

## **Riparian Restoration Boon to People and Wildlife**

San Joaquin River National Wildlife Refuge in California will have the largest riparian woodland in the San Joaquin Valley after 500,000 woody shrubs are planted on 2,200 acres over the next four years. Approximately 1,500 acres have been completed or are in progress; another 700 acres will be completed within the next five years.

A primary goal of the project was recovery of the endangered riparian brush rabbit prompted the project. The last known wild population survived at a state park along the Stanislaus River in San Joaquin County; a second remnant population was found further north in a flood overflow area near Stockton.

Beneficiaries of the restoration include not only rabbits, but also birds and the endangered San Joaquin woodrat. Moreover, plantings in the riparian areas have improved water quality by removing contaminants and reducing riverbank erosion.

Neotropical songbirds and migrants use the San Joaquin Valley like a freeway. A pair of least Bell's vireos nested in the restoration area -- the first known nesting of this once common bird species in the San Joaquin Valley in more than 50 years.

The riparian shrubs' root systems strengthen the integrity of the levees. A healthy riparian area levels out the high peaks of flooding and reduces the extreme lows during drought.