



The Western Section of The Wildlife Society and Wildlife Research Institute

Western Raptor Symposium
February 8-9, 2011
Riverside, California



Symposium
Sponsors



February 9 – 08:55-09:15 am Session: Raptor Management and Monitoring

Burrowing Owls and the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP): An Active Approach to Species Recovery

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Since the adoption of the Western Multi Species Habitat Conservation Plan (MSHCP) in 2004, Riverside County has been actively working towards a quantifiable approach to conservation objectives for burrowing owl (*Athene cunicularia*) as set forth in the plan. Plan objectives require establishment of 5 core burrowing owl conservation areas with a combined total breeding population of 120 burrowing owls throughout the plan area. Riverside County has developed an “active” multi level approach to achieving burrowing owl conservation. We provide a review and analysis of the conservation strategies currently being implemented including the methods and results of burrowing owl translocations, installation of artificial burrows, enhancement of grassland habitat, and movement of individual burrowing owls within the MSHCP. We explore the success and challenges of implemented techniques and what additional methods may be necessary to achieve the MSHCP burrowing owl conservation objective.

The authors and institutions that have provided the following presentations are happy to share their information, data, and opinions. However, these are not, necessarily, peer-reviewed presentations and the potential to take something out of context also exists. In order to avoid that, you are requested to contact the respective lead author(s) before using specific information contained in any of the following papers. Once you have done that, the proper citation is: “[Author(s). Date. Title.] Presented at the Western Raptor Symposium. Jeffrey L. Lincer and David Bittner (Co-Chairs). Hosted by Wildlife Research Institute and The Wildlife Society, Western Section. Riverside Convention center, Riverside, California, USA. February 8-9, 2011



Burrowing Owls and the Western Riverside County Multi-Species
Habitat Conservation Plan (MSHCP): An Active Approach to Species
Recovery

Prepared by Jared Bond
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What is the MSHCP ?

- A multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in Western Riverside County.
 - Issued by USFWS and CDFG
 - Created in 2004
 - Plan Area~1.26 million acres
 - Covers 146 native species
 - Approx 23 Permittees,
- Regional Conservation Authority (RCA)**
- Joint powers authority responsible for implementing MSHCP
 - Acquires Conserved Lands
- The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973 (FESA), as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001.
 - Authorize "Take" of plant and wildlife species identified within the Plan Area. (I.E. Quino Checkerspot, SKR, etc.)
 - In exchange for the assembly and management of a coordinated MSHCP Conservation Area

MSHCP and BUOW

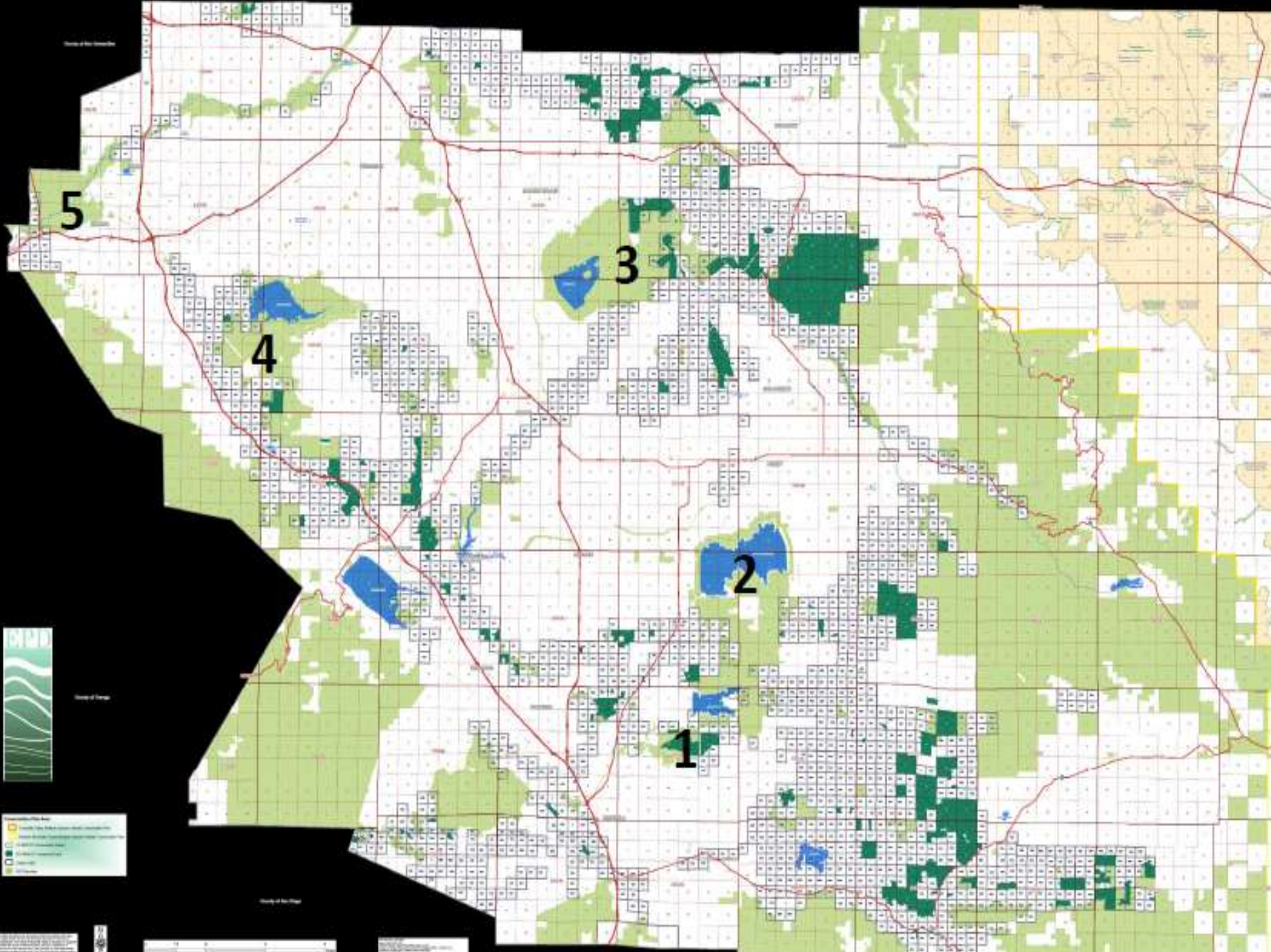
- MSHCP Covers 45 Avian Species
 - Including BUOW and 14 other raptors
- BUOW- Additional Survey Species
 - Requires additional surveys in order to achieve coverage (Take) for the species.
 - Established BUOW Species Objectives
 - Establish BUOW Survey Area
 - Establish BUOW Survey Protocol

BUOW Species Objectives

- Establish 5 Core Areas
- **120 breeding individuals**
- **Minimum of 5 breeding pair per Core Area**
- **Establish Translocation sites within Plan Area**

BUOW and THE MSHCP

- **Implemented at the project level during development review/entitlement**
- **WHAT HAPPENS WHEN OWLS ARE LOCATED**
 - 1) If the site is within the Criteria Area, then at least 90% of the area with long-term conservation value will be included in the MSHCP Conservation Area.
 - 2) If the site contains, less than 35 acres of suitable habitat and fewer than 3 pairs of BUOW, then relocate.
 - 3) If the site supports 3 or more BUOW and is greater than 35 acres, then 90% of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.
- **The survey and conservation requirements stated in this objective will be eliminated when Species Objectives have been met.**



5

4

3

2

1



Legend

 Urban and built-up areas
 Agriculture
 Forest
 Water bodies



Map of the Republic of Serbia

How are BUOW Conserved?

- BUOW exist on Conserved Lands
- Conserve occupied habitat
- Enhance breeding opportunities on Conserved lands
- Translocation



What has been done?

- **2006** -Survey Existing Conserved Lands
- **2006** Acquisition of El Sol property

- **2007** Assessment of BUOW habitat and 1st Artificial Burrow Installed
- **2007**-Vegetation management- 100 head of cattle
- **2007** DRAFT BUOW Management Plan

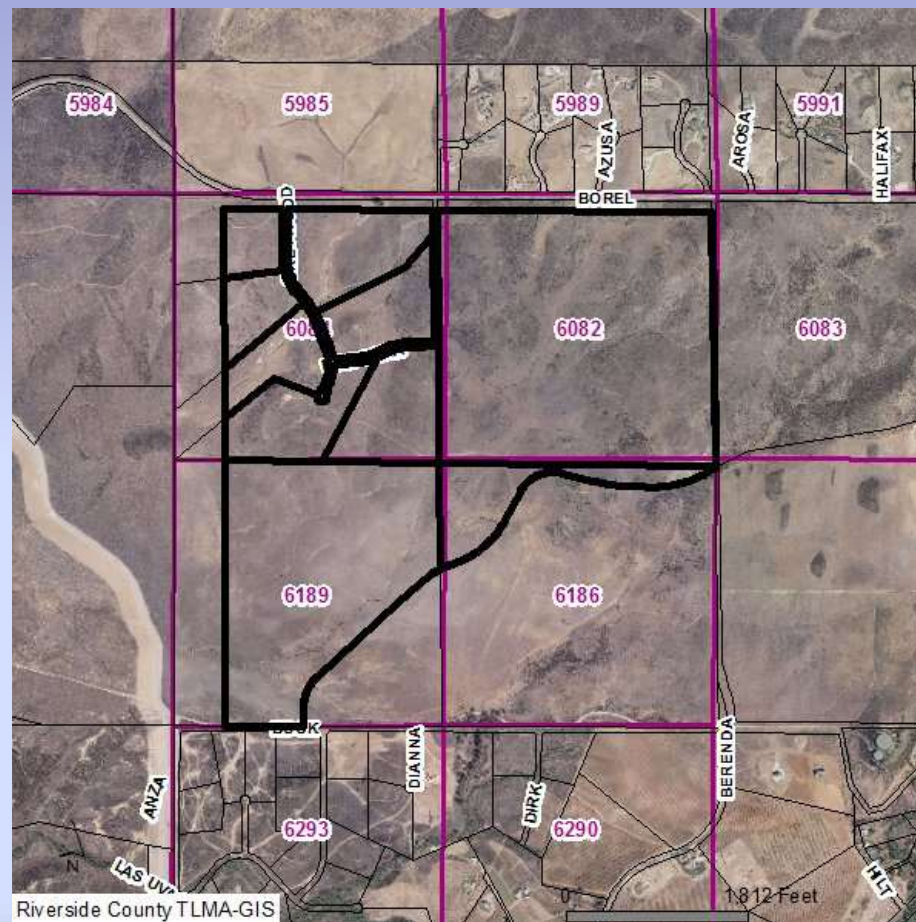
- **2008**-Individual BUOW start to be banded
- **2008**- El Sol Translocation Approved

- **2009**- Continue Artificial Burrow installation, banding, wildlife cameras
- **2009**- El Sol Translocation Approved

- **2010**- Partners Grant Approved for Lake Mathews (1 of 5 BUOW Cores)
- **2010**-DRAFT BUOW Management Plan updated
- **2010**- ~ 11 breeding pairs on Conserved Lands

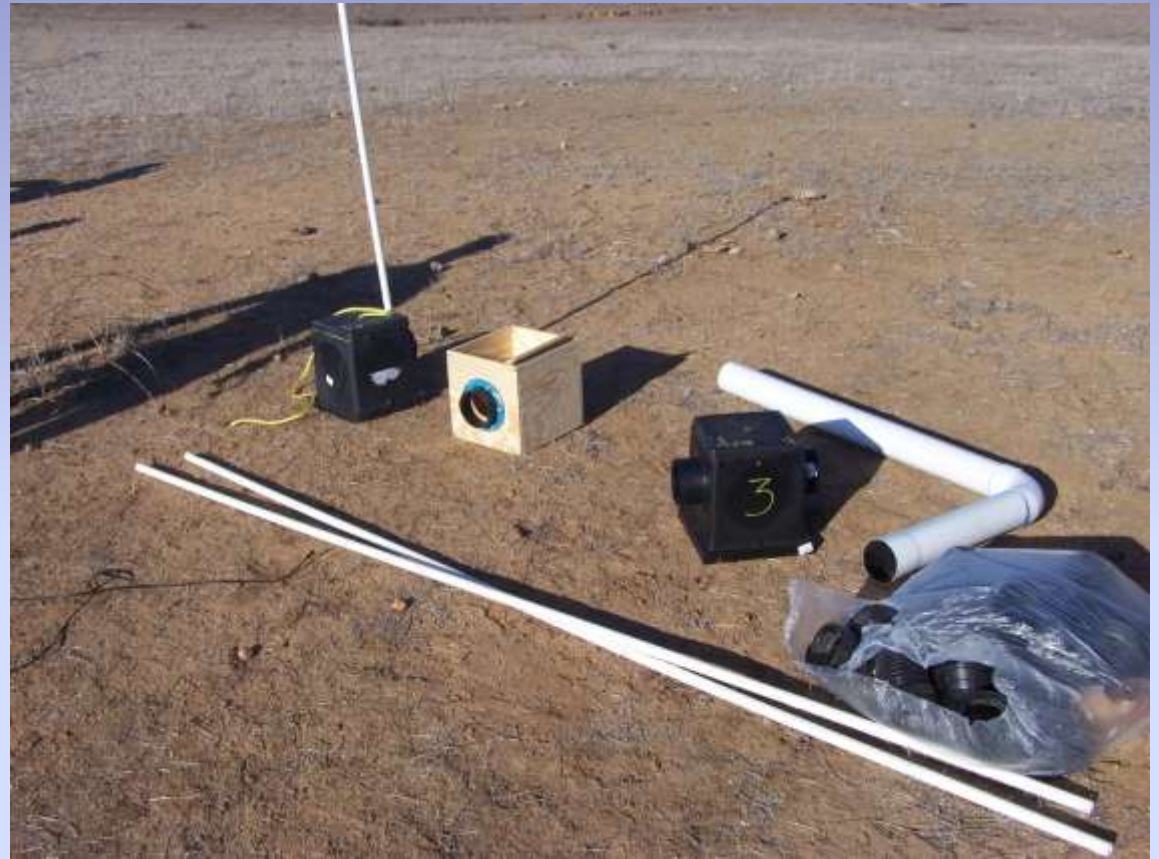
EL Sol

- Approximately 405 acres of conservation
- Acquired in 2006 through the Habitat Acquisition and Negotiation Strategy (HANS) process
- Occupied by BUOW
- Contributes to assembly of BUOW Core
- Owned by the RCA

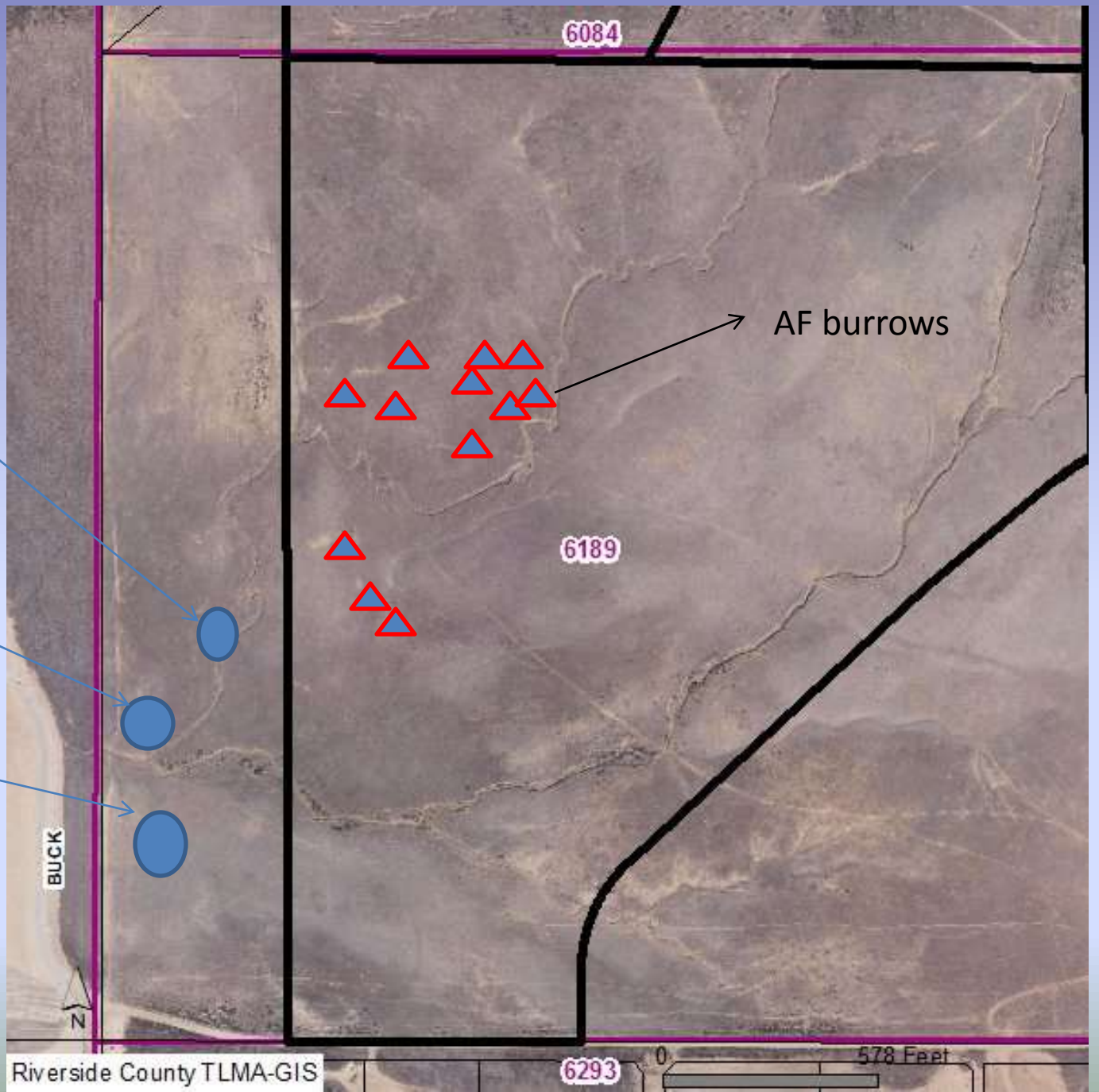


1st Artificial Burrow installation- November 2007

- RCA collaborated Boy Scouts of America
- Eagle Scout Project
- Total of 10 artificial burrows installed
- 5 wood
- 5 plastic
- Placed in groups to simulate burrow clusters







Natural Nest 3

Natural Nest 2

Natural Nest 1

AF burrows

Additional Artificial Burrows Installed





Two additional burrows installed in 2008 using 6" diameter single entrance

Owls Respond!



Banding at El Sol



All BUOW banded with both USFWS/USGS metal band and Auxiliary color band



2008- 4 BUOW banded

2009- 22 BUOW banded

2010-16 BUOW banded

TRANSLOCATION

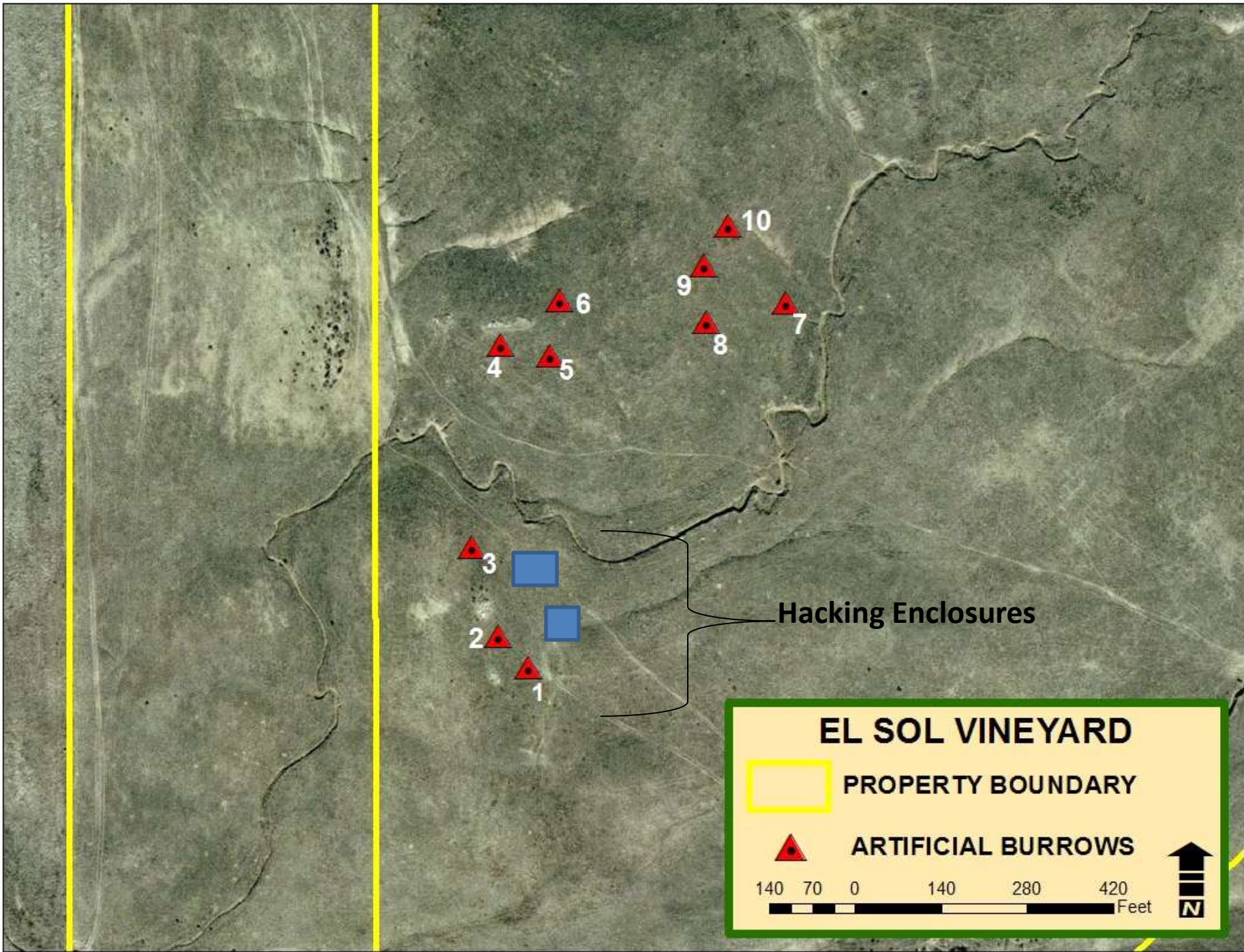
1st Translocation- 2008 Single BUOW from project site located during 30-day preconstruction survey . Bird was never moved

2nd Translocation- 2009 BUOW's brought into captivity located during 30-day preconstruction survey. Paired and then "hacked" at El Sol

3rd - Single BUOW, hard released at the El Sol property



Two Hacking Enclosures constructed
Enclosure 1. Potential breeding pair
Enclosure 2. Single unpaired bird





2010- Partners Grant

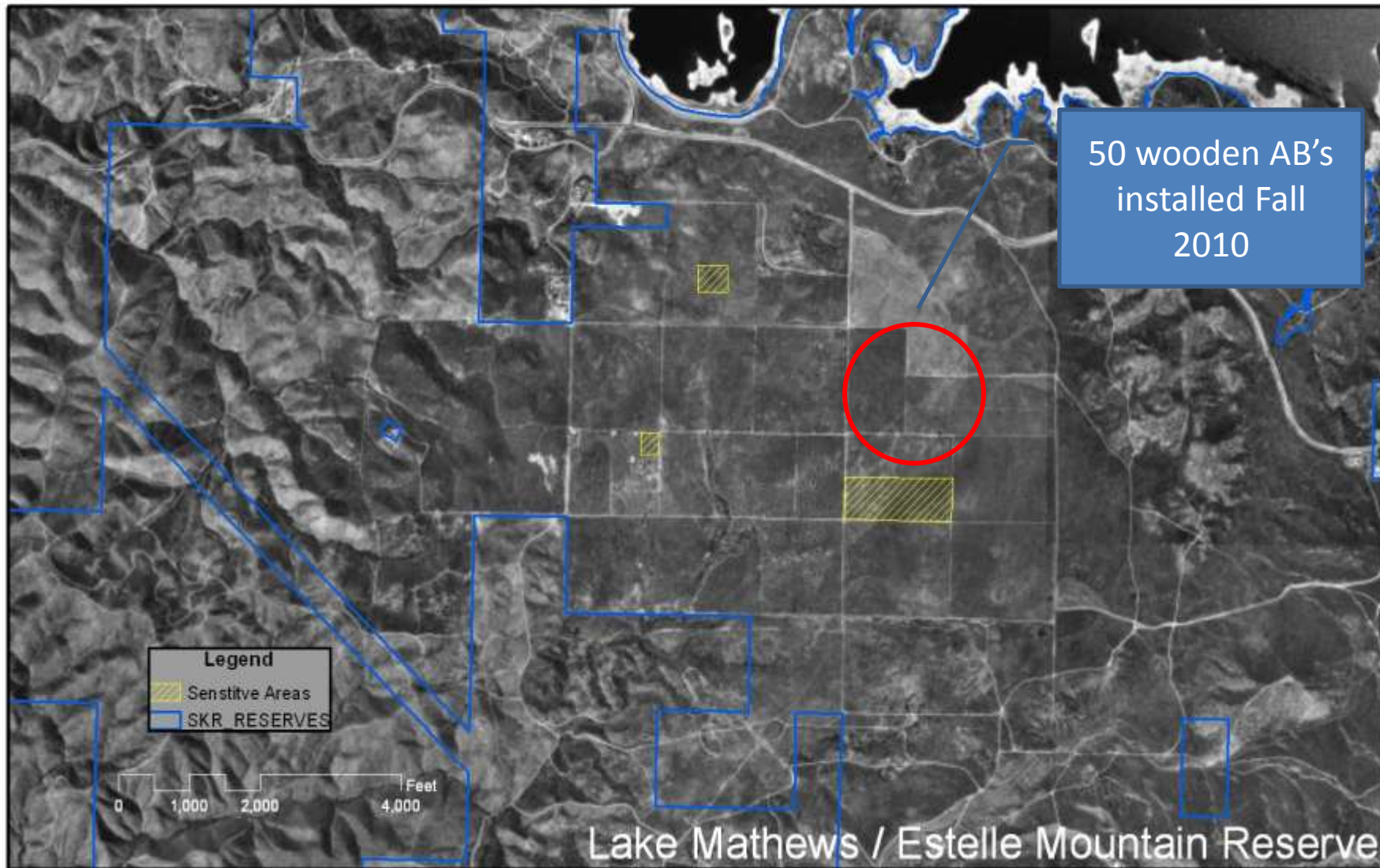
1. Granted \$7,500 to Riverside County Habitat Conservation Authority (RCHCA)
2. Construct 50 Artificial Burrows on RCHCA Conserved Lands at Lake Mathews
3. USFWS Volunteers

The logo for the Riverside County Habitat Conservation Agency, featuring a stylized orange and yellow sun over a black silhouette of a mountain range.

Riverside
County
Habitat
Conservation
Agency

Assembling 50 Nest Boxes





Road to 120- Achieving Species Objectives



- Continue to enhance breeding opportunities on Core Areas ~130 AB's
- Focused banding and monitoring effort across the MSHCP
 - Quantify to verify 120 BUOW's

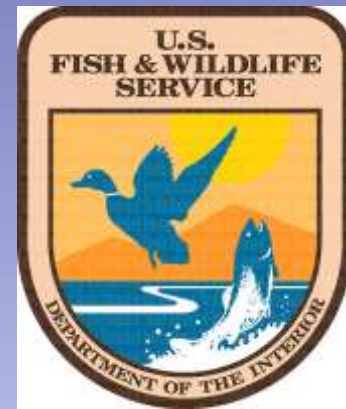
Road to 120- Achieving Species Objectives



- Develop BUOW “Strike Team” – reserve managers, local raptor experts
- Identify “Alternative Core” based on where owls are found- importance of “urban” owls?
- Streamline Active Relocation/Translocation- County M.O.U. with State
- Coordination of ALL PERMITEES via RCA for BUOW consistency
- Phase 2 Habitat Enhancement- CA Ground Squirrel re-intro



Questions?



THANKS!

Jeff Kidd Biological
Bloom Biological
Brian Shomo- RCHCA
Dustin McLain-County Parks
Boy Scouts of America
Leslie MacNair-CDFG
Jonathan Snapp-Cook
Karin Cleary-Rose-USFWS
Bill Kronland

