ABSTRACT

TITLE:	Is the Animas River Valley Prepared for a Major Flood Event?: A Look Into Mitigation Strategies and Potential Consequences
AUTHOR(S):	Ramseth, Paul
PRESENTED AT:	2016 Undergraduate Research and Creative Activities Symposium, Fort Lewis College

ABSTRACT: Originating high in the San Juan Mountains of Colorado, the Animas River has had a century long history with acid mine runoff. The river serves as the primary water source for many downstream farm operations. As a result, the potential for soil contamination is a concern for these farmers. The objective of this study was to understand the consequences that a flooding event could have on farm operations in the Animas River Valley, examine methods used by farmers to limit soil exposure from heavy metals found in the Animas River, and evaluate mitigations tactics being implemented by La Plata County. All four commercial farms in the Animas River Valley were contacted and three responded for an interview. Along with these interviews, Darrin Parmenter La Plata County's Colorado State University extension director for agriculture was also interviewed. Farmers were asked questions regarding flood mitigation, soil contamination, and historical events that could have contaminated their fields. Their responses varied. Two farmers were unconcerned about the threats of flooding and the possibility of soil contamination through irrigation. One farmer was very concerned about the impacts of acid mine runoff affecting his farm through irrigation and flooding. Their polarized responses seem consistent with the community's perception of the condition of the river. Some want change and others feel that it's best to continue with the ways things have been. La Plata County seems to be on the passive side of the debate as there are no mitigation procedures in place for flooding of for lessening the effects of acid mine runoff.