

Rock On: Limestone's Potential to Improve Water Quality in the Alamosa River Drainage

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The goal of this project is to simulate the application and use of limestone in acidic riparian systems, and how it positively impacts water chemistry from toxic tributaries within the Upper Alamosa River Watershed. While testing different limestone exposure times (25,50 and 100 minute) for each site location, there were drastic changes in metals levels with elimination of some toxic metals and increased hardness and alkalinity. Limestone increased pH with the largest increases over the 100-minute exposure time which also showed the most change in metals as well. Limestone could be applied to the field to increase pH in acidic river systems, which will help remediate poor water quality in compromised riparian systems. This will enable the introduction and/or the recovery of varieties of aquatic life.