

Re-Watering The Ground

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We have experienced the placement of rocks on hillsides in eroded areas. The rock dams capture silt and water. A great many dams placed close together in all drainages capture so much water that the hills become sponges. On a larger scale we have built many substantial structures with wire baskets filled with rocks and placed them strategically in large washes wherever flooding was destroying riparian areas.

Both methods imitate what Nature does in areas that have not been disturbed. Both change over time with storm events. Rocks move, trees are downed, but wherever the structures are the water slows down which allows sediment to redistribute to where it is needed. In all cases vegetation increases and the water near structures goes into the ground lasting longer and building up an underground flow which increases year after year. We measured an increase in the size of a wetland where we put the structures.

Ten years after installing structures we witnessed the largest flood in recorded history "Odile" Odile completely rearranged the river breaking apart some structures redepositing soils that had accumulated behind the structures. Many trees were downed but the overall effect was positive. New growth came out of the downed trees, and the river reset itself carving deep and shallow basins in the riverbed. The uplands profited from the overflow of the floods and new growth appeared there as well.

Structures can be effective in arid regions throughout the world by increasing the amount of water that goes into the ground. In areas where flooding is a danger the structures can modify the potential damage and, depending upon the terrain, direct the flow as well.

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