

Wellhead Protection Issues in Rural Eastern Nevada
Case Studies from Carlin and Lamoille, Nevada

Dean E. Alford, PG, Robin L. Simmons, E.I., Jason Dixon, E.I., and James L. Werle, P.E.

Converse Consultants
Elko and Las Vegas, Nevada

ABSTRACT

Greater emphasis is being placed upon groundwater protection issues throughout the Great Basin Region. Coupled with protection is accelerated population growth, supply development, and economic diversification issues. Technical aspects of groundwater hydrology are now paired with resource and economic development strategies. This paper contrasts two rural Nevada communities and their development of State of Nevada endorsed Wellhead Protection Programs. The City of Carlin, with a population of 2,000, is at the center of Nevada's gold mining operations, and seeks economic diversification and long-term growth strategies. Wellhead protection has been pursued to help protect current and future resource while simultaneously encouraging light industrial development. The community of Lamoille, Nevada is a slow to no growth community of 200 individuals. Wellhead protection strategies have been developed to protect water quality in keeping with the community's slow growth style. Technical contrasts included glacial alluvial deposits versus river gravels, geographic and land use variations, and variations in demographics. This paper documents the development of two very different wellhead protection programs and strategies in these communities.