Urban Watershed Management

Pueblo San Marcos

Prototype Started in 1987











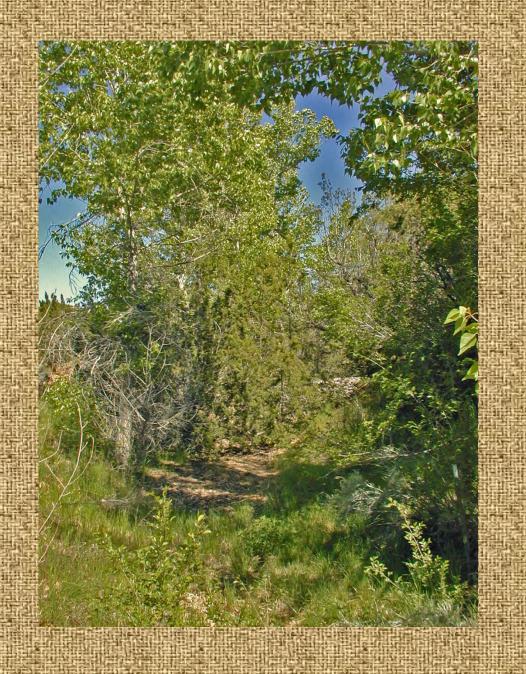
















ARROYO SAIZ 189 Acre Watershed Creating Semi-Riparian Habitat

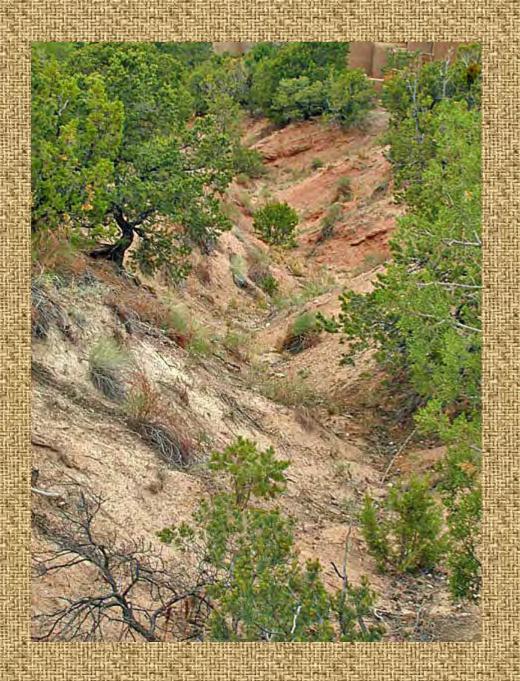
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Kachina Hills

13 Acre Watershed

Existing Conditions: 1995













Detention Ponds

Stormwater from Roads Makes a Lush Landscape







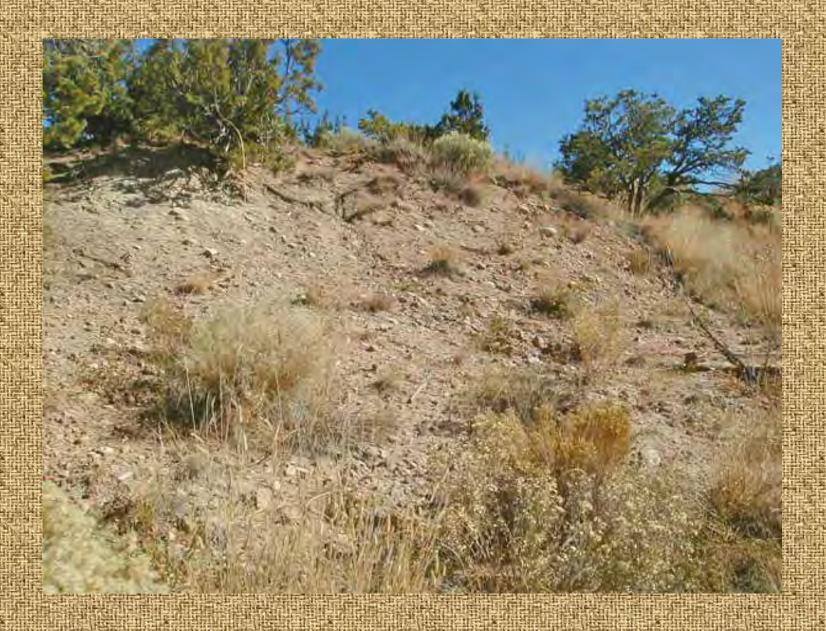








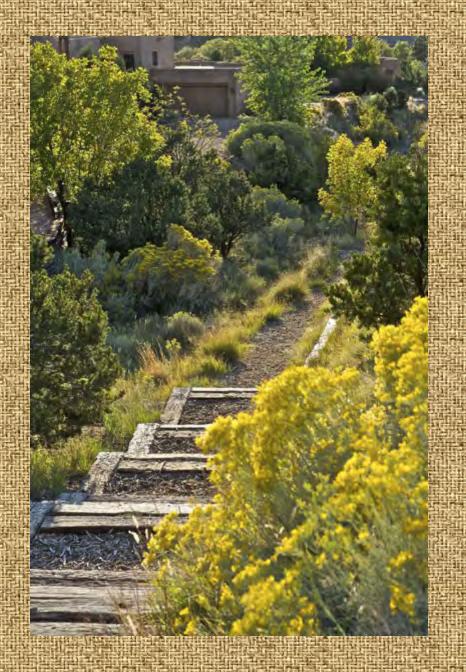
Watershed Restoration

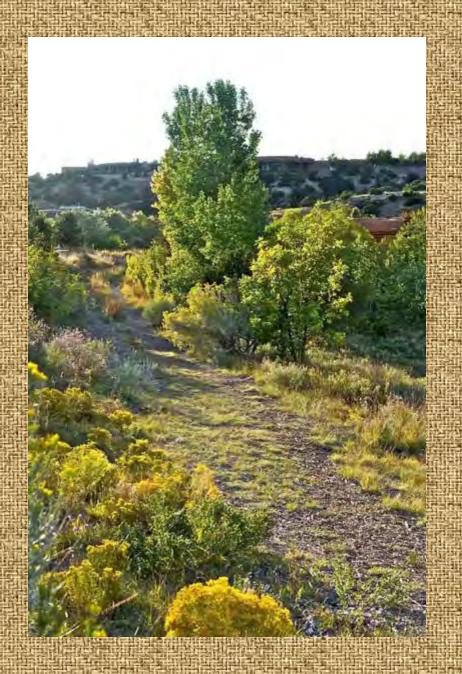


























A Gully Garden

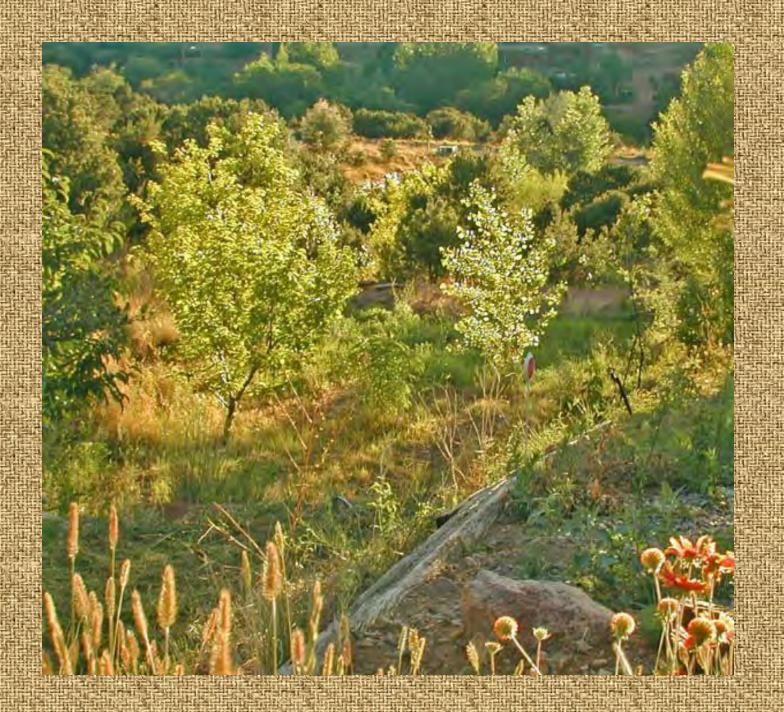












Another Gully Garden











Arroyo Saiz Main Channel

Headwaters of the Eastside

A Sewer Runs Through It









July 2008

Environmental Emergency











Remediation

Improvisation













Next Summer Sedimentation













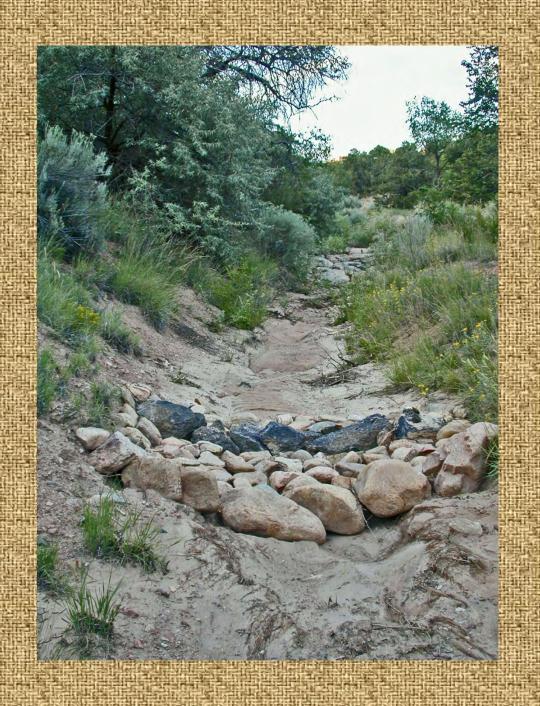
















Semi-Riparian

Occasional Surface Water Supports Lush Vegetation



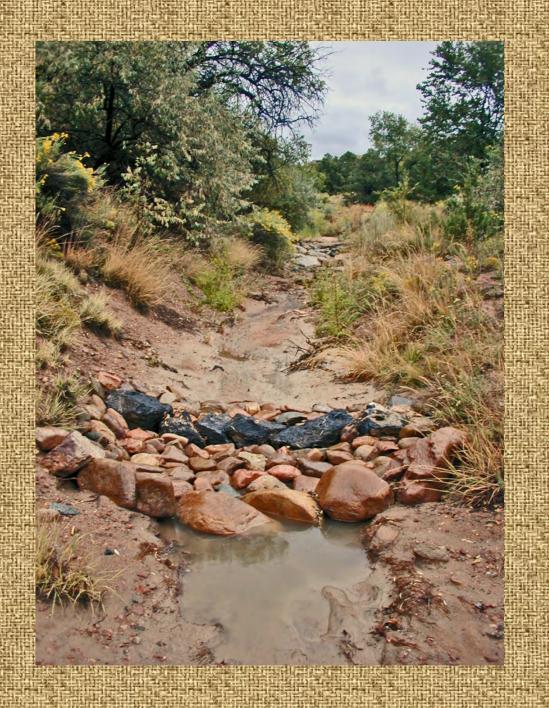








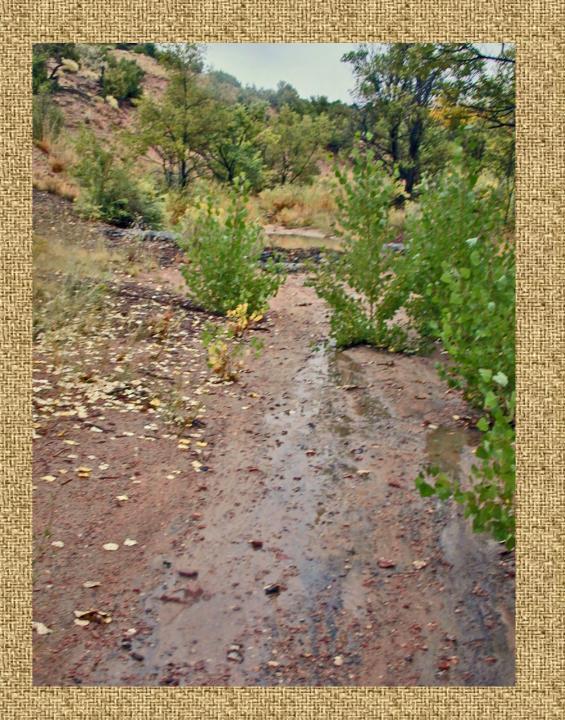












Arroyo Saiz Main Channel

September 2012





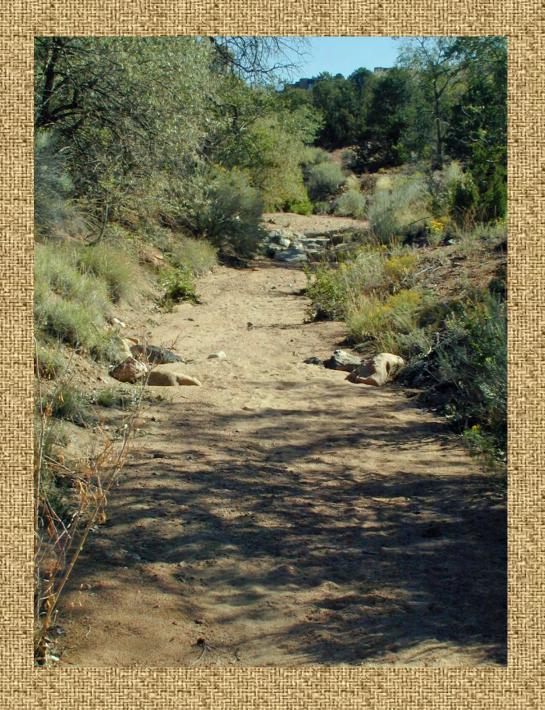












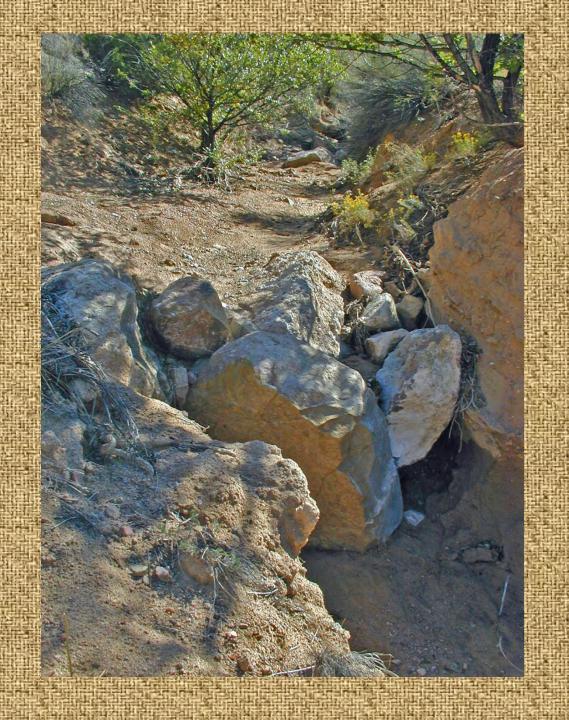












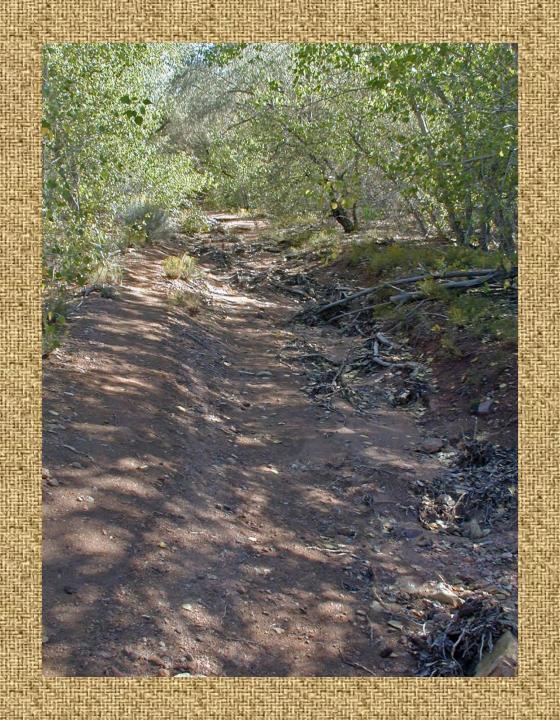


Between the Road Dams

Water from Above Estancia Primera
Still Degrades Habitat











Upper Saiz

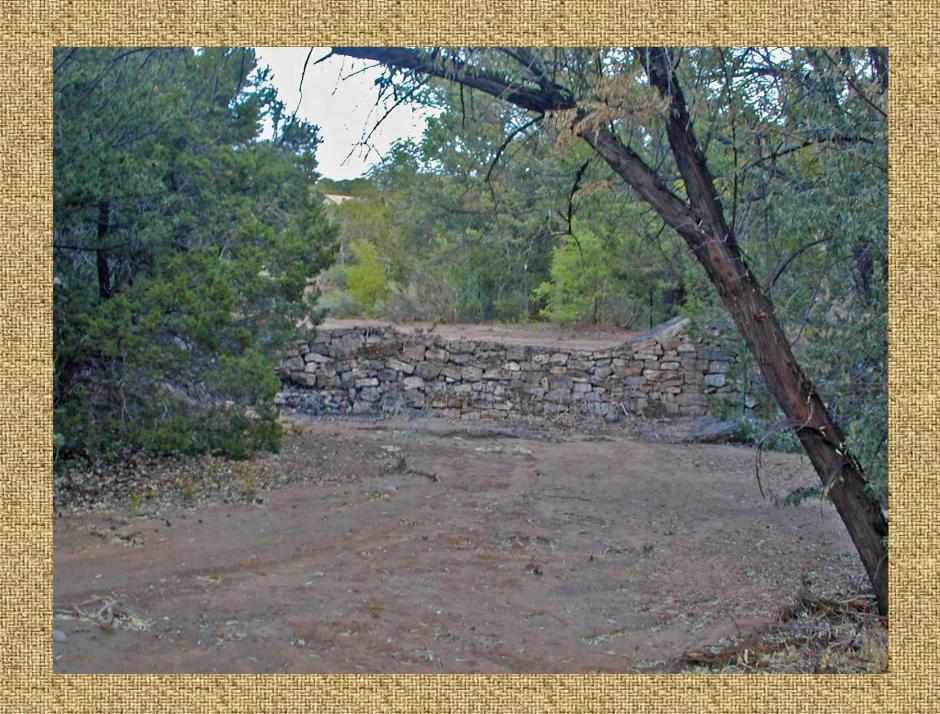
Stone Checkdams build by the CCC in the 1930's have worked for 80 years but

A lot of uncontrolled water and sediment still degrade downstream habit









Kachina Heights

FEMA, City Labrynth, Endless Consultants, And it Works Anyway

Culvert Construction 624 cfs, 1240 cfs, 829 cfs

How to size the flow













Finishing

























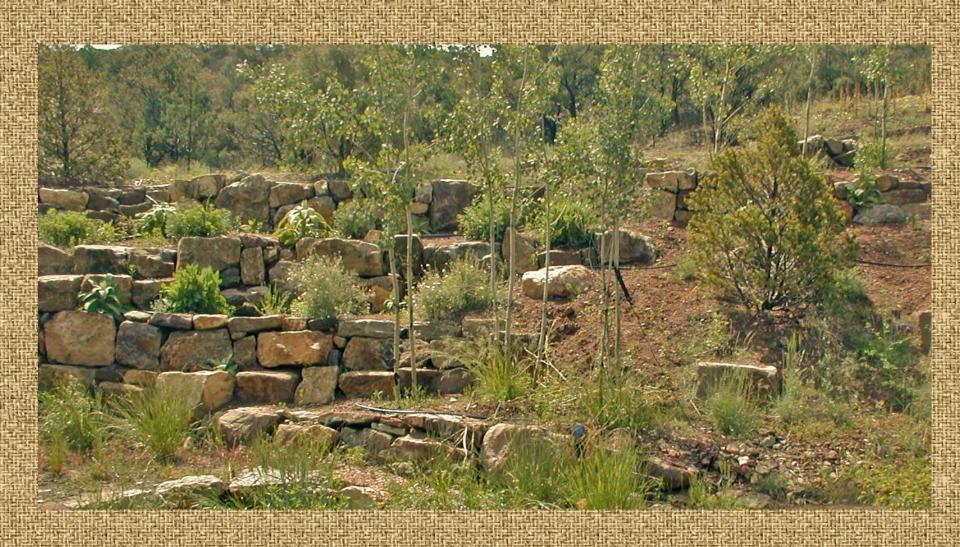












What Makes Semi-Riparian

The Same Water, More Soil More Time With Both

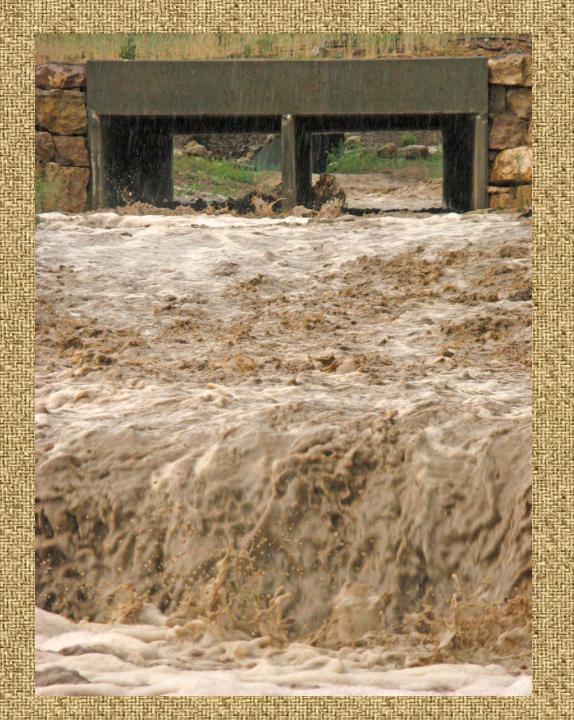


















Straw Wattles

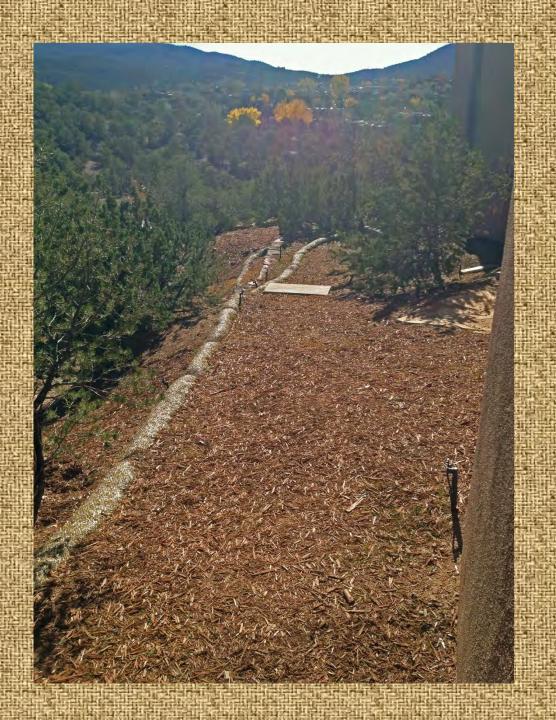
The Best Deal in Town

















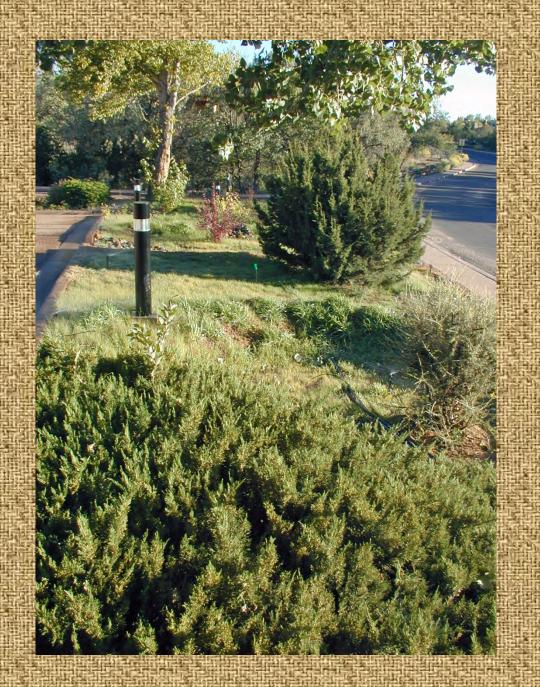






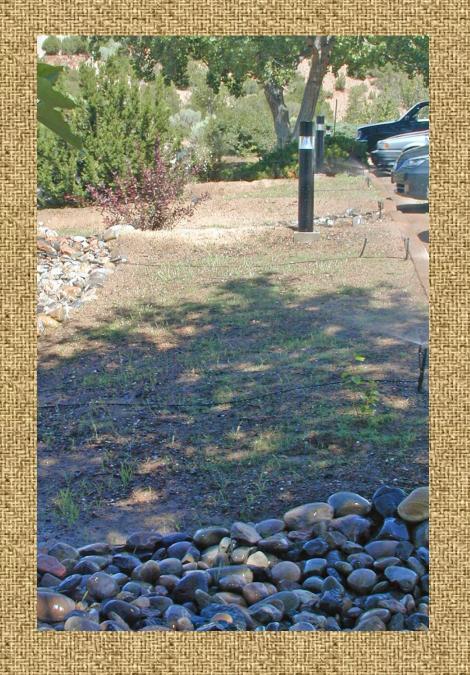
Estancia Primera

Planter Island
Five Times the Water

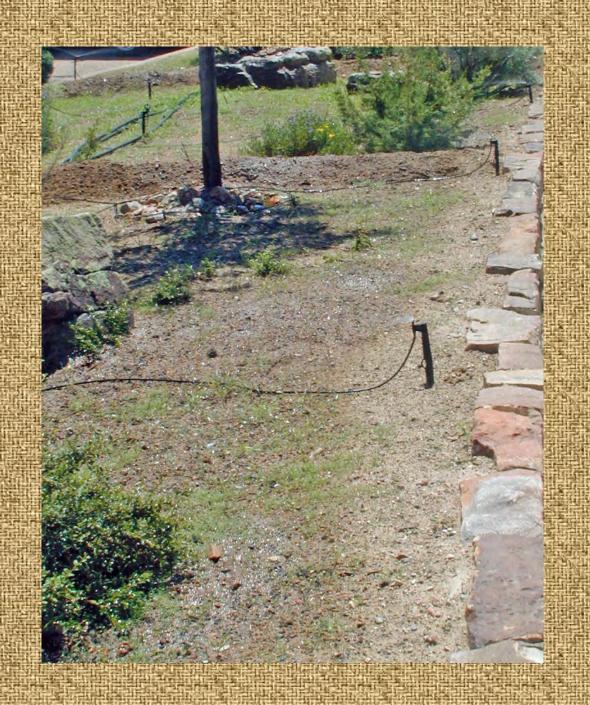




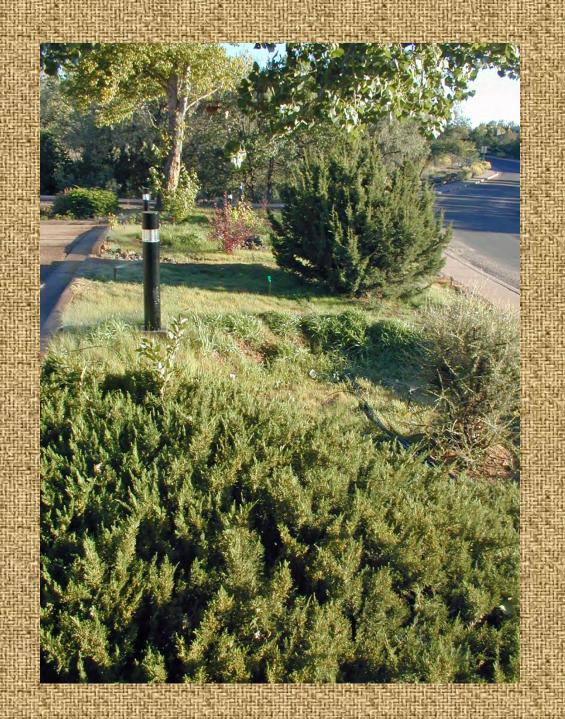










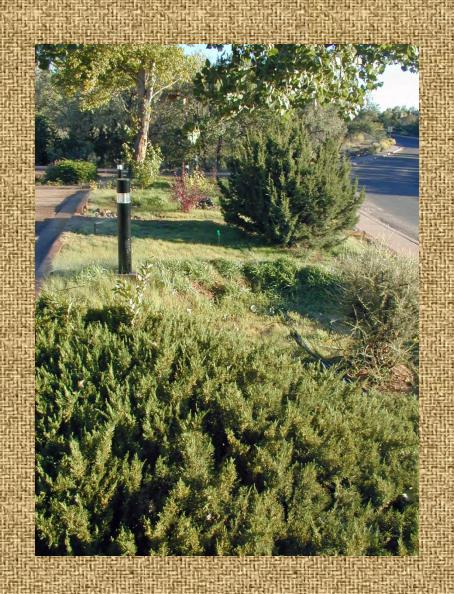


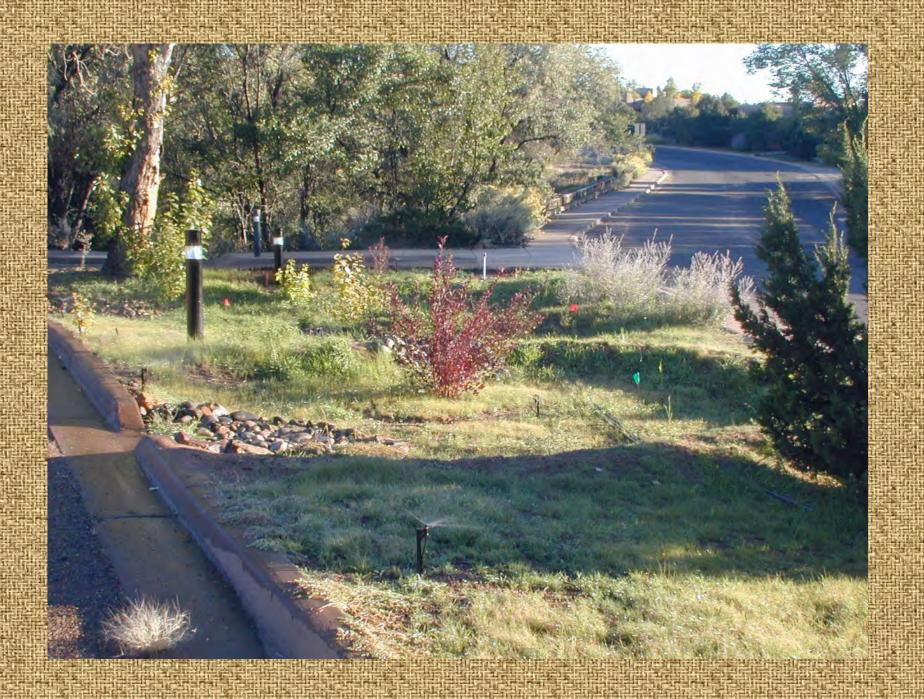












Thank You's

- Watershed West, Engineers
- Walbridge Associates, Engineers
- Plants of the Southwest
- The Savvy Workers