Guthrie, D.A., "Bird Observations during 2004 at Castaic Junction, an Area on the North Side of the Santa Clara River at the Junction of State Route 126 and Interstate 5, near Valencia, California" (August 24, 2004; 2004I)

Jon

BIRD OBSERVATIONS DURING 2004 AT CASTAIC JUNCTION, AN AREA ON THE NORTH SIDE OF THE SANTA CLARA RIVER AT THE JUNCTION OF STATE ROUTE 126 AND INTERSTATE 5. NEAR VALENCIA, CALIFORNIA

Prepared for:

Mark Subbotin Valencia Corporation 23823 Valencia Blvd. Valencia, Ca. 91355

Prepared by:

Daniel A. Guthrie W.M. Keck Science Center 925 N. Mills Ave Claremont Ca. 91711 (909) 607-2836 dguthrie@jsd.claremont.edu

REVISED

August 24, 2004

Bird Observations during 2004 at Castaic Junction, an area on the north side of the Santa Clara River at the Junction of State Route 126 and Interstate 5, near Valencia, California

Prepared by: Daniel A. Guthrie W.M. Keck Science Center 925 N. Mills Ave Claremont Ca. 91711 (909) 607-2836 dguthrie@jsd.claremont.edu

Nature and Scope of Surveys

During the spring and early summer of 2004 bird surveys were conducted on the north side of the Santa Clara River at Castaic Junction. The surveys covered an area roughly triangular in shape and bounded on the northeast by Interstate 5, on the northwest by State Route 126 and on the southern edge by the Santa Clara River (Figure 1).

Surveys were focused on determining presence or absence of California gnatcatcher, and followed U.S. Fish and Wildlife Service protocol for this species in non-NCCP areas. This protocol requires 6 surveys between March 15 and June 30 (see Table 1 for exact dates). Each survey involved one observer and lasted about 1 hour (9 to 10 am), and covered no more than 40 acres of suitable habitat

Each survey was conducted on foot by observers well acquainted with both visual and auditory characteristics of southern California birds. Tapes of calls of California gnatcatcher were played periodically along survey routes in an attempt to elicit a response. Survey routes were designed to visit all areas within the Proposed Project Area. However, routes for regular coverage were selected through preliminary surveys and were designed to cover all areas of appropriate habitat for the focus species. All surveys were conducted by Daniel A. Guthrie, working under Federal Fish and Wildlife Service Permit number TE810394-2, issued under section 10(a)(1)(A) of the Endangered Species Act.

On each survey, numbers of all species observed were noted and, in addition to the gnatcatcher, special attention was placed on locating species considered rare and endangered or of Special Concern, and on determining numbers of raptoral birds. Table 1 presents all observations during these surveys.

Habitat Condition and Bird Observations.

Over 80 % of the study area consists of agricultural fields. When crops were present, these fields were irrigated and attracted a few birds from adjacent riparian areas. During periods after plowing, blackbirds and killdeer were found foraging on the bare dirt areas.

A series of flowering eucalyptus trees along the frontage road in the area were attractive to starlings, orioles and wintering and migrating warblers. A pair of kestrels nested in one of these trees and red-shouldered hawk often hunted over uncultivated sections of the area.

A ditch containing irrigation and urban runoff (Figure 1) entered the site from the east and formed the southern border of the agricultural field. This ditch, containing cattails, was the only place within the study site where wet riparian species successfully nested, namely black phoebe, song sparrow and common yellowthroat.

The southwestern side of the study area bordered the Santa Clara River, with little or no transitional zone between the agricultural field area and the riparian river channel. Along most of this edge the river had cut into the bank, resulting in a cliff up to 15 feet high with agricultural field at the top and riparian vegetation directly below. In order to prevent further erosion of the river bank in this section, a new channel for the river was created by bulldozing in the spring of 1998. This new channel has moved the active river channel away from the field and road edge and has created a zone of low lying land along the north side of the riparian zone that is protected from erosion and scouring by spring floods. This protected section is wet from seepage from the main channel and from agricultural and urban runoff, with the result that a dense stand of willows has developed along the north edge of the riparian zone. These willows are now six years old and are prime habitat for both willow flycatchers and least Bell's vireo. This proximity of excellent riparian habitat to the agricultural area, and the need for any development of the lands adjacent to the riparian area immediately adjacent to the agricultural fields are mentioned in this report.

Observations of all birds are shown in Table 1. The numbers shown are of birds seen and heard, with heard individuals forming the majority of the observations. Numbers vary between censuses for several reasons. First, there was fog on some censuses which decreased bird activity. Secondly, some censuses were not complete but, rather, were focused on particular places or areas. Thirdly, bird activity varies with season. Different species breed at different times of the year. In general, species are most easily observed when they are actively defending territories by song during the establishment of breeding pairs. Once pairs are established and nesting begins song often decreases and the numbers of birds observed, therefore, also decreases. After young leave the nest, numbers observed increase. Thus, for most resident species, numbers of adult birds are most accurately censused in April and May, when territorial activity is at a maximum. A few species such as Anna's hummingbird that nest early in the season may be underestimated. Many species that nest in the area also migrate through the area to more northern portions of their ranges. Thus, numbers of nesting

3 -

1.1

species observed in May, which include migratory birds passing through the area, do not give an accurate count of actual resident birds.

Comments on Threatened and Endangered Species

California Gnatcatcher (Polioptila californica)

Lack of any coastal sage scrub vegetation in the study area make it an unsuitable habitat for this species, and none were observed.

Least Bell's Vireo (Vireo bellii pusillus)

Although no least Bell's vircos were found on the study site, this species was heard and seen at two locations in the riparian zone immediately south of the study area where they nested (Figure 1). One of these nesting sites is immediately adjacent to the agricultural field.

Summary of Bird Sightings

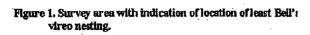
No California gnatcatchers or any other Endangered or Threatened Species or Species of Concern was observed in the survey area. Least Bell's vireo nested in the riparian habitat adjacent to the site, and several other species of concern (yellow warbler, yellow-breasted chat) were also present in this riparian section. These species might be affected by construction activities along this riparian edge if these were to occur during the nesting season for these species.

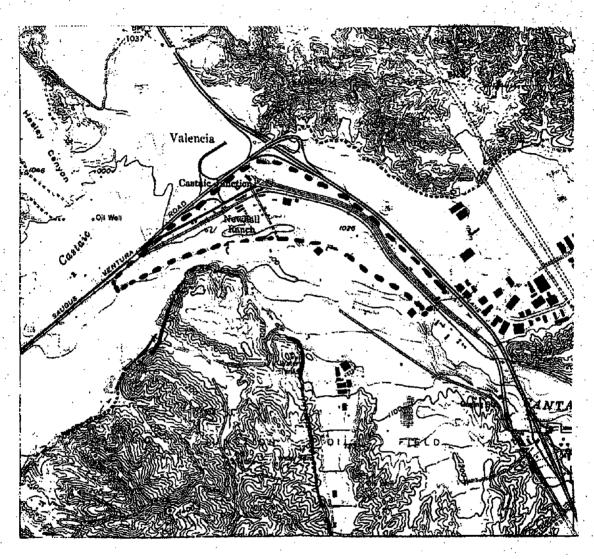
Endangered Species and Sp	pecies of Conc	ern Sha	ded			— T	
				Dates of Sur		eys	
SPECIES	STATUS	<u>4/27</u>	<u>5/18</u>	<u>5/27</u>	<u>6/9</u>	<u>6/15</u>	<u>6/23</u>
Turkey Vulture	S	1	0	0	0	0	0
Red-shouldered Hawk	г	1	1	0	0	0	1
American Kestrel	r	0	0	0	0	1	1
California Quail	r	4	0	2	4	0	0
Killdeer	r	0	0	1	0	2	0
Rock Dove	r	2	0	0	Ö	0	0
Mourning Dove	r	0	0	4	3	5	2
Black Phoebe	r	1	2	2	0	0	1
Ash-throated Flycatcher	S	1	1	1	0	2	0
Western Scrub Jay	r	5	2	0	Ō	1	0
American Crow	r	1	0	4	0	8	8
Common Raven	r	- 1	0	2	4	8	4
N. Rough-winged Swallow	S	4	3	0	0	0	2
Cliff Swallow	s	0	0		30	0	0
Bam Swallow	S	0	1	0	1	0	Ö
Bewick's Wren	r	2	0	0	0	1	0
House Wren	r	2	O	0	0	0	Ó
Western Bluebird	r	0	0	0	2	0	0
American Robin	r	0	0	0	2	0	0
California Thrasher	r	0	0	0	0	1	0
European Starling	r	6	0	1	2	0	4
Common Yellowthroat	r	0	0	1	0	0	0
Spotted Towhee	r	0	0	2	0	0	2
California Towhee	r	4	0	4	4	3	2
Song Sparrow	r	2	2	4	4	0	2
Black-headed Grosbeak	S	0	1	1	2	1	0
Blue Grosbeak	5	0	3	0	0	0	1
Red-winged Blackbird	S	2	10	18	9	8	6
Brewer's Blackbird	r	ō	1	0	0	0	0
Hooded Oriole	S	0	Ő	0	Ō	Ō	1
Bullock's Oriole	S	0	0	2	0	0	ō
louse Finch	r	16	15	13	10	9	36
esser Goldfinch	r	Ō	2	0	0	Ũ	Ö
American Goldfinch	w,m,r	0	0	0	0	0	1
House Sparrow	r	2	0	8	0	0	10
N		<u> </u>					
Status: m, migrant; r, resident;	s, summer only	; w, win	têr		L		

• '

.

.





- - - Approximate boundary of survey area.

- Least Bell's vireo nest site.

Base Map: U.S.G.S. 7.5 minute topographic map for Newhall, California, 1952, photorevised 1988

Fus

BIRD OBSERVATIONS IN THE STEVENSON RANCH, PHASE 5 AREA

7

NEAR VALENCIA, CALIFORNIA, 2004

Prepared for:

Mark Subbotin Valencia Corporation 23823 Valencia Blvd. Valencia, Ca. 91355

Prepared by:

Daniel A. Guthrie W.M. Keck Science Center 925 N. Mills Ave Claremont, Ca. 91711 (909) 607-2836 dguthrie@jsd.claremont.

REVISED

August 24, 2004

Bird Observations in Stevenson Ranch, Phase 5 near Valencia, California, 2004

Prepared by: Daniel A. Guthrie W.M. Keck Science Center 925 N. Mills Ave Claremont Ca. 91711 (909) 607-2836

Nature and Scope of Surveys

During the spring and early summer of 2004 surveys were conducted within the boundaries of the Stevenson Ranch, Phase 5 (Figure 1). Surveys were focused on determining presence or absence of California gnatcatcher, and followed U.S. Fish and Wildlife Service Guidelines for this species. Surveys followed the protocol for non-NCCP areas, involving 6 surveys of each area, occurring between March 15 and June 30 (see Table 1,2 for exact dates). Each survey involved two observers and lasted about 3.5 hours (6:30 to 10:00 a.m.), with each observer covering an area less than 80 acres of suitable habitat.

Each survey was conducted on foot by observers well acquainted with both visual and auditory characteristics of southern California birds. Tapes of calls of California gnatcatcher were played periodically along survey routes in an attempt to elicit a response. Survey routes were designed to visit all areas within the Proposed Project Area. However, routes for regular coverage were selected through preliminary surveys and were designed to cover all areas of appropriate habitat for the focus species. Personnel for all surveys were Daniel A. Guthrie and Judith A. Sugden, both working under Federal Fish and Wildlife Service Permit number TE810394-2, issued under section 10(a)(1)(A) of the Endangered Species Act.

On each survey, numbers of all species observed were noted and, in addition to the gnatcatcher, special attention was placed on locating species considered rare and endangered or of Special Concern.

Habitat Condition and Bird Observations.

A previous study of the site (Impact Sciences 2000) included a map of vegetational types for Stevenson Ranch, Phase 5. While much of the site is covered by chaparral and other dense shrub vegetation (cherry woodland, oak woodland) three areas in particular contain large tracts of sage scrub communities (Figure 1). Two of these areas, in Pico Canyon and Potrero Canyon, were

burned over in 1993 and contained very little remaining suitable habitat for gnatcatchers. The upper section of Long Canyon, and areas along the northern edge of the site contained large tracts of undisturbed sage scrub habitat and were the major focus of all survey work. Surveys focused on sites where California sage (*Artemesia californica*) and buckwheat (*Eriogonum sp.*) were dominant and where slopes were less than 40%. However, in the course of surveys every area of the Stevenson Ranch, Phase 5 area was visited.

Observations of the avifauna are presented in tables 1 and 2. Table 1 covers observations in the southern and western half of the site and includes Long, Potrero and Pico Canyons. Table 2 contains observations from the northern half of the site and the eastern edge adjacent to developed areas.

Dominant birds in the survey areas include species typical of chaparral and sage scrub with California quail, mourning dove, Bewick's wren, wrentit, western scrub jay, spotted and California towhee and rufous-crowned sparrow being the common species. Lack of any permanent water or development of riparian vegetation caused a near total absence of riparian species such as song sparrow and yellow warbler. Oak woodlands at the head of Potrero Canyon supported acorn woodpecker and Cooper's and sharp-shinned hawks.

The numbers shown in Tables 1 and 2 are of birds seen and heard, with heard individuals forming the majority of the observations. Numbers vary between censuses for several reasons. Some censuses were not complete but, rather, were focused on particular places or areas. Also, bird activity varies with season. Different species breed at different times of the year. In general, species are most easily observed when they are actively defending territories by song during the establishment of breeding pairs. Once pairs are established and nesting begins song often decreases and the numbers of birds observed, therefore, also decreases. After young leave the nest, numbers observed increase. Thus, for most resident species, numbers of adult birds are most accurately censused in April and May, when territorial activity is at a maximum. A few species that nest in the area also migrate through the area to more northern portions of their ranges. Thus, numbers of nesting species observed in May, which include migratory birds passing through the area, do not give an accurate count of actual resident birds.

Comments on Threatened and Endangered Species

California Gnatcatcher (Polioptila californica)

The California Gnatcatcher was listed as a Threatened species under the Federal Endangered Species Act in 1993. Preferred habitat includes various sage scrub communities, often dominated by California sage (*Artemesia californica*) and buckwheat (*Eriogonum sp.*)

California gnatcatchers generally avoid nesting in areas with a slope of greater that 40%.

Survey routes were selected to cover prime habitat for California Gnatcatcher, namely, stands of dense Sage Scrub in canyon bottoms and on north facing hillsides. No California gnatcatchers were heard or observed. Several blue-gray gnatcatchers were found nesting in scrub oak areas on the study site.

Comments on Sensitive Species

Sharp-shinned Hawk (Accipiter striatus)

The sharp-shinned hawk is considered a Species of Special Concern by the State of California. This species is found in southern California only in winter, and was observed on the study site in late March and early April.

Cooper's Hawk (Accipiter cooperi)

Cooper's hawk is considered a Species of Special Concern by the State of California. A pair of Cooper's hawks nested in the oak woodland in Potrero Canyon.

Yellow Warbler (Dendroica petechia)

The yellow warbler is considered a Species of Special Concern by the State of California. Yellow warblers prefer wet riparian habitat but are also found in large cottonwoods in drier riparian areas. Single yellow warblers were observed in April and early May and, as no nesting was observed in subsequent visits, were probably migrating through the area.

Southern California Rufous-crowned Sparrow (Aimophila rificeps canescens)

This species is considered a California Special Concern species by the Department of Fish and Game and a Species of Concern by the Fish and Wildlife Service. Rufous-crowned sparrows are a fairly common resident and breeding species throughout the unburned portions of the site.

Bell's Sage Sparrow (Amphispiza belli belli)

This species is considered a California Special Concern species by the Department of Fish and Game and a Species of Concern by the Fish and Wildlife Service. Bell's sage sparrows were observed once in dry sage scrub habitat on cliffs near the eastern edge of the study site and probably nest in small numbers in the area.

Lawrence's Goldfinch (Carduelis lawrencei)

This species, which occurs sporadically in chaparral habitat, is a highest priority species on the Audubon Birds to Watch list for 1996 and is a Bird of Management Concern for the Fish and Wildlife Service. Lawrence's goldfinch was observed rarely in the study area.

Summary

California gnatcatchers were not observed on the site. Birds of the site are those typical of chaparral, sage scrub and oak woodland habitat. Three California Special Concern species, Cooper's hawk, southern California rufous-crowned sparrow and Bell's sage sparrow nest on the site while two other Special Concern Species, sharp-shinned hawk and yellow warbler, were observed migrating through the area.

References

Federal Register, 2003. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*) and Determination of Distinct Vertebrate Population for the California Gnatcatcher *Polioptila californica*). Vol 68, no 79 April 24, 2003, p. 20228.

Impact Sciences, 2000. Results of Focused Surveys for the Coastal Califonria Gnatcatcher, ±156 acre Project Site, Santa Clarita, Los Angeles County, California.

5

Endangered Species and Sp SPECIES Turkey Vulture									
		<u>ا</u>			f Survey:				
Turkey Malture	STATUS	1-Apr	8-Apr	29-Apr	9-May	3-Jun	16-Jun		
		2	1	1	1	1	0		
Coopers Hawks	3 19	<u>ē</u>							
Red-tailed Hawk	r	8	2	1	1	3			
California Quail	r	98				<u>75</u>	32		
Killdeer Spotted Sandpiper	s s	0			· · · · · · · · · · · · · · · · · · ·	0			
Rock Dove						0	0		
Mourning Dove	r	36		18	54	37	17		
Greater Roadrunner	r	0				0	0		
Bam Owl	<u>r</u>	0		2		0	0		
White-th. Swift	1	3		2		2	1		
Black-chinned Hummingbird Anna's Hummingbird	s r	13		22	5		13		
Costa's Hummingbird	S	0		0	0	ō	0		
Rufous Hunningbird		1	0	0	0	0	0		
Allen's Hummingbird	r,m	2			0	0	0		
Acorn Woodpecker		0		4	1	0	0		
Nuttall's Woodpecker Northern Flicker			0		0				
Pacific Slope Flycatcher		0		1			0		
Black Phoebe	r	2	0	1	0	3	4		
Say's Phoebe	٢	0		2		2	0		
Ash-throated Flycatcher	S	0		6		4	11 0		
Cassin's Kingbird	S	2	2	0	0	2	1		
Western Scrub Jay		27	25	14		31	12		
American Crow	r	0		0	0	0	2		
Common Raven	r	15		7	6	5	9		
Violet-green Swallow	S	0		0		8	5		
N. Rough-winged Swallow	<u>s</u>	0				4 27	0 97		
Cliff Swallow Barn Swallow	S	14		0		0	1		
Oak Titmouse		2		2		0	7		
Bushtit	r	21	18			27	19		
Bewick's Wren	r	23				33	15		
House Wren	<u>r</u>	3		2		1	0		
Blue-gray Gnatcatcher	[r	12 0		2		2	6		
Hermit Thrush	w,m	1		Ö		0	0		
Wrentit	<u> </u>	28	58	52	72	40	22		
Northern Mockingbird	r	7				20	3		
California Thrasher	<u> </u>	4	18	6	8	5	4		
		┝	┢━━━──┤		<u>├</u>				
<u> </u>		<u> </u>	r		 				
								·	
· · · · · · · · · · · · · · · · · · ·								-	

Endangered Species and S	pecies of Co	oncern S	haded						
					f Survey				
SPECIES	STATUS	1-Apr	8-Apr	29-Apr	9-May	3-Jun	16-Jun		
European Starling	r	0	1		2				
Phainopepla	r	1	0		74				
Orange-crowned Warbler	w,m	9	8	8	0	2	0		
Yellow Warbler, Wexays	SIN		0.02×0.00	0	H. 200	8-27-A O			
Black-th. Gray Warbler	m	0	1		0	0	0		
Common Yellowthroat	r	1	0		1	2	3		
Wilson's Warbler	m	0	1	1	5	0	0		
Western Tanager	m	0	0	0	1	0	0		
Spotted Towhee	r	19	25	34	55	70	28		
California Towhee	r	46	73	48	74	64	25		
Rulous-crowned Spanrow *		n 1115	4.6.482	美 一种作品			医进行()		
Lark Sparrow	r	0	0	5	0 (1977-199	0	2		
Sage Spanow A start start		<u>1</u>	的游戏		644-87.0		0		
Song Sparrow	Г	0	v		4	1	4		
Lincoln's Sparrow	w,m	3	3		0	0	0		
White-crowned Sparrow	w,m	15	10	0	1	0	0		
Golden-crowned Sparrow	w,m	17	8	0	0	0	0		
Black-headed Grosbeak	S	1	8	18	62	34	11		
Blue Grosbeak	S	0	0	1	0	0	0		
Lazuli Bunting	s	0	0	6	4	0	0		
Brown-headed Cowbird	S	0	0	7	8	6	5		
Hooded Oriole	S	2	0	1	0	0	0		
Bullock's Oriole	S	8	0	0	16	25	Ũ		
House Finch	Г	36	47	64	24	54	116		
esser Goldfinch	r	0	0	10	0	2	22		
awrencels Goldlinches and st	Str. Start	a 14-24	0		9 70		13 A D		
Manager - Jung - All Manager Dig Construction of a set in 1995 and 398		and a the second staff birds					and all take has seen a first (in formeren brittinteris. Bergin	
Status: m, migrant; r, reside	nt: s. summ	er only;	w, winte) r					
						I			
·									

.

- ..

е , .

-

Endangered Species and Species	Decles of C	oncern Si	naded	Deferre	0			
SPECIES	STATUS		6 4	Dates of		7-Jun	18-Jun	
	STATUS	<u>23-Mar</u>	<u>o-Apr</u>	<u>20-Apr</u>	<u>11-May</u>	<u>_/~Jun</u>	<u>10-Jun</u>	
Furkey Vulture	S	0	3	0		0	1	
sharp shinned Hawki area	in w							
soopers Hawk					0			
Red-tailed Hawk	C C C C C C C C C C C C C C C C C C C	1	2	1	1 1	0	3	The design of the second s
California Quail	r	62	460		150	142	98	
Nourning Dove	-ir	35	34	18	36	7	65	
Barn Owl	r	0	0		0	0	2	
White-th. Swift	r	0	2	0	1	2	0	
Black-chinned Hummingbird	s	0	0	0	0	1	0	
Anna's Hummingbird	T T	2	6		8	3	5	
Allen's Hummingbird	r,m	0	0		0	1	0	
corn Woodpecker	r	0	0	3	0	0	1	
Nuttall's Woodpecker	r	2	1	0	0	0	0	
Black Phoebe	r	0	1	0	1	0	0	
Say's Phoebe	r	0	0		1	0	0	_
http://www.shipping.com/shippin	S	0	2	6	3	8	11	
Cassin's Kingbird	S	0	4	0	0	0	0	
Vestern Kingbird	S	0	9	2	2	4	0	
Varbling Vireo	m	0	0	0	1	0	0	
Vestern Scrub Jay	<u>r</u>	4	30	12	22	20	22	
merican Crow		0	0	0	0	4	1	
Common Raven		11	18	5	6	7	9	
ree Swallow	s	0	2	0	Ō	0	0	
Nolet-green Swallow	S	0	0	0	0	2	0	
I. Rough-winged Swallow	S	0	0	0	0	52	2	
Cliff Swallow	S	0	0	0	<u>0</u>	6	24	
Dak Titmouse		0	0	0	7	2	3	_
Bushtit		13	22 39	0	24	10	14	
ewick's Wren		2		23	42	32	28	
lòuse Wren Ilue-gray Gnatcatcher		0	4	3	4	0	0	
Vestern Bluebird	r i	0	0	0		0	2	
lermit Thrush	w.m	4	0	2		0	0	
merican Robin	m	12	0	0		0	0	
Vrentit	F	18	72	16	0	14	47	
lorthern Mockingbird	r	4	8	2	10	4	17	
alifornia Thrasher	r	4	19	7	12	2	4	
uropean Starling	r	0	0	0	0	ō	2	
hainopepla	r	0	2	4	24	11	23	
Prange-crowned Warbler	w,m	0		0	3	0	0	•
	1 1				Ť			
· · · · · · · · · · · · · · · · · · ·								
			· T			T		

Endangered Species and S	inecies of Co	oncern St	naded					
				Dates of	Surveys			<u>_</u>
SPECIES	STATUS	<u>23-Mar</u>	<u>6-Apr</u>		<u>11-May</u>	<u>7-Jun</u>	<u>18-Jun</u>	
Yellow Warblen	S					12010		
Common Yellowthroat	C C	0	0	1	0	0	0	12020-0467-1219 B1979-12
Wilson's Warbler	m	0	0	0	1	0	0	
Spotted Towhee	r	6	33	17	55	47	36	
California Towhee	r	20	114	36	80	46	72	
Rulous=orownee=Sparrow=		0	18		16			
Lark Sparrow	r.	Õ	0	0	0	0	2	
Fox Sparrow	W	1	1	0	0	0	0	
Song Sparrow	r	0	1	0	0	1	0	
Lincoln's Sparrow	w,m	0	1	0	0	0	0	
White-crowned Saprrow	W	8	12	0	0	0	0	
Dark-eyed Junco	w	1	2	0	0	0	0	
Black-headed Grosbeak	S	0	10	12	20	13	11	
Blue Grosbeak	S	0	0	0	1	0	0	
Lazuli Bunting	S	0	0	5	0	0	0	
Red-winged Blackbird	S	0	0	0	0	6	0	
Western Meadowlark	r	1	O	0	0	0	0	
Brown-headed Cowbird	S	0	0	0	4	0	5	
Hooded Oriole	s	0	2	0	0	0	0	
Bullock's Oriole	S	ō	5	7	9	0	0	
House Finch	r	0	20	14	81	106	360	
esser Goldfinch	r	0	0	0	0	2	3	

к у . .

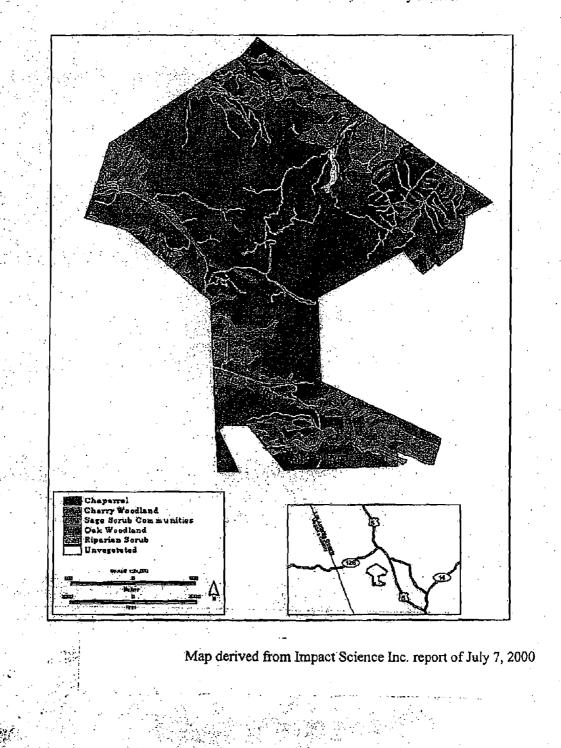


Figure 1. Vegetation Map of Stevenson Ranch, Phase 5, with major locality names.

1.10

1.6.44.6.77

.

ALL ALL ALL ALL ALL ALL

Sec.