Panelists (Building, Maintaining and Reusing GoldSim Model Components)

Alyssa Seal (Golder Associates)

Alyssa Seal is a Senior Environmental Planner at Golder Associates in Redmond, Washington. She has a bachelor's degree from the University of Pennsylvania in environmental studies and urban studies and a Master of Water Resources degree from the University of New Mexico. Alyssa specializes in developing GoldSim models to support decision-making in the water resources, mining, and oil and gas industries. Her experience related to developing GoldSim models for mining clients includes site-wide water balances for copper and gold mines which include mine heap leach operations, process facilities, water storage ponds, water supply sources, and tailings storage facilities. These models typically include understanding the impact water management operations under different mine plan, operations, and climate scenarios.

John Tauxe (Neptune and Company)

John Tauxe is an Environmental Engineer with Neptune and Company, with specialization in groundwater pollutant transport and environmental modeling. He has been a GoldSim user since 1998, when it was RIP. John studied Earth Science as a undergrad and worked for a few years in marine geology where he took longer than some (ahem!) to discover that it was not his true calling. He decided that as one who treasures the environment and enjoys model building and problem solving, his fate would lie in environmental engineering. After a lot of retooling and reprogramming, he was awarded a doctorate in Civil Engineering, with Fellowships from the University of Texas and the Department of Energy. Twenty years ago, Dr. Tauxe joined Neptune and Company, applying his radiological performance assessment skills to with new-fangled software called RIP. John has spent thousands of hours writing GoldSim models with an annoying degree of persnicketiness, and in the process has developed several time-saving and mouse-click-saving model-building tricks, some of which he is eager to share with you.

David Hoekstra (SRK)

David Hoekstra is civil engineer with over 30 years of experience in mining, environmental, solid waste and geotechnical projects. He has extensive experience in facility earthworks layout, mine closure, mine water management including the design of surface water conveyance, stormwater structures, and capture and storage structures for surface water and solution flows. He has been developing probabilistic, dynamic water balances for roughly 25 years, using a variety of tools to simulate the management of process solutions, AMD, runoff, and groundwater flows for a wide variety of mining projects, from coal to precious metals and from prefeasibility to operational and closure facilities. Mr. Hoekstra is an industry recognized expert in GoldSim water balance modeling. He first became involved in GoldSim simulation software during the early development of the tool in the late 90's and developed the first mine water balance using GoldSim in 1999. He been an intensive user of it ever since. He has presented multiple GoldSim water balance projects at mining conferences, including SME, Convencion Internatcional de Mineria, Mine Water Solutions, and Monitoring and Modeling Mining Solutions.

Paul Haby (Stantec)

Dr. Paul Haby is a Senior Water Resource Engineer with Stantec in Fort Collins, Colorado. Paul specializes in developing dynamic water balance and water management simulation models that incorporate both hydrologic and geochemical phenomena. Paul began developing dynamic simulation models in 2001 and has been a daily user of GoldSim since 2010. Paul has developed models for simulation of water quality impacts to rivers from legacy mine sites, heap leach optimization and closure, enhanced evaporation systems, tailings storage facility water and material balances, stratified pit lake hydrology and water quality predictions, water treatment trade-off studies, and site-wide water and chemical mass balance models. He received his Ph.D. from Colorado State University in Bioresource & Agricultural Engineering with a specialization in water resources and water quality. He holds a Master's degree in Environmental Soil Science with a specialization in soil microbiology and bioremediation from the University of California Riverside, and a Bachelor's degree in Biochemistry from Texas A&M University.