

## PROCESS AND IMPACTS OF SOIL COMPACTION



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### **Abstract**

We are exposed to soil every day. Soil is common, and seen as a simple material by many, but soils are actually very complex in their composition and their response to stresses. Soil reactions to compaction are even more complicated when the soils are moist or water is involved. This

presentation will discuss the curious nature of soil compaction and how things often may not behave the initially expected way. This presentation will walk through fundamental concepts and processes for the non-technical professional, but also provide a refresher for the engineer or soil scientist.

### **Biography**

has been the Director of the Erosion and Stormwater Management Certification Program at the University of Minnesota Department of Bioproducts and Biosystems Engineering since 2004. The Erosion and Stormwater Management Certification Program is a joint venture with the Minnesota Department of Transportation and the Minnesota Pollution Control Agency to provide continuing stormwater education and certification for engineers and contractors. The certification program offers classes on construction site, industrial site, and municipal stormwater controls and management, along with other topics.

Prior to working for the University of Minnesota, John worked as an engineering consultant on hazard evaluation of slopes and debris flows and other water resources and geotechnical engineering projects in the central and western United States. Much of his experience has been in erosion, landslides, natural hazard mitigation, and infrastructure development. John is a registered professional engineer in Minnesota and Colorado. He graduated from the University of Wisconsin-Madison with a M.S. degree in civil engineering and a B.S. degree in geology and geological engineering.

John has served as a Minnesota Erosion Control Association elected board member since 2005, holding positions of Treasurer and Vice President of the organization. John has also served on the Minnesota Stormwater Steering Committee since 2005 and Chairman of the Education workgroup since 2007.