

2004 and 2006 Reptile Survey Results Newhall Ranch Specific Plan Area

Los Angeles County, California

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1.0 EXECUTIVE SUMMARY

Reptile surveys conducted during 2004 and 2006 demonstrated that several habitats within the Newhall Ranch Specific Plan Area (NRSPA) support several common occurring reptiles and two special-status reptile species. Additionally, based on a literature/database review and the habitat quality on the NRSPA, there are several additional special-status species that have the potential to occur. Potentially occurring special-status reptile species include: southwestern pond turtle (Clemmys marmorata pallida), coastal western whiptail (C. t. stejnegeri), coastal rosy boa (Charina trivirgata), coast (western) patch-nosed snake (Salvadora hexalepis), California red-sided garter snake (Thamnophis sirtalis infernalis), two-striped garter snake (Thamnophis hammondii), and the red diamond rattlesnake (Crotalus ruber). Both the coast horned lizard (Phrynosoma coronatum frontale) and the silvery legless lizard (Anniella pulchra pulchra) were observed during the 2004 and 2006 surveys. These two species are considered Species of Special Concern by the CDFG.

2.0 INTRODUCTION

This report summarizes the methodologies and results of surveys conducted for reptile species within the NRSPA. The boundaries used for surveying within the NRSPA include the following planned development areas: Mission Village, Landmark Village, Homestead, and Protero Village (herein, "NRSPA"). Several reptile species that have the potential to occur within the area are protected by state and/or federal agencies. The purpose of the 2004 and 2006 reptile surveys is to develop a list of common and special-status reptile species observed or expected to occur within the NRSPA, with particular emphasis on those species considered of special status; and to document the relative diversity and extent of reptile species observed during the course of the survey efforts.

The Specific Plan Area is located in an unincorporated portion of the Santa Clara River Valley in northwestern Los Angeles County, approximately one-half mile southwest of the junction of Golden State Freeway (I-5) and State Route 126 (SR-126). Both the Santa Clara River and SR-126 transect the northern portion of the Specific Plan Area. The boundaries of the Specific Plan Area encompass approximately 11,963 acres, which includes additional areas that were not surveyed to the south of the Protero Village project area to the Santa Susana Mountain Range.

3.0 METHODOLOGY

3.1 Literature/Database Review

A query of the California Department of Fish and Game's California Natural Diversity Database (CNDDB) (CDFG 2006) was conducted to identify special-status reptile species previously recorded in the area. The

CNDDB lists historical and recently recorded occurrences of special-status animal species. The areas searched include the U.S. Geological Survey (USGS) 7.5-minute quadrangle for Newhall, as well as surrounding eight USGS quadrangles.

The potential for special-status species to occur on the NRSPA is based on the proximity of the site to recorded occurrences listed in the CNDDB database, on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences, and geographic ranges of special-status reptiles known to occur in the region.

In addition to the CNDDB, a literature review of known home range sizes, habitat preferences, and other life history information was performed to compile a list of common and special-status reptile species with the potential to occur on the NRSPA. The results of this literature and database review are presented in section 4.0, RESULTS.

3.2 Field Survey Methods

The 2004 and 2006 reptile surveys were concentrated on the proposed development areas of the NRSPA, but also include some sampling within the Magic Mountain Entertainment Center, Castaic Junction, and Stevenson's Ranch Phase V. Reptile surveys occurred in a variety of plant communities, which included (but not limited to): coastal sage scrub, oak woodland, chaparral, riparian, and non-native grassland. Plant communities chosen for reptile surveys included those that have the greatest potential for supporting expected or potentially occurring reptiles. For example, reptile surveys did not occur in agricultural fields.

Pitfall trap lines

Pitfall trap lines were installed in various habitat types to obtain a representative sample of reptile distribution within the NRSPA. Five-gallon buckets, used as pitfall traps, were placed at ground level and spaced at 40 feet apart along transects made of two foot high silt fencing (drift fences). On average, ten buckets occurred on each transect. In addition, one drift fence array with ten pitfall traps occurred in the Landmark Village Planning Area. **Photo 1** below portrays an example of the array configuration used in Landmark Village. Pitfall traps were filled with 3-4 inches of soil, rocks, and leaves to provide temporary cover for trapped animals. An elevated lid was placed over the opening of the buckets to provide shade during warm ambient temperatures. Trap lines were surveyed for five consecutive days, and each trap line was checked twice a day, once during the morning hours between 6:00AM and 9:00AM and again between 4:00PM and 6:00PM.



Photo 1. Example of drift fence array used in Landmark Village. *Source:* http://www.lvwash.org/being done/progress/reptilesrv.html

Two pitfall surveys occurred within the NRSPA. The first occurred between September 29 to October 6, 2004, and the second occurred from August 21 through August 25, 2006. During the 2004 surveys, the weather consisted of clear skies to complete cloud cover, with temperatures ranging between approximately 60 – 100 degrees Fahrenheit. Weather during the 2006 surveys consisted of clear skies with temperatures ranging from between approximately 60 and 104 degrees F. All captured animals were identified and released immediately upon inspection near the origin of capture. The buckets were tightly closed at the end of the 2004 and 2006 trapping sessions.

Raking Surveys

Hand raking was conducted to determine the presence of silvery legless lizards in suitable habitat areas. Silvery legless lizards typically occur in areas of loose soil substrate such as sandy soils or in areas covered with leaf litter (duff), such as oak woodlands; therefore, raking surveys occurred in such areas within the NRSPA. Hand raking was conducted in the late afternoons or early mornings between October 3 and October 7, 2004. Ambient temperatures ranged from 80 – 90 degrees Fahrenheit.

4.0 RESULTS

4.1 Literature and Database Review

A list of both common and special-status reptile species with the potential to occur on the NRSPA is provided below. As previously indicated, this list is based on the proximity of the site to recorded

occurrences listed in the CNDDB database, on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences, and geographic ranges of special-status reptiles known to occur in the region.

Family Emydidae - Box and Pond Turtles

- Southwestern pond turtle (Clemmys marmorata pallida) < 8.5 inches. Ponds, rivers, irrigation ditches with aquatic vegetation. Found all year in area. Declining in 80% of range from drainage, cattle, and ORVs, bordering on extinction in San Joaquin Valley. Omnivorous including carrion. Habitat should be fenced. *Federal Species of Special Concern and California Species of Special Concern</p>
- Red-eared slider (*Trachemys scripta elegans*) < 14.5 inches. Thoroughly aquatic, uses quiet
 waters, reservoirs with aquatic vegetation. Omnivorous, preferring insects. Much
 transplanting.

Families Geckkonidae and Eublepharidae

• Western (San Diego) banded gecko (*Colenyx variegates abbotti*) < 3 inches. Soft skin, vertical pupils. Can live in very arid areas as nocturnal and burrows, and rocky crevices. Eats insects. Creosote, chaparral, pinyon-juniper.

Family Crotaphytidae - Collared and Leopard Lizards

Long-nosed leopard lizard (*Gambelia wislizenii*) < 5.75 inches. Arid to semi-arid, bunch grass, sagebrush. Lies in shade of rocks and brush to ambush insects, arthropods, snakes, and pocket mice. Runs on hind legs. Found in NW Ventura Co. and to east, though no overlap/contact between them and Blunt-nosed leopard lizards.

Family Phrynosomatidae - zebra-tailed, fringe-toed, spiny, side-blotched, horned lizards

- Western fence lizard (Scleroporus occidentalis) < 3.5 inches. Often on fence posts, logs, rocks in variety of habitats from grassland and agriculture to chaparral and conifers, not severe desert.
- Southern sagebrush lizard (*Scleroporus graciosus vandenburgianus*) < 3.5 inches. Often in mountains higher than Western fence lizard. Uses ceanothus/manzanita brush, open ground near brush, logs, rocks. Eats insects.

- Common side-blotched lizard (*Uta stansburiana*) < 2.5 inches. Abundant in arid-semi-arid with rocks, shrubs, often along washes. Primarily a ground dweller. Eats insects.
- Coast horned lizard (*Phrynosoma coronatum frontale*) <.5 inches. Variety of habitats from
 western edge of Sonoran desert scrub, to coastal sage scrub, oak woodland, conifers,
 particularly in sandy washes. Harvester and other native ants are primary food being
 displaced by introduced Argentine ant. Lowland habitats greatly reduced from
 agriculture and urbanization. *Federal Species of Special Concern and California Species of
 Special Concern

Family Xantusiidae – Night Lizards

• Yucca desert night lizard (*Xantusia vigilis vigilis*) < 2.75 inches. Arid to semi-arid in branches of fallen Joshua trees, dead yucca, and in rocks, beneath logs and brush of inner Coast Range, Santa Clara river drainage.

Family Scincidae - Skinks

- Western red-tailed (Gilbert's) skink (*Eumyces gilberti rubricaudatus*) < 4.5 inches. In a variety of habitats from grassland to high desert, pinyon-juniper, open chaparral in rocky areas with ephemeral or permanent stream. from inner coast ranges to Southern California mountains.
- Skilton's (Western) skink (*Emeces skiltonianus skiltonianus*) < 3.4 inches. Grassland, broken chaparral, juniper woodland, open pine in rocks near streams.

Family Teiidae - Whiptails

- California western whiptail (*Cmeidopherus tigris mundus*) <5 inches. Similar to coastal whiptail (below).
- Coastal western whiptail (*C. t. stejnegeri*) < 5 inches. In desert to semi-arid habitats with open areas for running and along streamside growth. Eats insects and spiders. **California Species of Special Concern*
- Orange-throated whiptail (*Cnemidophorus hyperthrus*) < 2.74 inches. Inhabits washes, streamsides and other sandy areas with rocks and brush, often in coastal chaparral. Eats insects and spiders.

Family Anguidae - Alligator lizards

Southern (California or San Diego) alligator lizard (*Elgaria multicarinata*) < 7 inches. In grassland, oak woodland, chaparral and open pine in moist bottoms with cover. Partly nocturnal in summer. Eats slugs, insects and spiders as well as lizards and small mammals.

Family Anniellidae - North American Legless Lizards

• Silvery legless lizard (*Anniella pulchra pulchra pulchra*) < 7 inches. Blunt on both ends to burrow in loose soil of sand or sandy loam with some moisture and plant cover. Found in beach, chaparral, pine – oak woodlands and riparian, occasionally desert scrub. Forages in leaf litter and burrows in sand and loose soil of dunes, washes and sometimes, wood rat nests. Agricultural conversion and exotic plants such as ice plant as well as ORV use in dunes have damaged populations. *Federal Species of Special Concern and California Species of Special Concern

Family Leptotyphlopidae – Blind snakes

• Western blind snake (*Leptotyphlops humilis*) <16 inches. From desert to chaparral slopes with rocks and loose soil suitable for burrowing on hillsides and in washes among roots and rocks. In open nocturnally.

Family Boidae - Boas and pythons

- Coastal rosy boa (*Charina trivirgata*) < 44 inches. Rocky shrub land and desert attracted
 to streams and oases but doesn't require permanent water. Crepuscular/nocturnal.
 Spotty distribution in coastal southern California. *California Species of Special Concern
- Rubber boa (*Charina bottae*) < 33 inches. Grassland, woodland, chaparral and forest openings under logs and rocks. Swims, burrows, and climbs. Eats small mammals, birds, and salamanders. Found around Mt. Pinos and Tehachapi as well as San Bernardino mountains.

Family Colubridae – colubrids

• San Bernardino ring-necked snake (*Diadophis punctatus modestus*) < 34 inches. Moist habitats in woodlands, farms, gardens, and chaparral. Restricted to watercourses in most

- arid area of range. Found under logs and stones. Eats salamanders, frogs, lizards, snakes, insects and worms. * Federal Species of Special Concern.
- Chaparral (California) whip snake (striped racer) (*Masticophis lateralis*) < 60 inches. Main chaparral snake. Favors rocky, open grassy patches and gullies on hillsides up to mixed deciduous or pine types. Lizards are main food (particularly spiny lizards of *Sceloporus*).
- Red racer coachwhip (*Masticophis flagellum piceus*) < 102 inches. A variety of habitats from desert and fields, through scrub and woodland, to juniper-grassland. Active in heat and very fast. Seeks rodent burrow refugium. Inner coast range through southern California.
- Western yellow-bellied racer (*Coluber constrictor morman*) < 75 inches. Open areas in meadows, sagebrush, chaparral, pinyon-juniper, and forest near rocks, logs near lizards, which is the preferred food. Also eats small mammals, birds and insects.
- Coast (western) patch-nosed snake (Salvadora hexalepis) < 46 inches. Diurnal resident of grassland, chaparral, sagebrush, pinyon-juniper, and desert scrub in sandy and rocky areas of lower slopes and plains. Eats small mammals, lizards and nestling birds. Occasionally climbs in vegetation and crawls rapidly like a whipsnake. *Federal Species of Special Concern and California Species of Special Concern
- San Diego gopher snake (*Pituofis catenifer annectens*) < 110 inches. Variety of habitats desert, prairie, fields, brush land, woodland from lowlands into high mountains. Good climber and burrower, it kills by constriction and eats rodents, rabbits, birds, and occasionally, insects and lizards.
- Short-tailed California glossy snake (*Arizona elegans*) < 70 inches. Prefers open areas from desert through sagebrush, grassland, chaparral slopes, and woodland. Burrows in sand or loam. Mostly nocturnal. Primarily eats lizards although takes some birds, snakes and mammals.
- Coast mountain king snake (*Lampropeltis zonata multifasciata*), San Diego mountain kingsnake (*Lampropeltis zonata pulchra*) -*California Species of Special Concern, San Bernardino mountain king snake (*Lampropeltis zonata parvirubra*) *California Species of Special Concern. All are <85 inches. These three subspecies converge near the Newhall area. Inhabits coastal sage scrub through manzanita chaparral to oak-pine and riparian areas. Uses rotting logs and rocks. Eats lizards, snakes, bird eggs and nestlings and small mammals.

- California (Common) king snake (*Lampropeltis getula*) < 85 inches. Variety of habitats from coastal marshes to farms, chaparral, coniferous forest, and river bottoms. Eats lizards, snakes, bird nestlings and small mammals. Often near rocky outcrops and under logs. Crepuscular.
- Western long-nosed snake (*Rhinocheilus lecontei lecontei*) < 60 inches. Crepuscular –
 nocturnal inhabitant of desert and shrub, it eats lizards (favors whiptails), snakes, small
 mammals and occasionally, birds and insects.
- California red-sided (common) garter snake (*Thamnophis sirtalis infernalis*) < 55 inches.
 Grassland, city lots, shrub, woodland, chaparral, and forest near moisture e.g. ditch, slough, borrow pits, and streams. Good swimmer. Eats fish, amphibians, small mammals, insects. * *California Species of Special Concern*
- Two-striped garter snake (*Thamnophis hammondii*) < 40 inches. In or near freshwater streams with riparian vegetation. Nearly half of range eliminated by urban development.
 * Federal Species of Special Concern.
- Night snake (Hypsiglena torquata) < 26 inches. Rocky and sandy areas of variety of habitats from grassland through chaparral, sagebrush, desert, woodland, moist meadows and thorn forest. Nocturnal and crepuscular. It injects venom into lizards and small snakes.
- California black-headed snake (*Tantilla planiceps*) < 15.5 inches. Poorly known. Found in grassland through chaparral, oak-woodland and desert edge in washes and rocky hillsides. Often in crevices and burrows of other animals and under plant debris. Eats insects and centipedes.
- Western lyre snake (*Trimorphodon biscutatus*) < 47.75 inches. Rock-dwelling snake of lowlands, mesas, and lower slopes in desert, creosote, chaparral, pinyon-juniper, and oak-woodland. Emerges at night from deep crevices. Eats lizards, birds, small mammals including bats, which it injects with venom.

Family Viparidae - Pit vipers (subfamily Crotalinae)

Southern Pacific (western) rattlesnake (*Crotalus viridus helleri*) < 65 inches. Inhabits a
variety of habitats from coastal sand dunes to timberline. Uses rocky outcrops, ledges,
rocky stream beds and, in cooler areas dens in rodent burrows, crevices, and caves. Eats
small mammals to rabbit size, birds, eggs, reptiles, and insects.

• Red diamond rattlesnake (*Crotalus ruber*) < 65 inches. Desert scrub on alluvial fans, coastal sage, chaparral, woodland. Less aggressive than diamondback. **California Species of Special Concern*.

4.2 2004 Pitfall Trap Survey Results

Impact Sciences observed eight species of reptiles during the 2004 pitfall trapping surveys, one of which is a California Species of Special Concern, the coast horned lizard. The species trapped during the 2004 pitfall surveys include: western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), red coachwhip (*Masticophis flagellum piceus*), San Diego alligator lizard (*Elgaria malticarinata webbii*), western skink (*Eumeces skiltonianus*), San Diego gopher snake (*Pituophis catenifer annectens*), common king snake (*Lampropeltis getulus*), and southwestern rattlesnake (*Crotalus viridis helleri*). While no coast horned lizards were observed in the pitfall traps, more than five individuals were observed within the NRSPA during reptile survey site visits, and other site visits conducted by Impact Sciences during the summer of 2004. Pitfall trapping results for the 2004 survey are provided in **Appendix A**.

4.3 2004 Raking Survey Results

A total of ten locations were surveyed within the NRSPA to determine presence of silvery legless lizards. Several habitats were inspected for presence, which included coastal sage scrub, riparian, chaparral, non-native grassland, and oak woodland. Of the habitats surveyed, silvery legless lizards were only observed within the leaf litter of coast live oak woodland. A total of 23 individual silvery legless lizards were captured and released. Raking surveys for the silvery legless lizard was not performed in 2006, since presence of this species was confirmed in 2004.

4.4 2006 Pitfall Trap Survey Results

Impact Sciences observed ten reptile species during the 2006 pitfall trapping surveys, including one coast horned lizard (California Species of Special Concern). These species include: western fence lizard, side-blotched lizard, southern alligator lizard, western skink, California western whiptail (*Cmeidopherus tigris mundus*), coast horned lizard, western diamondback rattlesnake (*Crotalus atrox*), California whipsnake (*Aspidoscelis tigris munda*), California western blindsnake (*Leptotyphlops humilis*), California black-headed snake (*Tantilla planiceps*). Pitfall trapping results for the 2006 survey are provided in **Appendix B**.

5.0 CONCLUSION

Two special-status reptile species were observed during the 2004 and 2006 reptile surveys, the coast horned lizard and the silvery legless lizard. Survey locations and methodologies were chosen to develop a general understanding of the diversity of reptilian species occurring in a variety of habitat types within the NRSPA. Survey efforts did not focus on a particular reptile species. Furthermore, each development boundary (Mission Village, Landmark Village, Homestead, and Protero Valley) was not surveyed in its entirety or at a level of detail necessary to determine presence or absence of a special-status species. Because several of the potentially-occurring special-status species were not observed during the 2004 and 2006 survey efforts, focused surveys utilizing specific survey methods may need to be conducted to confirm presence/absence of such reptile species.

6.0 REFERENCES

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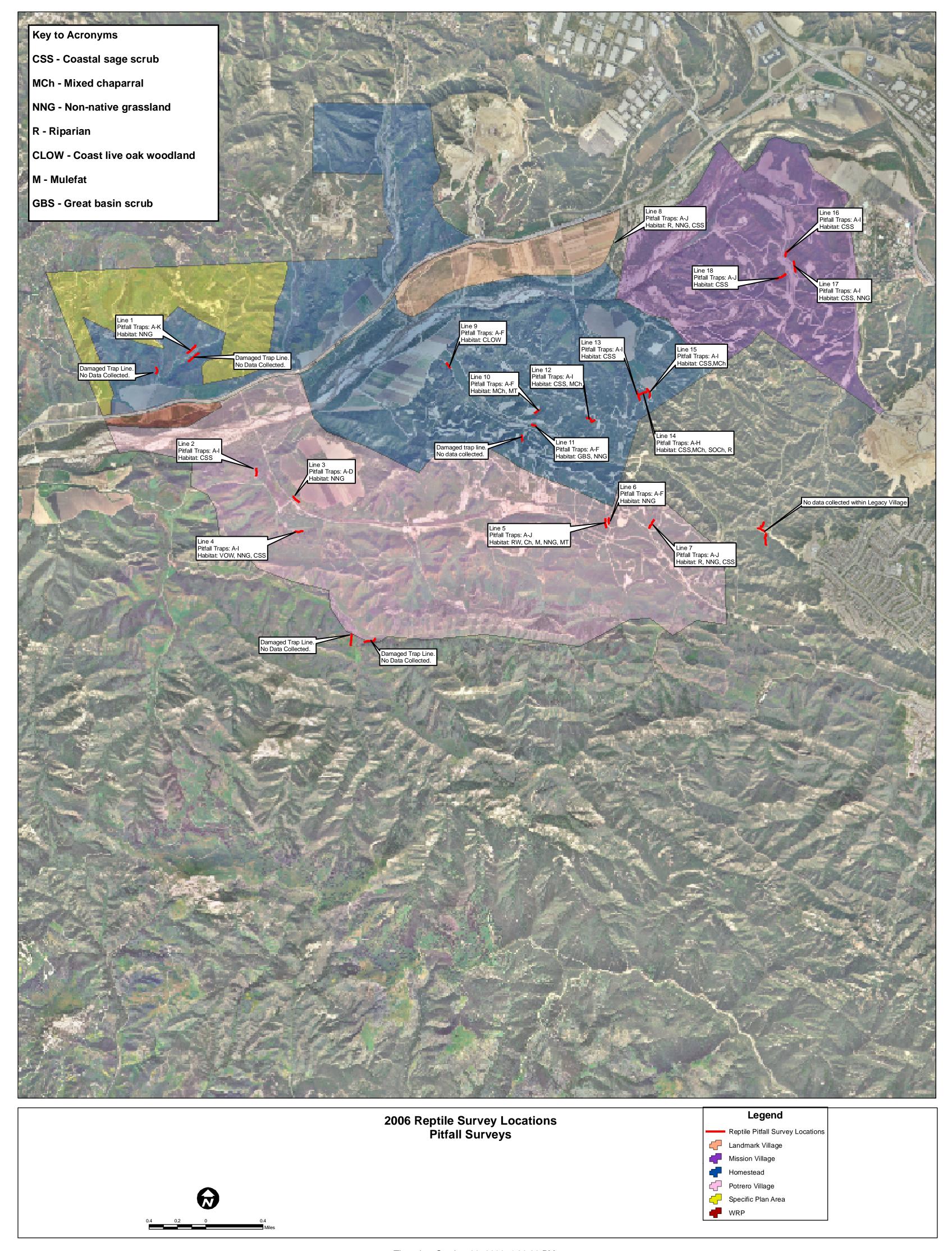
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Mesas East Pitfall						Trap	ping Date	es							
Trapping Results		10/1/2004			10/2/2004			10/3/2004			10/4/2004			10/5/2004	
Species Trapped	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3
Fence Lizard				2									1		
Side-Blotched Lizard										1					
Southern Alligator Lizard													1		
Western Whiptail															
Western Skink					1				1						
Gopher Snake															
Common King snake															
Harvest Mouse	2	2	1		3	1				1					
California Mouse															
Brush Mouse															
Cactus Mouse															
Deer Mouse	1	1	2							1					
Ornate Shrew							1								
California Pocket Mouse															

Mesas West Pitfall						Trap	ping Date	s							
Trapping Results		9/30/2004		10/1/2004			10/2/2004				10/3/2004			10/4/2004	
Species Trapped	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3
Side-Blotched Lizard										1					
Harvest Mouse					1										

Potrero Valley Pitfall						Trap	ping Date	es							
Trapping Results		9/30/2004			10/1/2004			10/2/2004			10/3/2004			10/4/2004	
Species Trapped	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3
Fence Lizard										1			1		
Side-Blotched Lizard							1								
Southern Alligator Lizard															
Western Whiptail															
Western Skink															
Gopher Snake										1			1		
Common King snake															
Harvest Mouse	14	1		5			1	1			1		2	2	
California Mouse															
Brush Mouse															
Cactus Mouse													1		
Deer Mouse	2			1											
Ornate Shrew		1										·			
California Pocket Mouse							·				1	·			

Phase 5 Pitfall						Trap	ping Date	·s							
Trapping Results		9/30/2004			10/1/2004			10/2/2004			10/3/2004			10/4/2004	
Species Trapped	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3
Fence Lizard									1				1		
Side-Blotched Lizard							1			1		1			
Southern Alligator Lizard											1	2			
Western Whiptail															
Western Skink															
Gopher Snake															
Common King snake															
Harvest Mouse													1		
California Mouse															
Brush Mouse							1	1							
Cactus Mouse															
Deer Mouse															
Ornate Shrew													1		1
California Pocket Mouse															

Oak Valley Pitfall						Trap	ping Date	es							
Trapping Results		10/1/2004			10/2/2004			10/3/2004	ļ		10/4/2004	ļ		10/5/2004	
Species Trapped	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3
Fence Lizard							2			2					
Side-Blotched Lizard			2	1	1	1	2					1	2		
Southern Alligator Lizard		1													
Western Whiptail			1			1			1			1			
Western Skink			1		1		1								
Gopher Snake					1										
Common King snake				1											
Harvest Mouse	1	4			1		1	2			1				
California Mouse															
Brush Mouse								1			1			1	
Cactus Mouse					1	1									
Deer Mouse											1				
Ornate Shrew			1												
California Pocket Mouse															

Magic MTN. Pitfall		Ti	rapping Dates		
Trapping Results	10/2/2004	10/3/2004	10/4/2004	10/5/2004	10/6/2004
Species Trapped	Line 1	Line 1	Line 1	Line 1	Line 1
Fence Lizard					
Side-Blotched Lizard		1	1		
Southern Alligator Lizard					
Western Whiptail					
Western Skink					
Gopher Snake					
Common King snake					
Harvest Mouse	1				
California Mouse					
Brush Mouse					
Cactus Mouse					
Deer Mouse	1	1			
Ornate Shrew					
California Pocket Mouse					

Onion Field Pitfall		1	Trapping Dates		
Trapping Results	9/30/2004	10/1/2004	10/2/2004	10/3/2004	10/4/2004
Species Trapped	Line 1	Line 1	Line 1	Line 1	Line 1
Fence Lizard					
Side-Blotched Lizard					2
Southern Alligator Lizard					
Western Whiptail					
Western Skink					
Gopher Snake					
Common King snake					
Harvest Mouse					
California Mouse					
Brush Mouse					
Cactus Mouse					1
Deer Mouse					
Ornate Shrew					
California Pocket Mouse					

Homestead Pitfall				Trap	ping Dates					
Trapping Results	10/1/	2004	10/2	2004	10/3/20	004	10/4/	2004	10/5/	/2004
Species Trapped	Line 1	Line 2	Line 1	Line 2	Line 1	Line 2	Line 1	Line 2	Line 1	Line 2
Fence Lizard										
Side-Blotched Lizard		1		1						
Southern Alligator Lizard										
Western Whiptail				1						
Western Skink						1		1		1
Gopher Snake										
Common King snake										
Harvest Mouse		2		2					2	
California Mouse										
Brush Mouse										
Cactus Mouse				1						
Deer Mouse							3		1	
Ornate Shrew					1					
California Pocket Mouse									2	
Peromyscus species	1									

High Country Pitfall		Trapping Dates 10/1/2004 10/2/2004 10/3/2004 10/4/2004 10/5/2004												
Trapping Results	10/1/2	2004	10/2	/2004	10/3/20	004	10/4	/2004	10/5/	/2004				
Species Trapped	Line 1	Line 2	Line 1	Line 2	Line 1	Line 2	Line 1	Line 2	Line 1	Line 2				
Fence Lizard	4		1		2		2							
Side-Blotched Lizard							1							
Southern Alligator Lizard		1	2											
Western Whiptail		1												
Western Skink				1					1	2				
Gopher Snake														
Common King snake						1								
Harvest Mouse	1	1	1			1		1						
California Mouse														
Brush Mouse	2													
Cactus Mouse				1										
Deer Mouse					1				1	1				
Ornate Shrew						1				1				
California Pocket Mouse														
Peromyscus species			1											
Tarantula				1				1		1				

Long Canyon Pitfall		Trapping Dates																			
Trapping Results		10/1/2004			10/2/2004	1			10/3	/2004			10/4/	2004			10/5	/2004		10/	/6/2004
Species Trapped	Line 1	Line 2	Line 3	Line 1	Line 2	Line 3	Line 4	Line 1	Line 2	Line 3	Line 4	Line 1	Line 2	Line 3	Line 4	Line 1	Line 2	Line 3	Line 4		Line 4
Fence Lizard															1		1				
Side-Blotched Lizard							1								2		1				
Southern Alligator Lizard												1									
Western Whiptail															1	1					
Western Skink																					1
Gopher Snake																					
Common King snake																					
Harvest Mouse	1					1															
California Mouse																					
Brush Mouse																					
Cactus Mouse	1																				
Deer Mouse		1																			
Ornate Shrew	1		1	1															1		1
California Pocket Mouse																					

Trap Line: 2										
Survey Dates:	8/21	/2006	8/22/2006		8/23/2006		8/24/2006		8/25/2006	
Weather:	AM:	PM: Sunny	AM: Sunny	PM: Sunny	AM: Sunny	PM: Sunny	AM: Sunny	PM: Sunny	AM: Sunny	PM: Sunny
Temperature:	AM:	PM: 89	AM: 91	PM: 95	AM: 67	PM: 95	AM: 76	PM: 91	AM: 63	PM: 83
Pitfall A Habitat: CSS Soils: Sandy Loam Results:					W harvest mouse				S. Alligator lizard	
Pitfall B Habitat: CSS Soils: Sandy Loam Results:									W harvest mouse	
Pitfall C Habitat: CSS Soils: Sandy Loam Results:					W. skink (juv)			W. whiptail lizard		
Pitfall D Habitat: CSS Soils: Sandy Loam Results:				W. whiptail lizard	Deer mouse				Deer mouse	
Pitfall E Habitat: CSS Soils: Sandy Loam Results:							Deer mouse			
Pitfall F Habitat: CSS Soils: Sandy Loam Results:										
Pitfall G Habitat: CSS Soils: Sandy Loam Results:			W. whiptail							
Pitfall H Habitat: CSS Soils: Sandy Loam Results:										
Pitfall I Habitat: CSS Soils: Sandy Loam Results:				Deer mouse						