

Name: Ari Ferro

Presentation title: Groundwater Phytoremediation

Abstract: Dr. Ferro will discuss the principles and application of phytoremediation to remove or stabilize contaminants in soils, groundwater or wastewater. He will discuss phytoremediation processes that enhance the rates of contaminant removal, the role of transpiration and methods for measuring rates of water use for tree stands. The results of modeling studies assessing the formation of groundwater capture zones by stands of deep-rooted trees, and the cultural practices that are used to encourage the development of deep roots, will be discussed. Three common applications of the technology will be discussed and highlighted with specific case studies: 1) Biological “pumping and treating” of groundwater, 2) Irrigation of tree stands with recovered groundwater, and 3) Hydraulic control of groundwater contaminants using deep-rooted trees.

Short Bio: Dr. Ari Ferro is an expert in phytoremediation and is a pioneer in commercialization of the technology. Before joining URS he conducted research at Utah State University and then founded a company to apply the techniques at groundwater remediation sites (Phytokinetics, Inc.). He has worked on many successful phytoremediation projects for major manufacturing and oil companies – projects ranging in scope from greenhouse studies to full-scale installations. Dr. Ferro is a frequent lecturer and has published numerous scientific articles on phytoremediation. He serves on the editorial board of the *International Journal of Phytoremediation*.
