STEAMBOAT LAKE WATER DISTRICT

REVISED SERVICE PLAN

APRIL 1972

INTRODUCTION

The Steamboat Lake Water District Board of Directors has determined that the Service Plan prepared for the District by Wright-McLaughlin Consulting Engineers, dated April 1969, no longer applies to the type of development now in progress on some of the lands within the revised District. This Revised Service Plan reflects the current trends and requirements of the current development and replaces the previous Service Plan.

SECTION I - DESCRIPTION OF AREA

General

The Steamboat Lake Water District is located in the northern portion of Routt County, Colorado, about 25 miles north of the town of Steamboat Springs. Map No. 1 shows the location of the District and Map No. 2 shows the boundaries and topography in detail.

The District comprises an area of approximately 15.9 square miles of which Steamboat Lake and the State owned recreational lands around it comprise about 4.2 square miles.

This Service Plan is based on a Study Area consisting not only of the land presently within the District boundaries but

also of all of the privately owned land lying within the drainage basin and capable of being developed for residential use. This was done with the view that such "outside" land may be developed and annexed to the District at a later date. There is currently a proposal to form a Santitation District encompassing the same property as the Water District. It is anticipated that the two districts will be merged into one district at some later date.

Basic Economy

Since the construction of Steamboat Lake, the land in the Study Area has become a major recreation area. Prior to that time the main economic bases were ranching and timber production.

With the current development program in the area, the economic base has shifted principally to the recreation industry and will be based upon permanent and part-time residents and tourists.

Existing Development

The community of Hahn's Peak consists of about forty buildings including a few seasonally operated commercial facilities. At the present time there are almost no permanent residents within the entire Study Area.

The Steamboat Lake Recreation Area is partially developed with more facilities under way and proposed.

The U.S. Forest Service currently operates one public campground on Pearl Lake in close proximity to the District boundary.

Proposed Development

The Master Plan of the Steamboat Lake Development is enclosed, see Map No. 3. It is a recreational-residential community plan consisting of approximately 10,000 potential homesites.

Comparable densities have been projected for the other privately held parcels of land within the Study Area to provide the basis upon which the water system is planned.

Studies of similar types of developments (Table 5) show that the rate of home building is slow. The great majority of the homes constructed are occupied only a small part of the time.

SECTION II EXISTING WATER FACILITIES

There are no central community water facilities within the entire Study Area at the present time.

The existing private and State owned water supplies are provided by individual wells of small capacity in the shallow ground water table.

It is reported that some of the wells in the town of Hahn's Peak are currently experiencing some contamination from the septic tanks in the area.

SECTION III WATER SOURCE

Water Requirements

The projected water demands for the entire Study Area are shown in Table 1. This table shows the projected rate of development, the population assuming full occupancy, and the water requirements.

The maximum water requirement for 25 years and 100% occupancy will be approximately 1,100,000 gallons per day (765 gallons per minute) or 1.03 cubic feet per second.

The maximum water requirement under 100% development and occupancy will be approximately 4,400,000 gallons per day (3060 gallons per minute) or 4.12 cubic feet per second. The indications are that most of this water will be available from underground and the District has more than ample rights to surface water to make up any difference.

Surface Water

The District presently has water rights as shown in Appendix B.

It is the present intention not to use surface water as a source for initial domestic supply. Surface water will be used to augment the subsurface source should the demand ever warrent it.

Tributary Ground Water

The tributary ground water is that lying within the alluvium soil in the immediate vicinity of a surface stream. It is recharged directly from water percolating into the soil from the stream bed.

This source of water is discussed further in the Geological Report attached as Appendix A.

Non-Tributary Ground Water

In this area the deep or non-tributary ground water exists primarily in the Dakota sandstone formation. This water does not depend upon the flow in a stream for recharge.

Wells of this category will be used to provide the main initial water supply for the District.

This source is discussed further in the Geological Report, attached as Appendix A.

SECTION IV WATER TREATMENT FACILITIES

It is anticipated that ground water taken from wells will require no treatment other than chlorination. Chlorinators will be installed at each well location.

SECTION V WATER STORAGE FACILITIES

The storage tanks will provide a total of 3,015,000 gallons, which represents 48 hours flow at an average daily demand plus 343,000 gallons of storage for fire protection. These flows allow 15% dead storage in the tanks.

SECTION VI WATER DISTRIBUTION LINES

The water mains will be designed to the sizes required under full development of the entire Study Area and under 100% occupancy. They will also be designed to prevent freezing and to provide for year-round operation.

The main distribution system is shown on Map No. 4 All facilities will be designed and constructed to the standards of the State of Colorado Health Department.

SECTION VII COSTS

General

The estimates are based upon present day costs and include engineering and administrative fees.

It is anticipated that cost inflations on the later stages of construction will be compensated for by an increase in tap fees and service charges, if necessary.

Water Sources

The costs and anticipated time schedule for well development are shown in Table 3. The approximate well locations are shown on Map No. 4.

The estimates for the wells also include the necessary pumping and chlorination facilities.

Storage Facilities

The locations of the storage tanks are shown on Map No. 4 with the sizes indicated. The cost and time schedule estimates are shown in Table 3.

Distribution Lines

The main water lines are shown on Map No. 4. The costs for the secondary water distribution lines were estimated from detailed plans for the first two phases of the Steamboat Lake Development, and an average cost per lot was $520. This average cost is used for distribution line construction cost in Table No. 2.

SECTION VIII INCOME

General

The District has three primary sources of income: the basic use or availability fee for the services provided; a tap fee for connecting the service to the system; and ad valorum taxes.

Basic Use Fee

This fee is presently set at $5.00 per month for each water connection. This fee will be assessed against every lot which has water lines available to it whether or not a connection is made. Until a connection is made, it will serve as an availability charge.

At the discretion of the District, this fee can be raised to compensate for increased costs due to inflation or unplanned system expansion.

The income projection for this source of revenue under the present rate is shown in Table 4.

Tap Fees

Initially a tap fee of $800 is anticipated. This fee will be due and payable when the service is available or a connection is made.

This fee may also be increased by the District to compensate for increased costs.

The income projection for this source is also shown in Table 4. There was no financial consideration given for taps to any of the existing public or private facilities.

Taxes

The assess valuation of the land and improvements within the District for the year 1972 was $50,590. This is quite low but will increase very rapidly with the development of the privately owned property.

An ad velorum tax levy of 10 mills is considered to be acceptable for the District and this would provide a substantial source of income. The income derived from service charge and tap fees will finance the District but the tax levy income will be used if required. This potential source of income is shown in Table 6.

SECTION XI FINANCING

The entire source, storage and distribution system will be financed by the District through bond issues. Table No. 4 shows the projected income and repayment schedule for the bond redemption.