

A COMPARISON OF THE VEGETATION COMMUNITIES ON GEOMORPHIC AND NON-GEOMORPHIC RECLAIMED MINE LANDS IN NORTHWESTERN NEW MEXICO¹

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Abstract: Geomorphic reclamation of surface mine lands attempts to create stable land forms that mimic natural areas in key aspects such as meandering drainage channels, slope and aspect diversity, and microhabitat diversity. In theory, geomorphic reclamation should allow for the development of a more diverse plant community as species suited to each of these niches establish themselves where conditions are most favorable.

In 2012, vegetation sampling was conducted in northwestern New Mexico at San Juan Mine on two reclaimed areas. The first area has a geomorphic land form that includes steep slopes and meandering drainage channels. The second area was constructed with a more traditional reclamation land form with few slopes and no meandering drainage structures. This paper presents the results of the vegetation survey and contrasts the vegetation communities of the geomorphic and non-geomorphic areas.

¹ Oral paper presented at the 2013 National Meeting of the American Society of Mining and Reclamation, Laramie, WY *Reclamation Across Industries*, June 1–6, 2013. R.I. Barnhisel (Ed.). Published by ASMR, 3134 Montavesta Rd., Lexington, KY 40502

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