

D R A F T

MESA COUNTY SEWER ISSUES PAPER

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I. INTRODUCTION

Mesa County has grown in the last several years from a predominantly rural county to a urban county. With this growth, pressures for urban services have grown. While the County for the most part does not have the ability or the desire to operate urban services, the needs for them are being expressed by County residents on a daily basis.

The County has recognized the important relationship between sewer service and land use in the Mesa County Land Use and Development Policies (1982-1983). This policy has the following major elements:

1. New subdivisions outside of the Grand Junction 201 areas must connect to a available public sewage disposal system or an approved private system or use a septic system conforming to state and local laws.
2. New development within the Grand Junction 201 sewer service area must connect to sewer line under certain circumstances. These are, basically, when the line is capable of handling the flow and is within 400 feet of the property line.
3. The County subscribes to the Colorado Department of Health policy of "consolidation" to discourage small and scattered sewage treatment systems from being established.
4. Septic systems are recognized as appropriate for low density residential development and for small-scale isolated commercial development only. The Mesa County Land Development Code sets a guideline of 1 dwelling per 2 acres as a minimum lot size for septic.

While these elements have been an appropriate first step towards a consolidated policy framework for sewer service in the County, further development of decision making tools seems to be needed in response to citizen and landuse pressures.

The County's involvement in sewers includes not only development and landuse issues, however. The County owns, through its issuance of revenue bonds, the Persigo Waste-water Treatment Plant and most of the major interceptor sewer lines currently managed by the City of Grand Junction. (These are: River Road, Goat Wash, Tiara Rado, and Scenic) The City of Grand Junction operates the plant, interceptors, and collects fees for sewer service for this system. The County must play a strengthened role in reviewing the sewer plant and line capacities with regard

to land use patterns and aggregate growth, in setting that the County should also take steps in making policy for sewer line extensions, setting fees and financing future plant expansion.

The County now must deal with costs associated with the completion of the Persigo Plant and the major interceptors. Numerous decisions must be made in the next year to deal with sewer line extension, what populations can be served, financing proposals, and land development. The following report outlines specific issues pertaining to the Persigo Service Area. Other geographical areas are address as well. Following the statement of issues, the Public Works group offer recommended actions. In part, this paper is based on studies of sewer service in Mesa County, including:

1. Carrying Capacity Study for the Grand Junction Area. Nov. 1979
2. Grand Junction 201 Wastewater Treatment Facilities Study. August 1977
3. Fruita 201 Wastewater Facilities Study. January 1977
4. Palisade 201 Wastewater Treatment Facilities Plan. April 1978
5. Mack Sanitation District Study and Articles. 1976 & 1977
6. DeBeque Sewer Studies from Chevron's Analysis of 1982.
7. Collbran Sewer Studies from Chevron's Analysis of 1982.

Other related documents to developing a countywide policy framework are attached as appendices:

- A. County Attorney's memo describing legal aspects of various mechanisms to manage sewer lines.
- B. Memo from Grand Junction Assistant Utility Director summarizing the City/County Agreement.
- C. County Planning Consultant, Eric Kelly's memo's concerning alternative sewer management entities.
- D. (Mesa County Data Book, 1983)

II. PROBLEMS AND ISSUES RELATED TO GEOGRAPHICAL AREAS AND TYPES OF SEWER ENTITIES

- A. Grand Junction - Persigo 201 Area
Grand Junction, the Central Grand Valley Sanitation District and Orchard Mesa Sanitation District are all within the Grand Junction 201 Area. The 201 grant program was federally funded through the Federal Water Pollution Act as amended in 1972. Based on EPA 75% financing, a study was conducted to determine sewer needs for this area of the County and the Persigo Plant was built to treat the wastewater. Persigo is designed to treat 12.5 million gallons per day or an estimated 100,000 people at average levels of flow. Potential

capacity of the plant is 25 mpg or an equivalency population of 200,000. The present population within the Grand Junction 201 area is estimated at 62,000. As growth continues in the Greater Grand Valley area, capacity will eventually be reached and expansion must take place. While there is some unclarity as to specific financial responsibilities for any expansions, the County by virtue of its ownership of the plant is ultimately obliged to deal with further expenditures for the Persigo facility. The interceptor lines in the County but outside of the Grand Junction 2 mile influence area are also under County authority although again vaguely defined through the City-County agreement.

The City of Grand Junction is currently updating the 201 plan and conducting a storm sewer separation study, which are also matters which affect the County. Yet the County has no assigned personnel to represent it.

Finally, the City acts as a centralized billing agency for itself and the 7 districts in the 201 Area. There are currently no contractual arrangements addressing the coordination of financing plans for line replacements or line extensions. This is seen to be a matter of importance.

Major Issues for the Grand Junction - Persigo 201 Area

1. Land Use and Engineering

- a. Need for improved coordination of new development with sewer line capacity in the unincorporated areas of the County.
- b. Needed County participation in developing criteria for expanding Persigo Service Area.
- c. Lack of technical expertise in County government for comprehensive sewer engineering and project level review.
- d. Delayed or displaced growth due to forestalled sewer extensions.

2. Septic Systems

- a. Need for clear policy for determining when to require connection of properties served by septic systems to sewer lines, both new and existing.
- b. Need for septic suitability analysis.
- c. Need for monitoring the cumulative impact of septic systems in the Grand Valley.

3. County Fiscal Concerns

- a. Need for County to have consistent, defined role in Persigo Service Area budget.
- b. Need for a financial plan for line extensions.
- c. Need for improved payback system when oversizing lines (currently accomplished through line maintenance program).
- d. Need for setting revenues for future plant expansions.

B. Fruita 201 Wastewater Treatment Area

As in Grand Junction, Fruita's Wastewater Treatment Plant was partially funded by the EPA 201 Wastewater Treatment Program. The Fruita 201 area is quite extensive and includes large portions of the Redlands as well as the City of Fruita itself. While the funding process has been completed for Fruita's facility, the 201 area south of the River is without trunk sewer lines. Constraints in the existing Fruita 201 include:

- Obligation to serve those within the existing sewer service area upon need.
- Management practices which will fit the intent of the goals of the wastewater treatment facilities plan i.e. keep levels of water quality in defined boundaries.
- Avoidance of sewer plants being built at fringes of 201 service area to treat sewage.

Based on the County Commissioners Resolution approving Quail Ridge zone change and Outline Development Plan, this development must be incorporated into the Fruita 201 service boundaries, and connected to the Fruita sewer system. In the process of planning a line extension and expanding service boundaries, consideration must be given to landuse policy for intervening areas between Quail Ridge and municipal boundaries. King's View Estates, to the south of Fruita and within the Fruita 201, may also in the future be compelled to tie into the Fruita facility, thus creating another service boundary change.

Serious questions need to be addressed concerning sewer service in those areas of the county which are adjacent to or near Fruita:

Major Issues for the Fruita 201 Area

1. The County's role needs to be better defined as 201 area expansions occur, and criteria for area boundary changes needs to be established.

2. Fruita's plant capacity for development is considerable - the County needs to coordinate zoning with this capacity and with Fruita's master plan.
3. At what point should King's View Estates seek sewer service from the Fruita plant? Decisions on the Redlands area landuses and subsequent line sizing must be made in a rational way.

C. Rural Sanitation, Water & Sanitation Districts and Municipal Facilities & Lines

As in the case of 201 service areas, rural districts and municipalities also have boundaries in which sewer service is provided to those requesting it. Unlike a 201 plan however, the above entities are in general less constricted in their programming and monitoring of service needs vis a vis capacity, or in the determination and alteration of boundaries. Another distinguishing feature is that in Mesa County the entities not having received EPA funds are lesser in size and resources. Major impacts of a "boom" nature can be expected in some of these areas such as Collbran and Debeque with growth spurts far exceeding the ability of the sewer systems to handle it. The County has played a role in helping finance sewer facilities in rural areas (e.g. Collbran) as well as setting the stage for sewer facilities through its land development permits. The various issues pertinent to all of these entities and location specific issues are outlined below.

Rural Mesa County Sewer Issues

1. General

- a. Need for sewer service engineering standards in areas under County jurisdiction and which receive County assistance.
- b. Need for contracts with districts to ensure that financial planning takes place when using County funds and under County jurisdiction.
- c. Need for agreements for annexation or power of attorney to annex by municipalities when that municipality provides sewer service.

2. DeBeque: the concerns listed above.

3. Palisade

A prior EPA 201 Step I Study was conducted for Palisade, including a proposed special sewer district west of the town; there is a possibility of this district eventually forming. The County has not taken a position officially for this possible formation or examined associated costs should it happen.

4. Mack

The size of the Mack facility will accommodate approximately 90 more sewer taps. Should this be insufficient capacity in the future, an expansion of the facility would be required; should the County address this need by assistance?

5. Mesa Water & Sanitation District

Mesa's District encompasses approximately 230 acres and is capable of handling an estimated 180 more taps. The looming growth of Powderhorn area into recreational community is creating a situation which calls for either a new service district or inclusion into the Mesa Water & Sanitation District in which the County and State Health Department are expected to take the lead in policy.

6. Collbran

With the Collbran sewer plant damaged by the 1983 flood, the County must make some decision regarding further financial assistance to the community and requiring a detailed service plan to be done.

D. Private Plants

Although the County has adopted landuse policies and a landuse code discouraging private sewer plants, several of these plants are already located outside of the urbanized area of Grand Junction, and isolated from districts or other systems. These existing plants pose special problems in and of themselves in terms of expansion and changeovers to another type of ownership.

1. Powderhorn (See Mesa)

2. Valley Vista

- Lack of written contract delineating sewer service area.
- Need for decision whether or not to encourage formation of special district.

3. Kingsview

a. There is at present no County policy for tying this development into the Fruita 201 Area. Components to such a policy should include:

- limitation on future growth of Kingsview without tying into Fruita sewer system.
- criteria for sizing line

- financing mechanism
- land uses and zoning recommendations in intervening and surrounding areas between King's View and the Fruita plant.

E. Possible New Districts

1. It may be appropriate for an overall policy to be established for areas which may propose districts (See County Land Use Policies #6) in the future. Since the County may use special districts, certain questions arise as to how it uses this power.
 - a. Should the County assert itself in arbitrating district boundaries?
 - b. Options for establishment of facilities should be developed.
 - c. Some kind of consistent review procedure should be adopted for district petitions.
 - d. There is a need to identify all areas which may need facilities including Gateway, Kannah Creek, Whitewater, and Loma.
 - e. There is a need to review other areas zoned to densities which would require sewer service.

F. General Concerns

Certain issues and needs are increasingly apparent in the County and are not tied to locations or specific entities. When preparing any comprehensive policy, the issues listed below would represent major countywide concerns

1. Sewer service often leads to the need for other urban services. Other service costs associated with providing sewer service need to be recognized and dealt with. These would include the frontend expenditures of adequate fire protection, police protection, schools and roads and their associated ongoing expenses. Ultimately the question to what degree sewer service determines the expenditures of tax dollars and landuse patterns. (See Costs of Sprawl & Cost Effective Site Planning)
2. ~~There are needed~~ annexation policies tied to providing sewer service ^m municipalities *and special districts are needed*
3. Communities in Mesa County impacted by energy development should be compensated by the generators of impact in the vital services provided. Methods to assess these impacts and types of mitigation on a systematic basis are needed.
4. Strategies for coordinating road planning in the County with sewer line placement is needed to avoid

expenses and problems associated with repairs and replacements. (Specific points are listed in the proposed policies.)

5. Zoning in the County is often at odds with an ability to receive sewer service. An in depth analysis of current zoning is necessary to determine where changes should be made to reflect ^{an ability to} services.
6. As yet there are no County technical staff persons qualified to review sewer lines or develop standards for sewer design.

III. PUBLIC WORKS GROUP RECOMMENDATIONS FOR MESA COUNTY INVOLVEMENT WITH SEWER SERVICE

Members of the Public Works Group have been meeting since September to discuss the problem of sewer service in the County. In the course of this time, the recommendations listed below have been developed for the County Commissioners and appointed officials to review. This list of recommended actions is diverse, and necessarily so. The variety of situations in the County demands that there be a comprehensive perspective on providing and coordinating sewer service under this jurisdiction.

Specific recommendations are grouped under the following headings:

- A. Policy & Code Amendments
- B. Organizational Structure
- C. Financial Management
- D. City/County Agreement Revision
- E. Situation Specific Actions

A. ALTERNATIVES FOR ORGANIZATIONAL STRUCTURE IN MESA COUNTY

No Action Alternative

In the past, the County has chosen not to involve itself with sewer service as a component to an urban infrastructure system. In many ways this had been a prudent decision. Other entities have traditionally provided this service and growth has been, in general, contained in concentrated areas. In recent years however, intensive growth has occurred and the demand for services not forthcoming from other entities has increased. Should the County continue their policy of noninvolvement several problems are likely to arise:

1. Inconsistent decisions for sewer district establishment.
2. Inadequate line sizing for future development.
3. Extra costs to County taxpayers for ancillary services where sewer service exists.

4. Planning decisions made by sewer entities.
5. No funding for Persigo Plant expansion.
6. Further 201 boundaries extensions, jeopardizing EPA funding.
7. Possible inadequate service to tie-ins.

Organization Structure RECOMMENDATION

The recommended alternative for a County organizational structure to deal with sewer service is a Sewer Board appointed by the County Commissioners. While a number of questions arise as to the specific authority and consistency of such a Board, several advantages are evident in this organizational structure.

1. The Board would provide consistency in implementing sewer policy. Working from a specialized area of policy a Sewer Board would review on a regular basis service proposals and questions.

Further, its subordinate relationship to the Board of County Commissioners in terms of accountability would avoid conflicting policies and actions.

2. The Board would draw together various aspects of Sewer Policy rather than viewing any proposal or action in a vacuum. This would be accomplished by the function of the organization itself and potentially by its membership. Possible contributions of skills and interests could consist of professional engineers, legal consultants, representatives from other governmental entities and staff.
3. The Sewer Board concept has flexibility with regard to authority. Selected powers could be assigned to the organization, thus enforcing recommendations. There are optional directions which may be assigned, including a master sewer line plan for the urbanized areas, negotiating powers with special districts and control over a sewer service budget.
4. Centralization—currently, the numerous issues surrounding sewer service have been dealt with by different County divisions and departments. Communication is awkward in obtaining necessary information and notifying all concerns as these issues arise. With a Sewer Board, these questions become focused. Staff as needed would be informed.
5. Attention to financial management. With a working Board, ongoing efforts for cost effective sewer service planning would be accomplished.

Other organizational alternatives have been considered by the Public Works Group and should be noted here:

Metro District

Countywide Sewer District - this was seen to have all the disadvantages of a metropolitan district and none of the advantages such as coordination of services.

Metro-District

The metro-district alternative is contained in CRS 32-3-103. Districts are established by the District Court of the County. They may be within or outside of one or more municipalities or both.

To establish a Metro-District the following steps must be followed:

1. Petition to form a district filed in the office of the clerk of the court. The petition must be signed by 10% of the taxpayers of the district.
2. Bond filed with security approved by the court sufficient to pay all expenses connected with the proceedings in case the organization of the district is not effective.
3. A public hearing is held after proper public notice and an election is held.
4. Formation of a Board of Directors after declaration of a corporation by the court (5 directors).

Metro-districts have broad powers including: power to borrow money, acquire and dispose of land, manage and control the affairs of the district, hire and retain staff, power of eminent domain, construct and maintain facilities, to fix rates and pass regulations.

Metro-districts have all the powers of a water, sanitation and fire protection district.

The metro-district option provides all of the necessary tools for a County-wide metro-district. It could take on the functions of water, fire, and recreation if a County recreation district were formed under CRS 32-2-101 to 32-3-133. Police protection districts and safety protection districts are apparently also possible under the Metro-District structure.

Creating a metropolitan sewer district for Mesa County would have the following disadvantages: