## CALIENTE YOUTH CENTER BRIDGE FLOOD MITIGATION PROJECT Caliente, Nevada









CYC 12 Foot Culverts -- downstream side showing depth of sedimentaiton 11/19/2004

## **Project Description**

On behalf of the Nevada State Public Works Division, R.O. Anderson Engineering, Inc. (ROA) prepared the grant application, engineering design, hydraulic analysis, benefit/cost analysis, permitting assistance, and construction administration services for a 100-foot span bridge over Clover Creek in Caliente, Nevada. The project improved access to the Caliente Youth Center, access frequently hampered by flooding.

FEMA's Pre-Disaster Mitigation Grant Program funded the project. ROA prepared the grant application for the Nevada Department of Emergency Management and FEMA. ROA staff secured both in-kind and monetary matches and coordinated with federal, state, and local project partners including the Youth Center, Natural Resources Conservation Service, U.S. Fish and Wildlife Service, Lincoln County, City of Caliente, and Lincoln County Power District #1.

The project scope included replacing two existing twelve-foot diameter culverts beneath Youth Center Drive with a 100-Ft span steel bridge. The bridge installation required the relocation of existing utilities serving the Youth Center and a neighboring hotel as well as the installation of a new sewer lift station and rerouting of sewer and water mains below the river bed. The work also necessitated re-grading and armoring the existing river bank, re-routing of irrigation infrastructure, and coordinating the re-rerouting of power. The presence of high ground water, poor soil conditions, and the nesting habitat of a protected bird species complicated the project. ROA assisted with the preparation of an Environmental Assessment (EA) and conducted an informal scoping program at the beginning of the NEPA process with local, state and federal stakeholders.

The project received the APWA Project of the Year Award in the \$5M category for Structures.