



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92011



In Reply Refer To:
FWS-OR-3046.2

JUN 06 2007

Brad Schnepf
President
Marnell Properties
6650 Via Austi Parkway, Suite 150
Las Vegas, Nevada 89119

Subj: Presence of Arroyo Toad in Silverado Creek adjacent to the Silverado Canyon Ranch Property, Orange County, California

Dear Mr. Schnepf:

This letter is in regard to the Silverado Canyon Ranch property (Tentative Tract 16191), an approximately 69-acre property located just north of Silverado Canyon Road in the community of Silverado in unincorporated Orange County, California. In 2005, the federally endangered arroyo toad was documented adjacent to the property (Glenn Lukos Associates 2005, Haase 2005). We are concerned about this population of arroyo toads because it appears to be a relatively small population that breeds intermittently and therefore may be vulnerable to threats such as loss and degradation of habitat.

Several arroyo toad surveys have been conducted along Silverado Creek since 2005. One survey documented arroyo toads along much of Silverado Creek, including a location about 100 m (328 feet) from the Silverado Canyon Ranch property (Haase 2005). A second survey did not include the stretch of creek adjacent to the property, but did re-confirm the presence of arroyo toads in Silverado Creek about 2.5 km (1.6 miles) downstream of the Silverado Canyon Ranch property (GLA 2005). More surveys along Silverado Creek and on Silverado Canyon Ranch were conducted later in 2005 and in 2006 (Bloom 2006). The surveys conducted later in 2005 and in 2006 did not document arroyo toads, but we still believe there is a high likelihood that arroyo toads are present on the Silverado Canyon Ranch property for the following reasons:

- 1) Arroyo toads are known to move into upland habitat over 1 km (0.62 miles) from the nearest stream course (Holland and Sisk 2000). The edge of the Silverado Canyon Ranch property is about 100 m (328 feet) from the nearest arroyo toad observation in 2005 (Haase 2005), so the property is well within the dispersal range of arroyo toads. According to the U.S. Fish and Wildlife Service (Service) survey protocol for the arroyo toad, "areas within one kilometer (1 km) of arroyo toad sites (documented by the presence

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of eggs, larvae, juveniles, or adults) that have suitable habitat shall be presumed to have arroyo toads" (Service 1999a).

- 2) There are no substantial barriers to arroyo toad dispersal from the observed locations in Silverado Creek to the subject property. Arroyo toads often disperse along drainages (Ramirez 2002a, 2002b), and the property is connected to Silverado Creek by a small drainage that contains surface water when it rains and along which arroyo toads could easily disperse.
- 3) According to a recent report (Bloom 2006), about 1/3 of the property contains good-quality coastal sage scrub and a few small oak trees, while the other 2/3 is disked annually for fire control and contains mostly non-native grasses. The disking is a potential threat to any toads on the property, but disked, friable soil may be attractive to toads in search of potential sites to bury themselves (aestivate) during the non-breeding season (Griffin *et al.* 1999). Arroyo toads can forage in all of the habitat types on the property: coastal sage scrub, oak woodland, grassland, and disturbed areas (Service 1999b). Therefore, the Silverado Canyon Ranch property contains suitable upland habitat for the arroyo toad.
- 4) The negative surveys by Mr. Bloom at this location late in 2005 and in 2006 were inadequate to determine that arroyo toads are absent from the property or the surrounding environment. The surveys by Mr. Bloom in 2005 were not protocol surveys, as they were conducted primarily in late July after most toads in this portion of their range have metamorphosed and become harder to detect because they are buried underground or are foraging in the upland environment. In 2006, it was much drier than in 2005, and it appears that there was no breeding along Silverado Creek that year.

Although arroyo toads were not observed at Silverado Creek in 2006, they can remain buried in the soil for extended periods of time, emerging to breed or forage only when conditions are appropriate, so based on the observation of breeding arroyo toads at this location in 2005, it is likely that toads are still present in suitable habitat along Silverado Creek. This population of arroyo toads appears to breed intermittently and may be particularly difficult to observe on a year to year basis, as evidenced by the fact that, prior to 2005, the last documented observation of arroyo toads in the immediate area was in 1985 (R. Fisher, *in litt.* 1985).

We understand that the Silverado Canyon Ranch property is being considered for development. Because of the presence of arroyo toads along Silverado Creek and the likelihood that arroyo toads occur on the Silverado Canyon Ranch property, we encourage you to coordinate with our office to ensure that proposed activities are consistent with the Endangered Species Act of 1973, as amended (Act). In addition, we recommend that any maintenance activities on the property be conducted in a manner that is consistent with the Act. For example, we understand that in the past, the property has been disked annually to remove vegetation (Bloom 2006). Plowing or

Mr. Brad Schnepf (FWS-OR-3046.2)

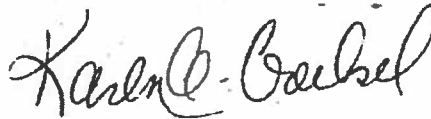
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past, the property has been disked annually to remove vegetation (Bloom 2006). Plowing or disking can kill or injure arroyo toads buried in the soil, so we recommend that fuel modification be limited to clearing and thinning around existing structures as required by the Orange County Fire Authority and that the fuel modification be conducted using hand tools rather than plowing or disking. For more information on compliance with the Act, please visit our website regarding federally listed species at <http://www.fws.gov/endangered/>.

If you are interested in restoring or enhancing habitat for the arroyo toad, please contact this office regarding potential partnering opportunities and grants that could be used to fund this restoration.

Thank you for your attention to this matter. If you have any questions, please contact Jonathan Snyder of this office at (760) 431-9440, extension 307.

Sincerely,



Karen A. Goebel
Assistant Field Supervisor

cc:

Tony Marnell II, Marnell Carrao Associates, Las Vegas, Nevada
Tim Neely, County of Orange, Santa Ana, California
Marie Palladini, U.S. Fish and Wildlife Service, Torrance, California

Literature Cited

- Bloom, P. H. 2006. Results of focused surveys along portions of Silverado Creek in the vicinity of the proposed Silverado Canyon Ranch Project located in the County of Orange, California. Letter report dated October 24, 2006. 3 pp.
- Glenn Lukos Associates. 2005. East Orange Planned Community Project in Orange County, California – Letter report on focused surveys for the arroyo toad. Letter report dated July 8, 2005, prepared for The Irvine Company. 5 pp.
- Griffin, P. C., T. J. Case, R. N. Fisher. 1999. Radio telemetry study of *Bufo californicus*, arroyo toad movement patterns and habitat preferences. Report to California Department of Transportation. v + 66 pp.
- Haase, R. 2005. Presence of arroyo toads in Silverado and Santiago Creeks: A report of field observations from April 29, May 6, and May 8, 2005. Letter report dated May 17, 2005. 2 pp.
- Holland, D. C., and N. R. Sisk. 2000. Habitat use and population demographics of the arroyo toad (*Bufo californicus*) on MCB Camp Pendleton, San Diego County, California: Final report for 1998-1999. Report prepared for the United States Marine Corps, Camp Pendleton, California.
- Ramirez, R. S., Jr. 2002a. Arroyo toad (*Bufo californicus*) radio telemetry study, San Juan Creek. Unpublished report submitted to the Cleveland National Forest.
- Ramirez, R. S., Jr. 2002b. Arroyo toad (*Bufo californicus*) radio telemetry study and pitfall trapping studies, Little Horsethief Canyon, Summit Valley Ranch. Unpublished report submitted to Caltrans District 8. 92 pp.
- U.S. Fish and Wildlife Service. 1999a. Survey protocol for the arroyo toad. 3 pp.
- U.S. Fish and Wildlife Service. 1999b. Arroyo southwestern toad (*Bufo microscaphus californicus*) recovery plan. U.S. Fish and Wildlife Service, Portland Oregon. vi + 119 pp.