

CA Department of Fish and Wildlife Perspective on Burrowing Owl



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Burrowing Owl Protection

Designation

❑ **Species of Special Concern**

- Impacts and mitigation evaluated through the CEQA process

Fish and Game Codes

- ❑ 86. "**Take**" means hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill.
- ❑ 3515. It is unlawful to take or possess any migratory nongame bird as designated in the **Migratory Bird Treaty Act** or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act.
- ❑ 3503. It is unlawful to take, possess, or needlessly destroy the **nest or eggs** of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.
- ❑ 3503.5. It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (**birds-of-prey**) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Department Objectives for Conservation

1. Maintain size and distribution of existing populations.
2. Increase range into formerly occupied historical range.
3. Increase size of populations where possible and feasible.
4. Protect and restore ecosystems and natural communities which can support owls.



Department Objectives for Conservation (cont.)

5. Minimize or prevent unnatural causes of population declines.
6. Augment/restore natural dynamics of populations (movement and genes) among populations to prevent listing under CESA and/or ESA.
7. Engage stakeholders involved in BUOW protection and management.



Mitigation: Changes from 1995 to 2012

Staff Report **Guidelines**

- Foraging
 - No 6.5 acre requirement
 - Based on local natural history

- Artificial Burrows
 - No 2:1 replacement
 - Based on mitigation site-specific conditions



Mitigation: Changes from 1995 to 2012

Staff Report **Guidelines** (cont.)

□ Overall

- Both flexible and specific guidance (Appendix C-F).
- Provide as much information as possible!
- Support your mitigation proposal with justification supported by local observation and literature!!

Mitigation:

Energy Projects

- Easements
 - CDFW is working with applicants to establish conservation easements for BUOW.
 - Purpose of the easement is to ensure the land will be retained in agricultural use compatible with burrowing owl forage and to prevent use that will impair or interfere with those values.
- Artificial burrows
 - Applicants are also providing artificial burrows to compensate for directly impacted burrows.
- Desert Renewable Energy Conservation Plan (DRECP)
 - Burrowing owl will be covered under the plan and a conservation strategy is currently being developed.

BUOW Information to Assist Mitigation

- Foraging
 - Link between field irrigation methods and BUOW foraging?
 - Buffer strips: How much land is required to sustain the necessary amount of food (invertebrates and mammals) for BUOW?



BUOW Information to Assist Mitigation (cont.)

- Foraging (cont.)
 - Prey surveys on cropland (crop type and irrigation)
 - Diet analysis
 - Determining foraging distances on a project site
 - Overlap of foraging
 - Foraging on solar sites



BUOW Information to Assist Mitigation (cont)

□ Passive Relocation

- Fate of eviction
- Site fidelity

□ Artificial burrows

- Better success evaluation (banded individuals)
- Configuration

BUOW Information to Assist Mitigation (cont)

- Residents vs. migrants

- Disturbance studies
 - Appropriate buffers
 - Minimization measures

- Appropriate distances between project site and mitigation site

- HCP/NCCP studies
 - Farming/drain maintenance impacts
 - Active relocation

Other Mitigation Concepts

- ❑ Land bank (currently established only in Sacramento, Colusa, Solano, Alameda/San Joaquin, Merced)
- ❑ Easement program
- ❑ Habitat improvement

Emphasis on **local** studies/conservation



Questions?

