

**A Framework to Manage the Environmental Reality of
Orphaned and Abandoned Mine Lands
November 14, 2017
Facilitators Biographies**

David Holm

Early in his career, Dave was the founding manager of Colorado's Inactive Mine Reclamation Program. During that period and in the ensuing years he has been directly involved in well over 100 mine reclamation projects that were primarily focused on water quality improvement. He served as Director of the Water Quality Control Division at the Colorado Department of Public Health and Environment for 14 years. Since then, he has consulted for a handful of state and local water quality programs and worked on several cases involving quality/quantity litigation (in Colorado).

Dave has served as Executive Director of the Clear Creek Watershed Foundation in Idaho Springs for the last 5 years and was a project manager there beginning in 2009. CCWF is a 'Good Samaritan' mining remediation agency with over 50 projects completed since 1997. CCWF also does stream restoration work, habitat improvement and stream access projects.

Robin Bullock

Robin is an Associate Teaching Professor at the Colorado School of Mines in the Engineering, Design and Society Division. She has been working with students at Mines for 3 years, teaching Project Management and Engineering Design, as well as serving for the past 2 years as the Entrepreneurship and Innovation Manager for Mining competitions.

Prior to coming to Mines, Robin spent over 30 years in the Pulp and Paper, Mining and Oil and Gas industries. She worked as a process engineer and boiler foreman at Paper mills in Montana and Oregon, before returning to Montana and managing the legacy mining sites for Atlantic Richfield/Anaconda Company. There she was accountable for remediation of the largest superfund site, along with mining sites in the western US and Canada. Following BP's acquisition of ARCO, she became BP's global decommissioning manager for onshore oil and gas, mining and manufacturing. While stationed in Alaska, she joined the Deepwater Horizon oil spill response team, and served nearly 3 years as BP's Director for Natural Resource Damages and Environmental Sciences. During these roles, she managed to closure the largest NRDA's under both CERCLA and OPA. She then transitioned to Vice President of Global HSSE for Talisman Energy in preparation for the North Seas joint ventures and eventual sale. She returned to academia to work toward completion of her PhD in Civil and Environmental Engineering at the University of Alaska in Fairbanks where her research centered on management of oil spills in the Arctic.

Mark Rudolph

Mark Rudolph has been an Environmental Protection Specialist with the Colorado Department of Public Health and Environment (CDPHE) for approximately 20 years and has 30 years of experience working on environmental projects including Superfund project management, site assessments, sampling investigations, and Brownfields redevelopment sites. Additionally, Mark has extensive knowledge in mine site reclamation, regulation and operations. He has experience in monitoring of air and water quality, emergency response and Quality Assurance and Quality Control planning.

Mark provided technical expertise in soil and water conservation, drinking water supply, sanitary system construction and forestry consultation for rural communities in the Dominican Republic. He is familiar with accessing information from public and private sources and carries out multifaceted tasks efficiently and independently. Mark is proficient in producing a large volume of high quality work and manages with streamlined efficiency. Mark is fluent in the Spanish language (both written and verbal). Mark is the Superfund Project Manager for the Bonita Peak Site, Summitville, Denver Radium and Smuggler Mountain Superfund Sites. Mark is also the CDPHE Brownfields Coordinator.

Mark loves anything outdoors including fishing, hiking, backpacking and backcountry snowboarding. He is an avid gardener and has 2 bee hives and lives in the downtown Denver area.

Linda Figueroa

Linda A. Figueroa is a Professor of Civil and Environmental Engineering at the Colorado School of Mines. Her career has been developed to address the important role that environmental engineers play in society in addressing issues of sustainable development and complex/interdisciplinary problems. Environmental engineers need to have the knowledge and experience required to facilitate engineering solutions to the environmental interplay between food, energy, water within a sustainable community context. Linda has a broad range of experiences that she brings to address environmental issues that include design and analysis of water and wastewater treatment systems, application of molecular microbiology tools to nitrogen transformations and the biogeochemistry of metal and radionuclide immobilization. Her research is driven by microbial solutions to environmental issues with the recognition of the need to minimize energy requirements and thus the carbon footprint of the solution. Her approach is to partner with industry and government agencies to ensure that we are producing solutions that will be accepted and implemented. Her passion is in the linkage of fundamental microbial processes with geochemistry and modeling to create solutions of the future.

Doug Young

Mr. Young is an Affiliate (formerly Senior Policy Director) with the Keystone Policy Center focusing on finding consensus solutions to environmental and natural resource issues. He is also currently a consultant with the Western Land Group in Denver focusing on land exchanges with federal land agencies. Prior to these positions, he was a Senior Policy Director (2011-2014) for Colorado Governor John Hickenlooper where he worked on the full range of environmental policy issues, including oil and gas development, water policy, cleanup of contaminated sites, and abandoned mine cleanups. He was District Policy Director (1998-2011) for Colorado Senator and Congressman Mark Udall, primarily working on environmental and natural resources issues such as the cleanup and closure of the Rocky Flats nuclear weapons facility, wilderness legislation, forest fire policies on federal public lands, mine waste cleanup, R.S. 2477 rights-of-way, transportation issues, and open space preservation. He was a member of the Colorado Roadless Area Review Task Force, which developed recommendations for the management of roadless areas on National Forest lands. Before working for Congressman Udall, Doug was Director of Environmental Policy (1993-1998) for Colorado Governor Roy Romer. At this position, he worked on the negotiations over the Animas-La Plata water project, reform of federal grazing policies, numerous state environmental legislative issues, and various Superfund, clean air and open space issues. Before working for Governor Romer, he was an environmental policy advisor to Colorado Senator Tim Wirth. Doug is a graduate of the University of Colorado (degree in Political Science) and the University of Colorado School of Law. During law school, he was a Law Clerk at the United States Attorney's Office in Colorado.

Marcie Bidwell

Marcie serves as Executive Director of Mountain Studies Institute (MSI), an independent not-for-profit mountain research and education center established in 2002 in Silverton, Colorado. She has a Master of Landscape Architecture degree from University of Washington with a specialty in landscape ecology and community restoration. She has more than twenty years of experience in water-based environmental education, community outreach, and science-based environmental planning. MSI develops science that people can use to address environmental issues facing the San Juan Mountains, including addressing abandoned mines and the resulting legacy of mining in the region. Located in the geothermally altered Silverton Caldera and the newly designated Bonita Peak Mining District (BPMD) superfund site, MSI is dedicated to advancing mountain science to understand issues such as draining mines and innovating solutions to improve remediation success. As part of MSI's mission to lead place-based science initiatives, the institute has been monitoring water quality of the Animas River before, during, and after the Gold King Mine release. MSI invites partners to form a Science & Innovation Center as a consortium of businesses, researchers and agencies to advance technology, science, and creative solutions to improve remediation. MSI is helping Silverton, CO pursue the center for excellence to continue a century-long legacy as a hub of innovation for addressing acid-mine drainage and to share lessons with similar communities across the West, and around the world. For more information, visit mountainstudies.org or email marcie@mountainstudies.org.

Nicole Smith

Dr. Nicole Smith is an Assistant Professor in the Mining Engineering Department at the Colorado School of Mines. She is a cultural anthropologist with research and teaching interests in artisanal and small-scale mining; mining, sustainability, and social responsibility; community development; and engineering education. Prior to her position in the Mining Engineering Department, she was a postdoctoral fellow in the Humanitarian Engineering Program at Mines. She is also an Honorary Research Fellow at the Centre for Social Responsibility in Mining at the Sustainable Minerals Institute at the University of Queensland. Dr. Smith holds a PhD in Anthropology and a certificate in Development Studies from the University of Colorado at Boulder, an MA in anthropology from Colorado State University, and a BA in anthropology from the University of Minnesota.