

TOXICITY OF COALBED METHANE DISCHARGE WATER TO PRAIRIE STREAM FISHES^{AFS}

Don Skaar, Montana Fish, Wildlife, and Parks, 1420 East 6th Avenue, Helena, MT 59620,
dskarr@mt.gov

Aida Farag,, U.S. Geological Survey, Jackson, WY

Acute (96 hr) and chronic (60-day) toxicity tests were conducted on various fish species in order to better understand the sensitivities to major ions in surface waters, particularly those present in coalbed methane discharge water of the Powder and Tongue River basins. Discharge water in portions of the basins is high in NaHCO_3 which when combined with reconstituted Tongue or Powder River water can be toxic to fish at environmentally relevant levels. A general discussion of the sensitivity of different lifestages and the mechanisms of toxicity was also provided.