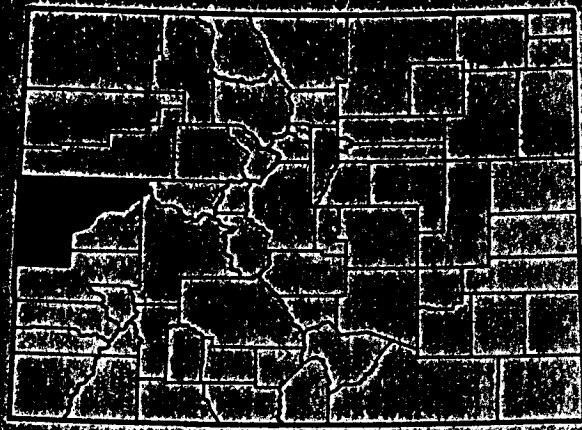


(031-003)

Mesa County Colorado



**Water & Sewer
Facility
Plan
1972**

INTRODUCTION

The purpose of this study is to prepare a comprehensive plan for the development of municipal or public water and sewer systems to satisfy both present and future needs in the County. Excluded are cities or towns with a population of 5,500 persons or more, as indicated by the 1970 Census. The Farmer's Home Administration Water and Sewer Loan and Grant Program is designed to assist small communities and counties with the construction of adequate water and sewer facilities. In this study, if a small community is located within close proximity to a central or larger city, it was recommended that future water and sewer improvements should be provided by that central city. Therefore, no specific recommendations were made concerning water and sewer improvements for the small community. In this situation all water and sewer planning and water and sewer improvements should be coordinated with the central or larger city which usually is better able to serve small developments contiguous to its boundaries. This study included, in some instances, considerations for special water and sewer districts that had been formed outside of incorporated cities due to urbanizing growth trends.

This plan is general in nature. Prior to construction of any water-sewer improvements in the cities or in any areas of the County, engineering design studies should be undertaken to design and locate the facilities where they are specifically needed.

It is not the purpose of this plan to promulgate the indiscriminate construction of water and sewer facilities. However, there are many areas in the mountainous counties that are experiencing growth due to skiing and/or other recreational activities. It is the intent of this report to indicate a need for facilities for these areas where it is deemed necessary. The philosophy is to coordinate water and sewer improvements for new development in order that perhaps one system may serve several developments within any given county.

In communities which experience large amounts of activity from tourists and recreationists, the analyses of the water and sewer systems were based upon satisfying the needs of the community's population at its peak rather than

basing it on the permanent population figures.

It is important to realize that certain rural residents may require better water and sewer facilities. In some instances rural water districts may be required to provide safe and adequate facilities for farming and ranching operations. In short, it is recommended that needed water and sewer facilities be provided on a compact and coordinated basis rather than the indiscriminate placement of improvements.

It has become a realization that water is a limited resource. The rate of usage of water by domestic, agricultural, industrial and commercial sources is increasing at an accelerating pace. At the same time, in many parts of the country and the world, the available supplies of good quality water are declining at a very rapid rate. A small percentage of Mesa County is underlain with large underground water supplies. Deep wells are necessary in many areas, however, relatively shallow wells in some areas are good producers of good quality water.

Apart from conservation for the future, there are also a number of more immediate reasons for successful water planning. There will be the obvious domestic conveniences to the individual and his family. The danger of well water contamination by lateral seepage from septic tanks and other sources can be eliminated, and likewise the necessity to collect rainwater and meltwater will vanish. There will also be some economic benefits. Cattlemen and irrigation farmers will undoubtedly benefit, industry is more likely to be attracted, and property values are likely to hold steady and probably rise.

Where sewage disposal is concerned, hazards generally fall into two categories: public health hazards and general nuisances including hazards to natural beauty and recreation. Public health hazards which may result in infection, epidemics and possibly death can occur when sources of drinking water are contaminated through lateral seepage from sewage lagoons, septic tanks, or even feedlot and barnyard run-off. Nuisances are created when recreational areas, lakes, rivers, etc., become polluted so that they are unsafe for water sports. The resultant odors and accompanying destruction of scenic areas which often occur

can keep tourists away, thus resulting in economic losses. Again, property values can be destroyed and industry discouraged which leads to the general economic detriment of the County.

The Farmers Home Administration of the U. S. Department of Agriculture has recognized the need for water and sewer planning and subsequently has provided funds for this task. These funds were utilized to formulate this study.

Sewer

Existing Facilities

Existing central sewer systems which are presently serving the incorporated communities in the County are shown on the Mesa County Sewer Plan in the back of the report. Additionally, there are several central sewer system operated by organized water and/or sewer districts which serve in unincorporated areas of the County. A summary of these districts and their facilities is as follows.

Clifton Sewer Districts #1 and #2

These districts together serve approximately 2,000 people in the Clifton area. Treatment facilities consist of three separate lagoon installations with a total of six cells. Total water surface amounts to 16.9 acres. The treatment facilities are overloaded at times and the district is considering the installation of aeration equipment in several of the cells to increase the capacity of the facility. This should be done in the near future.

Mack, Colorado

This community utilizes an old railroad sewer with no treatment facilities. The collection system is in very poor condition. There is an immediate critical need to improve sewerage facilities.

Mesa, Colorado

Mesa does not maintain a central system at the present time and critically needs central facilities.

Sewer Needs

The following summary indicates the sewer needs in Mesa County for the planning period.

Immediate Needs - Sewer

1. For Clifton Sewer District #1 and #2
 - a. Install aeration equipment as required to increase treatment capacity of the lagoons.
 - b. Expand the collection system to accommodate new development.
 - c. Maintain the sewerage system in an adequate manner.
2. For Loma, Mack and Whitewater, Colorado
Immediately consider construction of central facilities.
3. For Mesa, Colorado
Construction of a total sewerage system with all component parts.
4. Expand existing sewer districts, if possible, to accommodate new or existing development.
5. Provide individual systems for ranches and farmsteads which will not cause pollution or back-up when usage is heavy.
6. Provide suburban areas with service from municipal systems where feasible and practical.
7. Present all plans for new or rebuilt systems to a health officer or other appropriate person who could advise if the proposed installation is satisfactory.

Long Range Needs - Sewer

1. The long range needs of rural areas will be similar to those mentioned as immediate needs. A continuing effort is needed to assure that each and every resident of the County exists within the limits of accepted sanitary conditions.