## 30 Years of Reclamation and Remediation in the Silverton Caldera of Colorado<sup>1</sup>

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**Abstract:** The Animas River in the area around Silverton, San Juan County, Colorado has been adversely impacted by high loading of iron, aluminum, cadmium, copper, lead, zinc, arsenic, and nickel. Metals loading in the Animas River has limited aquatic life, including the trout fishery downstream from Silverton. The metals loading in the Animas River is due to acid rock drainage formed from a combination of natural weathering of mineralized rocks and residues from over 100 years of mining. Sunnyside Gold Corporation (SGC) was formed and acquired the Sunnyside Mine in the Upper Animas basin in 1985. Since 1985, SGC has engaged in more than 30 years of reclamation and remediation in the Silverton Caldera. Actions included removal of mine waste from owned and area mines, treatment of water discharged from mine portals, seasonal treatment of the flow in Cement creek, installation of bulkheads in mine workings, and stabilization of tailings deposits. Evaluation of the results of the actions demonstrates that the actions of SGC have substantially reduced acid rock drainage and metals loading in the Animas compared to what would have otherwise been the case.

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