

RECLAMATION

Managing Water in the West

Biological Control of Saltcedar

Carlsbad New Mexico

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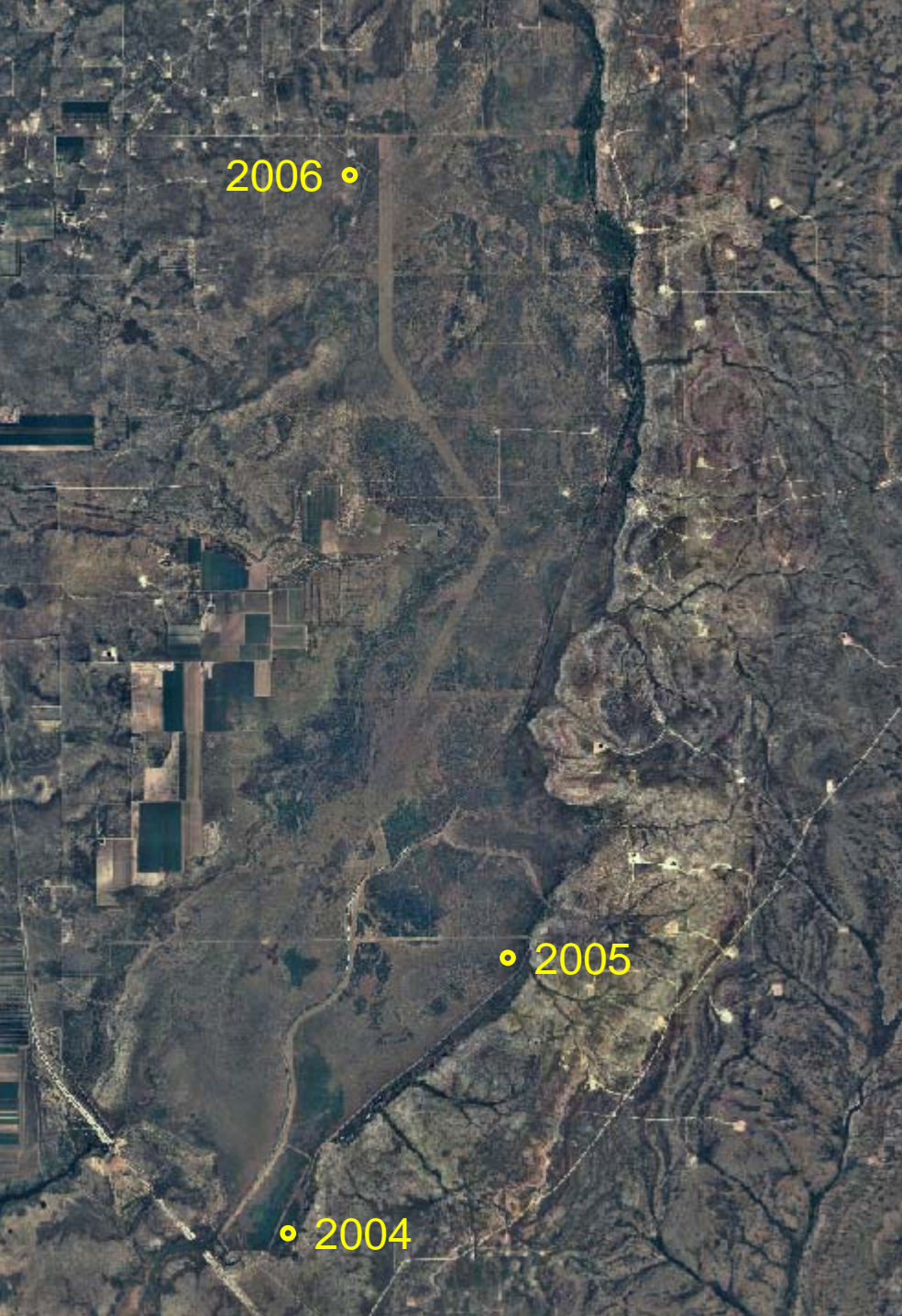
U.S. Department of the Interior
Bureau of Reclamation

Project Overview

- Releases initiated in 2004
- Posidi ecotype of saltcedar leaf beetle (*Diorhabda elongata*)
- Beetles released in cages and sleeve-bags



Release site locations



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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



2006 site - sacaton understory



Plants cut back to encourage regrowth



12' x 12' tent





- Populations of the Posidi beetle crashed at many sites early 2006
- Beetle stock was not available until mid July
- ~200 eggs were put in sleeve bags in the tent on July 18
- Eggs hatched, but NO beetles were found at 1 or 2 weeks after release



2006 2nd Beetle release

- David Thompson (NMSU) provided 50 adult beetles and released them at the 2006 site on September 12
- Will be checking on their progress Sept. 20



Summary

- **2004 – Flooding**
 - Vigorously growing saltcedar tends to be found in depressions or washes where water accumulates during periods of high precipitation
- **2005 – Grasshoppers**
 - Two species present are known to be forb eaters, may have been correlated with extensive kochia populations
- **2006 – Lack of beetles, low saltcedar vigor**
 - Late start and low release numbers were not able to overcome predation, unclear if low vigor will be problematic at this site
- **Predation issues in all years**
 - Impossible to keep ants out of sleeve bags