Refining the Application Rates of Onsite Surface Application
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Executive Summary

This research project collected double-ring infiltrometer data at different locations to measure soil infiltration rates; calculated the hydraulic conductivity of the soil at the locations using established equations; and compared the results to the results found in the NRCS Soil Survey website. The purpose of the research is to determine if the NRCS data is sufficient for accurately determining soil infiltration rates and if not, what amount of data is necessary to accurately predict soil infiltration rates.

Some conclusions of the research were:

- The data from the NRCS is not site-specific enough for accurate predictions;
- In order to obtain accurate predictions, the Horton and TTU2 equations may be used; and
- In order for these equations to accurately predict soil infiltration rates, more data must be collected.

Author's Recommendations

In order to completely utilize the Horton and TTU2 models, a larger set of data must be collected from a tighter set of soil conditions.

Were rule changes identified?

None

Is further researched needed?

No further research was identified by TCEQ staff.