

DESIGN FOR BENEFICIAL USE
OF FEEDLOT RUNOFF

by 523

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INTRODUCTION

The cattle feeding industry in the high plains and in Kansas is growing very rapidly. During 1968, according to the Kansas Crop and Livestock Reporting Service (1), the number of feedlots over 8,000 head capacity has grown 67 percent, and the numbers of cattle on feed as of January 1, 1969, has increased by 26 percent, over the figures for January 1, 1968.

The disposal of waste material generated by these cattle has become a serious problem for not only the feedlot operator, but also the general public. Smith and Miner (2) have listed several serious pollution incidents. These incidents were the pollution of streams in Kansas that could be directly related to feedlots and caused fish kills and septic conditions to exist in the streams.

Due to the recent national and state policies and regulations on water pollution, the Kansas feedlot operators have been required to provide storage for the surface runoff generated from their feedlots. Runoff must be disposed of in some manner in 5 to 10 days after the storm causing the runoff, in order to provide storage for additional runoff from future storms.

Disposal of runoff has lead to a number of questions regarding proper disposal methods. The Kansas State Board of Health has taken the position that, where possible, runoff water shall be returned to agricultural crop land. However, they