,000	61,594	923,032	( 74,250 )	848,782
1995	250,000	563,625	25,000	59,313	897,938	( 74,250 )	823,688
1996 (3)	340,000	540,500	35,000	57,000	972,500	( 74,250 )	898,250
1997	365,000	510,750	40,000	53,938	969,688	( 74,250 )	895,438
1998	395,000	478,813	45,000	50,438	969,250	( 74,250 )	895,000
1999	415,000	444,250	55,000	46,500	960,750	( 74,250 )	886,500
2000	445,000	407,938	65,000	41,688	959,625	( 74,250 )	885,375
2001	570,000	369,000	60,000	36,000	1,035,000	( 74,250 )	960,750
2002	615,000	312,000	65,000	30,000	1,022,000	( 74,250 )	947,750
2003	670,000	250,500	70,000	23,500	1,014,000	( 74,250 )	939,750
2004	725,000	183,500	75,000	16,500	1,000,000	( 74,250 )	925,750
2005	1,110,000	111,000	90,000	9,000	1,320,000	( 974,250 )	345,750
<b>TOTALS</b>	<b>\$7,420,000</b>	<b>\$13,398,828</b>	<b>\$805,000</b>	<b>\$1,402,323</b>	<b>\$23,026,151</b>	<b>\$(1,740,791 )</b>	<b>\$21,285,360</b>

(1) Average coupon interest rate is to be 9.51%.

(2) Bond Reserve Fund is assumed to be invested to yield 8.25%. See "THE BONDS - Flow of Funds".

(3) "Principal" in the years 1996 through 2005, inclusive, refers to mandatory Sinking Fund installments. See "THE BONDS - Redemption".

USE OF PROCEEDS

Series 1980A Bonds

The County anticipates receiving net proceeds from the sale of the Series 1980A Bonds to the Underwriters as follows:

Principal Amount of Series 1980A Bonds	\$7,420,000
Discount	
Original Issue Discount	( 209,125)
Underwriting Discount	( 181,206)
Costs of Issuance	( 67,659)
(Bond Reserve Fund Deposit)	( 80,000)
(O & M Expense Reserve Fund Deposit)	( 278,988)
Net Proceeds	<u>\$6,603,022</u>

The net proceeds of the Series 1980A Bonds are proposed to be expended, along with funds to be obtained from the United States Environmental Protection Agency, upon a Project including the following items

Construction of Sewer Treatment Facilities and Interceptor Sewers	\$26,860,000
Contingency	1,435,020
Design	1,172,400
Engineering	771,000
Studies, Reports	601,500
Total	<u>\$30,839,920</u>
Less Net Proceeds of Series 1980A Bonds	( 6,603,022)
Less Funds on Hand - City	( 989,000)
Less Funds Already Expended	<u>( 1,153,000)</u>
Funds required from EPA or Other Sources for Project Completion	\$22,094,898

The proposed Project consists of improvements which have been determined to be necessary to meet the needs of population projections, and to overcome insufficiencies perceived to exist in the wastewater treatment facilities presently operating within the area to be serviced by the new facilities. The requirements for greater treatment capacity are due in part to expanding concern for protection of water resources, as reflected by Federal and state legislation and regulations (see "THE JOINT SEWER SYSTEM - The 201 Planning Area"). The improvements planned include construction of the new Persigo Wash Wastewater Treatment Plant, which is planned as the main treatment plant of the Joint System, construction of an interim treatment plant to be used by the Joint System pending completion of the Persigo Wash plant and later to be incorporated into the Persigo Wash Plant, and six interceptor sewers. These facilities are to be operated in connection with the existing facilities of the City System, with the exception of the existing plant of the City System, which is to be abandoned. (See "THE JOINT SEWER SYSTEM".)

To date \$6,959,516 of contracts have been let with respect to the construction of the Project. It is contemplated that the contract for the Persigo Wash plant will be let in March, 1981, at an estimated contract price, including contingencies, of \$17,700,000.

The EPA Grant. A portion of the overall cost of the Project is expected to be defrayed from proceeds of a Wastewater Treatment Facility Grant from the EPA. The legislative basis for obtaining federal assistance funds is the Federal Water Pollution Control Act (the "Act"), which provides in part that grants may be made available for up to 75% of the cost of construction, to any state, municipality, or interstate or intermunicipality agency for the construction of publicly-owned sewer treatment plants. The Grant Agreement between the County and EPA contains numerous conditions and requirements which must be satisfied for grant funds to be disbursed. Federal regulations promulgated pursuant to the Act provide that the state is responsible for determining the amounts and priorities of federal assistance to each municipality for which treatment works funding within the state is approved. Within Colorado, the applications, which must define the scope of any project, are processed through the Water Quality Control Division of the Colorado Department of Health.

#### Series 1980B Bonds

The County anticipates receiving net proceeds from the sale of the Series 1980B Bonds to the Underwriters as follows:

Principal Amount of Series 1980B Bonds	\$805,000
Discount	
Original Issue Discount	( 24,958)
Underwriting Discount	( 19,659)
Costs of Issuance	( 7,340)
(O & M Expense Reserve Fund Deposit)	( 21,011)
Net Proceeds	<u>\$732,032</u>

The net proceeds of the Series 1980B Bonds are to be applied to a Refunding Escrow Account established pursuant to an Escrow Agreement (the "Escrow Agreement") to be entered into between the County and the First National Bank in Grand Junction, Grand Junction, Colorado (the "Bank") whereby the County agrees to deposit with the Bank in the Refunding Escrow Account the proceeds received from the sale of the Series 1980B Bonds, less the costs of issuance of the Series 1980B Bonds, plus \$80,000 par amount of 8 1/4 percent United States Treasury Bonds, held as a sinking fund for \$1,080,000 of bonds previously issued by the City for purposes of the City System (the "1978A Issue"), in accordance with a Federal securities Purchase Agreement dated May 11, 1978, between the City and Zions First National Bank of Salt Lake City, Utah. The proceeds are to be used to purchase certain U.S. Treasury securities listed in the Escrow Agreement which are to be at all times sufficient to pay the principal of and interest on the outstanding 1978A issue.

The Escrow Agreement provides, in part, that if funds on hand in the Refunding Escrow Account are insufficient to meet principal and interest payments as they become due, the County will deposit additional funds as may be required to meet payments. The Escrow Agreement restricts the use of the Refunding Escrow Account, requiring it to be separated from other funds and securities on deposit with the Bank, and directs the Bank to invest and reinvest in federal securities deposits from the County, in accordance with a schedule of security deposits so that sufficient funds will be available to pay interest and principal requirements of the 1978A Issue as they accrue.

#### THE JOINT SEWER SYSTEM

The Joint Sewer System will combine the facilities of the City System, after abandonment of the existing treatment plant, with the facilities to be constructed as part of The Project. The Joint System is designed to meet the requirements of existing and projected population increases, while complying with the applicable provisions of federal and state statutes and regulation concerning water quality and environmental control.

#### The 201 Planning Area

Planning Area Designation. The Joint Sewer System is designed to operate within an area of the County which has been designated by the EPA as a "201 Planning Area." The purpose of EPA's designation of such planning areas is to afford protection for specific environmental values, such as water quality, while providing for the application of grant moneys to sewage treatment facilities which serve existing and projected populations in a cost-effective manner. In designating the 201 Planning Area and approving the use of grant funds in the Project, the EPA has made a determination that the Project is the most cost effective treatment facility for the Planning Area. In addition, current regulatory policies of the Colorado Department of Health (which may be subject to change in the future) have the effect of limiting the issuance of discharge permits within the Planning Area for facilities other than the Project, although these policies would not limit the continuing operation of existing wastewater treatment facilities not included in the Joint System.

Water Quality. Concern for the protection of water resources has led to progressively more stringent regulations, through federal and State legislation, for the discharge of treated municipal wastewater. The State of Colorado manages a system of stream classifications and water quality standards, as defined in the Colorado Water Quality Act of 1973, to this end. Stream classifications are assigned to the waters of the state for the purpose of protecting the water quality for public water supplies, the propagation of wildlife and aquatic life, and for domestic, agricultural, industrial, recreational and other intended uses. Water quality standards are used in connection with stream classifications to maintain the water quality for protected uses by regulating water characteristics.



The main stem of the Colorado River receiving the City's effluent has been assigned a stream classification of B-2 by the State. This classification indicates this segment of the River is to be maintained as a warm water fishery. Due to the growing concern for endangered and threatened aquatic life, the U.S. Bureau of Reclamation has designated the Colorado squawfish, humpback chub, and razorback sucker as endemic fish species of the Colorado River approaching extinction. These species are classified as endangered or threatened by the State of Colorado, with the exception of the razorback sucker, and by the U.S. Fish and Wildlife Service. The Colorado Department of Health is currently reviewing stream classifications for possible revision. Any change in the stream classification of the Colorado River at Grand Junction could effect a change in the water quality standards for that segment of the River. More stringent water quality standards may require a higher degree of treatment or possibly advanced wastewater treatment processes.

Discharge Permit Standards. The City, in the operation of its sewer system, is required to keep in force a discharge permit issued by the Department of Health of the State of Colorado. The effluent standards set forth below indicate the permit limitations contained in the City's most recent permit which expired September 30, 1980. Pending final approval of a new permit and completion of the Project, the City is being permitted to operate on a temporary basis without established effluent limitations. As a result of overloading of the existing plant due to population growth and changes in accepted effluent standards, numerous violations of the City's discharge permits have occurred, and these violations are one of the principal reasons why the Project is considered necessary.

NPDES PERMIT EFFLUENT LIMITATIONS

<u>Parameter</u>	<u>Concentration</u>		<u>Instantaneous</u>
	<u>30-Day Average</u>	<u>7-Day Average</u>	
BOD(1)	30 mg/l(4)	45 mg/l	--
SS(2)	30 mg/l	45 mg/l	--
Fecal Coliform Bacteria	6000/100 ml	12000/100 ml	--
Total Residual Chlorine	--	--	0.35 mg/l max.
pH	--	--	6.0 - 9.0
Oil and Grease	--	--	10 mg/l

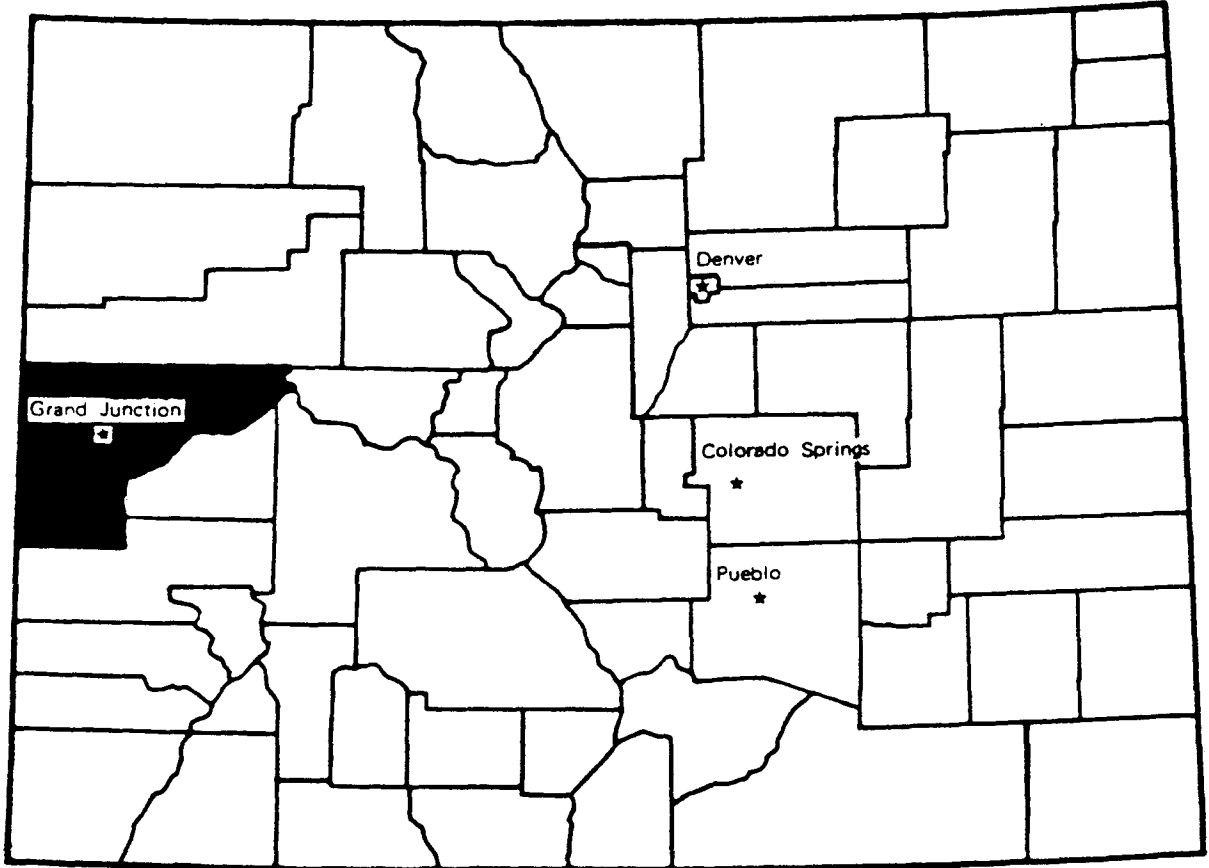
- (1) Biochemical Oxygen Demand  
(2) Suspended Solids

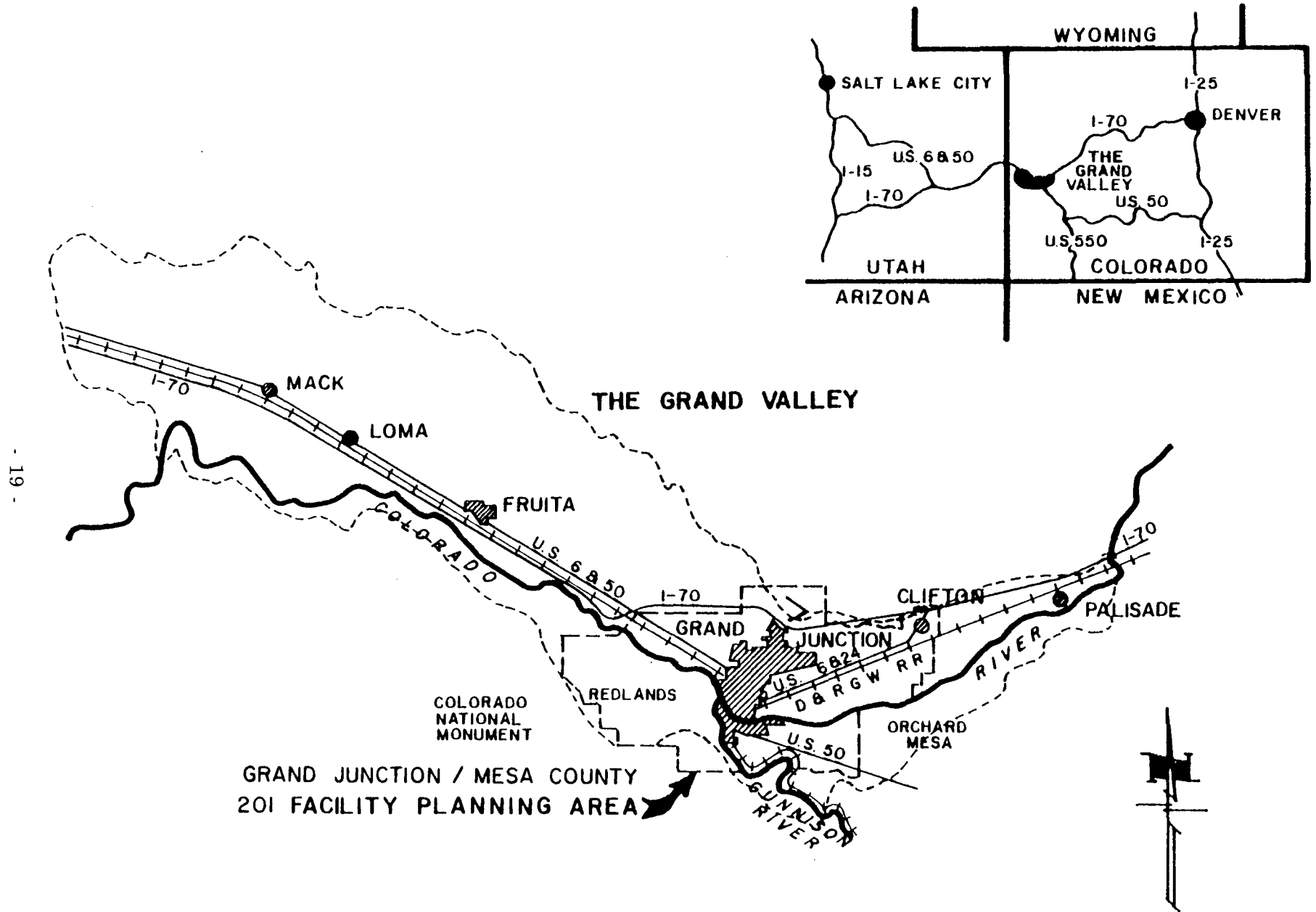
ANTICIPATED FUTURE  
NPDES PERMIT EFFLUENT LIMITATIONS  
APPLICABLE TO JOINT SYSTEM

<u>Parameter</u>	<u>Concentration</u>		<u>Instantaneous</u>
	<u>30-Day Average</u>	<u>7-Day Average</u>	
BOD	30 mg/l	45 mg/l	--
SS	30 mg/l	45 mg/l	--
Fecal Coliform			
Bacteria	6000/100 ml	12000/100 ml	--
Ammonia Nitrogetn			
NH <sub>3</sub>	--	--	5.5 - 6.0 mg/l
Total Residual			
Chlorine	--	--	0.1 mg/l max.
pH	--	--	6.0 - 9.0
Oil and Grease	--	--	10 mg/l

No assurance can be given that the City or the County will not in the future be required to expend substantial sums of monies in order to comply with state and federal environmental statutes and regulations which may hereafter be promulgated.

# Mesa County





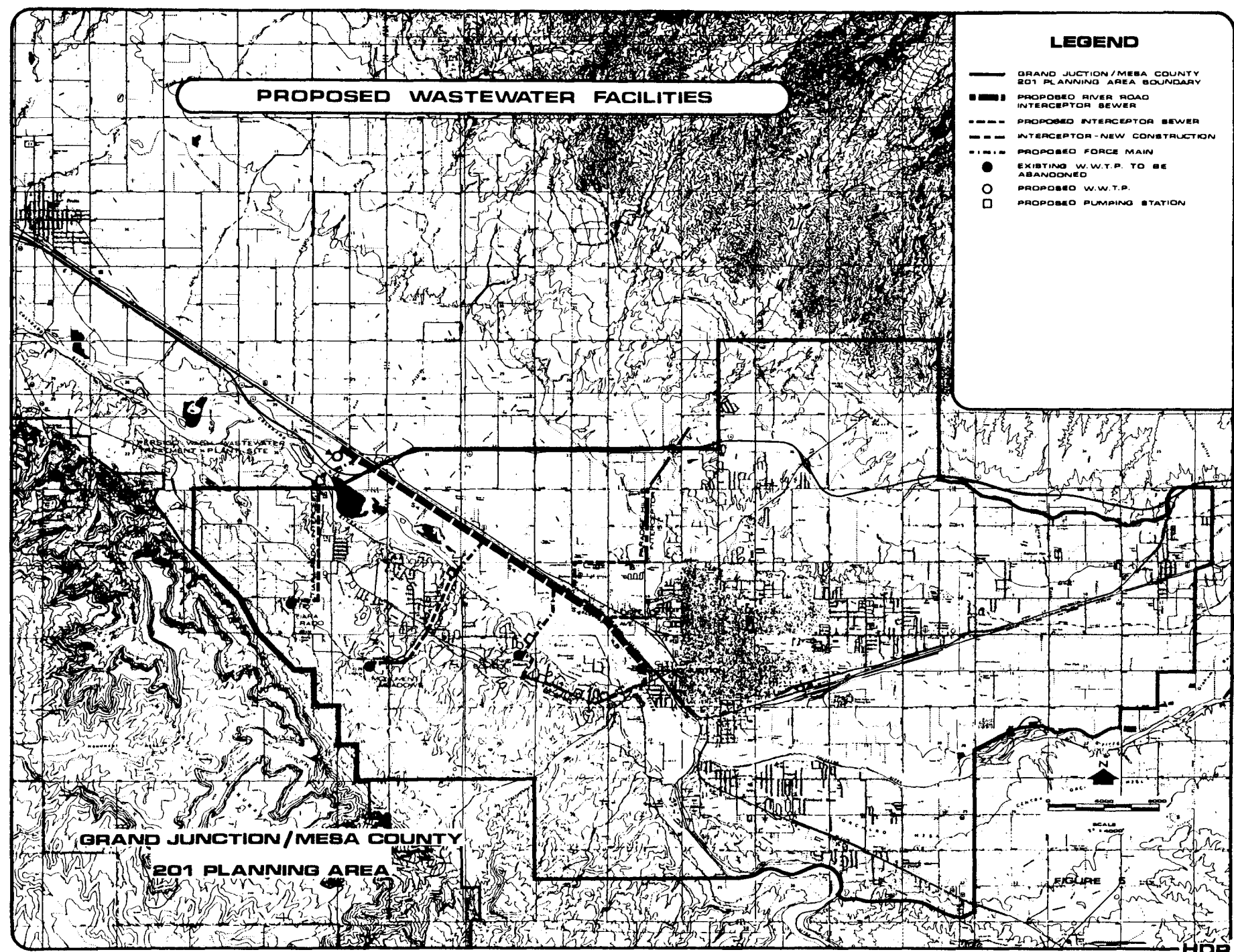
GRAND JUNCTION / MESA COUNTY  
201 FACILITY PLANNING AREA

VICINITY MAP  
FIGURE 1

**PROPOSED WASTEWATER FACILITIES**

**LEGEND**

- GRAND JUNCTION/MESA COUNTY  
201 PLANNING AREA BOUNDARY
- ▬ PROPOSED RIVER ROAD  
INTERCEPTOR SEWER
- - - PROPOSED INTERCEPTOR SEWER
- - - INTERCEPTOR-NEW CONSTRUCTION
- · - · - PROPOSED FORCE MAIN
- EXISTING W.W.T.P. TO BE  
ABANDONED
- PROPOSED W.W.T.P.
- PROPOSED PUMPING STATION



**GRAND JUNCTION/MESA COUNTY  
201 PLANNING AREA**

FIGURE 5

## Description of the City System

Physical Plant. The City System was described in a report entitled "Infiltration/Inflow Analysis, City of Grand Junction," prepared by Nelson, Haley, Patterson & Quirk, Inc., (NHPQ) as part of the Facilities Plan for the City of Grand Junction prepared in 1974. That report has been updated with additional information provided by the City. The City System presently treats 89 percent of the sewage flow in the Planning Area.

Prior to the construction of the City's first sewage treatment plant, which was completed in 1939, a combined sanitary/storm system developed. The sanitary system lines were laid under alleys and the storm lines under streets. The systems combined at points where main trunk and outfall lines connect, and both systems were at first discharged directly into the Colorado River without treatment.

According to the Grand Junction/Mesa County Predesign Report for Wastewater Treatment Facilities & Interceptor Sewers, prepared by HDR in 1977, records indicate that combined sewers comprise 170,478 linear feet in the present system.

The City System's West Side Wastewater Treatment Plant was originally constructed in 1939 as a primary treatment facility, expanded in 1957 as a conventional trickling filter plant to provide secondary treatment and upgraded in 1970 to operate as a two-stage trickling filter plant.

The influent open channel of the present treatment plant has a bypass opening. Because of the combined storm and sanitary sewer, heavy rain can cause a portion of a storm surge to exceed the hydraulic capacity of the plant and bypass the plant. Some untreated sewage will then flow directly into the Colorado River, although the City first chlorinates the discharge. In addition, it is possible that flood levels of the Colorado River could create a backflow into the influent open channel as it now exists. It is also possible that human error could cause the bypass opening to permit a direct flow, but the Utility Director of the City indicates there are no records of such an occurrence.

According to figures provided by the Utility Department of the City, spillages have ranged from a duration of 30 minutes to 3 hours, resulting in discharges from 45,000 to 3 million gallons of sewage. There have been 19 occurrences of discharge since July, 1975.

The City System's present plant receives power from Public Service Company of Colorado. No backup power is available. During the past 5 years, two power outages have caused a shutdown of treatment for a two hour-fifteen minute period and a one hour seven minute period, according to the wastewater treatment supervisor. It is contemplated that the risk of shutdowns due to power outages will be reduced in the Persigo Wash Plant by means

of connections to two electrical power "loops" of the Public Service Company system.

Customer Base. The City System treats sewage from areas within the City, areas within special service districts outside the City, and areas outside the City which are not within special service districts. The special service districts, separate quasi-municipal corporations organized under and acting pursuant to the laws of the State of Colorado, for which the City provides sewage treatment by agreement are Orchard Mesa Sanitation District, Fruitvale Water and Sanitation District, Central Grand Valley Sanitation District, and Ridges Metropolitan District (collectively, the "Districts"). See "THE DISTRICTS."

Areas not within the City and not part of special service districts are treated by the City pursuant to special powers of attorney obtained by the City prior to any connections to the City System.

The Colorado Municipal League reported the customer base of the City System in the years 1975 through 1979 as follows:

Number of Connections Served by City System (1979)<sup>(1)</sup>

	<u>Inside City</u>	<u>Outside City</u>	<u>TOTAL</u>
Residential	7,616	4,316	11,932
Commercial/Industrial	1,099	0	1,099
TOTAL	8,715	4,316	13,031

Connections Served by City System (Totals only)<sup>(2)</sup>

<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
7,820	8,000	8,466	12,434	13,031

(1) Source: Colorado Municipal League - 1980 Water and Sewer Utility Charges and Practices.

(2) Source: The City of Grand Junction. Figures for 1975-77 do not include special districts. Districts did receive service, but the City programs did not reflect totals served.

As of September 30, 1980, the City Utilities Department reports 14,679 connections served, of which 13,529 are residential and 1150 are commercial/industrial.

The City Utilities Department has indicated that no commercial or industrial user of the City System uses more than 4% of the City System's capacity.

## Description of the Joint System

Physical Plant. The physical plant of the Joint System is proposed to include the present City System along with the following new facilities to be constructed as parts of the Project (see "USE OF PROCEEDS"):

1. Interim Treatment Plant. The interim treatment facility will be located near the site of the new plant and is designed to treat an estimated 1.0 million gallons per day (MGD) excess flow from the City System's West Side plant before the new plant is completed and prepared for operation in 1983. The interim facility is to include aerated basins constructed of concrete. Low speed aerators are to provide the needed oxygen transfer in the wastewater to produce an acceptable effluent (see "THE JOINT SEWER SYSTEM - Environmental Concerns"). The aerated basins are planned to provide ten days of aeration and two days of settling prior to chlorination and discharge of the treated effluent. As the new plant is completed, the basins are to be modified to function as flow equalization basins for use at the new plant. Stormwater runoff caused by those sections of the City System which are combined wastewater-storm sewers would be diverted to these basins prior to treatment.

2. Persigo Wash Treatment Facility. The activated sludge process of biological treatment was selected for use at the new Persigo Wash plant to achieve current and probable future discharge requirements. According to the Feasibility Study on Wastewater Treatment/Interceptor Sewer Program prepared by the architectural and engineering firm of Henningson, Durham & Richardson, Inc. (HDR), that process is well adapted for expansion. Modifying the existing mechanical method of treatment of the City System was considered in the HDR study to be less adaptable to matching the activated sludge effluent quality. In addition, land area of the existing City System plant could not accommodate projected expansion. Population and wastewater flow projections in the area of treatment indicate the initial new system requires a 12.5 MGD capacity.

3. Interceptor Sewers. The interceptor sewers proposed include the River Road, Scenic School, Independent Avenue, Paradise Hills-Phase II, Goat Wash and Tiara Rado interceptors.

The River Road interceptor will run from the area of the existing plant to the Persigo Wash and interim plant facilities and is sized to carry all wastewater flows from the existing plant and all other planned interceptors. The design capacity of the proposed 48-inch and 54-inch interceptor sewer is adequate, according to the HDR study, to carry peak average daily flows and most infiltration/inflow to at least the year 2000. In addition, the Utility Director of the City believes the sizing will reduce the possibilities of any overflow until at least the year 1990 because of the storage capacity of the sewer interceptor itself.



The Tiara Rado, Goat Wash and Scenic School interceptors are designed to carry wastewater from the development areas of the Redlands area located west of the City, and to provide for the abandonment of certain package treatment plants. Each of these interceptors will require pumping stations to facilitate a flow by force main across the Colorado River to the River Road interceptor, such pumping stations to be constructed as part of the Project.

The Independent Avenue interceptor will intercept wastewater flows from the City's Horizon Drive Trunk Sewer, which serves development areas north of the City. The Horizon Drive Trunk Sewer extension, which presently runs to the City's existing sewer treatment plant, is a 15-inch inverted siphon, a thin-walled pipe carrying flow under pressure, which the HDR report states is undesirable pipe for those conditions. The point of interception at Independent Avenue is designed to relieve pressure on the extension.

The Paradise Hills Interceptor-Phase I was completed to permit the abandonment of a package treatment plant. Phase II, to be funded as part of the Project, is an extension of this interceptor sewer, serving the Paradise Hills subdivision. Phase II is proposed to run from the terminus of the Phase I interceptor at the Foresight Park Industrial complex to the River Road interceptor. The interceptor is to serve residential and industrial park development north and west of the City, as well as a shopping mall complex under construction.

Customer Base. The Joint System is designed to provide sewage treatment within the 201 Planning Area on a "wholesale" basis, which is to say that the obligation to pay for treatment services of the Joint System will be an obligation of the Districts and the City rather than their individual sewer customers. Individual industrial, commercial and residential connectors of the City and District systems will continue to be considered as customers of those systems, but all billing of customers will be done by the Manager of the Joint System. Amounts received from such billings are to be remitted to the City and the Districts by the Manager after deduction of amounts owing to the Joint System under the Agreement, Joint Ordinances and Resolutions and District agreements.

#### The Agreement, Joint Ordinances and Resolutions

The basic organizational structure of the Joint System is provided for in a series of agreements, ordinances and resolutions of the City, the County, and the Districts.

The Joint Sewerage Service Agreement (the "Agreement"), dated May 1, 1980, between the City and the County, contemplates a new treatment plant and ultimate abandonment of the City System's existing plant. Pursuant to the Agreement, the City System and other facilities will be considered separate for the purpose of

establishing zoning, subdivision and building permit criteria before connection permits are made available to users, and for collection line extensions within drainage areas; but construction which is part of any connection to the Joint System must be approved by the Utility Department of the City. Following completion of the Joint System, the County will own the new wastewater treatment plant and the River Road and Redlands area interceptors. The City will own the Paradise Hills and Independent Avenue interceptors and all lines and facilities currently owned. Ownership of lines within areas later annexed to the City will be transferred to the City. The Districts will continue to own all lines and facilities currently owned. The County will own all lines and facilities within the Joint System not owned by the City or the Districts, including the Persigo Wash Plant, the interim treatment plant, and certain interceptors.

A Joint Ordinance and Resolution of the City and the County, dated March 5, 1980, provides that the Director will sample certain industrial users of the system (those discharging 25,000 gallons per day or more) to determine the classification of the industry. This classification may be used for recovery by the City and County from the industrial user of the amount of the EPA grant allocable to capacity utilized by the industrial user and funded by federal grant monies as required by the EPA under the Industrial Cost Recovery program. Funds collected for this purpose are to be deposited in interest-bearing accounts to be fully collateralized by obligations of the U.S. government or guaranteed by the U.S. government. After deduction for administrative costs, the City, in conjunction with the County, may use ten percent of the retained funds at its discretion. Fifty percent of the original amount, along with fifty percent of the accumulated interest, is to be paid annually to the EPA. Forty percent of the original amount may be retained for investments until its use is required for expansion or reconstruction of the Joint System. However, according to the EPA, a moratorium on collection of funds due under the Industrial Cost Recovery Program began in 1977. The EPA was required to submit a report to Congress for a period of one year from July 1, 1979, after which the moratorium on collection was expected to end. However, the EPA indicates no action has been taken by Congress, and pending legislation would eliminate the Industrial Cost Recovery, and collection of recovered amounts has not been reinitiated.

An additional Joint Ordinance and Resolution of the City and the County, also dated March 5, 1980, requires a permit from the Director of Public Works and Utilities (the "Director") to connect to the Joint System. Certain restrictions as to the types of sewage to be disposed of in the Joint System are provided, as is the rate structure applicable to each person having a connection or eligible for a connection with the City Sewer System. (See "Rate Structure".) Penalties for non-compliance are also provided.

## Joint System Management

The Joint System is to be operated as a single system for the purpose of wastewater collection and treatment. Joint rates, tolls and fees are to be charged and billed as described under "Description of the Joint System." Management and operation of the Joint System, pursuant to the Agreement, is to be conducted by the City, under the supervision of the Director. A utility superintendent, utility systems supervisor and utility systems foreperson are to manage the staff responsible for operation and maintenance of the Joint System, including the Persigo Wash Wastewater Treatment Plant. The new plant will require 15 additional operation staff personnel under the established management and supervisory structure.

The Director of the Joint System is to be Mr. James Patterson. Mr. Patterson joined the City government in January 1972 as supervisor of the water and sewer treatment plants. His responsibilities increased thereafter to include supervision of the water supply and sewage collection systems, and as Utility Director, collection of solid waste. Named Director of Public Works and Utilities in 1976, he is responsible for all water and sewage treatment and water distribution and sewage and solid waste collection, as well as street maintenance and repair. Prior to coming to Grand Junction, Mr. Patterson received a BA degree from La Grange College (Georgia) and did post graduate work at the University of Georgia and Auburn University. He was a quality control chemist and superintendent of the water and sewer plants and sewage collection in Phenix City, Alabama, from 1966 to 1972.

## Joint System Rate Structure

Under the Agreement, Joint System rates are to be approved by the County and affirmed by the City. The initial Joint System rate structure reflects a substantial increase in rates from previous City System rates.

Charges for City System sanitary sewer service before January 1, 1980 were established on November 3, 1971, by City Ordinance No. 1410. There was an increase of rates in 1975; however, with that increase, the decision was made to return to the lower rates if an additional 1% municipal sales tax was approved by the voters of the City, with the tax revenue to be applied to the then-joint Water-Sewer Fund. With the approval of the sales tax, water rates were reduced in 1976. The City System rate structure in 1979 included sewer rates for eight kinds of service, ranging from \$2.05 per month for a single family dwelling to \$6.15 per month plus \$1.00 per month per additional units for multiple-family dwellings. These rates were, according to the Utility Director's Report, based on amounts of sewage treated under certain assumptions, rather than on the amount of pipe or construction required to provide service.

Recommendations for rate changes in anticipation of the establishment of the Joint System were approved by the City Council of Grand Junction on November 20, 1979 by ordinance, and by a Joint Resolution and Ordinance of the City and County (see "The Agreement; Joint Ordinances and Resolutions"). The original ordinance specified that rates were to be effective January 1, 1980. The Utility Director's Report indicated that the rate schedule recommended was developed using EPA guidelines that provide for a charge to each user based on the amount of pollutants produced by that user. The recommended rates were developed basing the rate structure on the fee determined for a single family residence, referred to as an Equivalent Residential Unit (EQU). The EQU represents the approximate monthly cost, per average residence, for operation and maintenance of the City System and retiring the debt of the system, and will equal approximately \$4.20 per month. It is a flat amount, which is not tied to the amount of a customer's actual or estimated use of sewer or water service.

Under this structure, for example, the monthly service charges for a single family residence in the City increases from \$2.05 to \$4.20 per month; for a single family residence outside the City it increases from \$4.10 to \$4.20; for a 15 unit apartment, it increases from \$18.15 to \$45.36 per month; for a 157-bed hospital, increases \$198.02 to \$586.87 per month. Because charges are determined on revenue requirements of the Joint System, as opposed to usage, the charges are designed to make the revenue self-supporting.

Under the current rate structure, tap fees of \$1050 per residential connection are imposed, while the City collects an additional plant investment fee of \$500.

In addition, a permit is required before any connection can be made to the City System. A fee of \$5.00 is required to be paid to the building department of the City for such a permit, although the connection charge can be adjusted if laterals are installed by the proposed connector.

It is contemplated that periodic rate increases will be necessary to maintain desired levels of revenue coverage for the Joint System. In the Bond Resolution, the County has covenanted to periodically have its rate structure reviewed for this purpose. See "THE BONDS - Certain Covenants of the Bond Resolution."

#### Proposed Future Capital Expenditures in Connection With the Joint System

No capital expenditures for wastewater treatment beyond the Project are presently planned. However, the Persigo Wash Wastewater Treatment Plant site was designed with some capacity for expansion, which is expected to be necessary within approximately 10 years. The new interceptor lines to be constructed as part of the Project are sized to meet estimated demand for a period of 20 years.

FINANCIAL INFORMATION CONCERNING THE CITY SEWER SYSTEM  
AND THE JOINT SEWER SYSTEM

Historical Comparison - Sewer Fund Revenues and Expenses

Prior to 1979, the Sewer Fund of the City was accounted for jointly with the Water Fund in the financial statements of the City. The figures shown in the following statement of revenues and expenses for the City Sewer Fund for the years 1975 to 1978 are based upon worksheets, financial records and other information supporting the City's audited financial statements but are not themselves audited. The City's audited financial statements, which combine the two funds for such years, are available upon request from the Finance Department of the City.

City of Grand Junction

STATEMENTS OF REVENUES AND EXPENSES

SEWER FUND

For the years ended December 31, 1979, 1978, 1977, 1976, and 1975

	1979	1978	1977	1976	1975
Operating revenues					
Service charges	\$ 608,500	\$ 565,346	\$ 472,534	\$411,967	\$ 456,621
Operating expenses					
Salaries and wages	202,095	156,744	120,362	111,586	109,926
Employee benefits	31,566	24,666	19,085	15,467	11,438
Supplies	38,056	24,564	22,893	25,952	26,398
Repairs and maintenance	19,910	16,329	16,872	12,212	8,890
Utilities	58,431	63,559	53,469	53,550	40,781
Equipment rent	38,504	40,558	28,825	16,974	17,592
Distribution system repairs		13,165	2,131	1,236	5,133
Contract services	10,883	6,278	6,738	6,850	7,009
Miscellaneous	10,120	5,029	2,056	6,404	2,452
Depreciation	101,618	100,443	87,065	63,697	63,697
Transfers - services	57,162	51,329	45,646	41,045	46,403
	<u>568,345</u>	<u>502,664</u>	<u>405,142</u>	<u>354,973</u>	<u>339,719</u>
OPERATING INCOME (LOSS)	<u>40,155</u>	<u>62,682</u>	<u>67,392</u>	<u>56,994</u>	<u>116,902</u>
Other income (expense)					
Miscellaneous	7,870	1,443	1,800		
Interest earnings	9,425	79,304	18,789	7,287	14,667
Interest expense	(69,076)	(76,738)	(100,299)	(99,834)	(110,963)
Sales and use taxes	1,360,489	1,121,555	964,153		
Loss on disposals	(22)				
	<u>1,308,686</u>	<u>1,125,564</u>	<u>884,443</u>	<u>(92,547)</u>	<u>(96,296)</u>
INCOME (LOSS) BEFORE TRANSFERS	1,348,841	1,188,246	951,835	(35,553)	20,606
Transfers in	8,718		49,452		23,496
Transfers out	<u>(1,257,729)</u>	<u>(635,954)</u>	<u>(429,430)</u>		<u>(62,629)</u>
NET INCOME BEFORE EXTRAORDINARY ITEMS	99,830	552,292	571,857	(35,553)	(18,527)
Gain on sale of refunding debt		<u>5,270</u>		<u>267,119</u>	
NET INCOME	<u>\$ 99,830</u>	<u>\$ 557,562</u>	<u>\$ 571,857</u>	<u>\$231,566</u>	<u>\$ (18,527)</u>

Note: Sewer tap fees are not reflected in the net income shown above. Sewer tap fees received in the years 1975, 1976, 1977, 1978, and 1979 were \$63,631, \$123,713, \$248,332, \$283,402, and \$570,924, respectively.

## Material Conclusions of Engineer's Feasibility Report

In connection with the issuance of the Bonds and construction of the Project, the City engaged the engineering firm of Henningson, Durham & Richardson, Inc. ("HDR") to prepare the summary Feasibility Report attached hereto as Appendix III. The HDR Report addresses the proposed construction activity of the Joint System, its customer base, management and staffing, rate structure and costs of operation, maintenance and debt service. Based upon the assumptions stated in the Report, HDR concludes in substance that the Joint System is an economically feasible method of providing wastewater treatment which will meet existing population and water quality requirements.

## Management's Comments Concerning Development of the Joint System

The following represents management's view of the material operating trends of the City System and the Joint System:

When the City's present treatment plant was last improved in 1969, federal standards required that treatment plants be designed to remove at least 80% of the pollutants from treated sewage before discharge. With the Water Pollution Control Act Amendments of 1972 came a change in treatment standards. Instead of a percentage removal, absolute limits were placed on the amount of pollutants that could be discharged to the stream. Even though the City plant was operating with high efficiency, modifications or a reduced capacity were considered necessary. With the availability of domestic water from the Ute Water Conservancy District in 1961, development and residential areas began to appear where the land had been devoted to agriculture or where the land had not been usable. Some of these areas used on-site septic systems, and sanitation districts were formed in other areas to build sewage collection systems. In some small neighborhood areas, homeowner associations were formed to install collection systems.

The City took the position of assisting and co-ordinating sewer collection systems being built outside the City limits in order to assure that systems being built would fit together into one entity that could be efficiently operated.

Growth outside and within the City, the requirements of new discharge standards and the need for extensive repairs to the existing plant all resulted in a need to provide increased capacity in a regional treatment plant. The City applied for grant funding from the EPA, and obtained a Step I grant to develop a facility plan in order to identify requirements and recommend solutions. The State Department of Health established the boundary for the Planning Area and the City contracted with NHPQ consulting engineers to prepare the plan. Although the Planning area extended beyond the City limits, the study was funded by EPA and City funds. The Valley Wide Sewer Advisory

Committee, representing the City, the County and the Districts, was established and became active in the selection of design engineers and the implementation of the facility plan. The facilities plan was completed in 1975 and recommended that the existing treatment plant be improved and that a new 7.5 MGD plant be built between Grand Junction and Fruita. When the plan was presented to the committee, it was determined that additional studies should be made regarding alternatives to mechanical and biological treatment. The EPA also determined that additional studies should be made on ammonia levels in the Colorado River to determine the level of treatment that would be required at the new plant.

As a result of the additional study the plan was amended to recommend that the existing plant be abandoned and that a new 12.5 MGD plant, which could be expanded to 25 MGD, be built between Grand Junction and Fruita. The EPA will not participate in funding the construction of facilities designed with a capacity to serve an area for more than a ten year growth period. The 12.5 MGD capacity is expected to be sufficient until 1990. The plant is being designed, however, so that additional treatment units can be added to double the capacity as needed. The site of the new plant is considered to be large enough to accommodate the enlargement of the plant.

The proposed new sewage treatment plant would replace the City's existing plant. Because of the expanded service area, the advisory committee recommended that the system become a joint venture of the City and the County. The governing bodies of the City and County agreed with the concept and considered several alternative methods of joint operation.

The result of the efforts of the City and County to set up a combined operation was an agreement that the County would own the treatment plant, the interceptors, and the collection systems not owned by the City or other districts and that the City would operate and administer the entire system.

Construction of the improvements recommended in the plan will take place in phases. The first phase of the new plant will be the construction of the flow equalization basin which will operate for two years with a capability of treating up to 1 MGD. The interim plant and the River Road Interceptor to deliver sewage to the interim plant are scheduled to be completed at the same time so they can be put into operation immediately upon their completion.

Previously, the City had pledged Sales Tax revenues to the payment of outstanding sewer refunding revenue bonds of the City. Those sales tax revenues will not be available for payment of the Bonds. In order to continue to recover the costs of operation and maintenance of the Joint System, the rates charged for service provided were adjusted to permit per residency charges based on recovery of the costs, and not based on degree of use. This reflects a commitment to make the Joint System self-supporting.



With the adoption of the new rate structure effective January 1, 1980, the City System began the changeover to the self-supporting "enterprise" method of operation which is to be the basis of the Joint System. The Joint System is intended to operate as a self-supporting entity which will provide sewage treatment services on a "wholesale" basis to all of the contracting entities within the 201 Planning Area.

## THE COUNTY

### Generally

Mesa County is located in Western Colorado in the Grand Valley of the Colorado River, 257 highway miles west of Denver. Grand Junction is the county seat of Mesa County and the largest city in Western Colorado. The County is a political subdivision of the State of Colorado, organized and existing under and pursuant to the Constitution and laws of the State of Colorado.

Mesa County is bordered on the west by the State of Utah, on the north by Garfield County, and on the east and south by Pitkin, Gunnison, Delta, and Montrose Counties.

Population centers in the County other than Grand Junction include Gateway, Fruita, Mack, Loma, Clifton, Palisade, Molina, Collbran, Whitewater, Skyway, Glade Park, DeBeque and Cameo. Of those, Clifton is within the Planning Area, but will not be served by the Joint System. (See "Planning Area Population Projections.")

### Principal Officials

The governing body of Mesa County is the Board of County Commissioners. The three members of the Board are elected for staggered four year terms. The following persons, as of the date hereof, are members of the Board:

<u>Name</u>	<u>Title</u>	<u>Term Ends</u>
Rick Enstrom	Commissioner	1983
Michael Kelly	Commissioner	1981
Maxine Albers	Chairman	1981

The County Administrator is Mr. Theodore Ford. Mr. Ford holds a BA degree from the University of Utah (1952), and has been an employee of the County for twelve years, six years each as Budget Officer and as County Administrator. Prior to that time he held various positions in broadcast management.

### Services; Employees; Unions

Services provided by the County include a Sheriff's Department; a Health Department; planning; building inspection; library; social services; road and bridge services; and a museum. County officials are charged by statute with the responsibilities for managing property tax and mortgage foreclosure.

The 450 full time and 25 part time employees of the county are not affiliated with or organized into any union. In accordance with part 9 of article 51 of title 24 of the Colorado Revised Statutes, 1973, as amended, the County participates in the Colorado Official's and Employee's Retirement fund. Employee contributions of 4% are matched by an equal amount by County contributions. Value of the fund as of the date hereof is \$1,947,000.00.

### Principal Facilities

The principal facilities of the County include the County Courthouse Complex, the Health Department Complex, the Sheriff's Office and Jail, museum, library and county garages.

### Capital Improvements

With the exception of the Project to be financed in part with the proceeds of the Bonds, there are no major County capital improvements forecast as of the date hereof.

### Pension Plans

The County provides a retirement plan for officials and employees of the County under the Colorado County Officials and Employees Retirement Association Retirement Plan. The plan is a defined contribution money-purchase plan. Total retirement expense was \$174,562 for 1979, which included funding of prior service costs in the amount of \$13,489.

### Other Authority for County to Issue Securities

In addition to the authority in the Bond Resolution, both the Constitution and statutes of the State of Colorado permit the County to issue general obligation bonds. Any such general obligation bonds must be issued pursuant to a resolution, and, must be authorized at a general or special election at which the question of their issuance is approved by a majority of the registered electors voting thereon. The purposes for which the County may contract general obligation indebtedness include purchasing land; purchasing, constructing, extending, and improving public streets, buildings, facilities, and equipment; and providing mass transportation or airport facilities. The County also may issue revenue bonds for the acquisition, construction, improvement or extension of water or sewerage facilities. The issuance of revenue bonds need not be authorized by the electors.

In addition, the County may issue bonds ("Funding Bonds") for the purpose of exchanging such bonds for outstanding County warrants, or using the proceeds of the sale of Funding Bonds to redeem or purchase warrants not exchanged. Future legislation could expand or restrict the authority for the County to issue additional securities.

General Population

<u>Year</u>	
1960	50,715
1970	54,374
1974*	61,305
1975*	62,500
1976*	65,000
1977**	66,712
1978*	68,900
1979*	68,864

\*estimates

\*\*Special census conducted by the Office of Socio-Economic Impact Coordination.

Assessed Valuation

<u>Year</u>	
1974	\$129,345,530
1975	139,946,380
1976	167,251,920
1977	203,023,230
1978	237,186,760
1979	271,457,120

Building Permits - Residential

<u>Year</u>	<u>Number</u>	<u>Valuation</u>
1974	495	\$11,452,103
1975	695	16,212,593
1976	989	23,171,660
1977	1388	32,513,376
1978	1983	54,300,212
1979	1197	46,657,968

Building Permits - Nonresidential

<u>Year</u>	<u>Number</u>	<u>Valuation</u>
1974	24	\$ 2,476,021
1975	34	4,022,428
1976	144	7,478,416
1977	136	7,480,362
1978(1)	233	10,677,618
1979(1)	1110	26,255,649

(1) Figures include both major construction and permits issued for minor repair. Source: County Planning Department

Trust Deeds\*

<u>Year</u>	<u>Number of Trust Deeds Recorded</u>	<u>Valuation of Trust Deeds Recorded</u>	<u>Average Valuation of Deed</u>	<u>Number of Foreclosures Initiated</u>
1974	2,729	\$ 88,074,225	\$32,273	16
1975	3,375	116,945,422	34,650	22
1976	4,598	192,551,450	41,878	17
1977	5,973	228,615,552	38,275	18
1978	7,003	312,748,404	44,659	33
1979	7,311	363,421,000	49,709	39

\*Sometimes referred to as mortgages.

Major Employers of Mesa County\*

<u>Employer</u>	<u>Approximate Number of Employees</u>	<u>Product or Activity</u>
1. Mesa County School District No. 51	1,350	Education
2. St. Mary's Hospital	720	Hospital Services
3. Mountain Bell	489	Telephone Service
4. Denver & Rio Grand Western Railroad	481	Railroad
5. Colorado State Home and Training School	478	Custodial and Remedial Care
6. Dixon, Inc.	449	Electronic Equipment
7. Mesa County	410	Government
8. City Market, Inc.	400	Retail Grocery and Related Products
9. Bendix Field Engineering	350	Engineering Services
10. City of Grand Junction	323	Government

\*Department of Employment Figures December 1977

Estimated Number of Persons Employed in Mesa County in:\*

<u>Trade</u>	<u>Number of People Employed</u>
Manufacturing	2540
Mining	1660
Trade (Retail and Wholesale)	7630
Government	5390
Transportation, Utilities and Communications	2270
Finance, Insurance and Real Estate	1160
Service	6050
Contract Construction	2960
Agricultural	1960
Self-employed	3690

\*Source: City Chamber of Commerce  
Analysis - June 1979

Unemployment in Mesa County\*

<u>Year</u>	<u>Work Force</u>	<u>Number Unemployed</u>	<u>Percentage</u>
1974	26,850	990	3.7
1975	28,940	1360	4.7
1976	29,690	1370	4.6
1977	32,800	1380	4.2
1978	32,950	1400	4.2
1979	36,110	1353	3.7
1980 (March)	37,352	1076	3.0

\*Colorado Dept. of Employment Division of Research and Analysis

Consumer Income (1978)

Number of Households	25,260
Total Retail Sales	\$245,573,000
Per Household Retail Sales	\$ 9,722
Consumer Spendable Income	\$332,964,000
Consumer Spendable Income Per Household	\$ 13,181

Retail Sales (1978)

Automotive	\$50,699
Food	44,961
Home Furnishings	12,188
General Merchandise	23,067
Service Stations	14,759

Effective Buying Income (1978)

Percent of Families

\$ 0-2999	7.4%
3000-4999	9.1
5000-7999	14.7
8000-9999	11.0
10,000-14,999	24.1
15,000-Over	33.7

Planning Area Population Projections<sup>(1)</sup>

<u>Location</u>	<u>1970</u>	<u>1974</u>	<u>1990</u>	<u>1994</u>	<u>2000</u>
City	21,240	24,090	33,456	35,800	39,310
North	2,540	3,370	9,314	10,800	13,030
Paradise Hills	--	440	2,488	3,000	3,768
Fruitvale	1,940	2,690	5,257	5,900	6,862
Pear Park	1,940	2,450	7,450	8,700	10,575
Orchard Mesa	5,950	6,720	13,106	14,700	17,094
Redlands	4,410	5,930	26,466	31,600	39,301
Clifton (2)	--	3,140	7,108	8,100	9,588
Northwest Area	680	700	940	1,000	1,090
Total Without Clifton	--	46,390	98,477	111,500	131,030
TOTAL	--	49,530	105,585	119,600	140,618

(1) Source: HDR Feasibility Report on Wastewater Treatment/Interceptor Sewer Program

(2) The unincorporated community of Clifton is located within the Planning Area, but is not presently projected to be served by the Joint System. Clifton Sanitation District No. 1 operates a 3-cell non-discharging oxidation pond. Clifton Sanitation District No. 2 operates a 2-cell oxidation pond designed to discharge but not currently doing so, and a 2-cell aerated lagoon with a capacity to discharge into the Colorado River, although not currently doing so.

THE CITY

Generally

Grand Junction is located in the County, at an elevation of 4,586 feet above sea level. Grand Junction is a regional trade center because of its access to major highway, rail and airline systems.

During the 1950s Grand Junction was the center of a uranium exploration and development project sponsored by the U.S. Government. The development of supplies of oil shale, coal, oil,

and gas in the region are projected to have a continuing impact on the Grand Junction economy.

Grand Junction is the home of Mesa College, a four-year state institution of higher education. Mesa College provides a broad curriculum including vocational, adult education and academic courses to over 3,000 students. The Intermountain Bible College, a four-year religious institution with 85 students, is located in Grand Junction. Western Colorado University is a private institution providing programs of study at the graduate and baccalaureate degree levels. Western Colorado School of Business offers accounting and secretarial programs, and American Beauty College and the Academy of Beauty Culture offer cosmetology courses.

The City and County are served by Walker Field, operated jointly by the Walker Field, Colorado, Public Airport Authority a separate entity formed by joint action of the City and County. United Airlines, Continental Airlines, Frontier Airlines, TransWestern Airlines and Key Airlines service area passengers with arrivals and departures daily. Monarch Aviation and Kempton Aviation, Inc., at Walker Field offer airline charter services with a total of thirty-four planes available. Junior Cole & Co., Inc., maintains two charter planes at a private dirt strip airport (2123 River Road). Rocky Mountain Helicopters maintains an available helicopter fleet of twenty aircraft at Walker Field.

St. Mary's, Mesa Memorial, Grand Junction Osteopathic and the U.S. Veterans Administration Hospitals have a combined bed capacity of 500. Grand Junction's medical facilities also include four nursing homes, a public health department, and eighteen pharmacies. Seventy-nine physicians-surgeons, thirty-eight dentists and other specialists are represented.

The City's professional and business community includes eighty-two lawyers, one stock brokerage firm, one commodity brokerage firm, forty certified public accountants, 500 licensed realtors and sixteen architects.

In addition to the City's sixteen parks (totaling 113.3 acres), recreational facilities include one private golf course, two public golf courses (totaling 146 acres), twenty-eight public tennis courts, and four municipal swimming pools.

The City has fourteen financial institutions, including seven commercial banks, four savings and loan associations, and three industrial banks. The combined commercial bank deposits totaled \$301.3 million as of December 31, 1979, an increase of 19.2% over 1978.

The City is served by one local daily newspaper, and one weekly advertising circular. There are four A.M. radio stations broadcasting in the city and three F.M. stations. The City has two television stations and commercial cable television

facilities provide Denver television channels and one movie channel.

### Establishment

The City was founded in 1881, and was incorporated in 1882. Grand Junction became a Home Rule city in 1909 by adopting its own charter pursuant to Article XX of the Constitution of the State of Colorado, and the Council-Manager form of government was adopted by the City in 1922.

### Principal Officials

The seven members of the City Council (including the Council President-Mayor, who is selected by the City Council from its members) are chosen for staggered four year terms in nonpartisan elections. The following persons, as of the date hereof, are members of the City Council:

<u>Name</u>	<u>Title</u>	<u>Principal Occupation</u>	<u>Term Expires (May)</u>
Jane Quimby	Council President-Mayor	Civic Leader	1981*
Robert W. Holmes	Councilman	Insurance Salesman	1981
Dale Hollingsworth	Councilman	Executive Vice-President, Grand Junction Chamber of Commerce	1983
Karl Johnson	Councilman	Retired Chief of Police	1983
Frank Dunn	Councilman	Auto Salvage	1983
William O'Dwyer	Councilman	Electrical Contractor	1981
Louis Brach	Councilman	Retired Meat Processor	1983

\* The Council President-Mayor serves in that position one year, then remains on the Council as a member if incumbant or reelected.

The City Manager is appointed by the City Council and serves at the pleasure of the Council under contract for an indefinite term. The City Manager as of the date hereof is Mr. James Wysocki. Mr. Wysocki was appointed City Manager in May 1976.



Prior to that time he had served in the government of the City for eight years as assistant City Manager and Director and Assistant Director of the City's Parks and Recreation Department. He holds a BA degree (1966) from the University of Wyoming.

Services; Employees; Unions

The City provides law enforcement; fire protection; ambulance service; rescue service; public works, including street maintenance; utility services, including water and sanitation and storm drainage facilities; solid waste disposal services; and parks and public recreational facilities.

The City is served by the Mesa Valley School District No. 51, which is an independent political subdivision of the State of Colorado, rather than a department of the City or of the County.

All full time employees of the City (except Department Heads) are subject to a civil service system pursuant to which positions are graded. Hiring and promotion policies are based on standard tests of merit.

City employees are not organized into or affiliated with any union. The City Manager characterized City-employee relationships as good.

Capital Budget

The City prepares an annual Project Summary describing financing forecasts for major capital expenditures. The following represent amounts forecast for each category of capital expenditure for the next five years, as indicated by the 1979 Project Summary.

<u>Project</u>	<u>Amounts</u>	<u>Source of Funds</u>
Open Space and Parks	\$ 334,500	General Revenue
	232,500	Federal Aid
Public Buildings	1,067,965	General Revenue
	2,135,000	Revenue Bonds(1)
Public Works	821,000	General Revenue
Police and Fire	255,565	General Revenue
	180,000	Federal Aid
Recreation Facilities	1,239,400	General Revenue
	300,000	Federal Aid
	145,000	Special Revenue
Sanitary Sewer <sup>(2)</sup>	323,000	Service Charge
	941,725	Revenue Bonds
	3,224,175	Federal Aid
	50,000	Special Revenue

Wastewater Treatment <sup>(3)</sup>	3,507,900	Revenue Bonds
	10,523,700	Federal Aid
	300,000	Special Revenue
Water System Financing	220,000	Service Charge
Water Supply Financing	177,000	Service Charge
Storm Service Financing	600,000	General Revenue
Street Financing	4,911,509	General Revenue
	3,157,600	General Obligation Bonds
	1,626,000	Special Assessments
Special Projects	326,797	General Revenue
	46,200	Reserve Fund

(1) Amount forecast for Recreation Center

(2) Includes River Road, Paradise Hills, and Independent Avenue interceptors of the Combined System

(3) Includes Persigo Wash Treatment Plant and interim sewage treatment plant of the Combined System

#### Utilities

Electrical power is provided to residents of the City by the Public Service Company of Colorado, and by the Grand Valley Rural Power Line, Inc. Public Service Company also provides City residents with natural gas.

Water is supplied to residents of the City by the City, and by the Ute Water Conservancy District. The source of water is Grand Mesa surface water. The capacity of the City's water treatment plant is 16 MGD, and the City's average consumption is 6.4 MGD. The water treatment plant was constructed in 1969. The Gunnison River Pumping Station was built in 1974 to provide an additional 6 MGD capacity.

Telephone service is provided within the City by Mountain States Telephone and Telegraph Co., and telegraph service by Western Union Telegraph Company.

#### Pension Plans

The City has three contributory pension plans, one covering policemen, one covering firemen, and one covering non-uniformed employees and uniformed employees who choose to participate in more than one plan.

In 1978, actuarial evaluations were made for both the firemen's pension fund and the policemen's pension fund. Based on these studies, the yearly provisions for pension costs for the

policemen's and firemen's pension funds were determined to be \$416,130.00 and \$493,521.00, respectively.

The Statement of General Long Term Debt for the City for the year ending December 31, 1979, indicates that the amounts available for payment for the policemen's and firemen's pension funds were respectively \$377,856 and \$673,333, leaving amounts to be provided of \$3,139,319 and \$3,805,230, respectively.

The City has elected to fund the total amounts over forty years. Therefore, the unfunded amounts will be reduced as the City transfers monies to fund the yearly provisions for pension costs.

The City provides a pension plan for all employees with more than one year of continuous service. Individuals can contribute between three and 7 percent, which the City matches with three percent for participating employees. Approximately eighty percent of the total number of City employees participate in the plan.

General Population

<u>Year</u>	
1960	18,694
1970	20,170
1974*	27,000
1975*	29,000
1976*	32,000
1977**	25,385
1978*	26,000
1979*	26,108

\* estimates

\*\* Special census conducted by the Office of Socio-Economic Impact Coordination. Apparently some of the growth estimates included in the figures for Grand Junction included areas very near the City but outside the City limits. The 1977 Census figure and estimates thereafter are believed to include only persons residing within the City limits.

<u>Year</u>	<u>Bank Deposits(1)</u>	<u>Assessed Valuation</u>
1974	\$117,603,507	\$ 57,618,530
1975	133,019,921	64,537,540
1976	158,991,462	74,540,990
1977	209,162,945	87,550,360
1978	252,614,800	99,236,560
1979	301,316,969	110,368,820

(1) Bank deposit figures are for the seven commercial banks located in the City, as of December 31.

Building Permits - Residential

<u>Year</u>	<u>Number</u>	<u>Valuation</u>
1974	128	\$3,693,185
1975	161	5,400,666
1976	197	8,247,900
1977	263	9,357,794
1978	219	9,413,198
1979	207	11,283,497

Building Permits - Nonresidential

<u>Year</u>	<u>Number</u>	<u>Valuation</u>
1974	65	\$4,552,951
1975	38	2,369,873
1976	117	9,017,700
1977	108	9,015,972
1978(1)	412	8,570,252
1979(1)	688	9,486,914

(1) Figures include both major construction and permits issued for minor repair. Source: County Planning Department

Consumer Income (1978)

Number of Households	10,970
Total Retail Sales	\$138,488,000
Per Household Retail Sales	\$ 12,624
Consumer Spendable Income	\$166,719,000
Consumer Spendable Income Per Household	\$ 15,198

Retail Sales (1978)

Automotive	\$31,451
Food	31,199
Home Furnishings	11,295
General Merchandise	20,937
Service Stations	10,127

THE DISTRICTS

The City treats sewage from four special service districts located within the Planning Area. Each of the Districts is a separate quasi-municipal corporation organized and existing under the laws of the State of Colorado.

Existing agreements between the City and the Districts contain various provisions concerning services to be rendered, fees and charges, provisions for increasing charges and the terms of the respective agreements. In addition, each of the Boards of Directors of the Districts has adopted separate Resolutions

whereby the Districts agree to accept those provisions of certain Joint Resolutions and Ordinances of the City and County which relate to the treatment of sewage (see "THE JOINT SEWER SYSTEM - The Agreement, Joint Ordinances and Resolutions"). Supplemental agreements between the City and each of the Districts provide that the Districts adopt those rates for treatment which are established for services within the City, and that the terms of the original agreements between the City and the Districts are extended for the longer of the period of the original agreement or 30 years.

The Districts have individual responsibilities and liabilities with respect to services provided, and have the authority to issue securities and pledge revenues from the operation of individual sewage systems. The City Utility Department presently collects from customers amounts necessary to provide both City and District charges. The City first retains its charge and then forwards to the District the remaining amounts.

Audited financial statements of the Districts are available upon reasonable request and the payment of reasonable copying charges, from the County.

Fruitvale Water and Sanitation District. Fruitvale Water and Sanitation District ("Fruitvale") was formed in 1959 and serves the residential area east of the City. Fruitvale has no sewage treatment facilities of its own, and the City collects and treats virtually all sewage originating in the Fruitvale area. Fruitvale's collection system has 3,200 connections, although Fruitvale presently has no outstanding general or revenue obligations. As a water and sanitation district, Fruitvale has the authority to provide potable water treatment and supply, but does not do so at this time.

Ridges Metropolitan District. Ridges Metropolitan District ("Ridges") provides sewage collection, water supply, irrigation and recreation services to a developing residential area located southwest of the City. Ridges has no sewage treatment facilities of its own, but discharges to the City System. Ridges was organized in 1977, and presently has 240 sewer connections. Ridges has \$3,500,000 of general obligation debt outstanding in connection with its water and sewer systems and the other services which it provides. The revenues of the various facilities are not at this time used to meet principal or interest requirements on those obligations, which are presently serviced from taxes.

Orchard Mesa Sanitation District. Orchard Mesa Sanitation District ("Orchard Mesa") was formed in 1974 and is located south of the City, in a developing residential area. In 1977, Orchard Mesa issued \$1,085,000 principal amount of sewer revenue bonds, which are secured by a pledge of revenue of the Orchard Mesa sewer system. As of December 31, 1979, there were \$1,050,000 of

these bonds outstanding. Orchard Mesa has no treatment facilities of its own. Wastewater from the 1,450 sewer connections on the Orchard Mesa collection system is treated by the City.

Central Grand Valley Sanitation District. The Central Grand Valley Sanitation District ("Central Grand Valley") was formed in 1971 in an area which was, at that time, primarily agricultural land southeast of the City. Central Grand Valley issued \$1,600,000 of general obligation bonds in 1971, of which less than \$1 million dollars remains outstanding. Principal of and interest on Central Grand Valley bonds are at this time being repaid entirely from ad valorem taxes and revenues of the district are not being applied to debt service. The district serves approximately 2000 connections in what is now a primarily residential area. Central Grand Valley collects sewage and discharges to the City system, and has no sewage treatment facilities.

#### LEGAL MATTERS

##### Bond Counsel

Legal matters incident to the authorization and issuance of the Bonds are subject to the approval of Tallmadge, Tallmadge, Wallace & Hahn, P.C., Denver, Colorado, Bond Counsel whose approving opinion on such matters is expected to state in substance that the Bonds are valid and legally binding special and limited revenue obligations of the County, payable according to their terms solely from the net income and revenues of the Joint System available pursuant to the Agreement and as defined in the Bond Resolution.

##### Underwriters' Counsel

Certain legal matters are subject to approval for the Underwriters by DeMuth, Kemp & Backus, Denver, Colorado, who have assisted the County in the preparation of this Official Statement (but do not assume any responsibility for the Appendices hereto or the financial and statistical data contained herein). The scope of such attorneys' engagement does not include the rendition of any opinion concerning the Agreement or the validity, enforceability or tax-exempt status of the Bonds.

##### No Litigation

There is no litigation pending concerning the validity of the Bonds or the Agreement or the organization of the County, or materially questioning the title of its officers to their respective offices, and the County will provide a no-litigation certificate to the foregoing effect as of and at the time of delivery of the Bonds.

## Disclosure Statement

The County will deliver to the Underwriters at the time of delivery of the Bonds a statement substantially to the effect that, to the best of the knowledge and belief of the authorized signators to such statement, the facts contained in this Official Statement and any supplement or amendment hereto delivered by the County (which shall be deemed an original part thereof for purpose of such statement) were, at the time of award of the Bonds to the Underwriters, and are, as of the date of delivery of the Bonds, true and correct in all material respects and did not, at the date of award of the Bonds, and do not, as of the delivery date of the Bonds, contain any untrue statement of a material fact or omit to state a material fact where necessary to make a statement not misleading in light of the circumstances under which it was made.

## TAX EXEMPTION

In the opinion of Bond Counsel, interest on the Bonds is exempt from taxation by the United States of America and by the State of Colorado under present Federal and Colorado income tax laws.

In addition, Bond Counsel is expected to deliver a supplemental opinion substantially to the effect that the amount of original issue discount in the selling price of the Bonds (i.e., the excess of the principal amount of the Bonds over the price to be paid to the Underwriters by purchasers of the Bonds, but not in excess of the difference between the principal amount of the Bonds and the price paid by the Underwriters) represents interest which is exempt from Federal income taxation, such tax-exempt interest being apportioned among the original purchasers of the Bonds and subsequent holders according to the respective periods during which the Bonds are held. Bond Counsel's supplemental opinion is expected to state that the maximum amount each respective holder is entitled to treat as exempt from Federal income tax is equal to that proportion of the amount of the original issue discount at which the Bonds were issued that the number of days (computed on an actual calendar day basis) the obligations were owned by the holder bears to the total number of days from the date of issuance of the Bonds to the date of maturity of the Bonds.

## RATINGS

As noted on the cover page of this Official Statement, Moody's Investors Service, Inc. has given the Bonds a rating of "A" and Standard & Poor's, Inc. has given the Bonds a rating of "A-". These ratings reflect only the views of the respective rating agencies, and explanations of the significance of such ratings may be obtained from the rating agencies. There is no assurance that these ratings will continue for any period of time or that they will not be revised or withdrawn. Any revision or

withdrawal of such ratings may have an effect on the market price of the Bonds.

#### EXPERTS

The audited financial statements of the City appearing in Appendices I and II hereto are included in reliance upon the authority of Chadwick, Steinkirchner & Davis as experts in the field of accounting and auditing. The Report appearing in Appendix III hereto is included in reliance upon the authority of Henningson, Durham & Richardson, independent consulting engineers, as experts in the field of engineering and municipal sewer systems.

#### UNDERWRITING

The Series 1980A Bonds were purchased from the County at negotiated sale October 29, 1980, by Boettcher & Company (the "Underwriters") for a purchase price of \$6,962,010 plus accrued interest to the date of their delivery to the Underwriters. The Series 1980B Bonds were purchased from the County at negotiated sale on the same date by the Underwriters for a purchase price of \$753,042 plus accrued interest to the date of their delivery to the Underwriters. As noted on the Cover Page hereof, certain Bonds of both Series are reoffered at substantial discounts from their par amounts. In addition, in the Bond Purchase Agreement, the Underwriters have agreed to pay the costs of issuance of the Bonds.

#### MISCELLANEOUS

##### Interest of Certain Parties Named in Official Statement

Because the County intends to pay the fees of Bond Counsel, as well as fees of Counsel for the Underwriters, out of the proceeds of the Bonds, it is possible that, in the event the Bonds are not delivered to the Underwriters, such attorneys' fees may not be paid in full.

##### Additional Information

Additional information concerning the Bonds may be obtained from Boettcher & Company, 828 17th Street, Denver, Colorado.

So far as any statements made in this Official Statement involve matters of opinion or estimates, whether or not expressly stated as such, they are not to be considered as representations of fact.

The summaries of documents, statutes, regulations and charter provisions herein do not purport to be complete and are qualified in their entirety by reference to the original documents or official compilations of such statutes, regulations and charter provisions. Copies of the same are available upon request during



the period of offering of the Bonds from the County or the Underwriters.

The execution of this Official Statement, and its delivery, have been duly authorized by the Board of County Commissioners of Mesa County, Colorado.

/s/

Chairman  
Board of County Commissioners  
Mesa County, Colorado

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APPENDIX I

EXCERPTS FROM  
AUDITED FINANCIAL STATEMENTS

CITY OF GRAND JUNCTION, COLORADO

December 31, 1979

The information contained in this Appendix consists of excerpts from the City's Audit Report for the fiscal year ended December 31, 1979 and is not intended to be a complete statement of the City's financial condition. Reference is made to the complete Annual Audit Report for further information.

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CHADWICK, STEINKIRCHNER, DAVIS & CO.

Certified Public Accountants

April 30, 1980

Members of the City Council  
City of Grand Junction, Colorado

We have examined the financial statements of the funds and account groups listed in the foregoing table of contents of the City of Grand Junction for the year ended December 31, 1979. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We made a similar examination for the prior year.

In our opinion, the financial statements referred to above present fairly the financial position of the funds of the City of Grand Junction as of December 31, 1979, and the results of their operations and changes in financial position for the year then ended, in conformity with generally accepted accounting principles which, except for the changes, with which we concur, in the methods of accounting for encumbrances, interest in special assessment funds, fixed assets, and the Water and Sewer funds, as explained in Note A to the Financial Statements, have been applied on a basis consistent with that of the preceding year.

The accompanying comparisons to budget and other schedules are not necessary for a fair presentation of the financial statements, but are presented as additional analytical data. This information, except for the schedule of insurance coverage, has been subjected to the tests and other auditing procedures applied in the examination of the financial statements mentioned above and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

*Chadwick, Steinkirchner, Davis & Co.*

Leard F. Chadwick, C.P.A.    Joseph D. Steinkirchner, C.P.A.    Danny G. Davis, C.P.A.    Richard D. Genova, C.P.A.  
Suite 401 • Valley Federal Plaza • Grand Junction, Colorado 81501 • 303/245-3000

	Internal Service Funds			Total (Memo- randum Only)
	Data Processing	Equipment	Stores	
<b>ASSETS</b>				
Cash		\$ 863		\$ 863
Investments - Note B		507,000		507,000
Accounts receivable (net of allowance)	\$ 45,468	3,622	\$ 408	49,498
Unbilled accounts receivable				
Due from other funds				
Due from other government units	117,222			117,222
Inventory			357,051	357,051
Restricted assets				
Cash and investments				
Land			46,887	46,887
Plant and system	33,912	48,824	129,301	212,037
Equipment	256,359	2,031,652	47,132	2,335,143
Construction in progress		19,195		19,195
Accumulated depreciation	<u>(24,274)</u>	<u>(888,222)</u>	<u>(68,416)</u>	<u>(980,912)</u>
	<u>\$428,687</u>	<u>\$1,722,934</u>	<u>\$ 512,363</u>	<u>\$2,663,984</u>
<b>LIABILITIES AND FUND EQUITY</b>				
<b>Liabilities</b>				
Accounts payable	\$ 10,000	\$ 22,395	\$ 6,215	\$ 38,610
Leases and contracts payable (current) - Note D	117,222			117,222
Accrued interest payable				
Due to other funds	43,727		267,040	310,767
Customer advance payments				
Leases and contracts payable (non-current) - Note D	117,222			117,222
General obligation bonds payable - Notes F and G				
Revenue bonds payable (net of unamortized discount) - Notes E and F				
	<u>288,171</u>	<u>22,395</u>	<u>273,255</u>	<u>583,821</u>
<b>Fund equity</b>				
Contributed capital	20,138	1,185,997	380,696	1,586,831
Retained earnings (deficits)				
Reserved for bond retirement		20,380		20,380
Reserved for construction	120,378	494,162	(141,588)	472,952
Unreserved	<u>140,516</u>	<u>1,700,539</u>	<u>239,108</u>	<u>2,080,163</u>
	<u>\$428,687</u>	<u>\$1,722,934</u>	<u>\$ 512,363</u>	<u>\$2,663,984</u>

Junction, Colorado

BALANCE SHEET

FUND TYPES

31, 1979

Enterprise Funds							Total
Water	Sewer	Sanitation	Swimming Pools	Lincoln Park Golf Course	Tiara Rado Golf Course	Cemetery	(Memorandum Only)
\$ 914,627	\$ 283	\$ 314	\$ 362	\$ 858	\$ 482	\$ 456	\$ 917,382
285,000	844,000	81,000	37,000	49,000	48,000	16,000	1,360,000
44,254	23,116	38,601				11,073	117,044
78,027	63,568	47,226					188,821
	11,709	37,000			20,762		69,471
	523,635		2,915				526,550
259,720	182,908				129,623		572,251
856,095	124,891			19,370	217,778	4,500	1,222,634
10,083,011	5,098,695		92,123	40,910	163,663	54,926	15,533,328
73,714	8,765	593,573	6,055	7,886	10,127	19,883	720,003
	727,895		18,690				746,585
<u>(2,633,529)</u>	<u>(676,035)</u>	<u>(137,196)</u>	<u>(56,144)</u>	<u>(17,691)</u>	<u>(58,881)</u>	<u>(23,301)</u>	<u>(3,602,777)</u>
<u>\$ 9,960,919</u>	<u>\$6,933,430</u>	<u>\$ 660,518</u>	<u>\$101,001</u>	<u>\$100,333</u>	<u>\$531,554</u>	<u>\$ 83,537</u>	<u>\$18,371,292</u>
\$ 26,880	\$ 42,442	\$ 17		\$ 857	\$ 24	\$ 805	\$ 71,025
		63,236					63,236
40,762	11,470				12,467		64,699
570	4,700						5,270
130,913							130,913
		176,729					176,729
5,350,000							5,350,000
	1,080,000				436,788		1,516,788
<u>5,549,125</u>	<u>1,138,612</u>	<u>239,982</u>	<u>-0-</u>	<u>857</u>	<u>449,279</u>	<u>805</u>	<u>7,378,660</u>
579,251	3,983,112	184,277	\$ 59,684	57,341	27,822	139,443	5,030,930
259,417	179,706				5,000		444,123
	514,506						514,506
3,573,126	1,117,494	236,259	41,317	42,135	49,453	(56,711)	5,003,073
<u>4,411,794</u>	<u>5,794,818</u>	<u>420,536</u>	<u>101,001</u>	<u>99,476</u>	<u>82,275</u>	<u>82,732</u>	<u>10,992,632</u>
<u>\$ 9,960,919</u>	<u>\$6,933,430</u>	<u>\$ 660,518</u>	<u>\$101,001</u>	<u>\$100,333</u>	<u>\$531,554</u>	<u>\$ 83,537</u>	<u>\$18,371,292</u>

## COMBINING STATEMENT OF CHANGES

ALL PROPRIETARY

For the year ended

	Internal Service Funds			Total (Memo- randum Only)
	Data Processing	Equipment	Stores	
Sources of working capital				
From operations				
Net income (loss)	\$ 11,723	\$ 12,829	\$(53,090)	\$ (28,538)
Items not requiring working capital				
Depreciation and amortization	24,660	191,036	6,467	222,163
Disposal of equipment	30,973	31,302	36	62,311
WORKING CAPITAL PROVIDED BY OPERATIONS	<u>67,356</u>	<u>235,167</u>	<u>(46,587)</u>	<u>255,936</u>
Increase in leases and contracts	117,222			117,222
Contributions from others		50,655	34	50,689
Transfer from Persigo Plant project				
Other sources	14,320	34,797		49,117
	<u>198,898</u>	<u>320,619</u>	<u>(46,553)</u>	<u>472,964</u>
Applications of working capital				
Increase in restricted assets				
Additions to plant	25,694	3,135		28,829
Additions to equipment	243,007	339,372	384	582,763
Additions to construction in progress		19,195		19,195
Adjustment of Persigo Plant estimated funding				
Retirement of bonds				
	<u>268,701</u>	<u>361,702</u>	<u>384</u>	<u>630,787</u>
INCREASE (DECREASE) IN WORKING CAPITAL	<u>(69,803)</u>	<u>(41,083)</u>	<u>(46,937)</u>	<u>(157,823)</u>
Working capital at beginning of year	<u>61,544</u>	<u>530,173</u>	<u>131,141</u>	<u>722,858</u>
Working capital (deficit) at end of year	<u>\$ (8,259)</u>	<u>\$489,090</u>	<u>\$ 84,204</u>	<u>\$ 565,035</u>

The accompanying Notes to Financial Statements are an integral part of this statement.



Junction, Colorado

IN FINANCIAL POSITION

FUND TYPES

December 31, 1979

Enterprise Funds							Total (Memo- randum Only)
Water	Sewer	Sanitation	Swimming Pools	Lincoln Park Golf Course	Tiara Rado Golf Course	Cemetery	
\$ 411,515	\$ 99,830	\$ 90,859	\$ (94,840)	\$23,531	\$ 43,572	\$10,572	\$ 585,039
166,098	101,618	50,725	5,216	4,260	16,384	5,086	349,387
1,699	22					36	1,757
<u>579,312</u>	<u>201,470</u>	<u>141,584</u>	<u>(89,624)</u>	<u>27,791</u>	<u>59,956</u>	<u>15,694</u>	<u>936,183</u>
		62,273					62,273
100	1,012,956			192			1,013,248
	574,840						574,840
5,153							5,153
<u>584,565</u>	<u>1,789,266</u>	<u>203,857</u>	<u>(89,624)</u>	<u>27,983</u>	<u>59,956</u>	<u>15,694</u>	<u>2,591,697</u>
197,690	40,242				48,655		286,587
2,337,678	108,376			6,219	25,941	5,743	2,483,957
9,518	2,973	162,813	2,035	192		750	178,281
	398,089						416,779
	188,121						188,121
					5,000		5,000
<u>2,544,886</u>	<u>737,801</u>	<u>162,813</u>	<u>20,725</u>	<u>6,411</u>	<u>79,596</u>	<u>6,493</u>	<u>3,558,725</u>
(1,960,321)	1,051,465	41,044	(110,349)	21,572	(19,640)	9,201	(967,028)
<u>3,214,017</u>	<u>356,234</u>	<u>99,844</u>	<u>150,626</u>	<u>27,429</u>	<u>76,393</u>	<u>17,523</u>	<u>3,942,066</u>
<u>\$ 1,253,696</u>	<u>\$1,407,699</u>	<u>\$140,888</u>	<u>\$ 40,277</u>	<u>\$49,001</u>	<u>\$ 56,753</u>	<u>\$26,724</u>	<u>\$2,975,038</u>

City of Grand Junction, Colorado  
STATEMENT OF CHANGES IN RETAINED EARNINGS

WATER FUND

For the year ended December 31, 1979

	<u>Reserved for Revenue Bond Retirement</u>	<u>Reserved for Construction</u>	<u>Unreserved</u>	<u>Total</u>
Retained earnings at beginning of year	\$ 61,211	\$ 2,031,828	\$ 5,047,965	\$ 7,141,004
Adjustment to record fixed assets at estimated cost - Note A2			(3,719,976)	(3,719,976)
Net income			411,515	411,515
Change in reserve for bond retirement	198,206		(198,206)	
Change in reserve for construction		(2,031,828)	2,031,828	
Retained earnings at end of year	<u>\$259,417</u>	<u>\$ -0-</u>	<u>\$ 3,573,126</u>	<u>\$ 3,832,543</u>

The accompanying Notes to Financial Statements are an integral part of this statement.

City of Grand Junction, Colorado  
STATEMENT OF CHANGES IN RETAINED EARNINGS

SEWER FUND

For the year ended December 31, 1979

	<u>Reserved for Revenue Bond Retirement</u>	<u>Reserved for Construction</u>	<u>Unreserved</u>	<u>Total</u>
Retained earnings at beginning of year	\$140,431		\$1,184,726	\$1,325,157
Adjustments				
Transfer in of Persigo Plant and Interceptors Fund Balance			574,840	574,840
Less reduction of Persigo Plant project estimated funding from \$711,756 to \$523,635			<u>(188,121)</u>	<u>(188,121)</u>
Net adjustments			386,719	386,719
Net income			99,830	99,830
Change in reserve for bond retirement	39,275		(39,275)	
Amount reserved for construction of Persigo Plant		<u>\$514,506</u>	<u>(514,506)</u>	
Retained earnings at end of year	<u>\$179,706</u>	<u>\$514,506</u>	<u>\$1,117,494</u>	<u>\$1,811,706</u>

The accompanying Notes to Financial Statements are an integral part of this statement.

City of Grand Junction, Colorado

COMPARISON TO BUDGET

WATER FUND

For the year ended December 31, 1979

	<u>Budget</u>	<u>Actual</u>	<u>Actual Over (Under) Budget</u>
<b>Revenues</b>			
Service charges	\$ 920,000	\$1,134,311	\$ 214,311
Fines and forfeitures	500	300	(200)
Transfers from other funds	1,183,195	1,138,565	(44,630)
Interest	35,000	214,890	179,890
Rents and leases	5,973	8,845	2,872
Miscellaneous	1,202	4,768	3,566
Sales tax refunds	1	193	192
	<u>\$2,145,871</u>	<u>\$2,501,872</u>	<u>\$ 356,001</u>
<b>Expenditures</b>			
Salaries and wages	\$ 401,895	\$ 430,162	\$ 28,267
Employee benefits	70,949	63,758	(7,191)
Office supplies	1,583	927	(656)
Operating supplies	74,115	65,881	(8,234)
Repairs and maintenance	83,286	82,158	(1,128)
Professional charges	9,000	17,086	8,086
Utilities	195,431	151,105	(44,326)
Equipment rental	60,298	62,586	2,288
Postage and printing	19,505	16,875	(2,630)
Contractual services	95,480	99,187	3,707
Capital outlay	2,960,748	2,357,377	(603,371)
Debt retirement and interest expense	524,357	524,357	-0-
Transfers to other funds	443,440	455,004	11,564
Miscellaneous	7,558	18,083	10,525
	<u>\$4,947,645</u>	<u>\$4,344,546</u>	<u>\$(603,099)</u>

The accompanying Notes to Financial Statements are an integral part of this statement.

City of Grand Junction, Colorado

COMPARISON TO BUDGET

SEWER FUND

For the year ended December 31, 1979

	<u>Budget</u>	<u>Actual</u>	<u>Actual Over (Under) Budget</u>
<b>Revenues</b>			
Service charges	\$ 564,051	\$ 608,354	\$ 44,303
Sewer tap fees		570,924	570,924
Transfers from other funds		15,290	15,290
Federal and state grants	13,989,375	442,032	(13,547,343)
Interest earnings		9,425	9,425
Rents and leases		1,800	1,800
Sale of revenue bonds	4,663,125		(4,663,125)
Miscellaneous		1,031	1,031
Tax collections	1,182,641	1,360,489	177,848
	<u>\$20,399,192</u>	<u>\$3,009,345</u>	<u>\$(17,389,847)</u>
<b>Expenditures</b>			
Salaries and wages	\$ 226,299	\$ 202,095	\$ (24,204)
Employee benefits	33,758	31,566	(2,192)
Office supplies	150	103	(47)
Operating supplies	35,180	37,953	2,773
Repairs and maintenance	19,782	16,342	(3,440)
Utilities	83,423	58,431	(24,992)
Equipment rental	36,807	38,504	1,697
Postage and printing	170	239	69
Contractual services	12,040	10,883	(1,157)
Capital outlay	18,785,501	532,424	(18,253,077)
Debt retirement and interest expense	106,802	106,802	-0-
Transfers to other funds	1,431,552	1,319,313	(112,239)
Miscellaneous	1,551	8,909	7,358
	<u>\$20,773,015</u>	<u>\$2,363,564</u>	<u>\$(18,409,451)</u>

The accompanying Notes to Financial Statements are an integral part of this statement.

December 31, 1979

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NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

1. Basis of Accounting

The General Fund, Special Revenue Funds, and the Debt Service Fund use the modified accrual basis of accounting, whereby revenue is recorded as received in cash, except for, (a) revenue which is both measurable and available, and (b) material revenue that has not been received at the normal time of receipt. Expenditures are recorded on the accrual basis except that prepaid expense and accrued interest on long-term debt is not recorded. The Enterprise, Internal Service, Capital Projects, Special Assessment, and Trust and Agency Funds use the accrual basis.

2. Change in Accounting Policies

In accordance with generally accepted accounting principles, Colorado Local Government Accounting, Auditing, and Reporting Laws as set forth in the Uniform Classification of Accounts for Water and Sewage Treatment Systems effective as of the calendar year 1978, and governmental accounting and financial reporting principles adopted by the National Council of Governmental Accounting in 1979, the City has changed accounting policies relating to encumbrances, fixed assets, interest in special assessment funds, and the Water and Sewer Funds.

a. Encumbrances - Previously, the General, Special Revenue, Capital Projects, and Special Assessment Funds utilized the encumbrance method of accounting wherein encumbrances were recognized as expenditures in the year bona fide commitments for purchase of materials or services were entered into by the City. Under the new principle, expenditures are recorded in the year when goods or services are actually received. Accordingly, expenditures reflected in these financial statements do not include encumbrances as they did in previous years.

b. Fixed assets - The City does not have historical cost records for certain assets acquired prior to 1969 and in 1970 recorded estimated fair market values for these assets. In 1979, in order to comply with generally accepted accounting principles, City personnel determined and recorded the estimated cost of these assets. The differences from previously recorded estimated value were adjusted to fund balance or retained earnings as appropriate.

City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

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NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

2. Change in Accounting Policies - Continued

c. Special assessment fund accrued interest - In prior years the amount shown as assessments receivable in the financial statements included an element of accrued interest receivable. This accrued interest was set up when the assessment was made and represented the finance charges to be made if a person elected the ten payment installment plan. Since many people pay their assessments prior to the full ten year period, a portion of the finance charge is never collected and is written off. Therefore, the fund balances of the various special assessment funds were overstated due to the deferred interest income included therein. For 1979, the City has deleted the unearned interest portion of assessments receivable, eliminating the overstatement in the various fund balances.

d. Water and Sewer Funds -

(1) Fund separation - Previously, water and sewer operations and financial statements were combined. As of January 1, 1979 the City has separated assets, liabilities and equity attributable to water operations from the assets, liabilities, and equity derived from sewer operations to produce two separate funds, the Water Fund and the Sewer Fund. The 1979 financial statements reflect financial position, changes in financial position and results of operations for each fund separately.

(2) Tap revenue - In accordance with Colorado Local Government Accounting, Auditing and Reporting Laws as set forth in the Uniform Classification of Accounts for Water and Sewage Treatment Systems effective as of the calendar year 1978, system development charges (tap fees) are recorded as contributed capital and not as operating revenue as was done, in part, in the past. If the 1978 financial statements were restated to reflect this change, the effect would be to reduce net income by \$283,400.

3. Reporting Procedures

The accompanying financial statements include all funds of the City of Grand Junction except for the Policemen's and Firemen's Pension Funds, which are included in a separate report.

The Downtown Development Authority and Park Improvement Funds are not City funds and are controlled by separate governing bodies. However, the City acts as custodian of their monies and performs record keeping functions for them. Financial statements for these entities are included herein and are covered by the auditors' report on page 1.

City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

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NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

4. Fixed Assets and Depreciation

The fixed asset accounts are presented at cost, or estimated cost where historical cost is not available. Non-enterprise capital expenditures for roads, bridges, curbs and gutters, streets and sidewalks, drainage systems, and lighting systems are not capitalized in the General Fixed Asset Group of Accounts. Equipment and facilities recorded in the General Fixed Asset Group of Accounts are not depreciated. Equipment and facilities recorded in the Enterprise and Internal Service Funds are depreciated using the straight-line method over the estimated useful lives of the assets.

5. Unbilled Accounts Receivable

The City follows cyclical billing procedures for Water, Sewer, and Sanitation billings. As of December 31, 1979, Water, Sewer, and Sanitation services in the amounts of \$78,027, \$63,568, and \$47,226, respectively, had been provided but not yet billed.

6. Inventory

The inventory of the Stores Fund is stated at cost using the moving average method. The cost of the inventory is charged to expense as the goods are consumed.

7. Intragovernmental Charges

Charges for services rendered by the Internal Service Funds to other funds are based upon the estimated cost of the services provided.

8. Inter-fund Accounts

Inter-fund receivables and payables are not eliminated and are recorded in the financial statements as due to or due from the appropriate fund at the actual amount.



City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

NOTE B - INVESTMENTS

Various funds, as listed below, participate in an investment arrangement whereby resources are combined and used to purchase investments in common. Investment principal is allocated to the various funds based upon their average monthly cash balances. Other funds not participating in the common investment arrangement purchase and account for investments in their own funds. At December 31, 1979, the total investments for all funds were as follows:

Fund	COST		Total at Cost
	Certificates Of Deposit	Treasury Bills	
General	\$3,890,000	\$278,108	\$ 4,168,108
Land	64,000		64,000
Revenue Sharing	99,000		99,000
Water	285,000		285,000
Sewer	964,000		964,000
Sanitation	81,000		81,000
Swimming Pools	37,000		37,000
Cemetery and Perpetual Care	406,000		406,000
Tiara Rado Golf Course	173,000		173,000
Lincoln Park Golf Course	49,000		49,000
Equipment	507,000		507,000
Street Improvement District 79	370,000		370,000
	<u>\$6,925,000</u>	<u>\$278,108</u>	<u>7,203,108</u>

Refunded Water and Sewer Bonds Escrow Funds

United States Treasury Obligations	5,979,540
GNMA Participation Certificate	177,864
	<u>6,157,404</u>
	<u>\$13,360,512</u>

The certificates of deposit are scheduled to mature continually throughout the year.

The estimated market value of the total investments is \$13,293,003.

December 31, 1979

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NOTE C - LEASE AGREEMENTS AND LONG-TERM DEBT

Lease Agreement with Grand Junction, Colorado, Parking Authority

On July 1, 1974, the City entered into a lease agreement (with option to purchase) with the Parking Authority, for the use of off-street parking facilities owned by the Authority. The lease expires each December 31, and is renewable until December 31, 1989. The lease payments consist of a \$9,200 monthly rental, and an additional rental amount equal to the necessary expenses of the Authority, not to exceed \$6,000 per year.

On March 1, 1976, the City entered into another lease agreement (with option to purchase) with the Parking Authority for the lease of lots 3, 4, 5, and 6 in Block 102 in the City of Grand Junction owned by the Parking Authority. The lease expires each December 31, and is renewable until December 31, 1987. The lease payments consist of a \$1,200 monthly rental and an additional rental amount equal to the necessary expenses of the Parking Authority, not to exceed \$1,000 per year.

On May 23, 1979, the City entered into a third lease agreement (with option to purchase) with the Parking Authority for the lease of lots 26, 27, 28, and 29 in Block 120 in the City of Grand Junction owned by the Parking Authority. The lease expires each December 1, and is renewable until June 23, 1984. The lease payments consist of a \$1,614 monthly rental and an additional rental amount equal to the necessary expenses of the Parking Authority, not to exceed \$1,000 per year.

Receipts from parking meters and parking lot operations, as well as any other legally available municipal income, is used to meet the rental obligations.

At any time before the respective lease agreements expire, the City has the option to purchase the facilities owned by the Parking Authority. The option price is the amount necessary to redeem the outstanding bonds of the Authority, and/or pay the remaining principal and interest due on the note payable of the Parking Authority, plus all unpaid costs of the Authority relating to the property, as well as any and all other closing costs.

Upon expiration of the maximum term of these leases, the Parking Authority has agreed to transfer all of the property included under these leases, to the City of Grand Junction without additional consideration being paid, provided the City has paid all of the costs, obligations, and expenses of the Parking Authority relating to the leased property, as well as the costs of conveying the property to the City.

City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

NOTE C - LEASE AGREEMENTS AND LONG-TERM DEBT - Continued

Special Improvement and Capital Projects

As of December 31, 1979, the City had various contracts outstanding on Special Improvement and Capital Projects. The amounts still owing on contracts at December 31, 1979 are shown as reserved for construction contracts in the Capital Project and Special Assessment Funds.

General Obligation Municipal Community Center Bonds-Series March 1, 1975

On March 1, 1975, the City of Grand Junction issued \$600,000 of general obligation bonds to help finance the construction of a municipal community center. The issuance of the bonds was authorized at the regular election of the City on April 3, 1973. The bonds are dated March 1, 1975, and were issued in denominations of \$5,000 with interest of 5.75% - 7% payable March 1 and September 1. The bonds mature, in varying amounts, starting March 1, 1977, and continuing until March 1, 1988. The City is authorized to levy an annual tax on the taxable property within the City sufficient to pay the interest and principal of the bonds. The outstanding principal balance as of December 31, 1979 was \$490,000.

Golf Course Revenue Bonds-Series March 1, 1975

On March 1, 1975, the City of Grand Junction issued \$450,000 of revenue bonds to finance the acquisition of the Tiara Rado Golf Course. The bonds are dated March 1, 1975, and were issued in denominations of \$5,000 each with interest of 8 1/2% payable March 1 and September 1. The bonds mature in varying amounts on March 1, 1978, and each year thereafter until March 1, 1989. The principal and interest on these bonds is to be paid from the revenue derived from the operation of the golf course. The reserve requirements of the bond indenture require that beginning February 1, 1979, and each February 1 thereafter, annual payments of at least \$5,000 shall be made to the reserve account until \$35,000 has been accumulated. The 1979 reserve requirements have been met. The outstanding principal balance as of December 31, 1979 was \$440,000.

NOTE D - LEASES AND CONTRACTS PAYABLE

On November 9, 1977, the City entered into a lease-purchase agreement with Jinco Leasing Corp. for the purchase of new sanitation trucks. One truck was purchased in 1977 for \$51,000 and four additional units were purchased in 1978 for \$184,972. During 1979, \$60,959 was paid toward the purchase of these vehicles. As of December 31, 1979, the total lease payable was \$126,256 which will be paid over the next five years in quarterly payments of \$12,290.

City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

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NOTE D - LEASES AND CONTRACTS PAYABLE - Continued

On December 1, 1979 the City entered into a lease-purchase agreement with the United Bank of Denver for the purchase of a Crane Carrier and a Load-All EDO 2100 for \$118,699 of which \$9,265 was paid toward the purchase in 1979. As of December 31, 1979, the total lease payable was \$113,709 which will be paid over the next five years in quarterly payments of \$7,078. The total cost of the equipment and the related liability as a result of these lease agreements are recorded in these financial statements.

NOTE E - JOINT SEWER AND WATER REFUNDING REVENUE BONDS - SERIES 1976

On September 22, 1976, the City Council of the City of Grand Junction adopted Ordinance 1627 which authorized the refunding of the 1968 Series A and 1969 Series B Joint Water and Sewer Improvement Revenue Bonds. The refunding was accomplished by issuing Joint Sewer and Water Refunding Revenue Bonds - Series 1976, in the principal amount of \$3,295,000, and placing the proceeds of this bond issue, together with \$406,375 of available funds of the Water and Sewer Fund, in an escrow account at the First National Bank in Grand Junction. These monies, together with future interest earnings, are calculated to be sufficient to redeem interest coupons and bonds of the 1968 Series A, and 1969 Series B Revenue Bonds as they mature. The First National Bank in Grand Junction has agreed to invest the escrow funds and redeem bonds and coupons of the 1968 and 1969 Issues according to their original terms. If for any reason the funds in the Refunding Escrow account become insufficient to meet such payments, the City will be required to deposit such additional funds as may be required.

The Refunded 1968 Series A and 1969 Series B Joint Water and Sewer Improvement Revenue Bonds, together with the assets of the refunding escrow account are presented in the financial statements of the Trust and Agency Funds.

Joint Sewer and Water Refunding Bonds, Series 1976, dated September 1, 1976, were issued in the principal amount of \$3,295,000. The refunding bonds are in denominations of \$5,000 with interest of 6.0% - 6.3% payable April 1 and October 1. The bonds mature in varying amounts, starting April 1, 1977, and continuing until October 1, 1994. The outstanding principal balance as of December 31, 1979 was \$3,105,000. The bonds are secured by a lien on the net operating revenue derived from the operations of the Water and Sewer Funds.

The Joint Sewer and Water Refunding Bonds, Series 1976, were refunded in May of 1978 as discussed in Note F. They are presented as in the financial statements of the Trust and Agency Funds.

City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

NOTE F - SEWER REFUNDING REVENUE BONDS, SERIES 1978 A AND GENERAL OBLIGATION WATER REFUNDING BONDS, SERIES 1978 B

On May 11, 1978, the City Council of the City of Grand Junction adopted Ordinance 1737 which authorized the refunding of the Joint Sewer and Water Refunding Revenue Bonds, Series 1976. The refunding was accomplished by issuing Sewer Refunding Revenue Bonds, Series 1978 A and General Obligation Water Refunding Bonds, Series 1978 B and placing the proceeds of these issues in an escrow account at First National Bank in Grand Junction. The proceeds were used to purchase securities which together with interest earnings are calculated to be sufficient to redeem interest coupons and bonds of the Refunding Revenue Series Bonds, Series 1976 as they mature. The First National Bank in Grand Junction has agreed to redeem the Series 1976 bonds and coupons according to their original terms. If for any reason the funds in this Refunding Escrow account become insufficient to meet such payments, the City will be required to deposit such additional funds as may be necessary.

The Refunded Joint Sewer and Water Refunding Bonds, Series 1976, together with the assets of its refunding escrow account are presented as Trust funds in the financial statements.

The Sewer Refunding Revenue Bonds, Series 1978 A in the principal amount of \$1,080,000 and the General Obligation Water Refunding Bonds, Series 1978 B in the principal amount of \$2,145,000 are dated May 1, 1978. The bonds are issued in denominations of \$5,000 with interest of 6.05% to 6.50% payable on May 15 and November 15. The bonds mature in varying amounts starting May 15, 1991 until May 15, 2005. The Sewer Revenue Bonds are secured by the net operating revenue derived from the sewer system. Ordinance 1737 provides for the levy and collection of an annual tax on all taxable property of the City to pay interest and principal of the General Obligation Water Refunding Bonds as due.

Reserve requirements pertaining to these issues, as set forth in the bond indentures, were complied with as of December 31, 1979.

NOTE G - GENERAL OBLIGATION WATER BONDS, SERIES 1978 C

On May 11, 1978 the City Council of the City of Grand Junction adopted Ordinance 1737 which authorized the issuance of General Obligation Water Bonds, Series 1978 C, dated May 1, 1978 in the amount of \$3,205,000. The bonds have been issued for the purpose of providing funds for the enlargement, extension and betterment of the waterworks system of the City.

The bonds are in denominations of \$5,000 with interest of 6.05% - 6.25% payable on May 15 and November 15. The bonds mature in varying amounts starting May 15, 1991 until May 15, 2005. Ordinance 1737 provides for the levy and collection of an annual tax on all taxable property of the City to pay interest and principal of the bonds as it becomes due.

City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

NOTE H - SPECIAL ASSESSMENT DISTRICT BONDS

Special Assessment District Bonds have been issued in negotiable coupon form and are callable upon 30 days notice. The bonds mature, generally, ten years from date of original issue, and are supported by special assessments against property located within the bounds of the respective districts. In addition, the City is authorized to levy an annual tax of 1 mill on all taxable property within the City to assist in meeting the debt service requirements of the several issues. Bonds and interest coupons are payable at the office of the City Treasurer.

Additional information concerning the Special Assessment District Bonds is as follows:

STREET AND SEWER DISTRICTS	Original	Original	Interest Rate	Balance at December 31, 1979	Payment Terms	
	Issue Date	Issue Amount			Principal Due	Interest Due
#79	11/1/79	\$430,000	6.75-8.00%	\$430,000	5/1/89	5/1&11/1
#78	10/1/78	254,000	4.75-5.60	254,000	10/1/88	4/1&10/1
#77	8/1/77	150,000	4.25-5.38	79,000	8/1/87	2/1&8/1
#76	10/1/76	138,000	8.00-8.50	88,000	10/1/86	4/1&10/1
#75	3/1/76	95,000	7.00-8.00	54,000	3/1/86	3/1&9/1
#74	9/1/74	174,000	6.75-8.00	56,000	9/1/84	3/1&9/1
#72	8/1/72	130,000	3.25-5.00	23,000	8/1/82	2/1&8/1
#34	5/1/77	41,000	4.00-5.40	31,000	5/1/87	5/1&11/1
#33	9/1/76	520,000	6.10-8.10	313,000	9/1/86	3/1&9/1
#32	12/1/74	85,000	7.00-8.00	12,000	12/1/84	6/1&12/1
#31	12/1/74	420,000	6.75-8.00	158,000	12/1/84	6/1&12/1
#30	9/1/74	247,000	7.00-8.00	113,000	9/1/84	3/1&9/1
#28	6/1/71	232,000	4.37-5.25	46,000	6/1/81	6/1&12/1

NOTE I - SPECIAL ASSESSMENTS RECEIVABLE

The City Council of Grand Junction has passed ordinances creating special improvement districts, and has assessed a portion of the cost of the improvement projects to the properties specifically benefited thereby. The ordinances provide that assessments are payable either in full, usually within thirty days from date of assessment, or in ten equal annual installments plus interest on the unpaid balance. The installment payment are payable to the Mesa County, Colorado Treasurer in the same manner as the general ad valorem taxes. The funds provided by the annual installments are to be used for payment of bonds, bond interest, and County Treasurer's fees. Any funds remaining shall be applied against construction costs incurred by the City.

City of Grand Junction, Colorado

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 1979

NOTE J - ESTIMATED AMOUNTS TO BE PROVIDED BY ASSESSMENT

Owners of property in the Special Assessment Street Improvement District No. 79 had not been assessed as of December 31, 1979. The amount to be provided by assessment for this district, \$404,582, is based upon the engineers' estimate of assessable costs. This amount is shown as revenue from special assessments.

NOTE K - PENSION FUNDS

The City of Grand Junction has separate pension plans covering its policemen and firemen. In 1978, actuarial valuations were made for both of these pension funds and, based upon these studies, the yearly provisions for pension costs for the policemen's pension fund and the firemen's pension fund were determined to be \$416,130 and \$493,521, respectively. The actual amounts provided in 1979 were \$235,524 and \$298,909 respectively.

The actuarial studies disclosed that as of January 1, 1979, the unfunded prior service cost for the policemen's and the firemen's pension funds were respectively \$3,517,275 and \$4,478,563. These amounts are not reflected in these financial statements. The Policemen's and Firemen's Pension Funds' financial statements are presented in a separate report.

NOTE L - RETIREMENT PLAN

The City provides a pension plan for all employees with over one year continuous service. The plan is a defined contribution money purchase retirement plan. The City contributed \$84,002 to this plan during 1979.

NOTE M - VALLEYWIDE SEWER PROJECT

The City of Grand Junction and Mesa County have agreed to construct a sewer collection and treatment facility to serve the needs of the metropolitan area in the Grand Valley. Preliminary design was commenced in 1977 and the final design work is now in process. The project has been approved by the Environmental Protection Agency (EPA) for 75% funding from the EPA, and Mesa County 25%. Mesa County's share will be raised primarily through the sale of revenue bonds to be repaid from user fees. The City will operate and maintain the plant with operating costs to be reimbursed through user fees. Expenditures from grant funds received to date are included in the construction in progress account in the Sewer Fund of the City.

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APPENDIX II

EXCERPTS FROM  
AUDITED FINANCIAL STATEMENTS

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

The information contained in this Appendix consists of excerpts from the City's Audit Report for the fiscal year ended December 31, 1978 and is not intended to be a complete statement of the City's financial condition. Reference is made to the complete Annual Audit Report for further information.

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CHADWICK, STEINKIRCHNER, DAVIS & CO.

Certified Public Accountants

April 20, 1979

Members of the City Council  
City of Grand Junction, Colorado

We have examined the financial statements of the funds and account groups listed in the foregoing table of contents of the City of Grand Junction for the year ended December 31, 1978. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We made a similar examination for the prior year.

As described in Note 3 to the financial statements, historical cost records for certain property, plant, and equipment items acquired prior to 1969 are not available and the City has recorded these assets at estimated fair market value as of the year 1969 in the following funds:

Enterprise Funds:  
Water and Sewer  
Sanitation  
Swimming Pools  
Cemetery  
Intragovernmental Service Funds:  
Stores  
General Fixed Assets Group of Accounts


The use of estimated value instead of cost is a departure from generally accepted accounting principles. The effect upon the financial statements of these funds cannot be reasonably determined.

As described in Note 10 to the financial statements, the City has included unearned interest in the special assessments receivable in the following Special Assessment Funds:

Sewer Districts Special Assessment Funds:  
#25 through #34  
Street Improvement Districts Special  
Assessment Funds:  
#68 through #77

Jerald F. Chadwick, C.P.A. Joseph D. Steinkirchner, C.P.A. Danny G. Davis, C.P.A. Richard D. Genova, C.P.A.  
Suite 401 • Valley Federal Plaza • Grand Junction, Colorado 81501 • 303/245-3000

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The inclusion of unearned interest in the accounts is a departure from generally accepted accounting principles. The effect of this practice upon the financial statements of these funds is to overstate the assessments receivable and fund balance accounts. The amount of overstatement cannot be reasonably determined.

In our opinion, except for the effects on the financial statements of the funds referred to in the preceding paragraphs relating to estimated value of property, plant, and equipment, and unearned interest on assessments receivable, the financial statements listed in the table of contents present fairly the financial position at December 31, 1978, and the results of operations of such funds for the year then ended, in conformity with generally accepted accounting principles which have been applied on a basis consistent with that of the preceding year.

The accompanying supplementary information is not necessary for a fair presentation of the financial statements, but is presented as additional analytical data. This information, except for the schedule of insurance coverage, has been subjected to the tests and other auditing procedures applied in the examination of the financial statements mentioned above and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

*Chadwick, Steinkirchner, Davis & Co*

## BALANCE SHEET -

CITY OF GRAND

December

<u>ASSETS</u>	
CURRENT ASSETS	
Cash	\$ 671,812
Accounts receivable	67,026
Unbilled accounts receivable	80,384
Due from other funds	14,173
Investments - Note 2	2,873,591
TOTAL CURRENT ASSETS	<u>3,706,986</u>
RESTRICTED ASSETS - Note 7	
Cash	3,055
Investments - Note 2	201,642
TOTAL RESTRICTED ASSETS	<u>204,697</u>
PROPERTY, PLANT, AND EQUIPMENT - Note 3	
Land and water rights	979,981
Land improvements	1,265
Plant, distribution systems and improvements	22,613,477
Equipment	71,451
Construction in progress	1,755,001
	<u>25,421,175</u>
Less accumulated depreciation	10,624,894
TOTAL PROPERTY, PLANT, AND EQUIPMENT	<u>14,796,281</u>
TOTAL ASSETS	<u>\$ 18,707,964</u>

Note - The accompanying Notes to Financial Statements are an integral part of this statement.

WATER AND SEWER FUND

JUNCTION, COLORADO

31, 1978

LIABILITIES, CONTRIBUTIONS, AND RETAINED EARNINGS

CURRENT LIABILITIES

Accounts payable	\$ 15,919
Due to other funds	69,033
Accrued bond interest payable	51,783
TOTAL CURRENT LIABILITIES	<u>136,735</u>

OTHER LIABILITIES

Customer advance payments	125,760
Bonds payable - Notes 7 and 8	6,430,000
TOTAL OTHER LIABILITIES	<u>6,555,760</u>

TOTAL LIABILITIES 6,692,495

CONTRIBUTED CAPITAL

Mesa County - Note 14	59,855
Others (Since 1970)	3,489,453
TOTAL CONTRIBUTED CAPITAL	<u>3,549,308</u>

RETAINED EARNINGS

Reserved for revenue bond retirement - Note 7	201,642
Reserved for construction - Note 4	2,031,828
Unreserved	6,232,691
TOTAL RETAINED EARNINGS	<u>8,466,161</u>

TOTAL LIABILITIES, CONTRIBUTIONS,  
AND RETAINED EARNINGS \$18,707,964

STATEMENT OF INCOME AND RETAINED EARNINGS

WATER AND SEWER FUND

CITY OF GRAND JUNCTION, COLORADO

For the year ended December 31, 1978

OPERATING INCOME		
Service charges		\$1,856,807
Fines and forfeitures		428
	TOTAL OPERATING INCOME	<u>1,857,235</u>
OPERATING EXPENSES		
Salaries and wages		564,153
Employee benefits		90,267
Operating and office supplies		90,740
Repairs and maintenance - general		109,318
Professional charges		5,762
Utilities		180,870
Equipment rental		114,268
Postage and printing		16,537
Contractual services		83,851
Transfer to General Fund - services		148,802
Repairs to plant and distribution system		93,931
Miscellaneous		15,991
	TOTAL OPERATING EXPENSES	<u>1,514,490</u>
	INCOME PROVIDED BY OPERATIONS BEFORE DEPRECIATION	342,745
DEPRECIATION		506,195
	LOSS FROM OPERATIONS	<u>163,450</u>
OTHER INCOME		
Sales and use taxes		1,121,555
Transfers from:		
Sanitation Fund		21,990
Other funds		5,694
Anti-Recession Fiscal Assistance Fund		3,000
Interest earnings		183,884
Rents and leases		8,890
Miscellaneous		45,880
Gain on sale of land		39,840
	TOTAL OTHER INCOME	<u>1,430,733</u>
OTHER EXPENSES		
Interest on bonds		318,356
Transfer of equipment		769
Transfer to General Fund - sales tax		596,243
Transfer to Sanitation Fund		106,107
	TOTAL OTHER EXPENSES	<u>1,021,475</u>
	INCOME BEFORE EXTRAORDINARY ITEM	245,808
EXTRAORDINARY GAIN ON REFUNDING OF BONDS - Note 7		<u>31,369</u>
	NET INCOME	277,177



STATEMENT OF INCOME AND RETAINED EARNINGS - (Continued)

WATER AND SEWER FUND

CITY OF GRAND JUNCTION, COLORADO

For the year ended December 31, 1978

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	NET INCOME (FORWARD)	\$ 277,177
RETAINED EARNINGS - JANUARY 1, 1978		7,985,636
ADD:		
Change in reserve for bond retirement		13,094
Other		585
DEDUCT:		
Transfer to Equipment Fund		11,973
Amount reserved for construction contracts		<u>2,031,828</u>
RETAINED EARNINGS - DECEMBER 31, 1978		<u>\$6,232,691</u>

Note - The accompanying Notes to Financial Statements are an integral part of this statement.

## STATEMENT OF CHANGES IN FINANCIAL POSITION

## WATER AND SEWER FUND

CITY OF GRAND JUNCTION, COLORADO

For the year ended December 31, 1978

## FINANCIAL RESOURCES PROVIDED BY:

## Operations:

Net income before extraordinary item	\$ 245,808
Add book value of equipment transferred	769
Add depreciation expense not requiring current outlay of funds	506,195

RESOURCES PROVIDED FROM OPERATIONS 752,772

Proceeds from sale of land	12,680
Customer deposits	15,498
Decrease in restricted assets	10,039
Contributions from others	378,627
Sale of bonds - Notes 7 and 8	6,430,000
Extraordinary gain on bond refunding - Note 7	31,369

TOTAL RESOURCES PROVIDED 7,630,985

## FINANCIAL RESOURCES USED FOR:

Refunding of long-term portion of bonds payable - Notes 6 and 7	3,185,000
Transfers to other funds	99,337
Additions to equipment	6,592

Additions to plant, distribution systems, and improvements	1,816,509
---	-----------

TOTAL RESOURCES USED 5,107,438INCREASE IN WORKING CAPITAL \$2,523,547

## INCREASE (DECREASE) IN CURRENT ASSETS AND LIABILITIES

## Current assets

Cash	\$ 652,477
Accounts receivable	6,385
Unbilled accounts receivable	17,160
Due from other funds	(82,161)
Investments	1,846,269

INCREASE IN CURRENT ASSETS 2,440,130

## Current liabilities

Accounts payable	(29,907)
Accrued payroll	(13,458)
Due to other funds	24,751
Accrued interest payable on bonds	197
Current portion of bonds payable	(65,000)

(DECREASE) IN CURRENT LIABILITIES (83,417)INCREASE IN WORKING CAPITAL \$2,523,547

Note - The accompanying Notes to Financial Statements are an integral part of this statement.

COMPARISONS TO BUDGET

WATER AND SEWER FUND

CITY OF GRAND JUNCTION, COLORADO

For the year ended December 31, 1978

	<u>Budget</u>	<u>Actual</u>	Actual Over (Under) <u>Budget</u>
<b>REVENUE</b>			
Service charges	\$1,404,498	\$1,856,807	\$ 452,309
Fines and forfeitures	500	428	(72)
Transfers from other funds	20,750	27,684	6,934
Federal grants	6,600	3,000	(3,600)
Interest earnings	35,000	183,884	148,884
Rents and leases	8,813	8,890	77
Sale of revenue bonds	3,500,000	3,200,270	(299,730)
Miscellaneous	2,202	45,880	43,678
Tax collections	977,605	1,121,555	143,950
	<u>\$5,955,968</u>	<u>\$6,448,398</u>	<u>\$ 492,430</u>
<b>EXPENDITURES AND ENCUMBRANCES</b>			
Salaries and wages	\$ 599,549	\$ 564,153	\$ (35,396)
Employee benefits	93,788	90,267	(3,521)
Office supplies	1,397	1,667	270
Operating supplies	146,330	89,073	(57,257)
Repairs and maintenance	98,706	109,318	10,612
Professional charges	11,000	5,762	(5,238)
Utilities	166,272	180,870	14,598
Equipment rental	115,647	114,268	(1,379)
Postage and printing	16,608	16,537	(71)
Contractual services	95,949	83,851	(12,098)
Capital expenditures	4,041,580	1,441,646	(2,599,934)
Debt retirement and interest expense	263,630	328,356	64,726
Transfers to other funds	851,700	851,152	(548)
Miscellaneous	7,912	15,991	8,079
	<u>\$6,510,068</u>	<u>\$3,892,911</u>	<u>\$(2,617,157)</u>

Note - The accompanying Notes to Financial Statements are an integral part of this statement.

NOTES TO FINANCIAL STATEMENTS

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

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Note 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The General Fund, Special Revenue Funds, and the Debt Service Fund use the modified accrual basis of accounting, whereby revenue is recorded as received in cash except for (a) revenue which is both measurable and available, and (b) material revenue that has not been received at the normal time of receipt. Expenditures are recorded on the accrual basis except that prepaid expense and accrued interest on long-term debt is not recorded. The Enterprise, Intragovernmental Service, Capital Project, Special Assessments, and Trust and Agency Funds use the accrual basis.

As a further modification of the accrual basis, encumbrances are reflected in the General, Special Revenue, Capital Project and Special Assessment Funds. An encumbrance is a bona fide commitment to incur expenditures under outstanding purchase orders or contracts, and differs from a liability in that the related goods and services have not been received at the time the encumbrance is recorded.

Reporting Procedures

The accompanying financial statements include all funds of the City of Grand Junction except for the Policemen's and Firemen's Pension Funds, which are included in a separate report.

The Downtown Development Authority and Park Improvement Funds are not City funds and are controlled by separate governing bodies. However, the City acts as custodian of their monies and performs record keeping functions for them. Financial statements for these entities are included herein and are covered by the auditors' report on page 1.

For accounting control and reporting purposes, certain entities have been segregated from the General Fund and accounted for as separate funds. These funds are as follows:

Special Revenue Funds:  
Recreation Capital  
Community Development Block Grant  
Roadway and Traffic Safety Plan  
Capital Project Funds:  
Lincoln Park Auditorium  
Federal Aids Projects  
Pomona Park Site  
Paradise Hills Interceptor  
Sewer Plant Modification  
Persigo Plant and Interceptors  
Grand Avenue River Crossing Sewer Line

December 31, 1978

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Note 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

Fixed Assets and Depreciation

The fixed asset accounts are presented at cost, or estimated value where historical cost is not available. Non-enterprise capital expenditures for roads, bridges, curbs and gutters, streets and sidewalks, drainage systems, and lighting systems are not capitalized in the General Fixed Asset Group of Accounts. Equipment and facilities recorded in the General Fixed Asset Group of Accounts are not depreciated. Equipment and facilities recorded in the Enterprise and Intragovernmental Service Funds are depreciated using the straight-line method over the estimated useful lives of the assets. See Note 3.

Unbilled Accounts Receivable

The City follows cyclical billing procedures for Water, Sewer, and Sanitation billings. As of December 31, 1978, Water and Sewer services and Sanitation services in the amounts of \$80,384 and \$25,751, respectively, had been provided but not yet billed.

Inventory

The inventory of the Stores Fund is stated at cost using the moving average method. The cost of the inventory is charged to expense as the goods are consumed.

Intragovernmental Charges

Charges for services rendered by the Intragovernmental Service Funds to other funds are based upon the estimated cost of the services provided.

Inter-fund Accounts

Inter-fund receivables and payables are not eliminated and are recorded in the financial statements as due to or due from the appropriate fund at the actual amount.

NOTES TO FINANCIAL STATEMENTS - (Continued)

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

**Note 2 - INVESTMENTS**

Various funds, as listed below, participate in an investment arrangement whereby resources are combined and used to purchase investments in common. Investment principal is allocated to the various funds based upon their average monthly cash balances. Other funds not participating in the common investment arrangement purchase and account for investments in their own funds. At December 31, 1978, the total investments for all funds were as follows:

<u>Fund</u>	<u>COST OF BASIS</u>		
	<u>Certificates Of Deposit</u>	<u>Treasury Bills</u>	<u>Total at Cost</u>
General	\$1,679,000	\$ 911,045	\$2,590,045
Land	19,000	10,209	29,209
Revenue Sharing	39,000	21,707	60,707
Recreation Capital	1,000		1,000
Downtown Development Authority	7,000	3,953	10,953
Water and Sewer	2,722,000	353,233	3,075,233
Sanitation	30,000	17,009	47,009
Swimming Pools	80,000	41,858	121,858
Cemetery and Perpetual Care	367,000	3,953	370,953
Tiara Rado Golf Course	83,000	46,160	129,160
Lincoln Park Golf Course	17,000	9,471	26,471
Equipment	325,000	176,579	501,579
Federal Aid Projects	44,000	24,003	68,003
Pomona Park	22,000	12,224	34,224
Street Improvement District 78	104,000	56,195	160,195
Conservation Trust	7,000		7,000
	<u>\$5,546,000</u>	<u>\$1,687,599</u>	<u>\$7,233,599</u>

Refunded Water and Sewer Bonds Escrow Funds

United States Treasury Obligations	6,149,771
GNMA Participation Certificate	178,771
<b>TOTAL REFUNDING INVESTMENTS</b>	<u>6,328,542</u>
<b>TOTAL INVESTMENTS</b>	<u>\$13,562,141</u>

The certificates of deposit are scheduled to mature continually throughout the year.

The estimated market value of the total investments is \$13,593,715.

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

Note 3 - FIXED ASSETS

Historical cost records for certain assets acquired prior to 1969 were not maintained and the cost basis could not be determined. Therefore, estimated fair market values were assigned by the City to these assets in 1970. Assets acquired after 1969 are recorded at cost. The following is a summary of the costs and estimated values of fixed assets as of December 31, 1978:

<u>Fund</u>	<u>Total</u>	<u>Recorded at Cost</u>	<u>Recorded at Estimated Value</u>
General Fixed Assets	\$ 7,047,143	\$4,804,868	\$ 2,242,274
Enterprise Funds:			
Water and Sewer	25,421,175	8,788,748	16,632,427
Sanitation	430,760	427,090	3,670
Swimming Pools	134,448	53,259	81,189
Cemetery	145,053	65,069	79,994
Tiara Rado Golf Course	365,627	365,627	
Lincoln Park Golf Course	61,829	61,829	
Intragovernmental Service:			
Funds:			
Equipment	1,878,431	1,878,431	
Data Processing	122,215	122,215	
Stores	315,609	93,772	221,837

Property, plant, and equipment included in the Enterprise and Intra-governmental Service Funds are depreciated by the straight-line method over the estimated useful lives of the assets.

Note 4 - LEASE AGREEMENTS AND LONG-TERM DEBT

Lease Agreement with Grand Junction, Colorado, Parking Authority

On July 1, 1974, the City entered into a lease agreement (with option to purchase) with the Parking Authority, for the use of off-street parking facilities owned by the Authority. The lease expires each December 31, and is renewable until December 31, 1989. The lease payments consist of a monthly rental of \$9,200 per month, and an additional rental amount equal to the necessary expenses of the Authority, not to exceed \$6,000 per year.

On March 1, 1976, the City entered into another lease agreement (with option to purchase) with the Parking Authority for the lease of lots 3, 4, 5, and 6 in Block 102 in the City of Grand Junction owned by the Parking Authority. The lease expires each December 31, and is renewable until December 31, 1987. The lease payments consist of a monthly rental of \$1,201, and an additional rental amount equal to the necessary expenses of the Parking Authority, not to exceed \$1,000 per year.

December 31, 1978

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Note 4 - LEASE AGREEMENTS AND LONG-TERM DEBT - (Continued)

Lease Agreement with Grand Junction, Colorado, Parking Authority-(Continued)

Receipts from parking meters and parking lot operations, as well as any other legally available municipal income, will be used to meet the rental obligations.

At any time prior to December 31, 1989 and 1987 respectively, the City has the option to purchase the facilities owned by the Parking Authority. The option price is the amount necessary to redeem the outstanding bonds of the Authority, and/or pay the remaining principal and interest due on the note payable of the Parking Authority, plus all unpaid costs of the Authority relating to the property, as well as any and all other closing costs.

Upon expiration of the maximum term of these leases, on December 31, 1989 and 1987 respectively, the Parking Authority has agreed to transfer all of the property included under these leases, to the City of Grand Junction without additional consideration being paid, provided the City has paid all of the costs, obligations, and expenses of the Parking Authority relating to the leased property, as well as the costs of conveying the property to the City.

Computer

The City of Grand Junction and Mesa County have jointly purchased a replacement computer and related peripheral equipment from NCR Corporation. The purchase was finalized March 1, 1979 at a cost of \$351,600. The purchase price is to be paid one-third upon acceptance and the remainder over the next two years. The cost will be shared equally by the City and the County.

Special Improvement and Capital Projects

As of December 31, 1978, the City had various contracts outstanding on Special Improvement and Capital Projects. The amounts still owing on contracts at December 31, 1978 are shown as reserved for construction contracts in the Capital Project and Special Assessment Funds.

Water and Sewer Fund

As of December 31, 1978 the City had various contracts outstanding on Water and Sewer Fund capital projects. These projects include the Clifton Water transmission lines, link line, and plant, the Juanita Reservoir, and the Juanita ditch upgrade. The amounts still owing on contracts are shown as reserved for construction contracts in the Water and Sewer Fund.



## CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

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Note 4 - LEASE AGREEMENTS AND LONG-TERM DEBT - (Continued)General Obligation Municipal Community Center Bonds-Series March 1, 1975

On March 1, 1975, the City of Grand Junction issued \$600,000 of general obligation bonds to help finance the construction of a municipal community center. The issuance of the bonds was authorized at the regular election of the qualified, registered electors of the City on April 3, 1973. The bonds are dated March 1, 1975, and were issued in denominations of \$5,000 with interest of 5.75% - 7% payable March 1 and September 1. The bonds mature, in varying amounts, starting March 1, 1977, and continuing until March 1, 1988. The City is authorized to levy an annual tax on the taxable property within the City sufficient to pay the interest and principal of the bonds. The outstanding principal balance as of December 31, 1978 was \$530,000.

Golf Course Revenue Bonds - Series March 1, 1975

On March 1, 1975, the City of Grand Junction issued \$450,000 of revenue bonds to finance the acquisition of the Tiara Rado Golf Course. The bonds are dated March 1, 1975, and were issued in denominations of \$5,000 each with interest of 8½% payable March 1 and September 1. The bonds mature in varying amounts on March 1, 1978, and each year thereafter until March 1, 1989. The principal and interest on these bonds is to be paid from the revenue derived from the operation of the golf course. The reserve requirements of the bond indenture require that beginning February 1, 1979, and each February 1 thereafter, annual payments of at least \$5,000 shall be made to the reserve account until \$35,000 has been accumulated. The outstanding principal balance as of December 31, 1978 was \$445,000.

Note 5 - LEASE AGREEMENT

On November 9, 1977, the City entered into a lease-purchase agreement with Jinco Leasing Corp. for the purchase of new sanitation trucks. One truck was purchased in 1977 for \$51,000 of which \$3,049 was paid and expensed in 1977. Four additional units were purchased in 1978 for \$184,972. During 1978, \$79,320 was paid toward the purchase of these vehicles. As of December 31, 1978, the total lease payable was \$163,617 which will be paid over the next five years in quarterly payments of \$12,290. The total cost of the trucks and the related liability are recorded in these statements.

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

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**Note 6 - JOINT SEWER AND WATER REFUNDING REVENUE BONDS - SERIES 1976**

On September 22, 1976, the City Council of the City of Grand Junction adopted Ordinance #1627 which authorized the refunding of the 1968 Series A and 1976 Series B Joint Water and Sewer Improvement Revenue Bonds. The refunding was accomplished by issuing Joint Sewer and Water Refunding Revenue Bonds - Series 1976, in the principal amount of \$3,295,000, and placing the proceeds of this bond issue, together with \$406,375 of available funds of the Water and Sewer Fund, in an escrow account at the First National Bank in Grand Junction. These monies, together with future interest earnings are calculated to be sufficient to redeem interest coupons and bonds of the 1968 Series A, and 1969 Series B Revenue Bonds as they mature. The First National Bank in Grand Junction has agreed to invest the escrow funds and redeem bonds and coupons of the 1968 and 1969 Issues according to their original terms. If for any reason the funds in the Refunding Escrow account become insufficient to meet such payments, the City will be required to deposit such additional funds as may be required.

The Refunded 1968 Series A and 1969 Series B Joint Water and Sewer Improvement Revenue Bonds, together with the assets of the refunding escrow account are presented in the financial statements of the Trust and Agency Funds.

Joint Sewer and Water Refunding Bonds, Series 1976 are dated September 1, 1976, and are in the principal amount of \$3,295,000. The refunding bonds are in denominations of \$5,000 with interest of 6.0% - 6.3% payable April 1 and October 1. The bonds mature in varying amounts, starting April 1, 1977, and continuing until October 1, 1994. The outstanding principal balance as of December 31, 1978 was \$3,185,000. The bonds are secured by a lien on the net operating revenue derived from the operations of the Water and Sewer Fund.

The Joint Sewer and Water Refunding Bonds, Series 1976, were refunded in May of 1978 as discussed in Note 7. They are presented as Trust and Agency Funds in these financial statements.

**Note 7 - SEWER REFUNDING REVENUE BONDS, SERIES 1978 A AND GENERAL OBLIGATION WATER REFUNDING BONDS, SERIES 1978 B**

On May 11, 1978, the City Council of the City of Grand Junction adopted Ordinance 1737 which authorized the refunding of the Joint Sewer and Water Refunding Revenue Bonds, Series 1976. The refunding was accomplished by issuing Sewer Refunding Revenue Bonds, Series 1978 A and General Obligation Water Refunding Bonds, Series 1978 B and placing the proceeds of these issues in an escrow account at First National Bank in Grand Junction. The proceeds were used to purchase securities which together with interest

NOTES TO FINANCIAL STATEMENTS - (Continued)

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

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Note 7 - SEWER REFUNDING REVENUE BONDS, SERIES 1978 A AND GENERAL OBLIGATION WATER REFUNDING BONDS, SERIES 1978 B - (Continued)

earnings are calculated to be sufficient to redeem interest coupons and bonds of the Refunding Revenue Series Bonds, Series 1976 as they mature. The First National Bank in Grand Junction has agreed to redeem the Series 1976 bonds and coupons according to their original terms. If for any reason the funds in this Refunding Escrow account become insufficient to meet such payments, the City will be required to deposit such additional funds as may be necessary.

The Refunded Joint Sewer and Water Refunding Bonds, Series 1976, together with the assets of its refunding escrow account are presented as Trust and Agency funds in the financial statements.

The Sewer Refunding Revenue Bonds, Series 1978 A in the principal amount of \$1,080,000 and the General Obligation Water Refunding Bonds, Series 1978 B in the principal amount of \$2,145,000 are dated May 1, 1978. The bonds are issued in denominations of \$5,000 with interest of 6.05% to 6.50% payable on May 15 and November 15. The bonds mature in varying amounts starting May 15, 1991 until May 15, 2005. The Sewer Revenue Bonds are secured by the net operating revenue derived from the sewer system. Ordinance 1737 provides for the levy and collection of an annual tax on all taxable property of the City to pay interest and principal of the General Obligation Water Refunding Bonds as due.

Reserve requirements pertaining to these issues as set forth in the bond indentures, were complied with as of December 31, 1978.

Note 8 - GENERAL OBLIGATION WATER BONDS, SERIES 1978 C

On May 11, 1978 the City Council of the City of Grand Junction adopted Ordinance 1737 which authorized the issuance of General Obligation Water Bonds, Series 1978 C, dated May 1, 1978 in the amount of \$3,205,000. The bonds have been issued for the purpose of providing funds for the enlargement, extension and betterment of the waterworks system of the City.

The bonds are in denominations of \$5,000 with interest of 6.05% - 6.25% payable on May 15 and November 15. The bonds mature in varying amounts starting May 15, 1991 until May 15, 2005. Ordinance 1737 provides for the levy and collection of an annual tax on all taxable property of the City to pay interest and principal of the bonds as it becomes due.

NOTES TO FINANCIAL STATEMENTS - (Continued)

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

Note 9 - SPECIAL ASSESSMENT DISTRICT BONDS

Special Assessment District Bonds have been issued in negotiable coupon form and are callable upon 30 days notice. The bonds mature, generally, ten years from date of original issue, and are supported by special assessments against property located within the bounds of the respective districts. In addition, the City is authorized to levy an annual tax of 1 mill on all taxable property within the City to assist in meeting the debt service requirements of the several issues. Bonds and interest coupons are payable at the office of the City Treasurer.

Additional information concerning the Special Assessment District Bonds is as follows:

	Original Issue Date	Original Issue Amount	Interest Rate	Balance at December 31, 1978	Payment Terms	
					Principal Due	Interest Due
<b>STREET IMPROVEMENT DISTRICTS</b>						
#78	10/1/78	\$254,000	4.75-5.60%	\$254,000	10/1/88	4/1 & 10/1
#77	8/1/77	150,000	4.25-5.38	96,000	8/1/87	2/1 & 8/1
#76	10/1/76	138,000	8.00-8.50	110,000	10/1/86	4/1 & 10/1
#75	3/1/76	95,000	7.00-8.00	63,000	3/1/86	3/1 & 9/1
#74	9/1/74	174,000	6.75-8.00	65,000	9/1/84	3/1 & 9/1
#73	9/1/73	42,000	6.00-3.00	12,000	9/1/83	3/1 & 9/1
#72	8/1/72	130,000	3.25-5.00	30,000	8/1/82	2/1 & 8/1
<b>SEWER DISTRICTS</b>						
#34	5/1/77	41,000	4.00-5.40	36,000	5/1/87	5/1 & 11/1
#33	9/1/76	520,000	6.10-8.10	373,000	9/1/86	3/1 & 9/1
#32	12/1/74	85,000	7.00-8.00	19,000	12/1/84	6/1 & 12/1
#31	12/1/74	420,000	6.75-8.00	188,000	12/1/84	6/1 & 12/1
#30	9/1/74	247,000	7.00-8.00	132,000	9/1/84	3/1 & 9/1
#28	6/1/71	232,000	4.37-5.25	56,000	6/1/81	6/1 & 12/1

Note 10 - SPECIAL ASSESSMENTS RECEIVABLE

The City Council of Grand Junction has passed ordinances creating special improvement districts, and has assessed a portion of the cost of the improvement projects to the properties specifically benefited thereby. The ordinances provide that assessments are payable either in full, usually within thirty days from date of assessment, or in ten equal annual installments plus interest on the unpaid balance. The installment payments are payable to the Mesa County, Colorado Treasurer in the same manner as the general ad valorem taxes. The funds provided by the annual installments are to be used for payment of bonds, bond interest, and county Treasurer's fees. Any funds remaining shall be applied against construction costs incurred by the City.

NOTES TO FINANCIAL STATEMENTS - (Continued)

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

Note 10 - SPECIAL ASSESSMENTS RECEIVABLE - (Continued)

Included in the amount shown as assessments receivable in these financial statements is an element of accrued interest receivable. This accrued interest is set up when the assessment is made and represents the finance charges which will be made if a person elects the ten payment installment plan. Since many people pay their assessments prior to the full ten year period, a portion of the finance charge is never collected and is written off. Therefore, the fund balances of the various special assessment funds are overstated due to the deferred interest income included therein. This practice, which has been followed consistently by the City, is contrary to generally accepted accounting principles. It is not practical to segregate the interest elements of assessments receivable for presentation in the financial statements.

Note 11 - ESTIMATED AMOUNTS TO BE PROVIDED BY ASSESSMENT

Owners of property in the Special Assessment Street Improvement District No. 78 had not been assessed as of December 31, 1978. The amount to be provided by assessment for this district is based upon the engineers' estimate of assessable costs.

Note 12 - PENSION FUNDS

The City of Grand Junction has separate pension plans covering its policemen and firemen. In 1978, actuarial valuations were made for both of these pension funds. Based upon these studies, the yearly provisions for pension costs for the policemen's pension fund and the firemen's pension fund were determined to be \$416,130 and \$493,521, respectively. These amounts include current pension costs and past service costs.

The actuarial studies disclosed that as of January 1, 1979, the unfunded past service cost for the policemen's and the firemen's pension funds were respectively \$3,517,275 and \$4,478,563. The City has elected to fund these amounts over 40 years, therefore the unfunded amounts will be reduced as the City transfers monies to fund the yearly provision for pension costs mentioned above. It is recommended by the actuary and generally accepted accounting principles, that an actuarial study be made every two or three years to recompute the yearly provision for pension costs and the unfunded past service costs. In prior years, the liability for the unfunded portion of the yearly provisions had been recorded in the General Fund. It has been determined that the full amount of past service cost should be presented as a general liability of the City of Grand Junction, rather than specifically attributed to the General Fund. Therefore, the total amount owing the pension funds is recorded in the Statement of General Long Term Debt.

The Policemen's and Firemen's Pension Funds' financial statements are presented in a separate report.

NOTES TO FINANCIAL STATEMENTS - (Continued)

CITY OF GRAND JUNCTION, COLORADO

December 31, 1978

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Note 13 - RETIREMENT PLAN

The City provides a pension plan for all employees with over one year continuous service. The plan is a defined contribution money purchase retirement plan. The City contributed \$82,444 to this plan during 1978.

Note 14 - CONTRIBUTIONS FROM MESA COUNTY

During 1977, the preliminary design was begun on the Persigo Plant and Interceptors project. Upon approval of the project by the Environmental Protection Agency (EPA), it is anticipated that the project will be funded 75% by the EPA and 25% by local sources. The City of Grand Junction and Mesa County will share the 25% local funding equally.

Until such a time as it is decided what entity will be responsible for the operation of the project, all of the assets will be included in the construction in progress account of the Water and Sewer Fund of the City of Grand Junction. Appropriate transfers of the assets will be made upon final determination of the operating entity.

Note 15 - OVEREXPENDITURE IN PARK IMPROVEMENT FUND

Expenditures in the Park Improvement Fund (See Note 1) exceeded the budget by \$3,262 which may be a violation of the Local Government Budget Law of Colorado.

September 8, 1980

Mr. James Patterson  
Director of Public Works  
City of Grand Junction  
250 North 5th  
Grand Junction, CO 81501

Re: Wastewater Treatment/Interceptor Sewer Program  
City of Grand Junction and Mesa County, Colorado

Dear Mr. Patterson:

This letter summarizes our "Feasibility Report on Wastewater Treatment/Interceptor Sewer Program," which was prepared as a part of the bond feasibility determination for the City of Grand Junction and Mesa County, Colorado.

The contents of this summary letter address the following topics:

- Program Background
- Population Growth
- New Facilities
- Management Structure
- User Charges
- Cost Estimates
- Projected Revenue

## PROGRAM BACKGROUND

The City of Grand Junction and Mesa County, Colorado have an immediate need for regional wastewater collection and treatment facilities to serve the projected increase in population and to meet Federal and State requirements. The population growth is due primarily to the development of energy resources in the area such as coal and oil shale. Compliance with Federal and State water quality legislation has required many of the planning and design considerations for the wastewater program.

The City of Grand Junction's West Side Wastewater Treatment Plant is fast approaching its hydraulic design capacity of 5.7 million gallons per day (MGD) and is having difficulty in meeting treated effluent requirements set by the state. This is documented by the City's receipt, over the past three years, of several non-compliance letters from the Colorado Department of Health pertaining to the permit for the discharge of treated wastewater.

- Alexandria
- Atlanta
- Austin
- Charlotte
- Chicago
- Dallas
- Denver
- Helena
- Houston
- Lexington
- Memphis
- Norfolk
- Omaha
- Pensacola
- Phoenix
- Santa Barbara
- Seattle
- Washington, D.C.

Mr. James Patterson  
City of Grand Junction  
September 8, 1980  
Page 2

Discharge permit violations are attributed to wastewater flows approaching the hydraulic design capacity of the City's plant which induce greater operational demands to meet effluent limitations of the permit. Achieving required effluent quality is becoming increasingly more difficult with the present treatment processes as the effluent limitations become more stringent. As you know, the State is proposing to relax certain discharge criteria between now and when the Interim Treatment Plant at Persigo Wash is put into operation, planned for the fall of 1981. However, these relaxed conditions will not extend beyond that date so adherence to the overall project schedule is important. The recent taking of bids on the Interim Plant should allow us to meet the State's requirements.

#### POPULATION GROWTH

Population projections were determined for the Grand Junction/Mesa County 201 Planning Area that was designated by the Colorado Department of Health. The planning area was divided into service areas in accordance with the Bureau of the Census 1970 block statistics, existing wastewater service areas, and topography to represent the area growth in population. Building permits issued by the Joint City/County Planning and Development Department from 1970 to 1973 inclusive, were the basis for the distribution of population projections in the various sections of the planning area. Growth patterns for both new and existing subdivisions were related to annual percentage rates which were applied to determine the population projections in the respective sections of the planning area.

In addition to the base projections that were recommended by the City/County Planning and Development Department, population projections are provided for the years 1990 and 2000 as shown in Table 1. The years of 1990 and 2000 were selected as probable design years for phased construction of expansions to the new wastewater treatment plant to serve the planning area.

#### NEW FACILITIES

The current wastewater program as planned and designed will provide adequate wastewater collection facilities to serve the planning area into the twenty-first century. The flexibility of the wastewater treatment plant design will permit ease in phased expansions to meet additional capacity and more stringent effluent discharge requirements that might occur in the future.

Production of a high quality effluent will require the construction of a new wastewater treatment facility that will consist of an interim and new plant. The interim treatment facilities, to be located at the site of the new plant, will be designed to handle an estimated 1.0 MGD excess flow from the City's



Mr. James Patterson  
City of Grand Junction  
September 8, 1980  
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existing wastewater treatment plant before the new Persigo Wash Wastewater Treatment Plant is in operation in 1983. The existing plant will be base loaded at its 5.7 MGD average design capacity to ensure that present effluent limitations are maintained. Most of the interim facilities will be incorporated into the new 12.5 MGD capacity Persigo Wash Wastewater Treatment Plant that will utilize the activated sludge process of biological treatment. The new plant will treat wastewater from the entire planning area, except for Clifton which will continue to operate its wastewater system. The estimated wastewater flows for the design years of 1990 and 2000 are shown on Table 2 for the planning area and these flows relate to the projected population.

Several new interceptor sewers will be constructed to convey wastewater from the planning area for treatment. Interceptor sewers proposed in this program include: River Road, Scenic School, Independent Avenue, Paradise Hills - Phase II, Goat Wash and River Crossing, and Tiara Rado and River Crossing. As you know, the River Road and Paradise Hills Interceptors are already under construction.

#### MANAGEMENT STRUCTURE

The City of Grand Junction and Mesa County have agreed to share in the administration of the joint wastewater program by adopting the Joint Sewage Service Agreement on May 1, 1980. The agreement grants complete authority to the City for the management, operation, and billing of charges and fees for the entire joint system while ownership of existing and proposed wastewater facilities is divided between the City and County.

Operation of the joint system will be conducted by the City under the supervision of the Director of Public Works. The utility superintendent, utility systems supervisor, and utility systems foreperson will manage staff responsible for the operation and maintenance of the wastewater collection and treatment system as indicated in Figure 1. It is anticipated that an additional operations staff of 15 must be added to perform the daily routines at the new plant. The new staff will function under the strong established management and supervisory structure and should be added when needed with orientation and training for their respective duties.

#### USER CHARGES

The City of Grand Junction maintains a user charge system that complies with Federal grant regulations. The user charge system is required to assure that each recipient of waste treatment services will pay a proportionate share of the costs of operation and maintenance, including replacement. The purpose of

the system is to promote self-sufficiency of the treatment works with respect to operation and maintenance costs. For continued self-sufficiency, the Federal regulations recommend that the user charge rate structure be reviewed annually and adjusted, if necessary, so each user continues to pay a proportionate share of the costs of operation and maintenance.

#### COST ESTIMATES

The wastewater collection and treatment program consists of many planning, design, and construction activities. Program costs for these activities are presented in Table 3. The anticipated cash flow forecast is provided on a quarterly basis, in thousands of dollars for each activity, starting with June of 1980 and ending in the third quarter of 1983.

Program costs along with the Federal grant and local share amounts are shown in Table 4. The Federal grant cost is 75% of eligible grant items and the local cost is 25% of the program total plus non-eligible grant items. The local share represents the program amount to be financed by the proposed improvement bond issue. This cost of improvements is estimated at \$7,799,725 for the wastewater collection and treatment program. Since the preparation of the cash flow forecast, we have taken bids on the Interim WWTP at Persigo Wash. The low bid of \$2,552,000 is \$426,000 under the estimated amount, lending support to the accuracy of the cost estimates.

#### PROJECTED REVENUE

The wastewater system will generate revenues to cover operation and maintenance expenses and debt service. Sources of revenues will be user charges and tap fees, as shown in Table 5, to provide gross system revenues. The City and County are protected for the generation of adequate revenues in that the joint document incorporating user charges requires that the rate structure be reviewed annually and adjusted to cover expenses of the system.

In conclusion, three items are pertinent:

1. The facilities as planned will provide a wastewater collection and treatment system that will solve the City and County needs and also meet current State of Colorado requirements.
2. The facilities are needed based on operational problems currently being experienced at the existing plant and because of anticipated and current development that is adding wastewater flow to the system.

Mr. James Patterson  
City of Grand Junction  
September 8, 1980  
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3. Based on growth projections and the existing user charge ordinances, the projected revenue stream should be generated adequate to meet the overall program financial requirements.

Very truly yours,

HENNINGSON, DURHAM & RICHARDSON, INC.  
OF COLORADO

By James E. Abbott  
James E. Abbott, P.E.  
Vice-President

JEA/jb

Enc.

TABLE 1

POPULATION PROJECTIONS

<u>Area</u> <u>No.</u>	<u>Location</u>	<u>1970</u>	<u>1974</u>	<u>1990</u>	<u>1994</u>	<u>2000</u>
1.	City	21,240	24,090	33,456	35,800	39,310
2.	North	2,540	3,370	9,314	10,800	13,030
3.	Paradise Hills	--	440	2,488	3,000	3,768
4.	Fruitvale	1,940	2,690	5,257	5,900	6,862
5.	Pear Park	1,940	2,450	7,450	8,700	10,575
6.	Orchard Mesa	5,950	6,720	13,106	14,700	17,094
7.	Redlands	4,410	5,930	26,466	31,600	39,301
8.	Clifton	--	3,140	7,108	8,100	9,588
9.	Northwest Area	680	700	940	1,000	1,090
Total Without Clifton		--	46,390	98,477	111,500	131,030
TOTAL		--	49,530	105,585	119,600	140,618

TABLE 2

ESTIMATED WASTEWATER FLOWS (1)

Area No.	Location	1990		2000	
		Projected Population	Average Daily Flow MGD (2)	Projected Population	Average Daily Flow MGD
1.	City	33,456	4.349 <sup>(3)</sup>	39,310	5.110 <sup>(3)</sup>
2.	North	9,314	1.025	13,030	1.433
3.	Paradise Hills	2,488	0.274	3,768	0.414
4.	Fruitvale	5,257	0.578	6,862	0.755
5.	Pear Park	7,450	0.969 <sup>(3)</sup>	10,575	1.375 <sup>(3)</sup>
6.	Orchard Mesa	13,106	1.442	17,094	1.880
7A.	Tiara Rado	5,468	0.601	8,298	0.913
7B.	Monument Meadows	8,616	0.948	13,076	1.438
	Scenic School	10,026	1.103	15,211	1.673
7D.	Rosevale	2,356	0.259	2,716	0.299
8.	Clifton	7,108	0.782	9,588	1.055
9.	Northwest Area	<u>940</u>	<u>0.103</u>	<u>1,090</u>	<u>0.120</u>
Total Without Clifton		98,477	11.651	131,030	15.410
Total		105,585	12.433	140,618	16.465

(1) Wastewater flows based on an average domestic flow rate of 110 gallons per capita per day (gpcd) plus an average infiltration/inflow rate of 20 gpcd where applicable.

(2) Million gallons per day.

(3) Based on 110 gpcd plus 20 gpcd.

# ADMINISTRATIVE & OPERATIONAL STRUCTURE FOR WASTEWATER PROGRAM

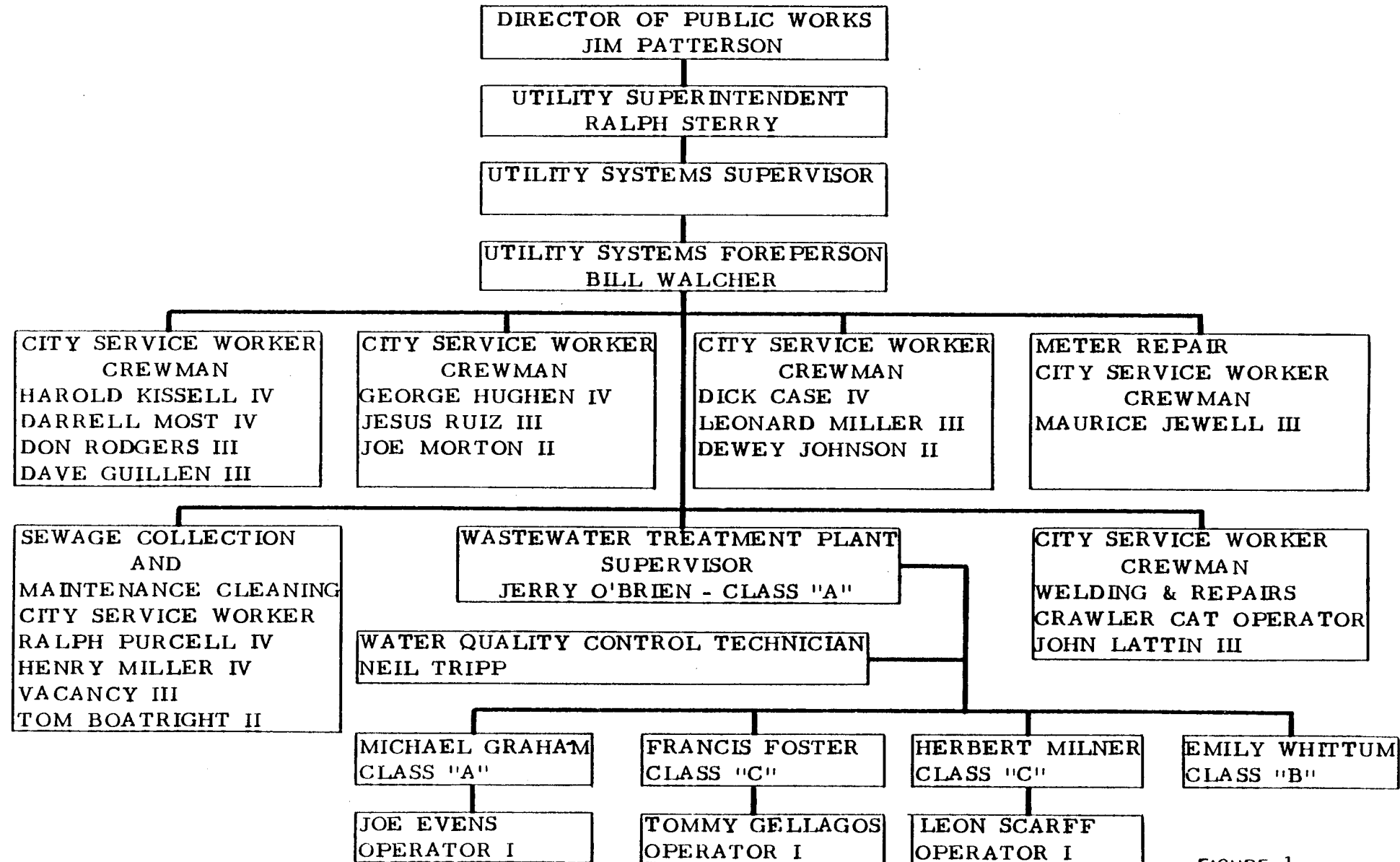


FIGURE 1

TABLE 3

PRELIMINARY CASH FLOW FORECAST  
WASTEWATER TREATMENT/INTERCEPTOR SEWER PROGRAM  
GRAND JUNCTION/MESA COUNTY, COLORADO

7/1/80  
Dollars in \$1,000

	Thru June 1980	July Sept 1980	Oct Dec 1980	Jan Mar 1981	Apr Jun 1981	July Sept 1981	Oct Dec 1981	Jan Mar 1982	Apr Jun 1982	July Sept 1982	Oct Dec 1982	Jan Mar 1983	Apr Jun 1983	July Sept 1983	Totals
<u>STUDIES/REPORTS/ SPECIAL ACTIVITIES</u>															
Predesign Report	\$ 54	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 54
Interim WWTP Report	10.5	0	0	0	0	0	0	0	0	0	0	0	0	0	10.5
Soils/Geotech/Testing	9.5	0	2	2	3	3	3	3	3	1	0	0	0	0	29.5
Cultural Resources Study	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
River Rd. Int. Right-of-Way	5.5	0	0	0	0	0	0	0	0	0	0	0	0	0	5.5
Tiara Rado/Goat Wash ROW	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	14.1
Solar Heating Studies	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
UC/IGR - Industrial Pretreat.	6	2	2	2	2	2	2	2	2	2	2	2	0	0	28
Plant Site (Land)	88.9	0	0	0	0	0	0	0	0	0	0	0	0	0	88.9
City Administration	2	2	2	2	2	2	2	1	1	1	1	1	1	0	20
Program Management	20	25	25	25	25	25	25	25	25	25	25	25	15	10	320
Sewer Easements	0	1	5	5	5	4	0	0	0	0	0	0	0	0	20
<u>DESIGN</u>															
Interim WWTP	46	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Value Engineering	88	6	0	0	0	0	0	0	0	0	0	0	0	0	94
River Road Interceptor	115	0	0	0	0	0	0	0	0	0	0	0	0	0	115
Paradise Hills Int. - II	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Independent Ave. Interceptor	10.9	0.5	0	0	0	0	0	0	0	0	0	0	0	0	11.4
Goat Wash Interceptor	30	15	15	0	0	0	0	0	0	0	0	0	0	0	60
Tiara Rado Interceptor	31	2	2	0	0	0	0	0	0	0	0	0	0	0	35
Persigo Wash WWTP	636	28	28	0	0	0	0	0	0	0	0	0	0	0	692
VE #2 - WWTP Revisions	0	23	10	0	0	0	0	0	0	0	0	0	0	0	33
Solar Heating	0	10	10	0	0	0	0	0	0	0	0	0	0	0	20
Scenic School Sewer	0	0	4	10	10	10	6	0	0	0	0	0	0	0	40
<u>CONSTRUCTION</u>															
River Road Sewer Const.	0	580	800	1,000	1,000	610	0	0	0	0	0	0	0	0	3,990
River Road Sewer Const. Eng.	5	15	25	25	20	13	2	0	0	0	0	0	0	0	105
Paradise Hills Sewer Const.	0	150	200	70	0	0	0	0	0	0	0	0	0	0	420
Paradise Hills Sewer Const. Eng.	1	8	12	3	0	0	0	0	0	0	0	0	0	0	24
Interim WWTP Const.	0	200	600	500	700	700	278	0	0	0	0	0	0	0	2,978
Interim WWTP Const. Eng.	0	10	25	25	25	25	16	0	0	0	0	0	0	0	126
Persigo Wash WWTP Const.	0	0	0	1,000	1,500	2,000	2,000	1,800	1,800	2,000	2,000	1,900	827	0	16,827
Persigo Wash WWTP Const. Eng.	0	0	15	35	40	45	45	40	45	45	40	35	15	0	400
Independent Ave. Sewer Const.	0	0	50	150	76	0	0	0	0	0	0	0	0	0	276
Independent Ave. Sewer Const. Eng.	0	0	2	6	2	0	0	0	0	0	0	0	0	0	10
Tiara Rado Sewer Const.	0	0	0	150	300	300	96	0	0	0	0	0	0	0	846
Tiara Rado Sewer Const. Eng.	0	0	2	9	9	9	7	0	0	0	0	0	0	0	36
Goat Wash Sewer Const.	0	0	0	150	275	275	73	0	0	0	0	0	0	0	773
Goat Wash Sewer Const. Eng.	0	0	2	9	9	8	6	0	0	0	0	0	0	0	34
O&M Manuals & Start-up (2 plants)	0	0	0	5	10	10	10	10	10	10	10	10	10	5	100
Scenic School Sewer Const.	0	0	0	0	0	0	0	0	100	200	200	150	0	0	650
Scenic School Sewer Const. Eng.	0	0	0	0	0	0	0	2	9	9	9	7	0	0	36
Program Sub-total	\$1,209.4	\$1,078.5	\$1,838	\$3,183	\$4,013	\$4,041	\$2,571	\$1,883	\$1,995	\$2,293	\$2,287	\$2,130	\$ 868	\$ 15	\$29,404.9
Program Contingencies (4.7%)	0	0	20	80	200	200	200	100	100	100	100	100	177	0	1,377
<b>PROGRAM TOTAL</b>	<b>\$1,209.4</b>	<b>\$1,078.5</b>	<b>\$1,858</b>	<b>\$3,263</b>	<b>\$4,213</b>	<b>\$4,241</b>	<b>\$2,771</b>	<b>\$1,983</b>	<b>\$2,095</b>	<b>\$2,393</b>	<b>\$2,387</b>	<b>\$2,230</b>	<b>\$1,045</b>	<b>\$ 15</b>	<b>\$30,781.9</b>

TABLE 4

COST ESTIMATE FORECAST  
WASTEWATER COLLECTION AND TREATMENT PROGRAM  
GRAND JUNCTION/MESA COUNTY

Item	<u>Total Cost</u>	<u>Grant Cost @ 75%</u>	<u>Local Cost @ 25%</u>
Predesign Report	\$54,000	\$40,500	\$13,500
River Road Interceptor Sewer	4,230,000	3,172,500	1,057,500
Paradise Hills Interceptor Phase II	470,000	352,500	117,500
Interim WWTP*	3,150,000	2,362,500	787,500
Persigo Wash WWTP*	18,526,500	13,894,875	4,631,625
Non-eligible Grant Items	139,000	--	139,000
Goat Wash Interceptor	867,000	650,250	216,750
Tiara Rado Interceptor	917,000	687,750	229,250
Independent Avenue Interceptor	297,400	223,050	74,350
Scenic School Interceptor	726,000	544,500	181,500
UC/ICR Consultation	<u>28,000</u>	<u>21,000</u>	<u>7,000</u>
Program Sub-Total	\$29,404,900	\$21,949,425	\$7,455,475
Program Contingencies @4.7%	<u>1,377,000</u>	<u>1,032,750</u>	<u>344,250</u>
Program Total	\$30,781,900	\$22,982,175	\$7,799,725

\* WWTP - Wastewater Treatment Plant



GRAND JUNCTION/MESA COUNTY, COLORADO

JOINT SEWER SYSTEM

CASH FLOW 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

- (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 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 9.674%.
- (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.

September 8, 1980

Mr. James Patterson  
Director of Public Works  
City of Grand Junction  
250 North 5th  
Grand Junction, CO 81501

Re: Wastewater Treatment/Interceptor Sewer Program  
City of Grand Junction and Mesa County, Colorado

Dear Mr. Patterson:

This letter summarizes our "Feasibility Report on Wastewater Treatment/Interceptor Sewer Program," which was prepared as a part of the bond feasibility determination for the City of Grand Junction and Mesa County, Colorado.

The contents of this summary letter address the following topics:

- Program Background
- Population Growth
- New Facilities
- Management Structure
- User Charges
- Cost Estimates
- Projected Revenue

#### PROGRAM BACKGROUND

The City of Grand Junction and Mesa County, Colorado have an immediate need for regional wastewater collection and treatment facilities to serve the projected increase in population and to meet Federal and State requirements. The population growth is due primarily to the development of energy resources in the area such as coal and oil shale. Compliance with Federal and State water quality legislation has required many of the planning and design considerations for the wastewater program.

The City of Grand Junction's West Side Wastewater Treatment Plant is fast approaching its hydraulic design capacity of 5.7 million gallons per day (MGD) and is having difficulty in meeting treated effluent requirements set by the state. This is documented by the City's receipt, over the past three years, of several non-compliance letters from the Colorado Department of Health pertaining to the permit for the discharge of treated wastewater.

Alexandria  
Atlanta  
Austin  
Charlotte  
Chicago  
Dallas  
Denver  
Helena  
Houston  
Knoxville  
Minneapolis  
Norfolk  
Omaha  
Pensacola  
Phoenix  
Santa Barbara  
Seattle  
Washington, D.C.

Mr. James Patterson  
City of Grand Junction  
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Discharge permit violations are attributed to wastewater flows approaching the hydraulic design capacity of the City's plant which induce greater operational demands to meet effluent limitations of the permit. Achieving required effluent quality is becoming increasingly more difficult with the present treatment processes as the effluent limitations become more stringent. As you know, the State is proposing to relax certain discharge criteria between now and when the Interim Treatment Plant at Persigo Wash is put into operation, planned for the fall of 1981. However, these relaxed conditions will not extend beyond that date so adherence to the overall project schedule is important. The recent taking of bids on the Interim Plant should allow us to meet the State's requirements.

#### POPULATION GROWTH

Population projections were determined for the Grand Junction/Mesa County 201 Planning Area that was designated by the Colorado Department of Health. The planning area was divided into service areas in accordance with the Bureau of the Census 1970 block statistics, existing wastewater service areas, and topography to represent the area growth in population. Building permits issued by the Joint City/County Planning and Development Department from 1970 to 1973 inclusive, were the basis for the distribution of population projections in the various sections of the planning area. Growth patterns for both new and existing subdivisions were related to annual percentage rates which were applied to determine the population projections in the respective sections of the planning area.

In addition to the base projections that were recommended by the City/County Planning and Development Department, population projections are provided for the years 1990 and 2000 as shown in Table 1. The years of 1990 and 2000 were selected as probable design years for phased construction of expansions to the new wastewater treatment plant to serve the planning area.

#### NEW FACILITIES

The current wastewater program as planned and designed will provide adequate wastewater collection facilities to serve the planning area into the twenty-first century. The flexibility of the wastewater treatment plant design will permit ease in phased expansions to meet additional capacity and more stringent effluent discharge requirements that might occur in the future.

Production of a high quality effluent will require the construction of a new wastewater treatment facility that will consist of an interim and new plant. The interim treatment facilities, to be located at the site of the new plant, will be designed to handle an estimated 1.0 MGD excess flow from the City's

Mr. James Patterson  
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September 8, 1980  
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existing wastewater treatment plant before the new Persigo Wash Wastewater Treatment Plant is in operation in 1983. The existing plant will be base loaded at its 5.7 MGD average design capacity to ensure that present effluent limitations are maintained. Most of the interim facilities will be incorporated into the new 12.5 MGD capacity Persigo Wash Wastewater Treatment Plant that will utilize the activated sludge process of biological treatment. The new plant will treat wastewater from the entire planning area, except for Clifton which will continue to operate its wastewater system. The estimated wastewater flows for the design years of 1990 and 2000 are shown on Table 2 for the planning area and these flows relate to the projected population.

Several new interceptor sewers will be constructed to convey wastewater from the planning area for treatment. Interceptor sewers proposed in this program include: River Road, Scenic School, Independent Avenue, Paradise Hills - Phase II, Goat Wash and River Crossing, and Tiara Rado and River Crossing. As you know, the River Road and Paradise Hills Interceptors are already under construction.

#### MANAGEMENT STRUCTURE

The City of Grand Junction and Mesa County have agreed to share in the administration of the joint wastewater program by adopting the Joint Sewage Service Agreement on May 1, 1980. The agreement grants complete authority to the City for the management, operation, and billing of charges and fees for the entire joint system while ownership of existing and proposed wastewater facilities is divided between the City and County.

Operation of the joint system will be conducted by the City under the supervision of the Director of Public Works. The utility superintendent, utility systems supervisor, and utility systems foreperson will manage staff responsible for the operation and maintenance of the wastewater collection and treatment system as indicated in Figure 1. It is anticipated that an additional operations staff of 15 must be added to perform the daily routines at the new plant. The new staff will function under the strong established management and supervisory structure and should be added when needed with orientation and training for their respective duties.

#### USER CHARGES

The City of Grand Junction maintains a user charge system that complies with Federal grant regulations. The user charge system is required to assure that each recipient of waste treatment services will pay a proportionate share of the costs of operation and maintenance, including replacement. The purpose of

Mr. Jim Patterson  
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September 8, 1980  
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the system is to promote self-sufficiency of the treatment works with respect to operation and maintenance costs. For continued self-sufficiency, the Federal regulations recommend that the user charge rate structure be reviewed annually and adjusted, if necessary, so each user continues to pay a proportionate share of the costs of operation and maintenance.

#### COST ESTIMATES

The wastewater collection and treatment program consists of many planning, design, and construction activities. Program costs for these activities are presented in Table 3. The anticipated cash flow forecast is provided on a quarterly basis, in thousands of dollars for each activity, starting with June of 1980 and ending in the third quarter of 1983.

Program costs along with the Federal grant and local share amounts are shown in Table 4. The Federal grant cost is 75% of eligible grant items and the local cost is 25% of the program total plus non-eligible grant items. The local share represents the program amount to be financed by the proposed improvement bond issue. This cost of improvements is estimated at \$7,799,725 for the wastewater collection and treatment program. Since the preparation of the cash flow forecast, we have taken bids on the Interim WWTP at Persigo Wash. The low bid of \$2,552,000 is \$426,000 under the estimated amount, lending support to the accuracy of the cost estimates.

#### PROJECTED REVENUE

The wastewater system will generate revenues to cover operation and maintenance expenses and debt service. Sources of revenues will be user charges and tap fees, as shown in Table 5, to provide gross system revenues. The City and County are protected for the generation of adequate revenues in that the joint document incorporating user charges requires that the rate structure be reviewed annually and adjusted to cover expenses of the system.

In conclusion, three items are pertinent:

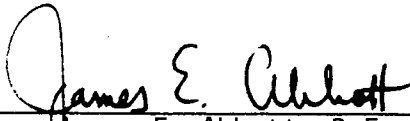
1. The facilities as planned will provide a wastewater collection and treatment system that will solve the City and County needs and also meet current State of Colorado requirements.
2. The facilities are needed based on operational problems currently being experienced at the existing plant and because of anticipated and current development that is adding wastewater flow to the system.

Mr. James Patterson  
City of Grand Junction  
September 8, 1980  
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3. Based on growth projections and the existing user charge ordinances, the projected revenue stream should be generated adequate to meet the overall program financial requirements.

Very truly yours,

HENNINGSON, DURHAM & RICHARDSON, INC.  
OF COLORADO

By   
James E. Abbott, P.E.  
Vice-President

JEA/jb

Enc.

TABLE 1

POPULATION PROJECTIONS

<u>Area No.</u>	<u>Location</u>	<u>1970</u>	<u>1974</u>	<u>1990</u>	<u>1994</u>	<u>2000</u>
1.	City	21,240	24,090	33,456	35,800	39,310
2.	North	2,540	3,370	9,314	10,800	13,030
3.	Paradise Hills	--	440	2,488	3,000	3,768
4.	Fruitvale	1,940	2,690	5,257	5,900	6,862
5.	Pear Park	1,940	2,450	7,450	8,700	10,575
6.	Orchard Mesa	5,950	6,720	13,106	14,700	17,094
7.	Redlands	4,410	5,930	26,466	31,600	39,301
8.	Clifton	--	3,140	7,108	8,100	9,588
9.	Northwest Area	680	700	940	1,000	1,090
Total Without Clifton		--	46,390	98,477	111,500	131,030
TOTAL		--	49,530	105,585	119,600	140,618

TABLE 2  
ESTIMATED WASTEWATER FLOWS <sup>(1)</sup>

<u>Area No.</u>	<u>Location</u>	<u>1990</u>		<u>2000</u>	
		<u>Projected Population</u>	<u>Average Daily Flow MGD</u> <sup>(2)</sup>	<u>Projected Population</u>	<u>Average Daily Flow MGD</u>
1.	City	33,456	4.349 <sup>(3)</sup>	39,310	5.110 <sup>(3)</sup>
2.	North	9,314	1.025	13,030	1.433
3.	Paradise Hills	2,488	0.274	3,768	0.414
4.	Fruitvale	5,257	0.578	6,862	0.755
5.	Pear Park	7,450	0.969 <sup>(3)</sup>	10,575	1.375 <sup>(3)</sup>
6.	Orchard Mesa	13,106	1.442	17,094	1.880
7A.	Tiara Rado	5,468	0.601	8,298	0.913
7B.	Monument Meadows	8,616	0.948	13,076	1.438
7C.	Scenic School	10,026	1.103	15,211	1.673
7D.	Rosevale	2,356	0.259	2,716	0.299
8.	Clifton	7,108	0.782	9,588	1.055
9.	Northwest Area	<u>940</u>	<u>0.103</u>	<u>1,090</u>	<u>0.120</u>
Total Without Clifton		98,477	11.651	131,030	15.410
Total		105,585	12.433	140,618	16.465

(1) Wastewater flows based on an average domestic flow rate of 110 gallons per capita per day (gpcd) plus an average infiltration/inflow rate of 20 gpcd where applicable.

(2) Million gallons per day.

(3) Based on 110 gpcd plus 20 gpcd.



# ADMINISTRATIVE & OPERATIONAL STRUCTURE FOR WASTEWATER PROGRAM

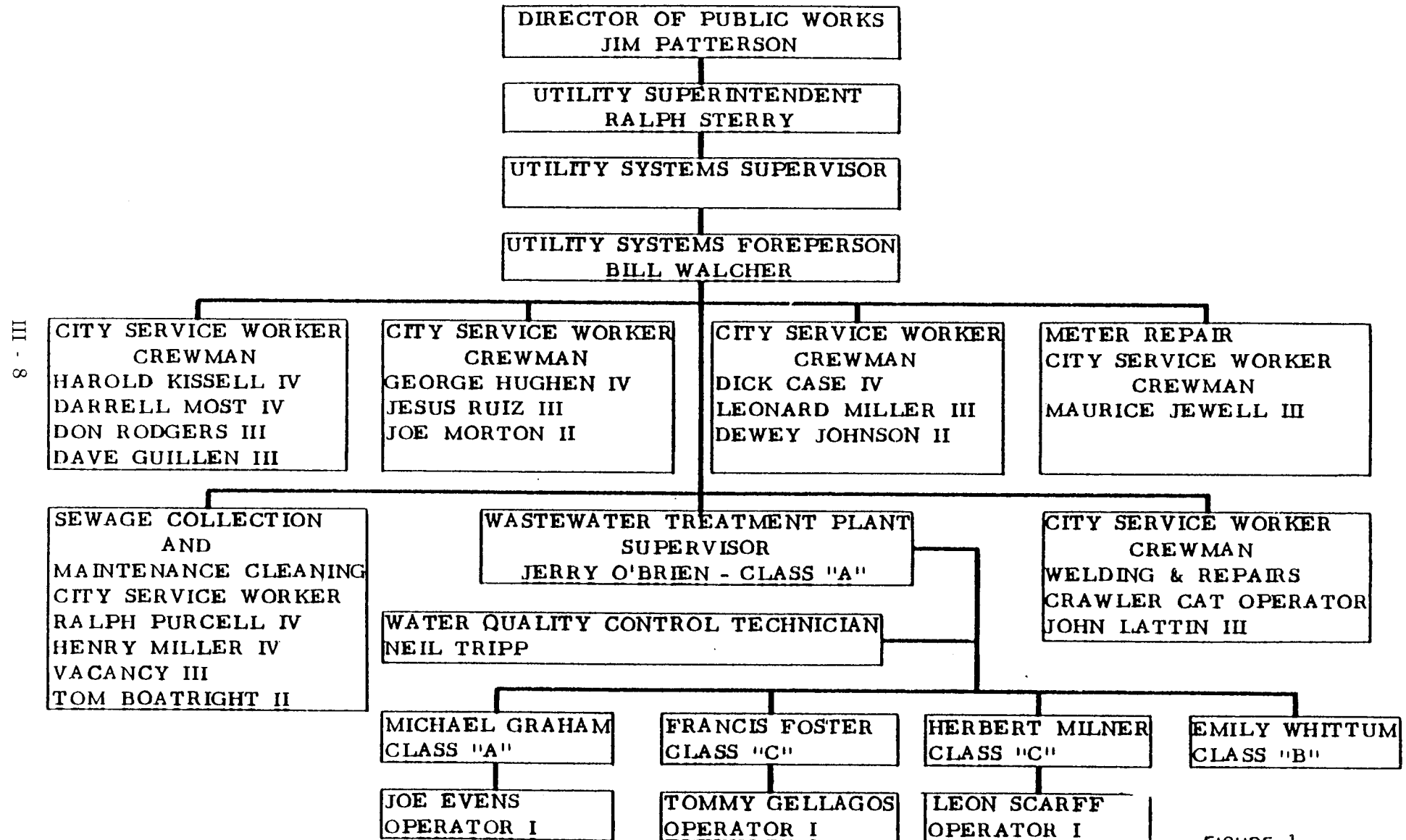


FIGURE 1

TABLE 3

PRELIMINARY CASH FLOW FORECAST  
WASTEWATER TREATMENT/INTERCEPTOR SEWER PROGRAM  
GRAND JUNCTION/MESA COUNTY, COLORADO

7/1/80

Dollars in \$1,000

	Thru June 1980	July Sept 1980	Oct Dec 1980	Jan Mar 1981	Apr Jun 1981	July Sept 1981	Oct Dec 1981	Jan Mar 1982	Apr Jun 1982	July Sept 1982	Oct Dec 1982	Jan Mar 1983	Apr Jun 1983	July Sept 1983	Totals
<u>STUDIES/REPORTS/ SPECIAL ACTIVITIES</u>															
Pre-design Report	\$ 54	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 54
Interim WWTP Report	10.5	0	0	0	0	0	0	0	0	0	0	0	0	0	10.5
Soils/Geotech/Testing	9.5	0	2	2	3	3	3	3	3	1	0	0	0	0	29.5
Cultural Resources Study	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
River Rd. Int. Right-of-Way	5.5	0	0	0	0	0	0	0	0	0	0	0	0	0	5.5
Tiara Rado/Goat Wash ROW	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	14.1
Solar Heating Studies	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
UC/ICR - Industrial Pretreat.	6	2	2	2	2	2	2	2	2	2	2	2	2	0	28
Plant Site (Land)	88.9	0	0	0	0	0	0	0	0	0	0	0	0	0	88.9
City Administration	2	2	2	2	2	2	2	1	1	1	1	1	1	1	20
Program Management	20	25	25	25	25	25	25	25	25	25	25	25	15	10	320
Sewer Easements	0	1	5	5	5	4	0	0	0	0	0	0	0	0	20
<u>DESIGN</u>															
Interim WWTP	46	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Value Engineering	88	6	0	0	0	0	0	0	0	0	0	0	0	0	94
River Road Interceptor	115	0	0	0	0	0	0	0	0	0	0	0	0	0	115
Paradise Hills Int. - II	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Independent Ave. Interceptor	10.9	0.5	0	0	0	0	0	0	0	0	0	0	0	0	11.4
Goat Wash Interceptor	30	15	15	0	0	0	0	0	0	0	0	0	0	0	60
Tiara Rado Interceptor	31	2	2	0	0	0	0	0	0	0	0	0	0	0	35
Persigo Wash WWTP	636	28	28	0	0	0	0	0	0	0	0	0	0	0	692
VE #2 - WWTP Revisions	0	23	10	0	0	0	0	0	0	0	0	0	0	0	33
Solar Heating	0	10	10	0	0	0	0	0	0	0	0	0	0	0	20
Scenic School Sewer	0	0	4	10	10	10	6	0	0	0	0	0	0	0	40
<u>CONSTRUCTION</u>															
River Road Sewer Const.	0	580	800	1,000	1,000	610	0	0	0	0	0	0	0	0	3,990
River Road Sewer Const. Eng.	5	15	25	25	20	13	2	0	0	0	0	0	0	0	105
Paradise Hills Sewer Const.	0	150	200	70	0	0	0	0	0	0	0	0	0	0	420
Paradise Hills Sewer Const. Eng.	1	8	12	3	0	0	0	0	0	0	0	0	0	0	24
Interim WWTP Const.	0	200	600	500	700	700	278	0	0	0	0	0	0	0	2,978
Interim WWTP Const. Eng.	0	10	25	25	25	25	16	0	0	0	0	0	0	0	126
Persigo Wash WWTP Const.	0	0	0	1,000	1,500	2,000	2,000	1,800	1,800	2,000	2,000	1,900	827	0	16,827
Persigo Wash WWTP Const. Eng.	0	0	15	35	40	45	45	40	45	45	40	35	15	0	400
Independent Ave. Sewer Const.	0	0	50	150	76	0	0	0	0	0	0	0	0	0	276
Independent Ave. Sewer Const. Eng.	0	0	2	6	2	0	0	0	0	0	0	0	0	0	10
Tiara Rado Sewer Const.	0	0	0	150	300	300	96	0	0	0	0	0	0	0	846
Tiara Rado Sewer Const. Eng.	0	0	2	9	9	9	7	0	0	0	0	0	0	0	36
Goat Wash Sewer Const.	0	0	0	150	275	275	73	0	0	0	0	0	0	0	773
Goat Wash Sewer Const. Eng.	0	0	2	9	9	8	6	0	0	0	0	0	0	0	34
O&M Manuals & Start-up (2 plants)	0	0	0	5	10	10	10	10	10	10	10	10	10	5	100
Scenic School Sewer Const.	0	0	0	0	0	0	0	0	100	200	200	150	0	0	650
Scenic School Sewer Const. Eng.	0	0	0	0	0	0	0	2	9	9	9	7	0	0	36
Program Sub-total	\$1,209.4	\$1,078.5	\$1,838	\$3,183	\$4,013	\$4,041	\$2,571	\$1,883	\$1,995	\$2,293	\$2,287	\$2,130	\$ 868	\$ 15	\$29,404.9
Program Contingencies (4.7%)	0	0	20	80	200	200	200	100	100	100	100	100	177	0	1,377
<b>PROGRAM TOTAL</b>	<b>\$1,209.4</b>	<b>\$1,078.5</b>	<b>\$1,858</b>	<b>\$3,263</b>	<b>\$4,213</b>	<b>\$4,241</b>	<b>\$2,771</b>	<b>\$1,983</b>	<b>\$2,095</b>	<b>\$2,393</b>	<b>\$2,387</b>	<b>\$2,230</b>	<b>\$1,045</b>	<b>\$ 15</b>	<b>\$30,781.9</b>

TABLE 4

COST ESTIMATE FORECAST  
WASTEWATER COLLECTION AND TREATMENT PROGRAM  
GRAND JUNCTION/MESA COUNTY

Item	<u>Total Cost</u>	<u>Grant Cost @ 75%</u>	<u>Local Cost @ 25%</u>
Predesign Report	\$54,000	\$40,500	\$13,500
River Road Interceptor Sewer	4,230,000	3,172,500	1,057,500
Paradise Hills Interceptor Phase II	470,000	352,500	117,500
Interim WWTP*	3,150,000	2,362,500	787,500
Persigo Wash WWTP*	18,526,500	13,894,875	4,631,625
Non-eligible Grant Items	139,000	--	139,000
Goat Wash Interceptor	867,000	650,250	216,750
Tiara Rado Interceptor	917,000	687,750	229,250
Independent Avenue Interceptor	297,400	223,050	74,350
Scenic School Interceptor	726,000	544,500	181,500
UC/ICR Consultation	<u>28,000</u>	<u>21,000</u>	<u>7,000</u>
Program Sub-Total	\$29,404,900	\$21,949,425	\$7,455,475
Program Contingencies @4.7%	<u>1,377,000</u>	<u>1,032,750</u>	<u>344,250</u>
Program Total	\$30,781,900	\$22,982,175	\$7,799,725

\* WWTP - Wastewater Treatment Plant

GRAND JUNCTION/MESA COUNTY, COLORADO  
JOINT SEWER SYSTEM  
CASH FLOW 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 Avail-able 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  
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- (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.