# Technical Memorandum

**To:** Mark Kelton

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**Subject:** Ferrini Ranch Wildlife Corridor

This technical memorandum is meant to summarize potential wildlife corridor issues associated with a proposed development on the 895-acre Ferrini Property (Project Area) outside the City of Salinas, Monterey County, California. I have conducted this review based on my experience in conservation planning for other large projects in Monterey (Santa Lucia Preserve) and in Tejon Ranch. The latter project involved working with the South Coast Linkages Project and the Trust for Public Land to design a preserve that would also provide regional and local wildlife corridor linkages for 24 species in the Tehachapi mountain range.

The Project Area is located south of the town of Salinas and to the east of Highway 68, or Salinas-Monterey Road. The northwestern edge of the Project Area borders Highway 68. The southeastern border is between approximately 0.3 and 0.7 miles from the highway and runs at an angle of roughly 40 degrees northeast. The Project Area is roughly 3.75 miles long.

I have reviewed both the proposed project and the alternate site plan dated February 1, 2008. This report will address the alternate site plan as we believe that this plan provides an evvironmentally superior wildlife corridor.

**BACKGROUND**

Potential barriers to wildlife movement currently exist within the Project Vicinity due to previous development activities for regional transportation needs and residential and commercial development. These barriers can affect both larger mammals which may move more frequently through the region as well as smaller, less mobile species that may move over generational time periods.

In particular, Highway 68 and the Toro Park Estates development are a major barrier for wildlife species attempting to travel east and west through the Project Area. As of 2007, it carried about 26,000 vehicles per day. This level of traffic presents a formidable barrier to wildlife movement. Adjacent to most of this barrier of heavy traffic is a sound wall built to shield

the Toro Park Estates development form the traffic noises of Highway 68. In addition, the development behind the sound wall is approximately 1400 ft wide. The three of these features impose a significant barrier to terrestrial wildlife species attempting to travel between Fort Ord to the Sierra de Salinas or Santa Lucia ranges. Wide-ranging terrestrial wildlife known to occur on Fort Ord lands include: American Badger, Mountain Lion, Bobcat (*Lynx rufus*), Black-tailed Deer (*Odocoileus hemionus)* and Coyote (*Canis Latrans*).

The current corridors for wildlife in this area are limited to El Toro Creek and the Portola Drive overpass (providing access to El Toro Regional Park) and possible culverts running beneath the highway. Those species that attempt to cross the road are subject to being killed. The Monterey Count SPCA lists the areas of greatest deer activity at night as Pebble Beach, Carmel Valley Road, the Highway 68 corridor, Holman Highway, River Road, and Highway 1 from Seaside to south of Carmel. Two of these roads abut the Project Area. During the deer breeding season in fall, the SPCA responds to an average of 20 to 30 hit-by-car deer calls a month in these areas, with almost all the deer involved either dead on arrival or needing to be humanely euthanized immediately.

## EL TORO CREEK UNDERCROSSING

As discussed above, the El Toro Creek undercrossing is one of the remaining significant safe passages for both small and large mammals, amphibians, and reptiles. It is bordered by riparian vegetation which offers cover and shade for day time movements and the creek itself is shallow and, except during storms, flowing slowly enough for mammals to wade through it. A small seasonal tributary to El Toro also joins at this point and provides additional cover and opportunities for movement of more terrestrial species as it does not have perennial flows. Therefore, this location offers a good opportunity for many species to utilize this undercrossing and move between Fort Ord and the open space provided in the proposed project site.

## PROJECT DESIGN CONSIDERATIONS TO CONTINUED USE OF UNDERCROSSING

Wildlife corridors design must consider a variety of factors including species specific habitat requirements, provision of cover for dispersal, and sufficient buffer from human disturbance. Wildlife do utilize a variety of man-made structures for crossing highways and roads, including culverts, bridges, and overpasses and are known to utilize relatively narrow passages in moving from one suitable habitat to another. Within open areas, corridor width may be larger to accommodate random movements associated with the search for cover or food. There is little research or data on optimal widths for wildlife corridors and larger species can move relatively quickly through narrow corridors whereas smaller species may need additional cover for multiple day movements.

The overall project conserves considerable open space and corridors for wildlife movement towards the El Toro Creek area. In particular, the large valley floor in the vicinity of the corridor will remain undeveloped as will the grassland and oak woodland corridor (800 to 1200 feet wide) between lot groupings in the 30s and 40s. A width of 300-400 feet is sufficient given the focal point of this undercrossing. This will provide both protected movement corridors and staging areas for wildlife moving from the higher open space lands to the valley floor. The

corridor width includes a variety of habitats including woodlands and aquatic habitats and therefore will accommodate a variety of species.

In the vicinity of El Toro Creek, the proposed project has been revised (per the alternate site plan) to reduce the number and density of lots near the El Toro Creek and Highway 68 undercrossing.

Important changes that have been made include:

- Maintenance of open space areas to the northeast of the undercrossing and parallel to Highway 68 so that species moving north-south through the project area can reach the undercrossing.

- In the area near San Benancio Rd the revised layout minimizes intrusion into riparian areas and preserves riparian corridor along El Toro Creek and its tributary through the reduction in number of lots from 12 to 1 and an increase in the size of the open space preserve lot (Parcel A2) at this location.

- Consolidation of three lots nearest El Toro Creek into one lot with no new structures proposed other than substantially within the footprint of the existing buildings.

- No barrier fencing will be allowed (open fencing such as rail fencing will be allowed) allowed on those portions of lots adjoining riparian areas in the area of El Toro Creek to allow for movement of species within lots outside of development envelope.

**CONCLUSION**

The revised plan will allow both large and small animals to access the undercrossing of Highway 68 at El Toro Creek. Additional space and passageways have been provided within the site plan to allow species to move from the larger open space areas provided in the project plan to the undercrossing. In addition, the width of the wildlife corridor prior to reaching the cover of El Toro Creek is sufficient to provide a staging area for a variety of species due to the inclusion of a variety of habitats that provide cover and food resources.