



FEMA

Flood Mitigation Project Protects Bidwell Paiute Tribal Reservation

Modoc County, CA - Annually, the Bidwell Paiute Tribe experienced damage to their reservation from heavy storms. Their outdated dam and gutters were ill-equipped to handle the heavy amounts of rain. As a result, heavy runoffs caused serious erosion damage, especially to the earthen dam upstream from the community. The dam holds a water volume of 450,000 cubic feet and houses a hydroelectric system and generator. Damage often occurs to these systems from the rainfall. The effects of the erosion disrupt supply lines and access roads.

The leadership of the Tribal Council applied for and received a grant from FEMA's Hazard Mitigation Grant Program to mitigate the problem areas. Phase I of the project was to place a concrete gutter along the southern portion of the Dam Road and eastern portion of Penstock Road (downstream) to carry storm runoff down a 24-inch culvert to Soldier Creek. In Phase II, the hydroelectric water supply pipe, which had collapsed into Soldier Creek, was buried further downstream. In addition, a timber-retaining wall was built with compacted stone behind it. The earthen ditches on the east and west sides of Dam Road were renovated with either concrete lining or corrugated metal pipes.

As a result of this mitigation, the Bidwell Paiute Tribe and their community are no longer in immediate risk of extensive damage or loss of life caused by the collapse of their dam upstream. Their community is better equipped to handle the annual heavy rains. The risk of their community being devastated by the loss of electricity, supply lines and access roads has been significantly reduced.

Savings over the life of the project due to avoided damages is expected to be at least \$104,308.



**Modoc County,
California**



Quick Facts

Sector:

Public

Cost:

\$13,635.00 (Actual)

Primary Activity/Project:

Land Use/Planning

Primary Funding:

Hazard Mitigation Grant Program (HMGP)