



# Pathways of Metal Transfer from Mineralized Sources to Bioreceptors: A Synthesis of the Mineral Resources Program's Past Environmental Studies in the Western United States and Future Research Directions

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**Chapter 1**—Introduction to pathways of metal transfer from mineralized sources to bioreceptors

By Roger P. Ashley, Elizabeth A. Bailey, Laurie S. Balistrieri, Andrea L. Foster, Larry P. Gough, Floyd Gray, Randolph A. Koski, James J. Rytuba, Robert R. Seal II, Kathleen S. Smith, Lisa L. Stillings, and Richard B. Wanty

**Chapter 2**—**[Not yet available]** Arsenic cycling in the gold-mining region of the Sierra Nevada, California

By Roger P. Ashley and Andrea L. Foster

**Chapter 3**—**[Not yet available]** Mercury release and transport in mercury mineral belts, California and Alaska

By James J. Rytuba and Elizabeth A. Bailey

**Chapter 4**—Biogeochemical and biochemical pathway investigations of cadmium in subarctic ecosystems using a cadmium accumulator species (willow)

By L.P. Gough, R.F. Sanzolone, J.G. Crock, A.L. Fostler, P.J. Lamothe, C.M. Ager, and C.A. Gent

**Chapter 5**—**[Not yet available]** Chemistry of surface waters, stream sediments, and mine waste in background and mining-impacted terrane in the Humboldt River Basin, northern Nevada

By Lisa L Stillings

**Chapter 6**—**[Not yet available]** Impacts of historic mining in the Coeur d'Alene River Basin

By Laurie S. Balistrieri, Stephen E. Box, Arthur A. Bookstrom, Robert L. Hooper, and J. Brian Mahoney

**Chapter 7**—**[Not yet available]** Metals distribution and transport mechanisms in surface and ground water from abandoned mine lands: A Basin and Range Upper Sonoran Desert example

By Floyd Gray, Laura M. Brady, Ailiang Gu, and Richard Leisure

**Chapter 8**—**[Not yet available]** Distribution of Se and other trace elements between surface water, stream sediment, soil, and plants in areas impacted by phosphate mining in SE Idaho

By Lisa L. Stillings and Michael C. Amacher

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