

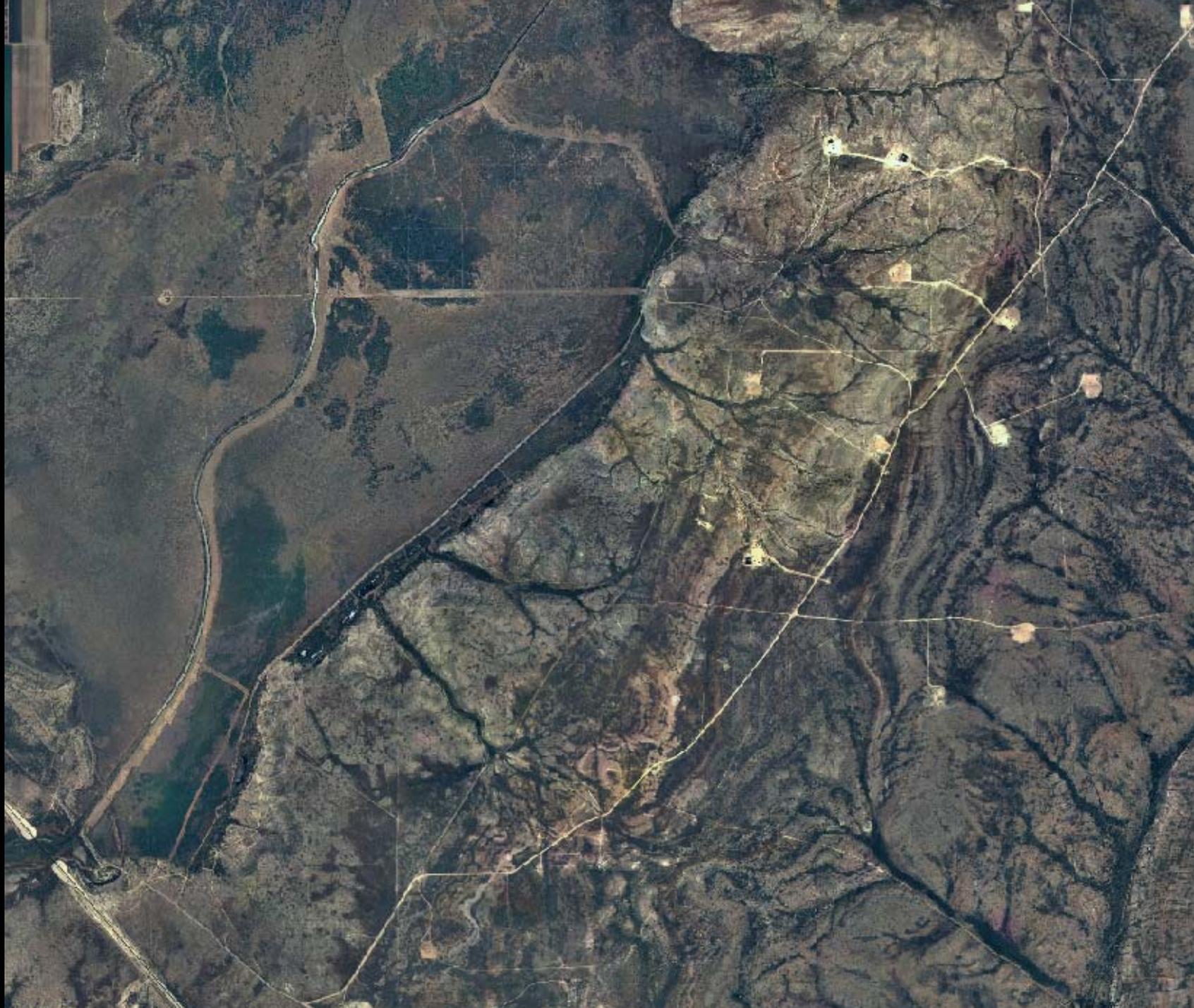
Biological Control of Saltcedar Carlsbad, NM

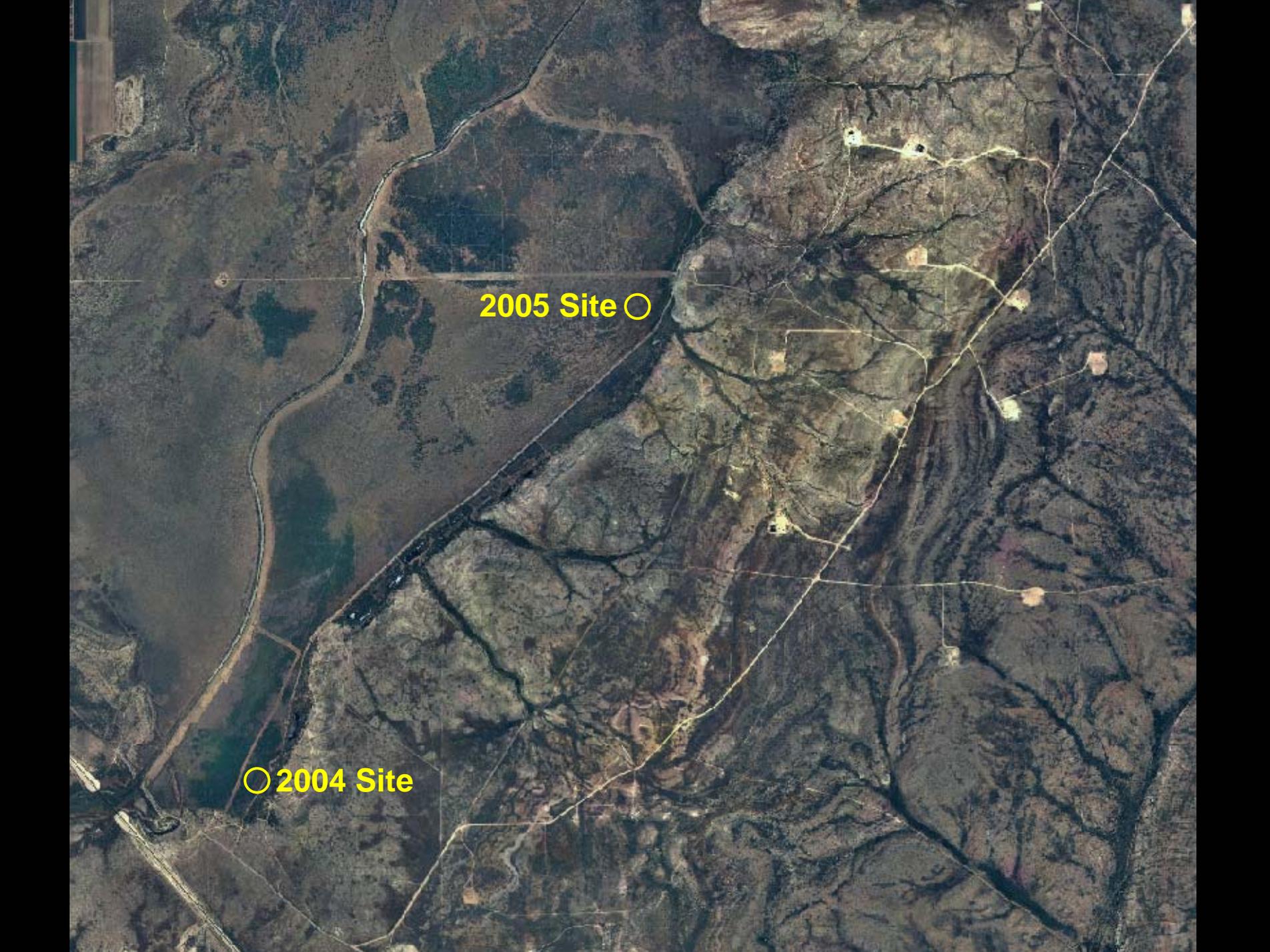
Bureau of Reclamation
Environmental Applications and Research
Scott O'Meara
Debbie Eberts

Project Overview

- Releases initiated in 2004
- Posidi ecotype of *Diorhabda elongata*
- Beetles released in cages and sleeve-bags





An aerial photograph showing a landscape with a river on the left and a hilly, forested area on the right. A road runs horizontally across the middle. Two study sites are marked with yellow circles. The 2005 site is located on the road, and the 2004 site is located in a valley to the left of the road. The terrain is rugged with many small gullies and ridges.

2005 Site ○

○ **2004 Site**

2004 site was in a basin just outside of levy road



Flooding occurred mid April and during over-wintering period



Predation



Yellowing from leafhopper damage



2005 site in lake bed
Before grasshopper invasion



After grasshopper invasion



Summary

- No success establishing beetles at either site/year
 - Flooding in 2004
 - Grasshoppers in 2005
 - Predation issues in both years

2006 Plan

- 2 sites?
 - Still scoping out good locations
 - Avoid standing water
 - Avoid grasshoppers (kochia correlated?)
 - Secure
 - Accessible
 - On approved BOR land
- Use cages and sleeve-bags
- Beetle availability still uncertain

2006 ?

