

Pantex Migratory Bird Program



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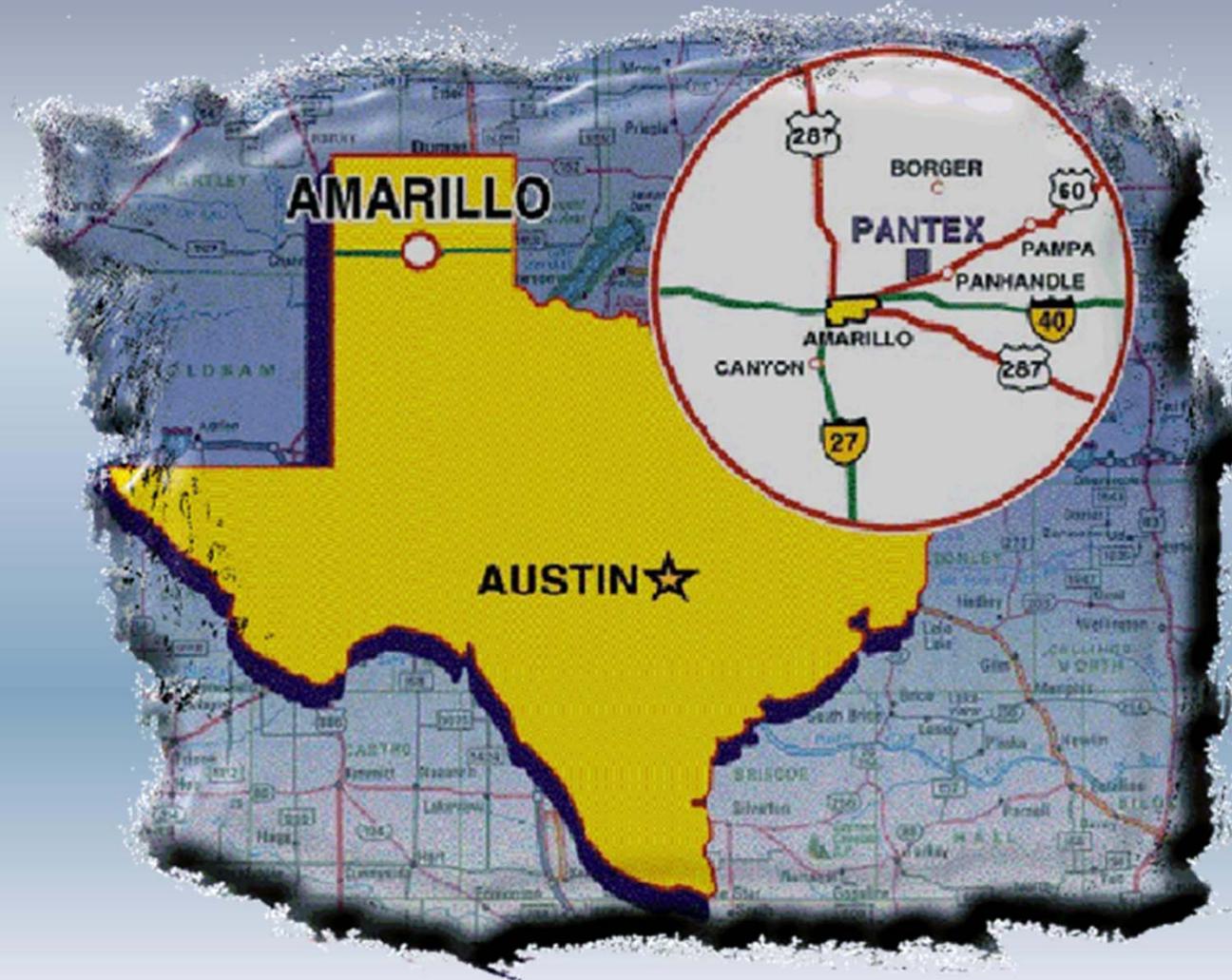


What is Pantex?

- **U.S. Department of Energy/National Nuclear Security Administration (USDOE/NNSA)**
 - Primary facility for maintenance and disassembly of the nation's nuclear weapons arsenal
 - Storage of plutonium components
- **The facility is operated by Babcock and Wilcox Technical Services Pantex, LLC (B&W Pantex)**



USDOE / NNSA Pantex Plant



B&W
technical services

Pantex
A VPP Star Site



Pantex

- Pantex is a 18,000-acre facility and, typical of the Panhandle, includes shortgrass prairie, playa wetlands, and cropland



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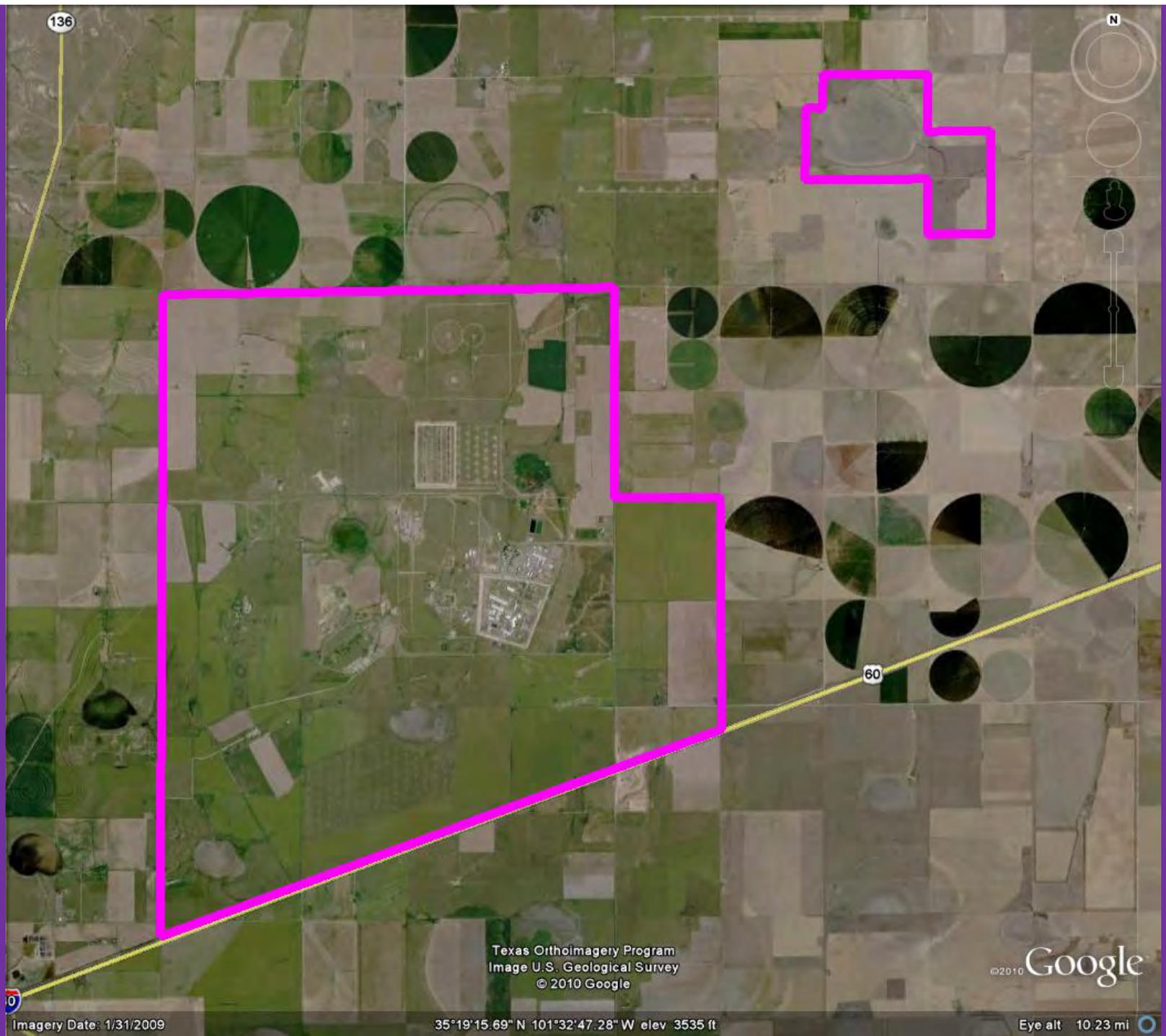
Texas Orthoimagery Program
Image U.S. Geological Survey
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Imagery Date: 1/31/2009

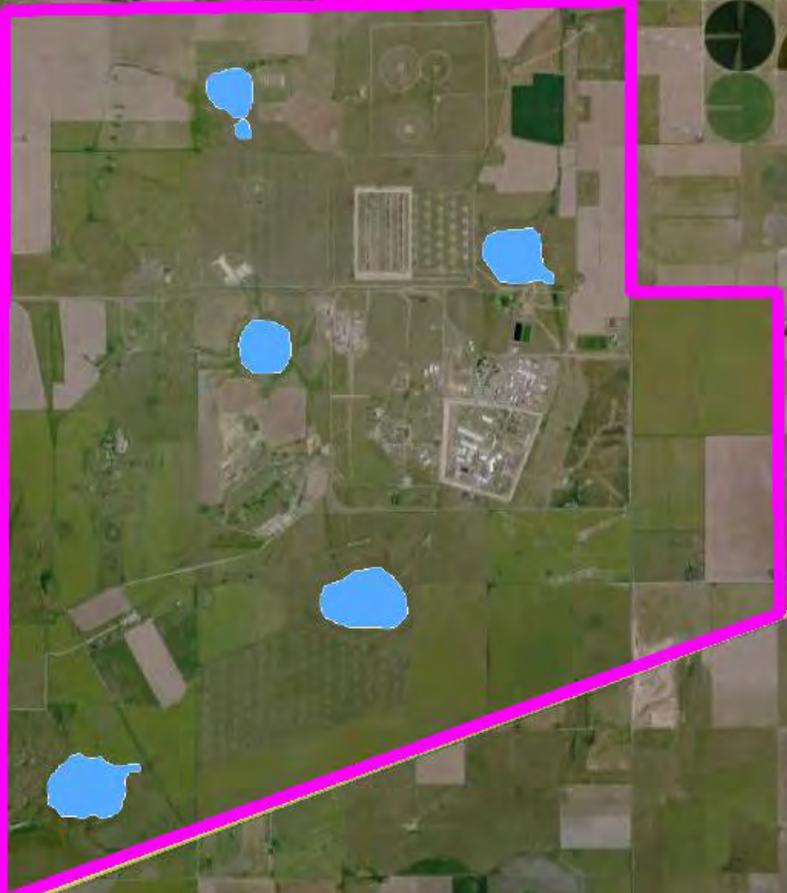
35°19'15.69" N 101°32'47.28" W elev 3535 ft

Eye alt 10.23 mi



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Image U.S. Geological Survey
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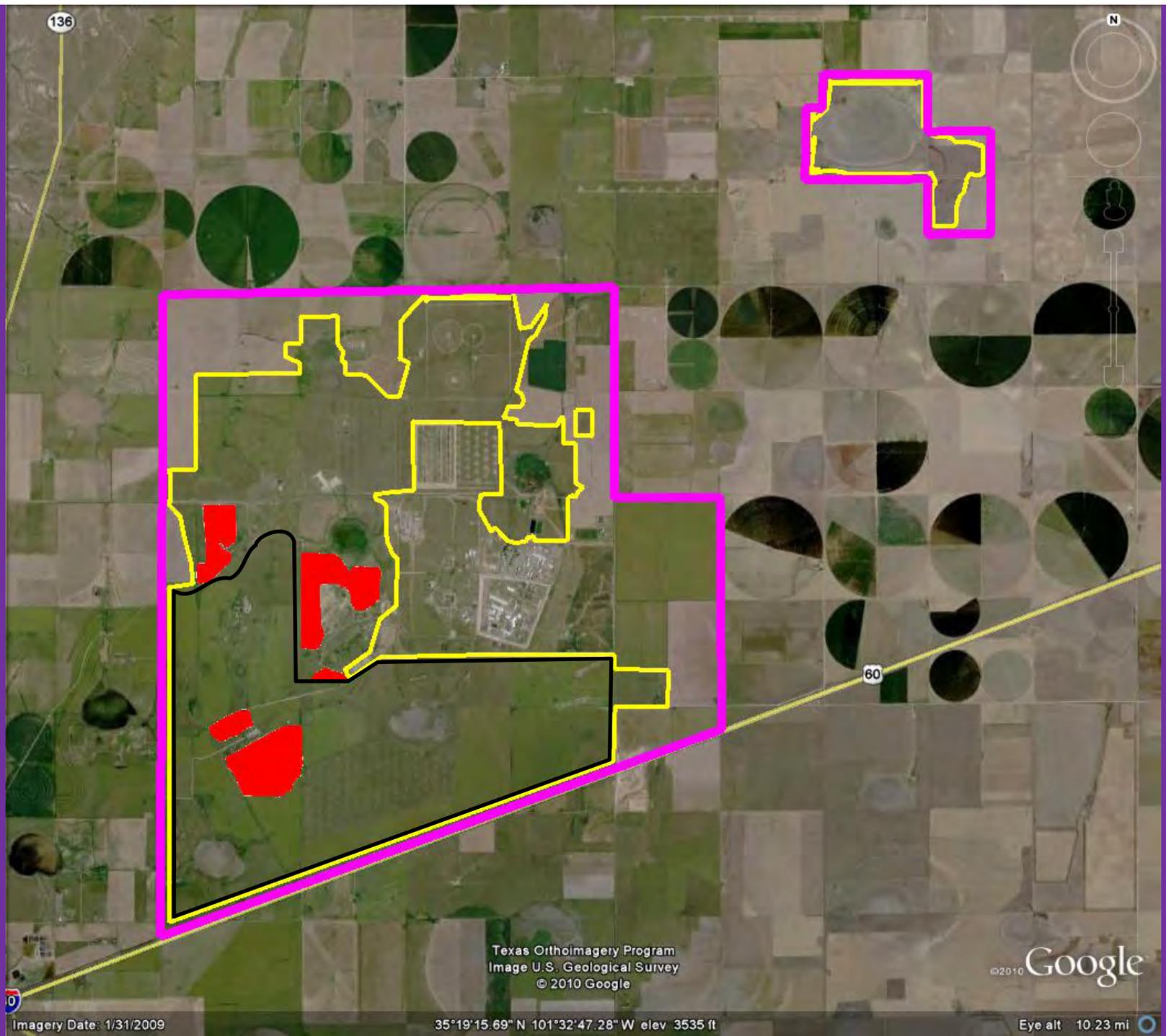
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Migratory Birds



Prior to 2002

- **Protection of nests when encountered**
 - Protection of burrowing owls during prairie dog control
- **Bird inventory**
 - Transect and opportunistic surveys
- **Contracts: Birds expected on and around Pantex**
- **Prairie dog biodiversity – birds (2000-2001)**
- **Presentation on attracting backyard birds**





200 Species



2011-12-16 6:20:29 PM M 3/3 40 -3°C



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January 10, 2001

- **Executive Order #13186:**
Responsibilities of Federal Agencies to Protect Migratory Birds
 - Best Management Practices for Migratory Birds
 - Driver for Habitat
 - Driver for Outreach
 - Driver for Research
 - Driver for Collaborations

Migratory Bird Work

- **Proactive**
- **Obtain answers through research**
 - Collaboration with others
 - ◆ Promotes credibility within the profession and to the outside
 - Scientifically defensible
- **Promote through outreach**
 - Presentations
 - Media
 - Journals and Magazines

Purple Martin Banding and Outreach (2001-Present)

- In 2001, B&W Pantex and USDOE/NNSA adopted this as a public outreach program





Banding Program

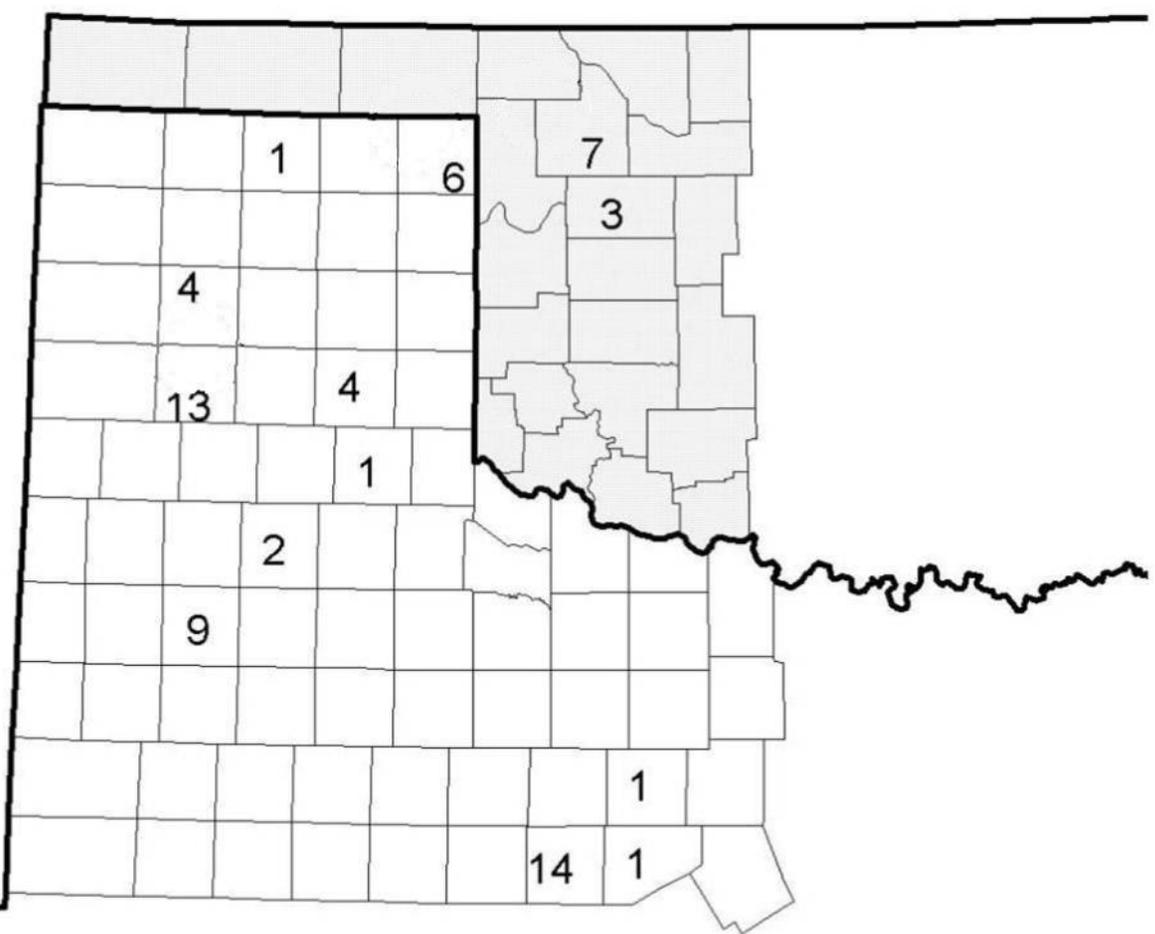
- Meaningful
- Numbers
- Natal Dispersal



Outreach Program

- Interaction
- News
- Publications

N= 66



Band-type Use (# Colonies) on Nestling Purple Martins in Northwest Texas and Western Oklahoma, 1997-2010.

Year	# of Colonies		
	USGS Bands ¹ Only	USGS, plus Colony-Specific Bands	USGS, plus State-Specific Bands
1997	10	-	-
1998	5	4	-
1999	8	5	-
2000	11	5	-
2001	19	4	-
2002	28	5	-
2003	36	4	-
2004	-	3	38
2005	-	3	26
2006	-	2	24
2007	-	2	28
2008	-	1	8
2009	-	-	4
2010	-	-	4

¹ United States Geological Survey

Results

- **8,500 nestlings banded with color bands and traditional bands**
- **> 80% of the nestlings breed within 30 miles of their natal colony**
- **Some will disperse more than 200 miles**

Results

- **Resulted in 13 publications in magazines and journals**
 - Including six in 2012
- **Resulted in seven major presentations to professional groups**
 - Including two in 2012
- **Television coverage**
- **Included in Pantex wildlife presentations**
- **Letters of thanks**
- **Board of Directors, Purple Martin Conservation Association**



Issues with burrowing owls and controlling prairie dog colonies in areas of special operational concern.

This owl is:

- Species of regional conservation priority
- Species of international conservation concern



Ecology of Western Burrowing Owls (2003-2005)

- **Texas Tech University**
 - Dr. Nancy McIntyre
 - Dr. Mark Wallace
- **Texas Cooperative Fish and Wildlife Research Unit / U.S. Geological Survey**
 - Dr. Clint Boal
- **B&W Pantex**
 - James D. Ray



Objectives

- **Effects of radio-transmitter necklaces on burrowing owls**
- **Nest-site selection**
- **Productivity**
- **Behavior differences between urban and rural owls**
- **Wintering vs summering owls**



Ecology of Western Burrowing Owls (2003-2005)

- Resulted in two publications in the scientific literature
- Resulted in seven major presentations to professional groups
- Included in Pantex wildlife presentations



Before



The National Environmental Policy Act review process resulted in 500 new utility poles being equipped with raptor protection (20 miles of new poles.)



After

Xcel Energy recognized Pantex for this proactive action through a news release.

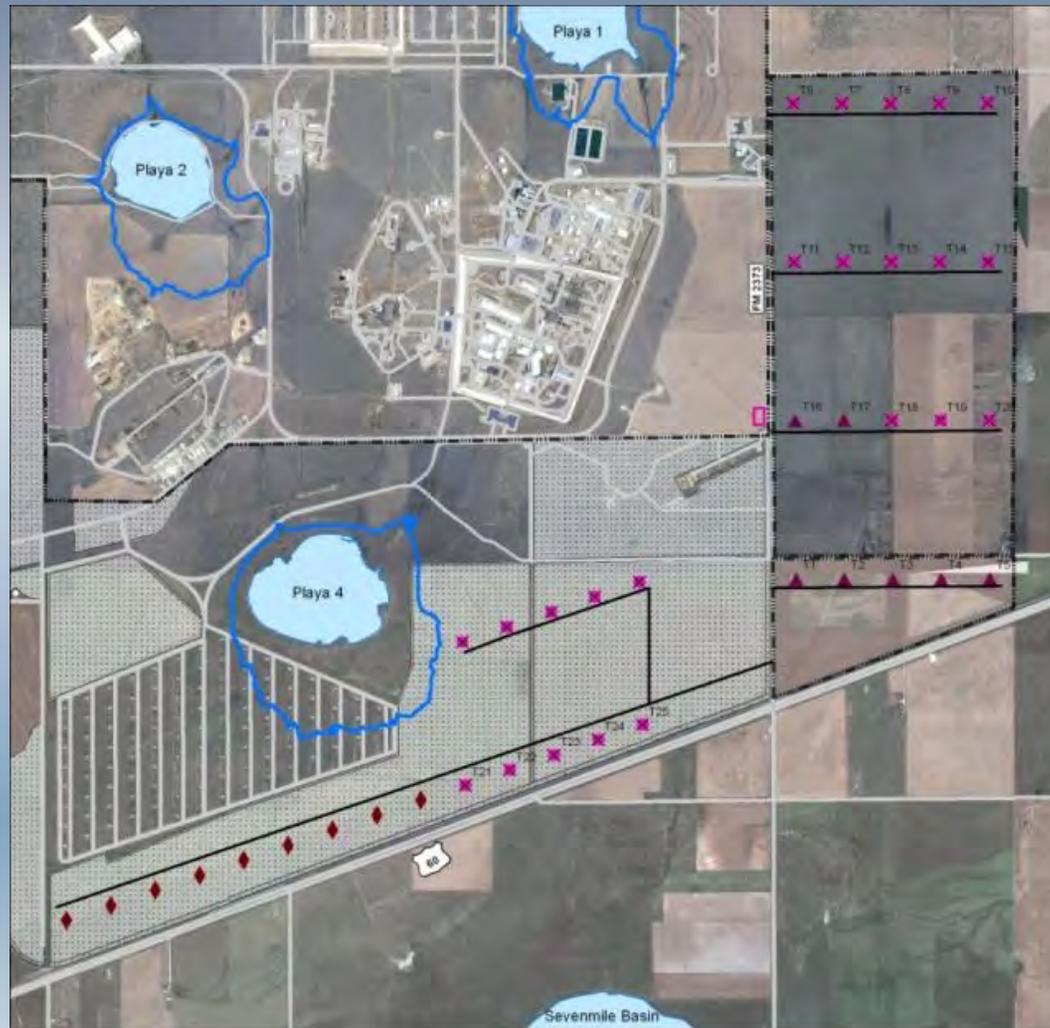


Insuring Native Prairie Restoration

- Reviewed soil types and seeding mix and rates
- Consulted with Playa Lakes Joint Venture and Natural Resources Conservation Service
- Adopted the utilization of appropriate seeding mixes/rates by soil type
- Included in Pantex wildlife presentations

Issues with migratory birds and wind energy development

Need for pre-monitoring and post-monitoring



Pre-Monitoring Pantex Renewable Energy Project (2010-Present)

- **West Texas A&M University**
 - Dr. Raymond S. Matlack
- **B&W Pantex**
 - James D. Ray













Two Types of Transmitters

14 gram VHF Transmitter



22 gram GPS PTT



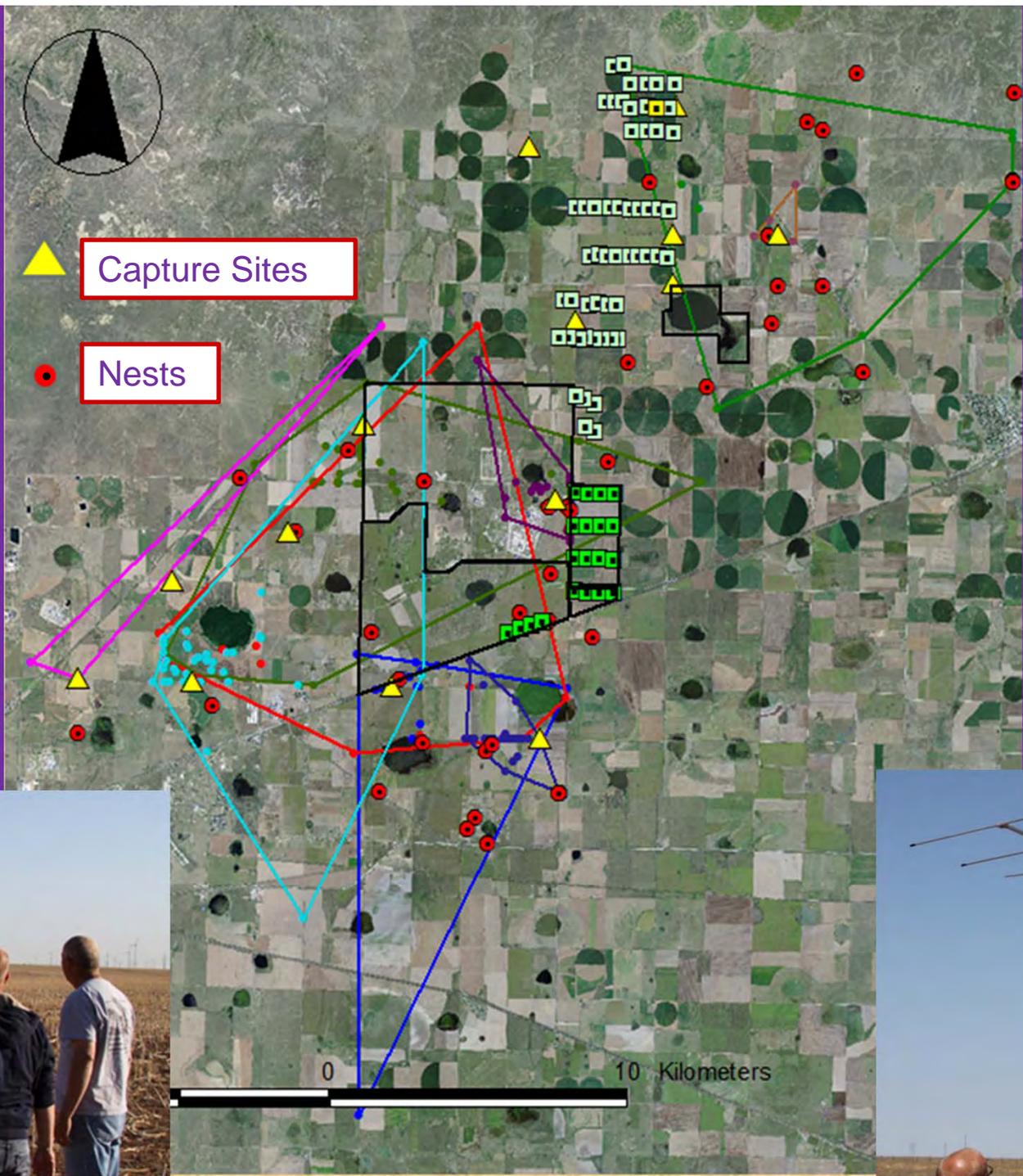






▲ Capture Sites

● Nests



11/2/2012 11/12/2012
11/1/2 11/12/2



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Data SIO, NOAA, U.S. Navy; NGA, GEBCO
US Dept of State Geographer

Google earth

10°33'19.14" S 70°11'22.26" W elev 837 ft

Eye alt 3909.98 mi



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OUTDOORS

Pre-Monitoring Pantex Renewable Energy Project

- One major presentation to professional group, so far
- Swainson's hawk note
- Television coverage
- Included in Pantex wildlife presentations



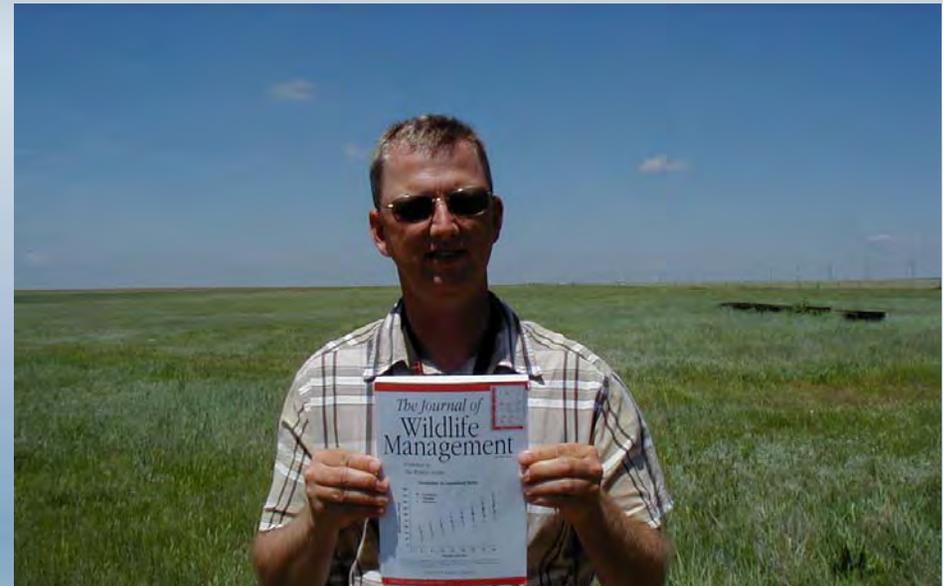
Wildlife Initiatives

- Playa Lakes Joint Venture
- Western Burrowing Owl Working Group
- Playa Lakes Joint Venture

Presentations and Publications

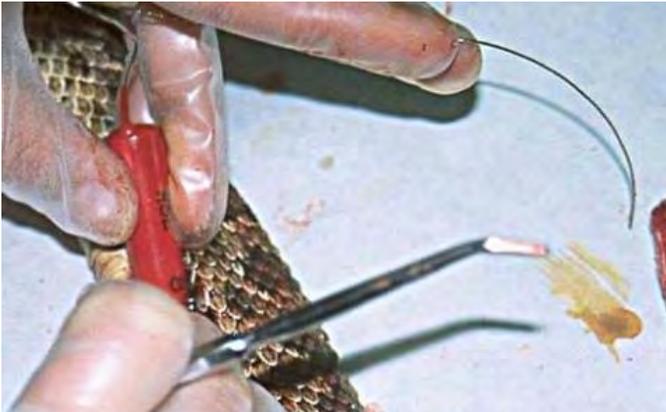
Not Counting Newsletters or News Releases

- **Magazines and Journals**
 - 23
- **Presentations**
 - 17



Acknowledgements

- **U.S. Department of Energy/National Nuclear Security Administration, in cooperation with Babcock & Wilcox Technical Services Pantex, LLC**
- **Partners**
 - Texas Tech University, Lubbock
 - U.S. Geological Survey's Texas Cooperative Fish and Wildlife Research Unit
 - West Texas A&M University, Canyon



The End

