Table 3
Dates, Times, and Weather Conditions for Focused Yellow-billed Cuckoo Surveys

Date	Time	Weather Conditions*
June 11	0600-1100	T(a) = 56 ► 66 F; 1-3 mph winds; 100% □ 90% cloud cover
June 26	0600-1100	T(a) = 59 ► 85 F; 1-3 mph winds; clear skies
July 8	0600-1130	T(a) = 63 ► 76 F; 0-2 ►1-3 mph winds; 100% overcast ► clear but hazy
July 15	0530-1100	T(a) = 62 ► 84 F; 0-2 ► 1-3 mph winds; 100% overcast ► clear

► indicates a unidirectional change during survey period
* indicates a range of fluctuation during survey period
Winds measured with Dwyer hand held wind meter 6 ft. above ground
T(a) is ambient temperature measured with Spirit Pocket Thermometer (REI) 4 ft. above ground in shade of body

Surveys for yellow-billed cuckoo were conducted by walking slowly and methodically within and along the riparian habitat. Taped vocalizations of the yellow-billed cuckoo were played approximately every 50 feet in an attempt to elicit a response from potentially present individuals. The tape was played for roughly 15 seconds, stopped for one or two minutes to listen for a response, and then played again before moving to the next spot.

Survey Results

Southwestern Willow Flycatcher

No nesting southwestern willow flycatchers were reported in the vicinity of the project site in the California Natural Diversity Data Base (CDFG 2003). Only a few southwestern willow flycatcher territories have been identified in Orange County in recent years, including a pair in Canada Gobernadora, a singing male at Laguna Lakes, and one individual at the San Juan River (Daniels, pers. comm. 2003). In addition, there are approximately three to four nesting pairs annually at Prado Basin approximately ten miles east (Leatherman, pers. comm. 2003).

One willow flycatcher was observed in the Carbon Canyon basin during the first survey on May 23, 2003. However, this bird was not observed within the 500-foot buffer area, and was not observed on subsequent surveys.

Migrant willow flycatchers are expected to occur in the area in small numbers during spring and in higher numbers during fall migration (Garrett and Dunn 1981). However, migrant flycatchers in the project region are almost always the more common northern subspecies (*E.t. brewsteri* and *E.t. adastus*), and not the federally Endangered southwestern subspecies (*E.t. extimus*) (Unitt 1987). The first two survey periods (May 15-31 and June 1-21) are conducted during a time when migrant willow flycatchers of all three California subspecies might occur in the project area. Unless nesting behavior is observed during these first two surveys, it is the final survey period (June 22 to July 17) in which detected birds are likely either breeding birds or non-breeding resident floaters (non-paired birds). Migrant willow flycatchers are typically no longer moving through the southwest during this third survey period. Because the flycatcher observed in the study area was found on the first survey and not subsequent surveys, it is recognized as a migrant.

Least Bell's Vireo

No occurrences for least Bell's vireo were recorded in the CNDDB (CDFG 2003); however, least Bell's vireos were observed throughout the basin within Carbon Canyon Regional Park (i.e., the riparian area upstream of the dam). The distribution of least Bell's vireos within the basin and in the study area was not static through the breeding season. One singing male was observed within the 500-foot buffer area on the initial survey on April 11. Then, despite the documentation of six least Bell's vireo territories in the basin, none were observed within the study area until the last survey on July 8, when a pair of vireos was observed foraging within the study area near the bore location behind the dam. On July 15, during the final survey for southwestern willow flycatcher and yellow-billed cuckoo, another singing vireo was observed adjacent to the pipeline route in the study area. The locations of the observations within the study area are shown on Exhibit 3.

Portions of the Carbon Canyon basin are dominated by black willow riparian forest and portions are dominated by giant reed, an invasive non-native species. The vireo territories tended to be associated with the higher quality habitat represented by the black willow forest, most of which is located on the east side of the basin. The study area, which is located on the west side of the basin, is along an area where black willow forest and giant reed are intermixed, and therefore represents suitable but lower quality habitat for the vireo than that available elsewhere in the basin. The observations of singing males and a pair within the study area lead to the conclusion that the habitat is occupied for foraging, even though pairs did not apparently successfully within the study area. As the population of vireos in southern California continues to increase (USFWS 1998), it is likely that the habitat within the study area will be occupied by nesting pairs.

Yellow-Billed Cuckoo

No yellow-billed cuckoos were observed within the study area during the focused surveys and no nesting yellow-billed cuckoos were reported in the vicinity by the California Natural Diversity Data Base (CDFG 2003). Reports of the yellow-billed cuckoo nesting in southern California are scattered and include records from the Santa Ynez River in Santa Barbara, Kern River in Kern County, and the Owens Valley (Daniels, pers. comm. 2003). Yellow-billed cuckoos have not been observed nesting in Orange County since the 1970's (Garrett and Dunn 1981). In the past three decades, the nearest known possible nesting occurrence of the yellow-billed cuckoo was at the Prado Basin, approximately ten miles to the east (Leatherman, pers. comm. 2003).

Conclusions

The southwestern willow flycatcher and yellow-billed cuckoo are considered absent as breeders from the study area at this time. At least six least Bell's vireo territories occur in the basin within Carbon Canyon Regional Park (i.e., the riparian area upstream of the dam), but only three observations of vireos were made within the study area. The habitat within the study area (i.e., pipeline route and 500-foot buffer area) is therefore considered occupied, even though nesting within the survey area was not documented.

Numerous male and female brown-headed cowbirds were observed during each of the surveys. Cowbird parasitism on several least Bell's vireo (*Vireo pusillus bellii*) nests within the basin (outside of the study area) was observed.

BonTerra Consulting has appreciated the opportunity to assist on this project. If you have any comments or questions, please call Amber Oneal at (714) 444-9199.

Sincerely,

BONTERRA CONSULTING

Ann M. Johnston
Principal, Biological Services

Amber S. Oneal
Project Manager/Ecologist

Enclosures: Exhibits 1, 2, and 3
Attachment A

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cc: Alan Ashimine, RBF Consulting
Brian Leatherman, White-Leatherman BioServices

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ATTACHMENT A

WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

The following is a list of species observed or detected on the project site. Non-native species are indicated by an asterisk. Species on CDFG's Special Animals list are indicated by two asterisks. Other species may have been overlooked or inactive/absent because of the season (amphibians are active during rains, reptiles during summer, some birds (and bats) migrate out of the area for summer or winter, some mammals hibernate etc.). Taxonomy and nomenclature generally follow Stebbins (2003) for amphibians and reptiles, AOU (1998) for birds, and Jones et al. (1992) for mammals.

SCIENTIFIC NAME	COMMON NAME
AMPHIBIA	**AMPHIBIANS**
Bufonidae	**True toads**
Bufo boreas halophilus	Western toad
Hylidae	**Treefrogs and allies**
Hyla regilla	Pacific treefrog
REPTILIA	**REPTILES**
Phrynosomatidae	**Phrynosomatids**
Sceloporus occidentalis biseriatus	Western fence lizard
Uta stansburiana	Side-blotched lizard
Anguidae	**Alligator lizards**
Elgaria multicarinata webbii	Southern alligator lizard
Colubridae	**Colubrids**
Pituophis catenifer	Gopher snake
Viperidae	**Rattlesnakes**
Crotalus viridis	Western rattlesnake
AVES	**BIRDS**
Ardeidae	**Herons and Egrets**
** *Ardea herodias*	Great blue heron
** *Ardea alba*	Great egret
** *Egretta thula*	Snowy egret
** *Nycticorax nycticorax*	Black-crowned night-heron
Cathartidae	**Vultures**
Cathartes aura	Turkey vulture
Anatidae	**Geese and ducks**
Anas platyrhynchos	Mallard
Accipitridae	**Raptors**
** *Accipiter cooperii*	Cooper's hawk
Buteo lineatus	Red-shouldered hawk
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Odontophoridae	**Quail**
Callipepla californica	California quail
Charadriidae	**Plovers**
Charadrius vociferus	Killdeer
Columbidae	**Pidgeons and doves**
Zenaida macroura	Mourning dove
Columbina passerina	Common ground-dove
Strigidae	**Owls**
Bubo virginianus	Great horned owl
Apodidae	**Swifts**
Aeronautes saxatalis	White-throated swift

ATTACHMENT A

WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

SCIENTIFIC NAME	COMMON NAME
Trochilidae	**Hummingbirds**
Archilochus alexandri	Black-chinned hummingbird
Calypte anna	Anna's hummingbird
Calypte costae	Costa's hummingbird
Selasphorus sasin	Allen's hummingbird
Picidae	**Woodpeckers**
Melanerpes formicivorus	Acorn woodpecker
Picoides nuttallii	Nuttall's woodpecker
Picoides pubescens	Downy woodpecker
Tyrannidae	**Tyrant flycatchers**
Contopus sordidulus	Western wood-pewee
** *Empidonax traillii*	Willow flycatcher
Empidonax difficilis	Pacific-slope flycatcher
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Myiarchus cinerascens	Ash-throated flycatcher
Tyrannus vociferans	Cassin's kingbird
Tyrannus verticalis	Western kingbird
Vireonidae	**Vireos**
** *Vireo bellii pusillus*	Least Bell's vireo
Vireo plumbeus	Plumbeous vireo
Vireo cassinii	Cassin's vireo
Vireo huttoni	Hutton's vireo
Vireo gilvus	Warbling vireo
Corvidae	**Jays and crows**
Aphelocoma californica	Western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
Hirundinidae	**Swallows**
Tachycineta bicolor	Tree swallow
Stelgidopteryx serripennis	Northern rough-winged swallow
Petrochelidon pyrrhonota	Cliff swallow
Hirundo rustica	Barn swallow
Aegithalidae	**Bushtits**
Psaltriparus minimus	Bushtit
Troglodytidae	**Wrens**
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	House wren
Turdidae	**Bluebirds and thrushes**
Sialia mexicana	Western bluebird
Catharus ustulatus	Swainson's thrush
Catharus guttatus	Hermit thrush
Turdus migratorius	American robin
Timaliidae	**Wrentits**
Chamaea fasciata	Wrentit
Mimidae	**Mockingbirds and thrashers**
Mimus polyglottis	Northern mockingbird
Toxostoma redivivum	California thrasher

ATTACHMENT A

WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

SCIENTIFIC NAME	COMMON NAME
Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling
Bombycillidae	**Waxwings**
Bombycilla cedrorum	Cedar waxwing
Parulidae	**Wood warblers**
Vermivora celata	Orange-crowned warbler
Vermivora ruficapilla	Nashville Warbler
** *Dendroica petechia*	Yellow warbler
Dendroica coronata	Yellow-rumped warbler
Dendroica nigrescens	Black-throated gray warbler
Dendroica townsendi	Townsend's warbler
** *Dendroica occidentalis*	Hermit warbler
Oporornis tolmiei	MacGillivray's warbler
Geothlypis trichas	Common yellowthroat
Wilsonia pusilla	Wilson's warbler
** *Icteria virens*	Yellow-breasted chat
Thraupidae	**Tanagers**
Piranga ludoviciana	Western tanager
Emberizidae	**Towhees and sparrows**
Pipilo maculatus	Spotted towhee
Piplio crissalis	California towhee
Melospiza melodia	Song sparrow
Zonotrichia leucophrys	White-crowned sparrow
Zonotrichia atricapilla	Golden-crowned sparrow
Cardinalidae	**Grosbeaks and buntings**
Pheucticus melanocephalus	Black-headed grosbeak
Guiraca caerulea	Blue grosbeak
Icteridae	**Blackbirds and orioles**
Quiscalus mexicanus	Great-tailed grackle
* *Molothrus ater*	Brown-headed cowbird
Icterus cucullatus	Hooded oriole
Icterus bullockii	Bullock's oriole
Fringillidae	**Finches**
Carpodacus mexicanus	House finch
Carduelis psaltria	Lesser goldfinch
Carduelis tristis	American goldfinch
Estrildidae	**Estrildid finches**
Lonchura punctulata	Nutmeg mannikin
MAMMALIA	**MAMMALS**
Talpidae	**Moles**
Scapanus latimanus	Broad-footed mole
Leporidae	**Hares and rabbits**
Sylvilagus audubonii	Desert cottontail
Sciuridae	**Squirrels**
Spermophilus beecheyi	California ground squirrel
Sciurus griseus	Western gray squirrel
Geomyidae	**Pocket gophers**
Thomomys bottae	Botta's pocket gopher (burrows)

ATTACHMENT A

WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

SCIENTIFIC NAME	COMMON NAME
Canidae	**Dogs/wolves/foxes**
* *Canis familiarus*	Domestic dog
Canis latrans	Coyote (scat, tracks)
Mustelidae	**Weasels and allies**
Mustela frenata	Long-tailed weasel
Equidea	**Horses and allies**
* *Equus caballus*	Domestic horse

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August 27, 2003

Mr. Daniel Marquez
Southern California Field Office
U.S. Fish & Wildlife Service
6010 Hidden Valley Road
Carlsbad, CA 92009

VIA FACSIMILE AND MAIL
(760) 431-9624

Subject: Results of Focused Surveys for the Coastal California Gnatcatcher for the Carbon Canyon Pipeline Project Site, Orange County, Californa

Dear Mr. Marquez:

This letter reports the results of focused surveys to evaluate the presence or absence of the coastal California gnatcatcher (*Polioptila californica californica*) on the Carbon Canyon pipeline project site (hereafter referred to as the project site).

Project Location and Description

The project site and its associated study area are located in Carbon Canyon Regional Park near the cities of Brea and Yorba Linda in unincorporated Orange County (Exhibit 1). The project site is located in Orange County along the western end of Carbon Canyon Regional Park and through private property between Carbon Canyon Road (Highway 142) and Rose Drive, just east of Valencia Avenue (Exhibit 2). The northern third of the pipeline route is in the basin behind Carbon Canyon Dam, and the southern third is primarily through ruderal habitat and agricultural lands. The middle third of the pipeline would be bored under the northeastern corner of Carbon Canyon Dam.

Elevations on the project site range from approximately 420 to 525 feet above mean sea level (msl). Land uses in the vicinity include agriculture, oil drilling, residential development, water retention (Carbon Canyon Dam), and open space within Carbon Canyon Park.

Native vegetation types include coastal sage scrub, chaparral, and willow riparian forest. Although many of the native areas have scattered ornamentals, they are still considered high quality habitats. Non-native vegetation types include annual grassland, ornamental, irrigated row and field crops, and other disturbed and developed areas.

The coastal California gnatcatcher breeds primarily in coastal sage scrub. The extent of coastal sage scrub within the pipeline route is limited to two or three small patches that occur within otherwise disturbed or non-native habitats. These small patches are not large enough to support a pair of coastal California gnatcatchers. However, the patches of coastal sage scrub within the pipeline route and immediate vicinity may be of sufficient size to collectively support a pair of gnatcatchersCoastal sage scrub in the study area is dominated by California sagebrush (*Artemisia californica*). Other commonly occurring species include California buckwheat (*Eriogonum fasciculatum*),

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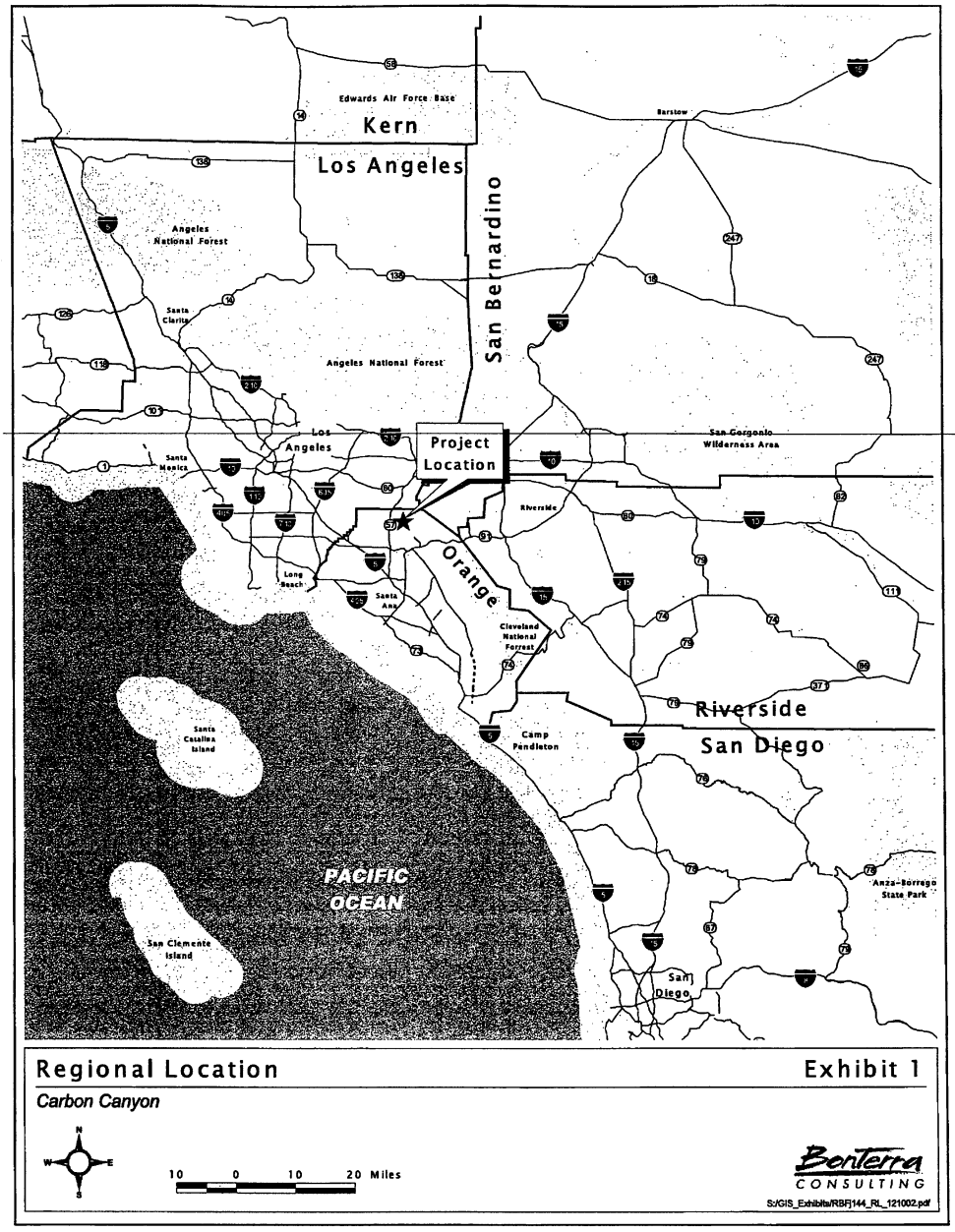

Regional Location

Exhibit 1

Carbon Canyon

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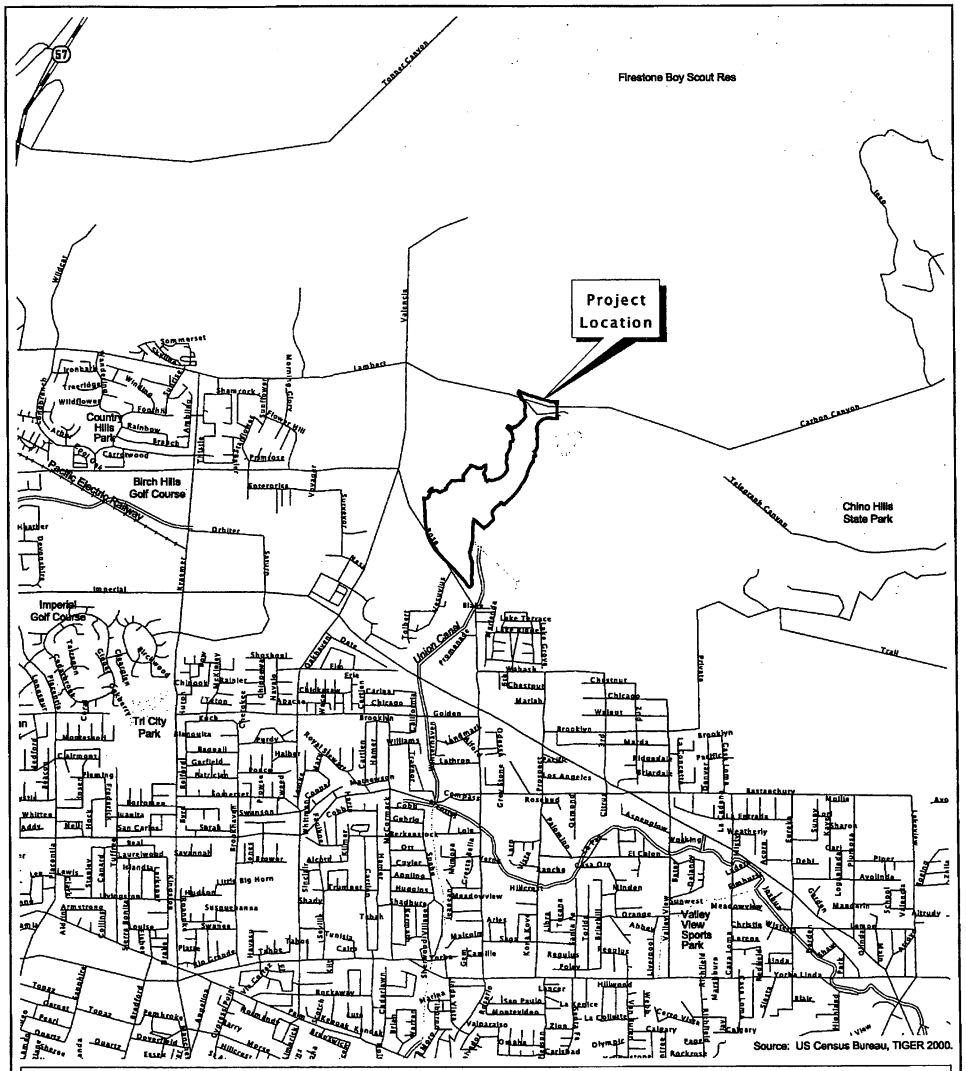

Local Vicinity

Exhibit 2

Carbon Canyon

N W E S

0.25 0 0.25 0.5 Miles

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coastal golden bush (*Isocoma menziesii*) and coastal prickly pear cactus (*Opuntia littoralis*). Mexican elderberry (*Sambucus mexicana*) is scattered throughout the upland areas, including within the scrub habitat. Non-native grasses and herbs dominate the understory.

Background

The coastal California gnatcatcher was listed by the U.S. Fish and Wildlife Service (USFWS) as a Threatened species in 1993 (USFWS 1993). Historically it occurred in California from the Santa Clara River valley and northern San Fernando Valley south through the coastal foothills of San Diego County (Garrett and Dunn 1981). Habitat loss and fragmentation from expanding development and agriculture has been a major factor in the decline of this species in southern California (Atwood 1993). On April 24, 2003, the USFWS proposed revised critical habitat for the coastal California gnatcatcher (USFWS 2003).

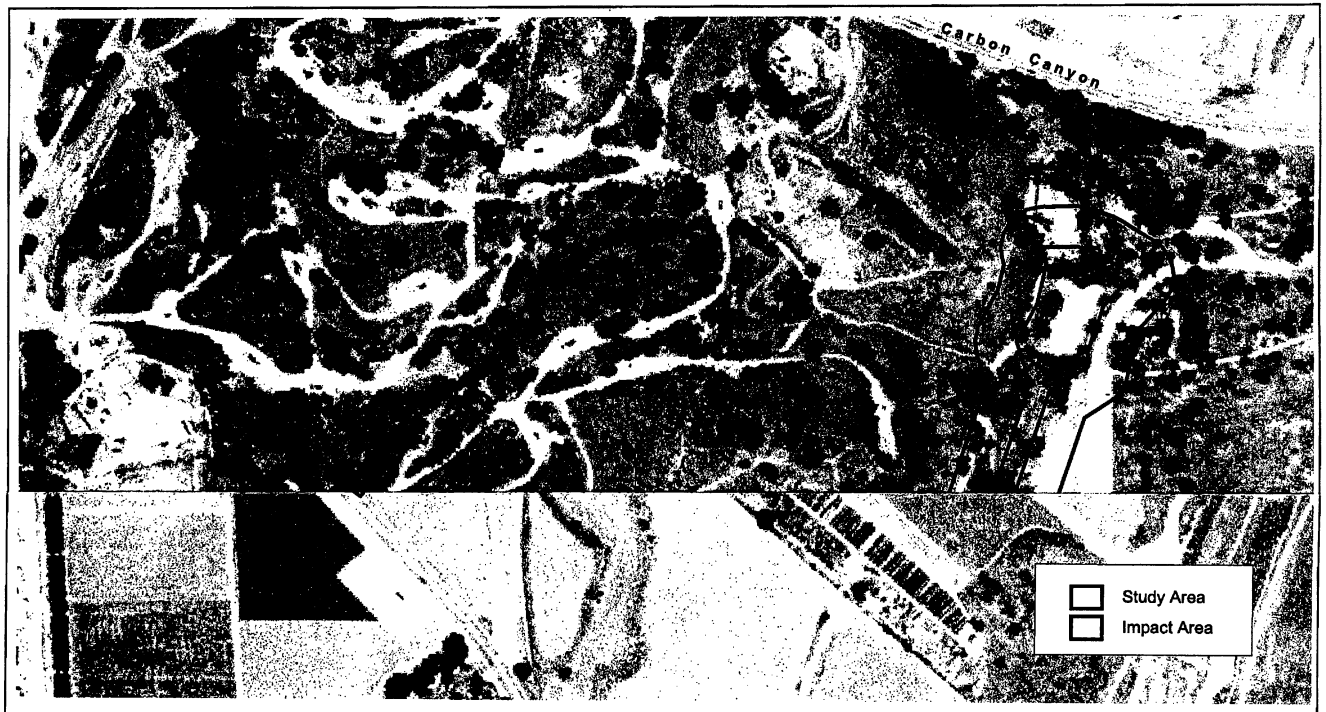
The coastal California gnatcatcher is a resident (non-migratory) songbird that nests and forages in moderately dense stands of coastal sage scrub occurring on arid hillsides, mesas, and washes. Coastal sage scrub vegetation types dominated by California sagebrush, California buckwheat, and white sage (*Salvia apiana*) seem to be preferred by this species, but shrub composition in occupied areas across the species' range varies, as does shrub community structure (height, density, etc.). For example, coastal California gnatcatcher populations in inland areas may occur in more open scrub habitats, inhabit scrub communities dominated by black sage (*Salvia mellifera*), occur at higher elevations (up to 2,640 feet), and tend to have larger home ranges than populations in coastal areas where denser scrub habitats are used, scrub habitats dominated by black sage are largely avoided, lower elevations are preferred (up to 1,485 feet), and home range sizes tend to be smaller (Atwood and Bontrager 2001).

Survey Methods

Prior to conducting the focused surveys, a search was conducted of the most recent version of the California Natural Diversity Data Base (CDFG 2003, Yorba Linda USGS 7.5 minute quadrangle), and other relevant available documents to determine if, and to what extent, the coastal California gnatcatcher occurs on the project site or immediate vicinity. The study area for the proposed project was the pipeline route with a 100-foot buffer area around the pipeline route, as determined by the project applicant in consultation with the adjacent property owner (Exhibit 3).

All focused surveys were conducted by Brian Leatherman (USFWS permit # TE 827493-3; CDFG MOU), a wildlife biologist with over 10 years field experience in southern California. Sightings of the listed species were mapped in the field on a 1-inch = 100-feet aerial photograph of the study area. The focus of the surveys was on the detection and identification of the target species, but all wildlife incidentally observed or detected on the project site was documented. Identifications were made with the aid of 8 x 42 power Bosch & Lomb Elite binoculars. A list of the species observed during the surveys is included in Attachment A.

Surveys for the coastal California gnatcatcher followed the presence/absence protocol (USFWS 1997) for jurisdictions outside an approved or interim Natural Communities Conservation Program (NCCP) area. The protocol requires that six surveys be conducted at least seven days apart between March 15 and June 30. Surveys are to be conducted between dawn and 11:00 a.m. under suitable weather conditions. The protocol allows coverage of 80



Coastal California Gnatcatcher Survey Area

Exhibit 3

Carbon Canyon

150 0 150 300 Feet

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acres of suitable habitat per survey day, or a rate of approximately 13 acres per hour. Surveys were conducted by walking slowly within and along the perimeter of coastal sage scrub stands while watching and listening for coastal California gnatcatcher activity. Taped vocalizations were used conservatively to solicit a response from any gnatcatchers potentially present. The frequency of taped playback use varied with site conditions including habitat patch size, topography, and ambient noise levels. Survey dates, times, and weather data for the coastal California gnatcatcher surveys are shown in Table 1.

TABLE 1
DATES, TIMES, AND WEATHER CONDITIONS FOR
FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEYS

Date	Time	Weather Conditions
April 16	0630-1130	T(a) = 50 ► 67 F; 0-2 mph winds; 0% ► 5% cloud cover
April 28	0630-1130	T(a) = 51 ► 69 F; 0-2 mph winds; 0% ►10% cloud cover
May 12	0630-1130	T(a) = 49 ► 67 F; 0-2 ► 1-3 mph winds; 90% ► 60% cloud cover
May 22	0700-1200	T(a) = 56 ► nr F; 1-3 mph winds; hazy but burning off ► clear skies
June 5	0630-1200	T(a) = 52 ► 68 F; 1-3 mph winds; 100% ► 100% cloud cover but thinning
June 12	0630-1200	T(a) = 58 ► 66 F; 0-2 ►1-3 mph winds; 100% cloud cover

► indicates a unidirectional change during survey period
* indicates a range of fluctuation during survey period
Winds measured with Dwyer hand held wind meter 6 ft. above ground
T(a) is ambient temperature measured with Spirit Pocket Thermometer (REI) 4 ft. above ground in shade of body

Survey Results

Four occurrences of the coastal California gnatcatcher were recorded in the CNDDB (CDFG 2003), and coastal California gnatcatchers are known from the immediate vicinity.

No coastal California gnatcatchers were observed in coastal sage scrub habitat in the study area. The coastal California gnatcatcher did not nest within the pipeline route and respective buffer area in Spring/Summer 2003.

At the end of Spring/Summer 2003, a family group of gnatcatchers was incidentally observed foraging approximately 1,500 feet southeast of the proposed pipeline (upstream of the dam). Although the gnatcatcher is absent from the pipeline and immediate vicinity in 2003, a pre-construction survey may be conducted to determine the location of any gnatcatchers within 500 feet of the proposed pipeline if construction would occur during the nesting season. If any gnatcatchers occur within the 500-foot buffer area, noise minimization measures may be necessary.

Numerous male and female brown-headed cowbirds (*Molothrus ater*) were observed during each of the surveys. Cowbird parasitism on several least Bell's vireo (*Vireo pusillus bellii*) nests within the basin (outside of the study area) was observed.

BonTerra Consulting has appreciated the opportunity to assist on this project. If you have any comments or questions, please call Amber Oneal at (714) 444-9199.

Sincerely,

BONTERRA CONSULTING

Ann M Johnston
Principal, Biological Services

Amber S. Oneal
Project Manager/Ecologist

Enclosures: Exhibits 1, 2, and 3
Attachment A

Cc: Alan Ashimine, RBF Consulting
Brian Leatherman, White-Leatherman BioServices

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ATTACHMENT A

WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

The following is a list of species observed or detected on the project site. Non-native species are indicated by an asterisk. Species on CDFG's Special Animals list are indicated by two asterisks. Other species may have been overlooked or inactive/absent because of the season (amphibians are active during rains, reptiles during summer, some birds (and bats) migrate out of the area for summer or winter, some mammals hibernate etc.). Taxonomy and nomenclature generally follow Stebbins (2003) for amphibians and reptiles, AOU (1998) for birds, and Jones et al. (1992) for mammals.

SCIENTIFIC NAME	COMMON NAME
AMPHIBIA	**AMPHIBIANS**
Bufonidae	**True toads**
Bufo boreas halophilus	Western toad
Hylidae	**Treefrogs and allies**
Hyla regilla	Pacific treefrog
REPTILIA	**REPTILES**
Phrynosomatidae	**Phrynosomatids**
Sceloporus occidentalis biseriatus	Western fence lizard
Uta stansburiana	Side-blotched lizard
Anguidae	**Alligator lizards**
Elgaria multicarinata webbii	Southern alligator lizard
Colubridae	**Colubrids**
Pituophis catenifer	Gopher snake
Viperidae	**Rattlesnakes**
Crotalus viridis	Western rattlesnake
AVES	**BIRDS**
Ardeidae	**Herons and Egrets**
** *Ardea herodias*	Great blue heron
** *Ardea alba*	Great egret
** *Egretta thula*	Snowy egret
** *Nycticorax nycticorax*	Black-crowned night-heron
Cathartidae	**Vultures**
Cathartes aura	Turkey vulture
Anatidae	**Geese and ducks**
Anas platyrhynchos	Mallard
Accipitridae	**Raptors**
** *Accipiter cooperii*	Cooper's hawk
Buteo lineatus	Red-shouldered hawk
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Odontophoridae	**Quail**
Callipepla californica	California quail
Charadriidae	**Plovers**
Charadrius vociferus	Killdeer
Columbidae	**Pidgeons and doves**
Zenaida macroura	Mourning dove
Columbina passerina	Common ground-dove
Strigidae	**Owls**
Bubo virginianus	Great horned owl
Apodidae	**Swifts**
Aeronautes saxatalis	White-throated swift

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WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

Trochilidae	**Hummingbirds**
Archilochus alexandri	Black-chinned hummingbird
Calypte anna	Anna's hummingbird
Calypte costae	Costa's hummingbird
Selasphorus sasin	Allen's hummingbird
Picidae	**Woodpeckers**
Melanerpes formicivorus	Acorn woodpecker
Picoides nuttallii	Nuttall's woodpecker
Picoides pubescens	Downy woodpecker
Tyrannidae	**Tyrant flycatchers**
Contopus sordidulus	Western wood-pewee
** *Empidonax traillii*	Willow flycatcher
Empidonax difficilis	Pacific-slope flycatcher
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Myiarchus cinerascens	Ash-throated flycatcher
Tyrannus vociferans	Cassin's kingbird
Tyrannus verticalis	Western kingbird
Vireonidae	**Vireos**
** *Vireo bellii pusillus*	Least Bell's vireo
Vireo plumbeus	Plumbeous vireo
Vireo cassinii	Cassin's vireo
Vireo huttoni	Hutton's vireo
Vireo gilvus	Warbling vireo
Corvidae	**Jays and crows**
Aphelocoma californica	Western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
Hirundinidae	**Swallows**
Tachycineta bicolor	Tree swallow
Stelgidopteryx serripennis	Northern rough-winged swallow
Petrochelidon pyrrhonota	Cliff swallow
Hirundo rustica	Barn swallow
Aegithalidae	**Bushtits**
Psaltriparus minimus	Bushtit
Troglodytidae	**Wrens**
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	House wren
Turdidae	**Bluebirds and thrushes**
Sialia mexicana	Western bluebird
Catharus ustulatus	Swainson's thrush
Catharus guttatus	Hermit thrush
Turdus migratorius	American robin
Timaliidae	**Wrentits**
Chamaea fasciata	Wrentit
Mimidae	**Mockingbirds and thrashers**
Mimus polyglottis	Northern mockingbird
Toxostoma redivivum	California thrasher

ATTACHMENT A

WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling
Bombycillidae	**Waxwings**
Bombycilla cedrorum	Cedar waxwing
Parulidae	**Wood warblers**
Vermivora celata	Orange-crowned warbler
Vermivora ruficapilla	Nashville Warbler
** *Dendroica petechia*	Yellow warbler
Dendroica coronata	Yellow-rumped warbler
Dendroica nigrescens	Black-throated gray warbler
Dendroica townsendi	Townsend's warbler
** *Dendroica occidentalis*	Hermit warbler
Oporornis tolmiei	MacGillivray's warbler
Geothlypis trichas	Common yellowthroat
Wilsonia pusilla	Wilson's warbler
** *Icteria virens*	Yellow-breasted chat
Thraupidae	**Tanagers**
Piranga ludoviciana	Western tanager
Emberizidae	**Towhees and sparrows**
Pipilo maculatus	Spotted towhee
Piplio crissalis	California towhee
Melospiza melodia	Song sparrow
Zonotrichia leucophrys	White-crowned sparrow
Zonotrichia atricapilla	Golden-crowned sparrow
Cardinalidae	**Grosbeaks and buntings**
Pheucticus melanocephalus	Black-headed grosbeak
Guiraca caerulea	Blue grosbeak
Icteridae	**Blackbirds and orioles**
Quiscalus mexicanus	Great-tailed grackle
* *Molothrus ater*	Brown-headed cowbird
Icterus cucullatus	Hooded oriole
Icterus bullockii	Bullock's oriole
Fringillidae	**Finches**
Carpodacus mexicanus	House finch
Carduelis psaltria	Lesser goldfinch
Carduelis tristis	American goldfinch
Estrildidae	**Estrildid finches**
Lonchura punctulata	Nutmeg mannikin
MAMMALIA	**MAMMALS**
Talpidae	**Moles**
Scapanus latimanus	Broad-footed mole
Leporidae	**Hares and rabbits**
Sylvilagus audubonii	Desert cottontail
Sciuridae	**Squirrels**
Spermophilus beecheyi	California ground squirrel
Sciurus griseus	Western gray squirrel
Geomyidae	**Pocket gophers**
Thomomys bottae	Botta's pocket gopher (burrows)
Canidae	**Dogs/wolves/foxes**
* *Canis familiarus*	Domestic dog
Canis latrans	Coyote (scat, tracks)

ATTACHMENT A

WILDLIFE OBSERVED ON THE CARBON CANYON PROJECT SITE

Mustelidae	**Weasels and allies**
Mustela frenata	Long-tailed weasel
Equidea	**Horses and allies**
* *Equus caballus*	Domestic horse

RBF CONSULTING

January 27, 2003

Mr. Larry A. Rein
ORANGE COUNTY SANITATION DISTRICT
10844 Ellis Avenue
Fountain Valley, California 92708-7018

SUBJECT: DELINEATION OF JURISDICTIONAL WATERS
Carbon Canyon Dam Sewer Pipeline Project

Dear Mr. Rein:

On behalf of RBF Consulting (RBF), we are pleased to submit this Delineation of Jurisdictional Waters for the above referenced project. The enclosed delineation was conducted on January 20, 2003 to document the regulatory authority of the U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game's (CDFG) jurisdiction pursuant to the Federal Clean Water Act (CWA) and the State Fish and Game Code. The project area was surveyed pursuant to the Corps' *1987 Wetland Delineation Manual*, to identify evidence of flows, riparian vegetation, and hydric soils.

This report presents RBF's best effort at determining the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies. However, as with any jurisdictional delineation, only the regulatory agencies can make a final determination of jurisdiction. Generally, this would be a written concurrence in the form of a Jurisdictional Determination (JD) letter.

Please note that based on a detailed review of current site conditions and proposed development plans, our research has indicated that it will be necessary for the project applicant to successfully obtain the following permits prior to commencement of construction activities within the delineated jurisdictional areas: Army Corps of Engineers 404 Permit, 1601 Streambed Alternation Agreement, and 401 Water Quality Standards Certification.

Please do not hesitate to contact me at 949/855-3686 or Richard Beck at 949/855-3687 if you or your staff has any questions or require further information.

Sincerely,

Bruce R. Grove Jr., REA
Project Manager
Environmental Services-Special Projects

Richard Beck
Regulatory Coordinator
Environmental Services-Special Projects

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DELINEATION OF JURISDICTIONAL WATERS

Carbon Canyon Dam Sewer Pipeline Project
County of Orange, California

Prepared For:

ORANGE COUNTY SANITATION DISTRICT
10844 Ellis Avenue
Fountain Valley, California 92708-7018
Contact: Mr. Larry A. Rein
714/593-7375

Prepared By:

RBF Consulting
14725 Alton Parkway
Irvine, California 92618
Contact: Mr. Bruce R. Grove, Jr.
949/855-3686
Mr. Richard Beck
949/855-3687

January 2003

JN 10-101519

1.0 INTRODUCTION AND PURPOSE

This report was prepared for the Orange County Sanitation District (OCSD) in order to delineate the U.S. Army Corps of Engineers' (Corps) and California Department of Fish and Game's (CDFG) jurisdictional authority for drainages located within a portion of the project site known as the Carbon Canyon Dam Sewer Pipeline Project. The project site is located within Carbon Canyon Regional Park, in the City of Brea, County of Orange, State of California (T.3S, R.9W SBBM) (refer to Exhibit 1, *Regional Vicinity* and Exhibit 2, *Site Vicinity*).

RBF Consulting (RBF) delineated the proposed impact area for the Carbon Canyon Dam Sewer Pipeline Project based upon impact boundaries provided by OCSD. This delineation has been designed to document the regulatory authority of the Corps and CDFG, the methodology undertaken by RBF to document jurisdictional authority, and the findings made by RBF within the boundaries of the proposed project site. This report presents our best effort at determining the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies; however, only the regulatory agencies can make a final determination of jurisdictional boundaries.

1.1 Project Description

The proposed project would be located in the northeastern portion of the County of Orange, eastern portion of the City of Brea and the western portion of the Carbon Canyon Specific Plan area. The northern extent of the project would begin approximately 425 feet south of Carbon Canyon Road approximately ½ mile east of the Carbon Canyon Road and South Valencia Avenue intersection. The entire project length would progress north to south through the Carbon Canyon Regional Park, Carbon Canyon Dam and adjacent Aera Energy property in an approximate reverse "S" configuration. The southern extent of the project would terminate on the north side of the Rose Drive right-of-way, approximately 3/4 mile south of Carbon Canyon Road.

◆ *Background and History:*

The OCSD owns and operates the Carbon Canyon Pump Station located within the 124-acre Carbon Canyon Regional Park. The Pump Station was originally built in 1974 and modified in 1984. Currently, there are two cast iron force mains, 4-inch and 6-inch in diameter, leaving the Pump Station. They both travel through the park and connect to an existing OCSD manhole at the top of Carbon Canyon Dam. Running parallel with the OCSD force mains is a 6-inch gravity waste water line owned by BreitBurn Energy Company that increases to 12-inches through the dam then reduces back to 6-inches and diverges from the OCSD alignment north of the intersections of Rose and Vesuvius Drives. Originally, OCSD sought to purchase the BreitBurn Energy Company lines in the vicinity of the dam and upstream to the pump station so that OCSD could abandon the pump station. However, and agreement could not be reached, therefore the current project was proposed.

The OCSD facilities were originally developed to serve land uses within the Carbon Canyon area that included the earlier Olinda Village tract and sparse residential development with later development including the Hollydale Mobile Estates. Recent community development has included the Olinda Heights tract and has the potential to include the Canyon Crest tract that is currently being considered by the City. Considering the fact that these later developments would contribute to the local sewage flow amounts, the proposed project is necessary.

Ex. 1 Regional

Ex. 2, Site