

Duck Creek Wastewater Planning Study

Purpose of the Study

Through various studies completed in recent years, State agencies responsible for maintaining environmental quality have determined that there may be a potential for groundwater and surface water contamination through septic systems in the Duck Creek area. Significant effort has been given in the past few years by these agencies to determine the magnitude of this potential. Having established that contamination of the water is possible, the State has commissioned a study to determine viable alternatives of wastewater treatment for the Duck Creek area. This study will evaluate several different types of treatment systems and determine a preferred alternative for the treatment of wastewater effluent. The study will look at both economic and environmental issues resulting from each alternative.

Major Tasks of this Study Are:

- Define and analyze the existing and future conditions within the study area that impact wastewater treatment and disposal.
- Assess the environmental conditions and constraints that are applicable to the study area.
- Develop and screen alternatives to meet the long-term needs of the area.
- Perform an in-depth assessment of principal alternatives.
- Identify preferred alternatives for wastewater treatment and disposal and provide an implementation plan.
- Develop a public participation plan.

Possible Treatment Methods

The following alternatives will be considered in the wastewater study. The preferred alternative for wastewater management may be a combination of these methods.

No Action Method

- Continue Septic Tank Use in Current Form

Onsite Treatment Methods

- Continue Septic Tank Use with Improved Management
- Alternative Methods (Peat, Mound, Gravel Systems)
- No Collection System Needed

Neighborhood Treatment Methods

- Large Scale Onsite Treatment Methods
- Sand/Gravel Filters
- Fabric Filters
- Membrane Bio-Reactor
- Lagoons
- Sequencing Batch Reactor
- Small Collection System Needed

Regional Treatment Methods

- Membrane Bio-Reactor
- Lagoons
- Sequencing Batch Reactor
- Conventional Systems
- Large Collection System Needed

