Adaptive Riparian Restoration
Restoration Potential

- Surface and ground water hydrology
- Abiotic Components
Revegetation Potential

Flooding
Natural or Controlled Flooding

Specific Hydrographs

Rio Grande
Revegetation Potential

Flooding

Natural Regeneration
Natural Regeneration

Forest

Brush

Meadow
Site Disturbance

Natural Regeneration
Mechanical Control

- Root Plow & Rake

Cost ~ $700/acre
>98% Control
Site Disturbance

Natural Regeneration

Flood Timing
Natural Regeneration

Site Disturbance

Seed Source

Flood Timing
Revegetation Potential

Flooding

Natural Regeneration

No Flooding
Avoid Soil Disturbance

- Prevent Weed Competition
- Conserve Soil Moisture
- Improve Soil Nutrients
Herbicide/Burn
$190/acre
Herbicide/Shred
$400/acre
Revegetation Potential

Flooding
- Natural Regeneration

No Flooding
- Artificial Planting
Artificial Planting
Factors Determining Artificial Planting Potential

- Soil Texture
- Salinity
- Depth to Groundwater
Pole Planting
Moderate Water Tables
Low Salinity
$900/acre
Shallow Water Tables

Moderate Salinity

$2,700/acre
Deep Water Tables
High Salinity
$120/acre
Revegetation Potential

Flooding

Natural Regeneration

No Flooding
Saltgrass Meadow

Alkali Sacaton Grassland
Groundwater Restoration

- Depth to water table: 0 feet to 2 feet
- Ground surface
- Low ET
- High ET

Months: Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep
Revegetation Potential

Flooding
  - Natural Regeneration

No Flooding
  - Artificial Planting

Saltcedar Control Strategies