

Drain field options after advanced pretreatment  
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Advanced or innovative and alternative (I&A) decentralized wastewater treatment systems can be designed to produce high quality effluent that is typically low in BOD, TSS, and may have had appreciable reductions in nutrients and bacteria. This high level of treatment has a low biomat development potential in the drainfields following these systems. Using creative drainfield options to disperse and treat the residual contaminants will help maximize wastewater treatment in the advanced system treatment train. Shallow placement of low pressure distributed wastewater within the soil profile will place contaminants in the most biochemically active soils zones to promote tertiary treatment.

This presentation will summarize treatment performance from shallow narrow low pressure dosed drainfields following advanced treatment technologies. In addition, this presentation will discuss the use of bottomless sand filters in Rhode Island as a drainfield option following advanced treatment systems meeting minimum effluent concentrations of 30 mg/L BOD and TSS.