Tipping the Balance: 
Using Natives to Combat Weeds and Promote Ecological Resilience of Riparian Restoration

Heyo Tjarks
River Partners
San Joaquin River National Wildlife Refuge

20 - 800 Acres
Evaluation of Site Conditions that support Horticultural Restoration
Two years after stopping irrigation

Cottonwood - dead

Elderberry - surviving
Objective

1. Design a native plant association that will develop into a sustainable community through ecological succession under current and future conditions.

2. Establish ecologically and structurally beneficial wildlife habitat.
Planting
Field Prep

Black Mustard
Native Understory Component

1) Can we get them to germinate and grow?
2) Will they tolerate our maintenance activities?
Conyza coulteri
Artemisia douglasiana
Grindelia camphorum

July 2003
Sterile Seedbed Approach
Parting the *Mugwort Sea*...
Long Duration Flooding
VOTE OF APPROVAL

Endangered least Bell’s vireo
First nesting in Central Valley in 60 years!
CONCLUSIONS

1. Rapid-growing native herbaceous species can be managed to replace invasive exotics.

2. Future monitoring will describe the long-term effectiveness of these plantings.
Thank You!

Creating Wildlife Habitat for the Benefit of People and the Environment