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Water & Soil Contamination through Hydraulic Conductivity in the Red River Basin

Division: Engineering & Computing Sciences / Environmental Innovation
Category: Intermediate
Region: Winnipeg Schools
City: Winnipeg, MB
School: Kelvin High School

Abstract: This study looks at average soil composition in Manitoba and its susceptibility to moving fertilizer through hydraulic conductivity. To understand the efficiency of hydraulic conductivity, each layer of soil was tested for both permeability and reactivity or its tendency to retain pollutant. It was proven that topsoil and subsoil do absorb fertilizer thus leaving the Red River and Lake Winnipeg at risk.

Biography

Samuel Nowicki is a Grade 9 student at École Kelvin High School in Winnipeg. He has been an active participant in Manitoba regional science fairs since 2004. He has an interest in marine biology and his projects often focus on environmental science and oceanography. This is his second Canada Wide Science Fair.