santa fe county Santa Fe River Greenways

Santa Fe County, New Mexico



In a 1774 report to the Spanish crown Don Pedro O'Crowly described the Santa Fe River: "Santa Fe was founded ... at the foot of a high mountain range from which flows a crystal clear river full of small but choice trout."

The Santa Fe river valley, like so many places in the Southwest, has seen a transition of land use from small irrigated farms to urban development. Over the years the middle reaches of the river valley became steadily degraded by the cumulative effects of water diversion, over grazing, gravel mining, and urban development.

Santa Fe County has taken on the challenge of restoring the ecologic condition of the river and is in the midst of a comprehensive Greenways project to restore the river A 12-mile greenway revives awareness of the Santa Fe River valley as a corridor linking the communities along the "Camino Real de Tierra Adentro", the centuries old royal Spanish colonial road between New Mexico and Mexico City.

corridor and create parks and a continuous 12-mile pedestrian/bicycle trail. Working with the City of Santa Fe and community groups, the County has implemented several segments of the project and brought in Biohabitats to assist with the work.

Channel incision in the reach is severe in places due to past disturbance by mining activities which is made worse by flashy urban runoff. Banks have eroded and the flood plain has become disconnected from the channel in many sections exacerbating stability problems. Non-native exotic plant species have invaded the abandoned flood plains.

Biohabitats staff performed a fluvial geomorphic survey of the reach and analyzed the data to determine the characteristic channel depth and width parameters for a stable design. The geomorphic data was then used in engineering design for regenerative channel restoration using natural materials.

In incised reaches the Biohabitats design employs boulder grade control structures to raise the degraded channel bottom. Boulder side slope protection reinforced with native willow plantings provides protection from high water velocities at the outsides of bends in the channel. Channel grades were adjusted to allow normal river flows to reach the flood plain. The design specifies removal of exotic trees and re-establishment of native species.

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