

How GCLs can help create more efficient waterways?

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Abstract

Commercial, agricultural, and recreational canals continue to be important economic drivers in many countries. A wide range of geosynthetic products, such as geotextiles, geomembranes, and geosynthetic clay liners (GCL), help create more efficient waterways. Barrier geosynthetics such as GCLs are used to improve canal performance in numerous applications. For example, for irrigation canals, geosynthetic lining systems prevent seepage loss into soils. This improves the economics and sustainability of the irrigation system. The geosynthetic barrier also optimizes water flow in the canal network. Irrigation is conveyed more quickly and efficiently. This presentation reviews the application of GCLs in hydraulic structures including canals, and presents considerations for GCLs to perform as an impervious lining in these applications.

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