Facilities Planning Study - The City of Driggs

This summarizes the report and presents conclusions and recommendations. It does not present detailed information to support the conclusions or recommendations. The detailed information can be found in the body of the report.

1.1 BACKGROUND

The City of Driggs is the County seat for Teton County which is located in Eastern Idaho. Figure 1-1 shows the location of Driggs with regards to the State of Idaho.

The existing Wastewater Management Program for the City of Driggs consists of a central collection system comprised of gravity lines, one small pump station, and a transmission line from the City to the existing wastewater treatment plant. The existing wastewater treatment plant is a 3-cell, non-aerated, facultative lagoon located approximately 1/z mile west of the City. The existing system was constructed in approximately 1962 and has operated since that time. Minor expansions have been made over the past several years to the collection system, primarily on the east side of town. During 1995 a large subdivision was added to the collection system.

The existing wastewater treatment facility has been modified in the past to include a chlorine disinfection system. This system was constructed in 1989 to meet EPA criteria.

The growth of the community has overloaded the existing Wastewater Management Facilities to a point where modifications are required. The existing treatment facility has detention times significantly below those required by State design criteria and there have been periods of noncompliance with the City's EPA Discharge Permit.

At the present time the City of Victor is in the process of developing a central wastewater facility for their community. The location of the treatment facility for Victor has yet to be selected. The opportunity exists at the present time to develop a regional facility for the Upper Teton Valley if funding can be developed. Discussions with several State agencies has indicated that there is strong support for a regional facility rather than developing one (1) or two (2) additional small wastewater treatment facilities in the Upper Teton River Valley.

There are also several large developments that are being considered both between Driggs and Victor and in the araa Pact of nrirrnc, ,If thecp riavalnnme to do develnn they ore lama ennj inh that they may require their own treatment facilities. There exists a prime opportunity for bringing together all entities to develop a regional facility that will handle wastewater flows from the Upper Teton River Valley area.

1.2 STUDY GOALS

This study has the following items as its goals:

1.
Document existing conditions in and around the Driggs and in the study area.

2.
Evaluate the effectiveness of the existing wastewater management techniques used in Driggs and the remainder of the study area.

3.
Develop possible alternatives for wastewater management.

4.
Evaluate proposed alternatives, determine their estimated cost (both for capital and for operation and maintenance), and develop a priority rating system for the various alternatives for wastewater collection, wastewater transmission, wastewa ter treatment, disinfection, and ultimate disposal.

5.
Develop a recommendation for the City of Driggs and the surrounding area for modifications to their existing Wastewater Management Facilities.

1.3 CONCLUSIONS AND RECOMMENDATIONS

As a result of the analysis that was completed on the existing facilities, anticipated growth in the area, and the concept of regionalization, the following conclusions and recommendations have been made.

1.3.1 Conclusions: The following conclusions were developed as a result of the study completed on the existing and future growth for the City of Drig9s and the remainder of the study area. The items that were concluded are as follows:

The existing wastewater treatment plant is overloaded and modifications need to be made.

The use of the existing lagoon facilities should be continued with modifications.

All indications are that significant growth will continue in Driggs, Victor, and the surrounding areas. Projected growth rates for the area vary significantly depending upon their source. However, all conclusions are that significant growth will develop in the area.

Soils in the study area are highly permeable and are of a very granular nature.

Groundwater in the study area varies in depth from over 60 ft on the eastern edge of the Valley to the ground surface in the area just west of the old railroad right-of-way.

The Teton Basin aquifer is part of the Snake River Stream Flow Source Area Boundary aquifer and falls under the Snake River Sole Source Aquifer requirements and Stream Flow Source, which are important water sources in Southeastern Idaho. Portions of the headwaters of this aquifer underlies the study area.

Due to the soils and groundwater in the area, the area included within the study area boundaries are susceptible to environmental constraints. There is a possibility of contamination of the aquifer from improper treated wastewater.

Most of the City of Driggs, the City of Victor, and the surrounding areas develop the majority of their culinary water from the subsurface aquifer.

The City of Driggs has passed a Revenue Bond for $200,000.

The City of Driggs needs to proceed with obtaining an additional $800,000 either through a Revenue Bond or through Judicial Confirmation of ordinary and necessary maintenance.

The regional concept of developing the existing wastewater treatment plant for the City of Driggs into an aerated lagoon for treatment of regional flows should be developed.

An agreement needs to be developed between the City of Driggs and the City of Victor regarding the responsibilities, costs, and operation and maintenance by an inter-city agreement.

1.3.2 Recommendations: Based on the above conclusions this report makes the following recommendations:

The City of Driggs should take the lead in developing a regional facility for the Upper Valley area. This would include the construction of a line between Driggs and Victor, upgrading of the existing wastewater treatment plant to provide a capacity of 550,000 gallons/day of flow, and have the capability to treat 603 Ibs of BOD per day.

The City of Driggs should proceed immediately to procure additional funds either through the Department of Commerce or through the State of Idaho - Division of Environmental Quality.

The City of Driggs should work with the City of Victor and any large developers in the area to develop other funding sources that may be available.

The City should involve its constituents in planning for the project.

1.4 STUDY ORGANIZATION: This study is organized into nine (9) chapters as follows:

Chapter 1 contains introductory material, a summary of the report findings, and a list of conclusions and recommendations.
Chapter 2 presents information on existing conditions in and around the City including land use, population, environmentally sensitive areas, existing water system, and existing water systems, and the existing wastewater systems.
Chapter 3 presents treatment requirements and effluent limitations that apply to the City of Driggs.
Chapter 4 presents information on planning period, population projections, future growth area, and future projected design flows.
Chapter 5 contains information on various wastewater collection alternatives.
Chapter 6 presents information on wastewater treatment alternatives that are available for the study area.
Chapter 7 evaluates the alternatives that were presented in Chapter 6.
Chapter 8 presents the Best Apparent Alternative for Wastewater Management within the study area.
Chapter 9 presents information on implementation of the best apparent alternative.

This report's format follows the Preliminary Engineering Report outline of the IDHW - Division of Environment Quality (DEQ).

1.5 ABBREVIATIONS

BODS
5 day biological oxygen demand
EPA
United States Environmental Protection Agency
fps
feet per second
gal
gallon
gpcc
gallons per capita per day
gpd
gallons per day
if,
infiltration inflow
IDHW
Idaho Department of Health and Welfare
lbs
pounds
lbs/d
pounds per day
mg/l
milligrams per liter
O&M
operation and maintenance
SCS
Soil Conservation Service
yr
year