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Memorandum

To: Mark Thompson, TRS Consultants

From: Vince Scheidt, Consulting Biologist
Brandon Myers, Associate Biologist

Date: April 3, 2019

RE: Current Status of Biological Resources – Shadow Run Ranch 3100-5223 (TM) RPL#3, 3300-00-030 (MUP), 3710-00-0205 (BC), ENVIRONMENTAL LOG NO. 3910-00-02-035

In response to recent discussions, we revisited the Shadow Run Ranch project site on 21 March 2019 in order to assess current site conditions as they relate to our prior biological studies. Previous field surveys of the Shadow Run Ranch property were completed in April of 2005, April through June of 2007, July and August of 2009, and April through July of 2012. Past directed field surveys consisted of surveys for California Gnatcatcher *(Polioptila californica)*, a federally-listed Threatened Species and Arroyo Toad (*Bufo microscaphus californicus)*, a federally listed Endangered Species. These directed field surveys were not updated during the 2019 site evaluation. During our most recent reconnaissance, we searched for any changes in previous site conditions and updated the project species list to reflect an updated species inventory.

Current Site Conditions

Shadow Run Ranch remains essentially the same as described previously and within the same footprint of use as previously documented in the most recent biological report provided for the project. All current agricultural use remains within the previous areas of use. All areas of natural vegetation remain in conditions previously documented. No additional sensitive species were found onsite during the most recent site visit. The probability of additional sensitive species occurring in the development area of the site is considered low. Thirteen species of sensitive animals were previously documented on Shadow Run Ranch. These included Cooper's Hawk, White-tailed Kite, Turkey Vulture, Yellow Warbler, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Great Blue Heron, Mountain Lion, Bobcat, Mule Deer, San Diego Desert Woodrat, Coastal Western Whiptail, and Orange-throated Whiptail. Much of the development area of the site is continually disturbed and maintained as an active agricultural grove. Areas of the site that qualify as supporting federal (USACE-defined), state (CDFW-defined), county (RPO) wetlands, as well as unvegetated "waters of the State" and "waters of the United States" were also examined for any signs of disturbance. No areas of wetland/waters showed any signs of disturbance beyond what was documented in previous biological reports.

Attached is an updated species list for the project site. Due to the wet winter/spring conditions in 2019, numerous new species were detected and have been added to the species list.

Thanks for the opportunity to provide this updated biological assessment. Please contact us if you have any questions.

UPDATED SPECIES LIST – SHADOW RUN RANCH - FLORA

Scientific Name	Common Name	Vegetation Community
Acmispon americanus	Spanish Clover	U
Acmispon argophyllus	Silver Lotus	U
Acmispon glaber	Deerweed	U
Acmispon strigosus	Strigose Lotus	U
Adenostoma fasciculatum	Chamise	U
Allophyllum glutinosum	Blue False-Gilia	W
Alnus rhombifolia	White Alder	W
Amaranthus albus *	White Tumbleweed	N
Amaranthus blitoides	Prostrate Tumbleweed	U
Ambrosia acanthicarpa	Annual Burweed	W
Ambrosia confertiflora	Ragweed	D
Ambrosia psilostachya	Western Ragweed	W
Artemisia californica	California Sagebrush	U
Artemisia douglasiana	Douglas Sagewort	W
Artemisia dracunculus	Dragon Sagewort	U
Arundo donax *	Giant Wild Reed	W
Asclepias californica	California Milkweed	U
Avena barbata *	Slender Wild Oat	D
Avena fatua *	Wild Oat	D
Baccharis pilularis	Coyote Brush	U
Baccharis salicifolia	Mule Fat	W
Baccharis sarothroides	Broom Baccharis	U
Brassica nigra *	Black Mustard	D
Brickellia californica	California Brickellbush	U
Bromus diandrus *	Ripgut Brome	D
Bromus mollis *	Soft Brome	U
Bromus rubens *	Foxtail Brome	U
Bromus tectorum *	Cheat Brome	U
Calystegia macrostegia	Morning Glory	U
Camissonia cheiranthifolia	Beach Evening Primrose	W
Camissonia sp.	Primrose	U
Camissoniopsis bistorta	California Sun Cup	U
Carduus pycnocephalus *	Italian Thistle	D
Carduus tenuiflorus *	Thistle	D
Carpobrotus edulis *	Sea-Fig	D
Castilleja exserta ssp. exserta	Purple Owl's Clover	U
Castilleja foliolosa	Indian Paintbrush	U
Caulanthus heterophyllus	San Diego Wild Cabbage	U
Ceanothus leucodermis	Chaparral Whitethorn	U
Ceanothus oliganthus	Hairy Ceanothus	U
Centaurea melitensis *	Tocalote	D
Cerastium glomeratum *	Mouse-Ear Chickweed	U
Cercocarpus betuloides	Birchleaf Mountain Mahogany	U
Chaenactis artemisiaefolia	White Pincushion	U
Chaenactis glabriuscula	Yellow Pincushion	U
Chenopodium album *	Common Lamb's-Quarters	U
Chenopodium berlandieri	Pitseed Goosefoot	U
Chenopodium murale *	Goosefoot	D
Chorizanthe procumbens	Prostrate Spineflower	U
Chorizanthe staticoides	Turkish Rugging	U

Chrysanthemum coronarium *	Chrysanthemum	D
Cirsium occidentale var. californicum	California Thistle	U
Citrus sp. *	Citrus	N
Clarkia purpurea	Four-Spot Clarkia	U
Claytonia perfoliata	Miner's Lettuce	U
Clematis pauciflora	Southern California Clematis	U
Conium maculatum *	Poison Hemlock	D
Consolida ambigua *	Rocket Delphinium	N
Cordylanthus rigidus	Chaparral Bird's-Beak	U
Corethrogyne filaginifolia	Sand Aster	U
Coronopus didymus *	Lesser Swine Cress	N
Cotula australis *	Australian Waterbuttons	D
Crassula connata	Sand Pygmyweed	U
Croton californicus	California Croton	U
Cryptantha intermedia	Common Cryptantha	U
Cryptantha micromeres	Minute-Flowered Cryptantha	U
Cryptantha nevadensis	Nevada Cryptantha	U
Cryptantha pterocarya	Wingnut Cryptantha	U
Cucurbita foetidissima	Stinking Gourd	U
Cuscuta californica	California Dodder	U
Cynodon dactylon *	Bermuda Grass	D
Cyperus eragrostis	Tall Flatsedge	W
Cyperus sp. *	Sedge	W
Datura wrightii	Sacred Thorn-Apple	U
Deinandra fasciculata	Common Tarplant	U
Dichelostemma pulchellum	Blue Dicks	U
Diplacus brevipes	Wide-Throated Yellow Monkeyflower	W
Diplacus puniceus	Red Bush Monkeyflower	U
Distichlis spicata	Desert Salt Grass	W
Dryopteris arguta	Coastal Wood Fern	U
Dudleya edulis	Edible Dudleya	U
Dudleya pulverulenta	Chalk Live-Forever	U
Dysphania pumilio	Clammy Goosefoot	D
Eleocharis sp.	Spike-Rush	W
Emmenanthe penduliflora	Whispering Bells	U
Epilobium sp.	Fireweed	W
Erigeron bonariensis *	Flax-leaved Horseweed	D
Erigeron canadensis *	Common Horseweed	D
Erigeron foliosus	Fleabane	U
Eriogonum fasciculatum	Flat-Top Buckwheat	U
Eriogonum sp.	Annual Buckwheat	U
Eriophyllum confertiflorum	Golden Yarrow	U
Erodium botrys *	Mediterranean Stork's-Bill	D
Erodium cicutarium *	Red-Stem Stork's-Bill	D
Erodium moschatum *	White-Stem Stork's-Bill	D
Erysimum capitatum	Wallflower	U
Erythranthe cardinalis	Scarlet Monkeyflower	W
Erythranthe floribundus	Seep Monkeyflower	W
Erythranthe guttata	Monkeyflower	W
Eschscholzia californica	California Poppy	U
Eucrypta chrysanthemifolia	Common Eucrypta	U
Eulobus californicus	California Primrose	U
Euphorbia lathyris *	Caper	N
Euphorbia maculata *	Spotted Spurge	N
Euphorbia peplus *	Petty Spurge	N

Euphorbia polycarpa	Smallseed Sandmat	U
Festuca arundinacea *	Tall Fescue	N
Fraxinus sp.	Ash	W
Galium angustifolium	Narrow-Leaf Bedstraw	U
Galium aparine *	Common Bedstraw	U
Galium nuttallii	Nuttall's Bedstraw	U
Gilia capitata	Blue Field Gilia	U
Gnaphalium palustre	Cudweed	W
Gutierrezia sp.	Matchweed	U
Hazardia squarrosa	Saw-Toothed Goldenbush	U
Hedypnois cretica *	Hedypnois	D
Helianthemum scoparium	Rock Rose	U
Helminthotheca echioides	Bristly Ox-Tongue	W
Hesperoyucca whipplei	Chaparral Yucca	U
Heteromeles arbutifolia	Toyon	U
Heterotheca grandiflora	Telegraphweed	D
Hirschfeldia incana *	Shortpod Mustard	D
Hypochaeris glabra *	Smooth Cat's-Tongue	D
Juncus bufonius var. bufonius	Common Toad Rush	W
Keckiella antirrhinoides	Yellow Bush Penstemon	U
Keckiella cordifolia	Climbing Bush Penstemon	U
Lactuca serriola *	Wild Lettuce	D
Lamarckia aurea *	Goldentop	U
Lamium amplexicaule *	Henbit Deadnettle	U
Lathyrus vestitus alefeldii	San Diego Pea	U
Lepidium nitidum	Shining Pepperweed	U
Lepidium sp.	Peppergrass	U
Lepidospartum squamatum	Scale-Broom	U
Logfia filaginoides	California Cottonrose	U
Logfia gallica *	Narrow-Leaf Cottonrose	U
Lolium multiflorum *	Italian Ryegrass	W
Lonicera subspicata	Wild Honeysuckle	U
Lupinus bicolor	Bicolor Lupine	U
Lupinus hirsutissimus	Stinging Lupine	U
Lupinus truncatus	Collar Lupine	U
Lysimachia arvensis *	Scarlet Pimpernel	D
Lythrum hyssopifolia	Grass-Poly	W
Madia sp.	Madia	U
Malacothamnus fasciculatus	Bushmallow	U
Malosma laurina	Laurel Sumac	U
Malva parviflora *	Cheeseweed	D
Marah macrocarpus	Man Root	U
Marrubium vulgare *	Horehound	D
Medicago polymorpha *	Bur Clover	N
Melica frutescens	Tall Melic	U
Melica imperfecta	Coast Range Melic	U
Melilotus indicus *	Indian Sweet Clover	N
Microseris lindleyi	Silver Puffs	U
Mirabilis laevis crassifolia	Wishbone Plant	U
Muhlenbergia microsperma	Small-Seed Muhly	U
Myriopteris newberryi	Newberry's Lip Fern	U
Navarretia hamata	Skunkweed	U
Nemophila sp.	Blue-Eyes	U
Nicotiana glauca *	Tree Tobacco	D
Nuttallanthus texanus	Texas Toadflax	U

Olea europa *	European Olive	N
Opuntia ficus-indica *	Indian Fig	U
Opuntia littoralis	Prickly Pear	U
Opuntia phaeacantha	Brown-Spined Prickly-Pear	U
Opuntia sp. *	Prickly Pear	U
Oxalis corniculata	Creeping Woodsorrel	D
Paeonia californica	California Peony	U
Parietaria hespera	Rillita Pellitory	U
Pectocarya linearis ferocula	Narrow-Toothed Pectocarya	U
Pellaea andromedifolia	Coffee Fern	U
Pellaea mucronata	Bird's-Foot Fern	U
Penstemon spectabilis	Showy Penstemon	U
Pentagramma triangularis	Goldback Fern	U
Persea americana *	Avocado	N
Phacelia cicutaria hispida	Caterpillar Phacelia	U
Phacelia parryi	Parry's Phacelia	U
Phacelia ramosissima	Phacelia	U
Phacelia sp.	Phacelia	U
Physalis crassifolia	Thick-Leaved Ground Cherry	U
Plantago erecta	Plantain	U
Plantago lanceolata *	Rib Grass	W
Platanus racemosa	California Sycamore	W
Poa sp.	Bluegrass	U
Polypodium californicum	California Polypody	U
Polypogon monspeliensis *	Rabbitfoot Grass	W
Populus fremontii	Western Cottonwood	W
Populus trichocarpa	Black Cottonwood	W
Portulaca oleracea *	Common Purslane	U
Prunica granatum *	Pomegranate	N
Prunus ilicifolia	Holly-Leaf Cherry	U
Pseudognaphalium biolettii	Two-Color Rabbit Tobacco	U
Pseudognaphalium californicum	California Cudweed	U
Pseudognaphalium canescens	Wright's Cudweed	U
Pterostegia drymarioides	Thread Stem	U
Pyrocantha sp. *	Pyrocantha	N
Quercus agrifolia	Coast Live Oak	W
Rhamnus californica var. californica	Coffee Berry	U
Rhamnus ilicifolia	Redberry	U
Rhus aromatica	Fragrant Sumac	U
Ribes indecorum	Winter Currant	U
Ricinus communis *	Castor Bean	W
Rubus ursinus	Trailing Blackberry	W
Rumex salicifolius	California Dock	W
Sairocarpus nuttallianus	Nuttall's Snapdragon	U
Salix gooddingii	Southwestern Willow	W
Salix laevigata	Red Willow	W
Salix lasiolepis	Arroyo Willow	W
Salsola pestifer *	Russian Thistle	N
Salvia apiana	White Sage	U
Salvia columbariae	Chia	U
Sambucus cerulea	Elderberry	U
Schinus molle *	Peruvian Peppertree	N
Schismus barbatus *	Schismus	U
Scirpus olneyi	American Bulrush	W
Scirpus sp.	Bulrush	W

Scrophularia californica ssp. floribunda	Bee Plant	U
Selaginella bigelovii	Bigelow's Spikemoss	U
Senecio vulgaris *	Common Groundsel	D
Silene gallica *	Common Catchfly	U
Silene lanciniata	Indian Pink	U
Sisymbrium altissimum *	Tumble Mustard	D
Sisymbrium orientale *	Eastern Rocket	U
Solanum douglasii	Greenspot Nightshade	D
Solanum nigrum *	Black Nightshade	U
Solanum nodiflorum *	White-Flowered Nightshade	D
Sonchus oleraceus *	Sow Thistle	D
Spergularia rubra	Ruby Sand Spurry	U
Stellaria media *	Common Chickweed	D
Stephanomeria virgata	Stephanomeria	D
Stipa coronata	Giant Stipa	U
Stipa lepida	Foothill Stipa	U
Stipa miliacea	Smilo Grass	D
Stipa pulchra	Purple Stipa	U
Tamarix parvifolia *	Salt Cedar	W
Tamarix sp. *	Salt Cedar	W
Taraxacum officinale *	Common Dandelion	D
Thalictrum polycarpum	Bush Rue	U
Thysanocarpus curvipes	Lacepod	U
Toxicodendron diversilobum	Pacific Poison Oak	W
Tribulus terrestris *	Puncture Vine	W
Trifolium obtusiflorum	Creek Clover	W
Trifolium sp. *	Clover	N
Turricula parryi	Sticky Nama	W
Typha angustifolia	Narrow-Leaf Cattails	W
Typha latifolia	Cattails	W
Urtica dioica ssp. holosericea *	Hoary Nettle	W
Urtica urens *	Dwarf Nettle	D
Vitis girdiana	Desert Grape	W
Vulpia myuros *	Rat's-Tail Fescue	D
Xanthium strumarium	Cocklebur	W

Total = 250 species of plants detected

* = non-native taxon

Vegetation community codes:

W – Wetland (SSARW, SCLORF, Floodway, OW)

U – Upland (CSS, CLOW, CC)

N – Non-native (OV, F/P)

D – Developed/Disturbed (DH, U/D)

UPDATED SPECIES LIST – SHADOW RUN RANCH – FAUNA

Scientific Name	Common Name
Birds	
Accipiter cooperii	**Cooper's Hawk**
Agelaius phoeniceus	Red-winged Blackbird
Aimophila ruficeps	**Rufous-crowned Sparrow**
Aphelocoma coerulescens	Scrub Jay
Archilochus anna	Anna's Hummingbird
Archilochus costae	Costa's Hummingbird
Ardea herodias	**Great Blue Heron**
Baeolophus inornatus	Oak Titmouse
Bubo virginianus	Great Horned Owl
Buteo jamaicensis	Red-tailed Hawk
Buteo lineatus	**Red-shouldered Hawk**
Callipepla californica	California Quail
Carduelis psaltria	Lesser Goldfinch
Carpodacus mexicanus	Housefinch
Cathartes aura	**Turkey Vulture**
Ceryle alcyon	Belted Kingfisher
Chamaea fasciata	Wrentit
Colaptes auratus	Northern Flicker
Columbia fasciata	Band-tailed Pigeon
Corvus brachyrhynchos	American Crow
Dendrocopos nuttallii	Nuttall's Woodpecker
Dendroica coronata	Audubon's Warbler
Dendroica petechia	**Yellow Warbler**
Elanus leucurus	**White-tailed Kite**
Empidonax difficilis	Pacific-slope Flycatcher
Falco sparverius	American Kestrel
Fulica americana	American Coot
Geococcyx californicus	Greater Roadrunner
Hirundo pyrrhonota	Cliff Swallow
Icteria cucullaria	Hooded Oriole
Melanerpes formicivorus	Acorn Woodpecker
Melospiza melodia	Song Sparrow
Mimus polyglottos	Mockingbird
Myiarchus cinerascens	Ash-throated Flycatcher
Passerina amoena	Lazuli Bunting
Phainopepla nitens	Phainopepla

Birds (cont)

Pipilo crissalis	California Towhee
Pipilo erythrophthalmus	Rufous-sided Towhee
Polioptila caerulea	Blue-gray Gnatcatcher
Psaltriparus minimus	Bushtit
Salpinctes mexicanus	Cañon Wren
Sayornis nigricans	Black Phoebe
Sayornis saya	Say's Phoebe
Sitta carolinensis	White-breasted Nuthatch
Spizella atrogularis	Black-chinned Sparrow
Sturnus vulgaris *	Starling
Thryomanes bewickii	Bewick's Wren
Toxostoma redivivum	California Thrasher
Troglodytes aedon	House Wren
Turdus migratorius	American Robin
Vermivora celata	Orange-crowned Warbler
Vireo huttoni	Hutton's Vireo
Wilsonia pusilla	Wilson's Warbler
Zenaida macroura	Mourning Dove

Mammals

Canis latrans	Coyote
Felis concolor	**Mountain Lion**
Lynx rufus	**Bobcat**
Neotoma lepida intermedia	**San Diego Desert Woodrat**
Odocoileus hemionus	**Mule Deer**
Peromyscus sp.	Deer Mouse
Procyon lotor	Raccoon
Sylvilagus audubonii	Desert Cottontail
Thomomys bottae	Valley Pocket Gopher
Urocyon cinereoargenteus	Gray Fox

Fish

Gambusia affinis *	Mosquito Fish
Lepomis cyanellus *	Green Sunfish
Micropterus dolomieu *	Smallmouth Bass

Amphibians

Bufo boreas	Western Toad
Hyla cadaverina	California Treefrog
Hyla regilla	Pacific Treefrog
Rana catesbeiana *	Bullfrog

Reptiles

Cnemidophorus hyperythrus beldingi	**Orange-throated Whiptail**
Cnemidophorus tigris multiscutatus	**Coastal Western Whiptail**
Hypsiglena torquata	San Diego Night Snake
Lampropeltis getulus	Common Kingsnake
Sceloporus occidentalis	Western Fence Lizard
Sceloporus orcuttii	Granite Spiny Lizard
Uta stansburiana	Side-blotched Lizard

Butterflies

Apodemia mormo virgulti	Behr's Metalmark
Calephelis wrighti	Wright's Metalmark
Coenonympha californica	California Ringlet
Erynnis funeralis	Funereal Duskywing
Erynnis sp.	Duskywing
Erynnis tristis	Mournful Duskywing
Hemiargus ceraunus gyas	Edward's Blue
Leptotes marina	Marine Blue
Limenitis lorquini	Lorquin's Admiral
Junonia coenia	Buckeye
Papilio eurymedon	Pale Swallowtail
Papilio rutulus	Western Tiger Swallowtail
Pontia protodice	Common White
Vanessa cardui	Painted Lady

Total = 92 animals (54 birds, 10 mammals, 3 fish, 4 amphibians, 7 reptiles, and 14 butterflies) detected

* = non-native taxon

bold = sensitive taxon (13 species)

A BIOLOGICAL RESOURCES SURVEY REPORT
FOR THE
SHADOW RUN RANCH PROJECT
3100-5223 (TM) RPL#3, 3300-00-030 (MUP), 3710-00-0205 (BC), ENVIRONMENTAL LOG NO. 3910-00-02-035
PAUMA VALLEY, COUNTY OF SAN DIEGO

Prepared for

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Prepared by

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Final March 2014
~~Revised with Project Redesign: February 2013~~
~~Revised with Project Redesign: October 2012~~
~~Updated and Reformatted October 2009~~

Vincent N. Scheidt, MA
Certified Biological Consultant

Lead Agency - County of San Diego

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TECHNICAL APPENDICIES/ATTACHMENTS

GLOSSARY OF STANDARD TERMS AND ACRONYMS

ACOE: Army Corps of Engineers

Adaptive Management: A systematic process for continually improving management policies and practices by learning from the outcomes of operational programs.

Alluvium: Material, including clay, silt, sand, gravel, or similar unconsolidated sediments, deposited by a streambed or other body of running water.

Biological Open Space Easement (BOSE): An easement dedicated to the County of San Diego or other jurisdictional body for the purposes of the preservation of natural resources.

Blue-line Stream: A watercourse shown as a blue line on a U.S. Geological Service topographic quadrangle map.

BLM: Bureau of Land Management

BMPs: Best Management Practices

Buffer Zone: An area of land separating two distinct land uses that acts to soften or mitigate the effects of one land use on the other.

California Department of Fish and Wildlife (**CDFW):** a department of the California Resources Agency.

California Endangered Species Act (CESA): The California Endangered Species Act (California Fish and Game code, Section 2050, et seq.) and all rules, regulations and guidelines promulgated hereunder, as amended.

California Environmental Quality Act (CEQA): The California Environmental Quality Act (California Public Resources Code, Section 21000, et seq.) and all guidelines promulgated hereunder, as amended.

California Regional Water Quality Control Board (**CRWQCB):** a department of the California Water Resources Board.

CCC: California Coastal Commission

CFGC: California Fish and Game Code

CNDDB: California Natural Diversity Data Base

CNPPA: California Native Plant Protection Act

CNPS: California Native Plant Society

CRWQCB: California Regional Water Quality Control Board

CWA: the federal Clean Water Act (1977)

Candidate Species: Any species of animal or plant or population thereof for which the USFWS currently has on file substantial information on their biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species. Issuance of proposed rules for listing is presently precluded by other higher priority listing actions.

Canopy Cover: The cover of leaves and branches formed by the tops or crowns of plants as viewed from above.

Carrying Capacity: Maximum stocking rate possible without inducing damage to vegetation or related resources. It may vary from year to year on the same area due to fluctuating weather conditions and forage production (see grazing capacity).

Community: A group of plants and animals living together in a common area and having close interactions.

Conservation Easement: A legal agreement between a landowner and a land trust or government agency, such as the CDFW, that permanently limits uses of the land in order to protect its conservation values (California Government Code Section 27255)

Conserve: To use "all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Endangered Species Act are no longer necessary...."

Conserved Land: Land that is permanently protected and managed for the benefit of natural resources under legal arrangements, including a Conservation Easement that prevent its conversion to other uses and the institutional arrangements that provide for its ongoing management.

Constrained Linkage: A constricted connection expected to provide for movement of identified species between core areas, where options for assembly of the connection are limited due to existing patterns of land use.

GLOSSARY OF STANDARD TERMS AND ACRONYMS

Consult/Consultation: A cooperative effort established by the FESA between Federal agencies and the USFWS. The purpose is to ensure that agency actions conserve listed species, aid in recovery of listed species, and protect critical habitat.

Core Area: A block of habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species.

Corridor: A direct or indirect connection that links separate patches of habitat.

Covered Species: Those species within a Subarea Planning Area that will be "adequately conserved" by the Plan when the Plan is implemented.

Covered Species Adequately Conserved: Covered Species that are adequately conserved by a Subarea Plan and which are provided in the Incidental Take Coverage Section 10(a) Permit and NCCP Permit and for animals through the Section 10(a) permit issued in conjunction with an Implementing Agreement.

Cumulative Impact: As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

Dedication: The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

Easement: Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

Edge Effects: Adverse direct and indirect effects to species, habitats and vegetation communities, generally along the natural wildlands/urban interface.

Endangered: A formal designation under CESA and FESA. Under CESA, a taxon which is "in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes" (CFGC § 2062). Under FESA, a taxon which is "in danger of extinction throughout all or a significant portion of its range" (FESA § 3 (6)).

Endangered Species: Those species listed as Endangered under FESA and/or CESA.

Environment: CEQA defines environment as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance."

Environmental Impact Report (EIR): A report required pursuant to CEQA which assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts.

Exotic Species: A species of plant or animal that is not indigenous, native, or naturalized to the area where it is found.

Federal Endangered Species Act (FESA): The Federal Endangered Species Act (16 U.S.C., Section 1531, et seq.) and all rules and regulations promulgated hereunder, as amended.

Forb: Any herbaceous plant other than those in the Gramineae (true grasses), Cyperaceae (sedges), and Juncaceae (rushes) families, i.e. any non-grasslike plant having little or no woody material on it. A broad-leaved plant with above ground stems that do not become woody or persistent.

FPA: Focused Planning Area

FSC: Federal Species of Concern

Ground Cover: Surface materials including the basal areas of grass and forbs, and aerial coverage of shrubs that provide protection to the soils surface.

Habitat: The combination of environmental conditions of a specific place providing for the needs of a species or a population.

Habitat Conservation Plan (HCP): An area-specific plan prepared pursuant to Section 10(a)(2) of FESA that is a mandatory component of an incidental take permit for a project with no Federal nexus for a listed species, designed to minimize and mitigate the authorized take of the species.

Habitat Requirements: A specific set of physical and biological conditions that surround a single species, group of species, or community of species upon which the species or associations are dependent for their existence. In wildlife management the major components of habitat are considered to be food, water, cover, and living space.

GLOSSARY OF STANDARD TERMS AND ACRONYMS

Herbaceous: Vegetation with little or no woody component, such as grasses and forbs.

Implementing Agreement (IA): A contractual obligation between individual jurisdictions within a Subarea and the Wildlife Agencies to implement the requirements of a Subarea Plan.

Incidental Take: Take which is incidental to the pursuit of an otherwise legal activity. Legal incidental take is set forth by the USFWS in a biological opinion under Section 7 of FESA.

Incidental Take Permit/Incidental Take Authorization: The authorization from the USFWS for taking of a federally listed wildlife species, if such taking is incidental to and not the purpose of carrying out otherwise lawful activities.

Indicator: Quantitative measure of an ecosystem element which is used to describe the condition of an ecosystem; changes in indicators over relatively short periods of time are used to measure the effects of management.

Lead Agency: Under CEQA, the public agency that has the primary responsibility for approving the proposed project/action.

Linkage: A connection between Core Areas with adequate size, configuration, and vegetation characteristics to generally provide biological viability and/or provide for genetic flow for identified species.

List 1A. A CNPS ranking applied to plants presumed extinct in California.

List 1B. A CNPS ranking applied to plants rare, threatened, or endangered in California and elsewhere.

List 2. A CNPS ranking applied to plants rare, threatened, or endangered in California, but more common elsewhere.

List 3. A CNPS ranking applied to plants about which we need more information—a “review” list.

List 4. A CNPS ranking applied to plants of limited distribution—a “watch” list.

Limited Building Zone (LBZ): A structural setback easement established by the County of San Diego that prohibits the construction of habitable structures. The LBZ extends from the edge of conserved habitat in the direction of development.

Listed Species: A taxon that is protected under the FESA or CESA. Listing categories include: Threatened, Endangered, Species of Special Concern, State Protected Species, Federally Proposed Threatened or Endangered, and Federally Petitioned Threatened or Endangered.

Migratory Bird Treaty Act (MBTA): The Federal Migratory Bird Treaty Act (50 C.F.R., Section 21, et seq.) and all rules and regulations promulgated hereunder, as amended.

MHCOSP: County of San Diego Multiple Habitat Conservation and Open Space Program

MHCP: County of San Diego Multiple Habitat Conservation Program, a Subregional Plan

MOU: Memorandum of Understanding

MSCP: A Subregional Plan. Also refers to the County of San Diego’s Multiple Species Conservation Program Subarea Plan or City of San Diego’s Multiple Species Conservation Program Subarea Plan.

Mean Sea Level (MSL): The average altitude of the sea surface for all tidal stages.

Mima Mound : A hump of soil in a vernal pool grassland. Mima mounds can be a few inches to a few feet high.

Mitigation: In general, a combination of measures to lessen the impacts of a project or activity on an element of the natural environment or various other cultural or historic values. More specifically, as defined by the Council on Environmental Quality in its regulations for implementing NEPA, mitigation includes: (a) avoiding the impact, (b) minimizing the impact, (c) rectifying (i.e., repairing, rehabilitating, or restoring) the impact (d) reducing or eliminating the impact through operations during the life of the project, or (e) compensating by replacing or substituting resources.

Monitoring: The timed collection of information to determine the effects of resource management and to identify changing resource conditions or needs.

Narrow Endemic Species: Species that are highly restricted by their habitat affinities, soil requirements, or other ecological factors.

GLOSSARY OF STANDARD TERMS AND ACRONYMS

Native Plant Protection Act (NPPA): A 1977 law which gave the California Fish and Game Commission the authority to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants (CFGC §§ 1900-1913).

Native (Indigenous) Species: A species of plant or animal that naturally occurs in an area and that was not introduced by humans.

Natural Community Conservation Planning Act: A habitat conservation program instituted by the State of California in 1991 to encourage the preservation of natural communities before species within those communities are threatened with extinction.

Natural Community Conservation Plan (NCCP): A plan prepared under the Natural Community Conservation Planning Program designed to conserve natural communities at the ecosystem scale while accommodating compatible land use.

NCCP Permit: The Permit issued in accordance with the IA by CDFW under the NCCP to permit the take of identified species, including rare species, species listed under CESA as threatened or endangered, species that are candidates for listing, and unlisted species.

Natural State: The condition existing prior to development.

Non-contiguous Habitat Block: A block of habitat not connected to other habitat areas.

Occurrence: A location where an element (plant, animal, or natural community) is found. The occurrence can consist of a single population or several colonies in the nearby vicinity. The separation distance between discrete occurrences as per CNDDB is 0.25 miles in California.

Perennial Plant Species: A plant that has a life cycle of three years or more.

Plant Community: Assemblage of plant populations in a defined area or physical habitat; an aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape.

Population: A group of individuals of a given species that inhabits a relatively well-defined geographic area and has the opportunity to interbreed freely.

Pre-Approved Mitigation Area (PAMA): Lands that have been identified through an extensive computer modeling process and independent scientific review as being of high biological importance. PAMA lands are “pre-approved” as being suitable for conservation.

Preserve: Noun: an area set apart for the protection of wildlife and natural resources. Verb: to keep intact or unimpaired; maintain.

Proposed Species: A species of plant or animal formally proposed by the USFWS to be listed as threatened or endangered under FESA.

Raptor: Any predatory bird (such as falcon, hawk, eagle, vulture, or owl) that has feet with sharp talons or claws adapted for seizing prey and a hooked beak for shearing flesh.

Rare: A species of plant or animal existing in such small numbers throughout all or a significant portion of its range that it may become endangered or threatened (as defined by CESA or FESA) if its environment worsens.

Recovery: Improvement in the status of a Listed Species to the point at which listing is no longer appropriate under the criteria set forth in Section 4 of FESA. Also, the process by which species and/or their ecosystems are restored to be self-sustaining.

Recruitment: Addition to a plant or animal population from all sources, including reproduction, immigration, and stocking.

Regional: Pertaining to activities or economies at a scale affecting a broad geographic area.

Regulatory Agency(ies): the ACOE, CDFW, and CRWQCB, collectively.

Resource Management Plan (RMP): An activity plan for wildlife resources for a specific geographical area of land. It identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

Resource Protection Ordinance (RPO): San Diego County Ordinance No. 9842 relating to wetlands, prehistoric and historic sites, agricultural operations, enforcement, and other matters

GLOSSARY OF STANDARD TERMS AND ACRONYMS

Right-of-Way (ROW): An easement or permit, which authorizes land to be used for a specified purpose that generally requires a long narrow strip of land. Examples are roads, power lines, pipelines, etc.

Riparian: In reference to the transitional area between an aquatic ecosystem and an adjacent terrestrial ecosystem identified by soil characteristics or distinctive vegetation communities that require significant hydration.

Section 7: The section of FESA that requires all federal agencies, in consultation with USFWS, to insure that their actions are not likely to jeopardize the continued existence of Listed Species or result in destruction or adverse modification of critical habitat.

SCS: Soils Conservation Service

SLRR: The San Luis Rey River, a major riverine system in northern San Diego County

Species: A fundamental category of plant or animal classification.

SSC: Species of Special Concern (State of California)

Special Status Species: Plant or animal species listed as endangered, threatened, candidate, or sensitive by federal, state, or local governments.

Subarea: Pertaining to a portion of a Subregion. Generally used to mean a discrete planning area under a single jurisdiction.

Subdivision: The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed..

Subregional: Pertaining to a portion of a region. Generally used to mean a discrete planning area under multiple jurisdictions.

Successional: Reference to the constantly occurring process of community change; the sequence of communities that replace one another in a given area over time.

Take: Under FESA and CESA: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct relative to a Listed Species.

Third Party Take Authorization: Take Authorization received by a landowner, developer, or other public or private entity pursuant to an IA, thereby allowing the Incidental Take of Covered Species.

Threatened Species: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and as further defined by FESA and the CESA.

T&E: Threatened and Endangered (Species)

Upland: Land at a higher elevation than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

USFS: United States Forest Service

United States Fish and Wildlife Service (FWS/USFWS): An agency of the United States Department of the Interior.

USGS: United States Geological Survey

Vegetative Community: Refers to the species or various combinations of species which dominate or appear to dominate an area of habitat (see plant community).

Viable Populations: Populations of plants and/or animals that persist for a specified period of time across their range despite normal fluctuations in population and environmental conditions.

Watershed: The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

Wetlands: An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wildlife Agencies: The USFWS and CDFW, collectively.

Wildlife Corridor: A landscape feature that allows animal movement between two patches of habitat or between habitat and sources of essential resources.

SUMMARY

The Shadow Run Ranch project, 3100-5223 (TM) RPL#3, 3300-00-030 (MUP), 3710-00-0205 (BC), ENVIRONMENTAL LOG NO. 3910-00-02-035consists of the subdivision of the approximately 248-acre Shadow Run Ranch property (APN 111-080-07, -08, -09, -10, -18, & -19, APN 111-070-12 & -13, and portions of APN 111-080-14, -15, & -16) into 44 legal residential lots, to be developed in the future with single family homes, and three open space lots intended for recreation (Lot 47), agriculture (Lot 45), and wildlife preservation (Lot 46). Approval and implementation of the Shadow Run Ranch project will result in the entirety of the site that is not conserved in lot 46 biological open space being biologically impacted or potentially impacted by grading for pad and road construction and future build out, including homes, landscaping, fire clearing, and related site improvements. The project includes offsite road improvements to Adams Drive (to the east) onto the property to provide secondary (east) ingress and egress. Habitats presently found on the property and in the footprint of the proposed offsite road improvements include Orchards and Vineyards, Chamise Chaparral, Diegan Coastal Sage Scrub, Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Floodway, Coast Live Oak Woodland, Open Water, Disturbed Habitat, Urban/Developed, and Field/Pasture. No biological mitigation for impacts to Orchards and Vineyards, Disturbed Habitat, Non-native Vegetation, or Urban/Developed will be necessary. However, impacts (direct, indirect, or cumulative) to Field/Pasture, Diegan Coastal Sage Scrub, and Coast Live Oak Woodland require compensatory mitigation at ½-to-1 for the pasture, 2-to-1 for the scrub and 3-to-1 for woodland. An additional 2.3 acres of scrub and 0.14 acre of woodland will be mitigated at a 3-to-1 and 4-to-1 ratio due to unauthorized clearing. Mitigation must take place either onsite and/or offsite in a County-approved location. The offsite mitigation will take place at the Daley Ranch Conservation Bank, the Red Mountain Conservation Bank, or other County-approved location. The most biologically sensitive areas of the site will be preserved in biological open space. An avian nesting survey and/or seasonal restrictions on site development are recommended to provide project consistency with the Migratory Bird Treaty Act, the Federal Endangered Species Act, and the California Fish and Game Code. Also recommended is the preparation and implementation of a Resource Management Plan and Wetland Mitigation Plan. Finally, project impacts to regulated jurisdictional lands, including CSS, wetlands, and “waters” will likely require the securement of various agency permits.

1.0 INTRODUCTION

1.1 Purpose of the Report

The purpose of this report is to document the biological resources identified as present or potentially present on the project site, identify potential biological resource impacts resulting from the proposed project, and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with federal, state, and local rules and regulations, including the Federal Endangered Species Act (FESA), the California Environmental Quality Act (CEQA), and the County of San Diego's Resource Protection Ordinance (RPO).

1.2 Project Location and Description

The project site is located north of Highway 76 (Pala Road) and west of Adams Drive in the Pauma Valley area of unincorporated San Diego County (Figure 1).

The Shadow Run Ranch project proposes a subdivision of the 248.26-acre Shadow Run Ranch property, creating 44 residential lots and three open space lots intended for agriculture (Lot 45), wildlife preservation (Lot 46), and recreation (Lot 47) (see Figure 2). The development area is primarily composed of the southern and central portions of the property (Residential Lots 1-44 and onsite roads). The "development envelope" (area to be directly developed for residential uses) totals 109.8 acres, including approximately 8.6 acres that are "impact neutral" and 4.8 acres that will be impacted by onsite road improvements. Open Space Lot 45 (measuring approximately 39.1 acres) is an Agricultural Open Space Easement located on the eastern portion of the site. Open Space Lot 46 (approximately 91.3 acres) is a Biological Open Space Easement (BOSE) located on the northern and western portions of the site. This lot contains Frey Creek and natural areas of the site associated with the southern flanks of Palomar Mountain. Open Space Lot 47 (approximately 8.0 acres) is a Recreational Open Space Easement located on the central northern portion of the site. Although existing residences are present onsite, no new residential structures are currently proposed as part of the project. However, it is anticipated that each of the undeveloped new lots will be built out in the future with single family homes, landscaping, accessory structures, etc. Access to the property for both ingress and egress would be from the southeast, off Adams Drive. Secondary access will also be provided from Adams Drive to the east.

Most of the land that will be included in the BOSE is currently in a natural state. No activities or uses are proposed within the BOSE, other than limited agriculture (citrus) in the second 100 feet and wetlands restoration/enhancement activities associated with the implementation of an approved Wetland Mitigation Plan. In order to prevent fire clearing impacts to the BOSE, a Limited Building Zone Easement (LBZ) is required. This easement shall be 100 feet wide and shall extend outward towards development from the BOSE boundary. The LBZ shall prohibit the construction of houses, barns, or other habitable structures that would require fire clearing into the open space areas. The LBZ has been designed to overlap, to the extent feasible, the Fuel Modification Zone (FMZ), which is measured outward from the structure. In no case does the FMZ encroach beyond the LBZ into the BOSE.

During construction, all heavy equipment and construction materials will be staged in areas that will be subject to grading. No staging of materials or equipment will be allowed in any of the undisturbed areas of the site, including any part of the BOSE.

1.3 Survey Methodologies

Literature that was reviewed prior to initiation of the site surveys included: U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) mapping for the project area; a database query of potential on-site sensitive species based on a determination of the site's physical characteristics (*e.g.*, location, elevation, soils/substrate, and topography); documentation of California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) records for the project vicinity; and previous biology reports prepared for the project area, including reports prepared by the author.

Field surveys of the Shadow Run Ranch property were completed in April of 2005, April through June of 2007, July and August of 2009, and April through July of 2012. The specific dates, personnel, and weather conditions are presented in Table 1. Investigators included the author (VS), Shannon Allen (SA), Biological Consultant, Julia Groebner (JG), Field Biologist, and Brandon Myers (BM), Patrick Maher (PM), and Sandra Groebner (SG), Field Assistants.

A previous biology study and wetland delineation of the subject property was completed by URS in 2001. The raw data from that report *(Biological Resources and Wetland Delineation Report; Schoepe Ranch Property; Pala, California; TM 5223)* have been incorporated into this current document, with the exception of obvious errors, such as Yellow Willow (*Salix lutea*), a plant that does not occur in San Diego County but was included on the species list of the URS biology report.

All plants, animals and habitats encountered during the survey periods were noted in the field. The limits of each habitat-type were mapped in the field utilizing an aerial photograph of the property. All plants and animals identified in association with the property are listed in Tables 4 and 5 at the end of this report. Plants were identified *in situ*, or based on characteristic floral parts collected and later examined in detail. Floral nomenclature used in this report follows Hickman (1993) and others. Plant communities, as designated by numerical code, follow Holland (1996, as amended).

Wildlife observations were made opportunistically. Binoculars were used to aid in observations and all wildlife species detected were noted. Animal nomenclature used in this report is taken from Stebbins (1985) for reptiles and amphibians, American Ornithologist's Union (1983, as updated) for birds, and Jones, et. al (1992) for mammals.

Several directed field surveys and habitat evaluations were conducted in conjunction with the biological study of this property. These included a protocol Arroyo Toad field survey (in April, May, and June of 2007), a protocol California Gnatcatcher field survey (in July and August of 2009), a Jurisdictional Wetland Delineation (conducted by URS in August and September of 2001), and habitat evaluations for various other sensitive species known from the

vicinity. The various directed surveys followed approved protocols to maximize detection of the respective biological resources, if present.

Table 1. Recent Field Surveys

Date	Hours	Personnel	Conditions
7 April 2005	10:30-17:15	VS, SA	clear, sunny, temps mid 60°s to 70°, light westerly breeze 0-3 MPH
15 April 2005	08:30-12:30	VS, SA	clear, temps high 60°s, light northwesterly breeze 1-4 MPH
27 April 2005	08:45-12:15	VS, SA	overcast, cool, temperatures in the mid 50°s to high 60°s, westerly breeze 0-5 MPH
3 May 2005	12:00-17:00	VS, SA	clear, mild, temperatures in the mid 60°s to 70°s, no wind
11 April 2007	20:15-23:15	VS, JG	partly cloudy skies, temps high 50°s, no wind
18 April 2007	20:00-23:00	VS, JG	clear, temps high 50°s to 50°, no wind
25 April 2007	20:00-22:30	VS, JG	clear skies with high, thin clouds, temps mid 60°s to 57°, no wind
16 May 2007	20:20-23:00	JG, SG	overcast, temps low 60°s to 60°, light northerly breeze
30 May 2007	20:50-23:00	VS, JG	clear to overcast skies, temps low 60°s, no wind
13 June 2007	20:30-22:40	JG, SG	clear, temps low 60°s, light northerly breeze
10 July 2009	09:30-13:00	VS, JG	clear with high, thin clouds, temps low 80°s to low 90°s, no wind
27 July 2009	08:30-12:30	VS, JG	clear skies, temps high 70°s to low 90°s, no wind
19 August 2009	08:30-16:00	VS, JG	cloudy to clearing, temps high 60°s to mid 80°s, no wind
27 Sept 2011	13:00- 14:20	VS	clear, mild, temperatures in the mid 70°s, no wind
4 April 2012	17:30 - 23:20	VS, BM	clear skies, temps low 60's, no wind
26 April 2012	18:30 - 23:50	VS, PM	clear skies, temps low 60's, no wind
8 May 2012	19:00 - 22:50	VS, BM	clear skies becoming overcast, low 60's, no wind
24 May 2012	19:30 - 23:10	VS, BM	clear skies, temps low 60's, northerly breeze
5 June 2012	20:00 - 23:00	VS, BM	clear skies, temps mid 60's, no wind
18 June 2012	20:00 - 22:50	VS, BM	clear skies, temps mid 60's, westerly breeze
16 July 2012	09:30 - 11:20	VS, BM	clear, mild, temperatures in the mid 60°s to 70°s, no wind
19 Feb 2014	09:00 – 11:00	VS, BM	clear, mild, temperatures in the mid 60°s to 70°s, no wind

1.3.1 Directed Field Survey – California Gnatcatcher

California Gnatcatcher *(Polioptila californica)*, a federally-listed Threatened Species, is known from habitat similar to that found on the Shadow Run Ranch site. Gnatcatchers occur in coastal and interior areas of coastal sage and related scrub habitats typically dominated by California Sagebrush *(Artemisia californica)*, Flat-top Buckwheat *(Eriogonum fasciculatum)*, Laurel Sumac *(Malosma laurina)*, and other soft-woody shrubs.

Protocol presence/absence field surveys for California Gnatcatcher were conducted by URS in 2001 and by VS and SA in 2005. An updated California Gnatcatcher field survey was completed by VS and JG in 2009, under Federal 10 (a)(1)(a) Recovery Permit #TE788133 (Attachment D). All field surveys were completed by slowly walking random transects through all areas of potential habitat on and adjoining the project site. Specimens were visually searched for at all times, and playback calls of this species were broadcast using a hand-held minicassette tape to assist with the detection of specimens. Weather conditions were conducive to California Gnatcatcher field surveying on each of the selected dates (Table 1). Particular attention was paid to areas that had the highest probability of supporting gnatcatchers. Binoculars were used to aid in observations, and all other wildlife species detected were noted (Table 5).

California Gnatcatcher was not detected on the property at any time during any of the protocol surveys, including the most recent ones (2009). The project site is thus considered “unoccupied” by this federally-listed Threatened Species.

1.3.2 Directed Field Survey – Arroyo Toad

Arroyo Toad (*Bufo microscaphus californicus)*, is a federally listed “Endangered” amphibian. This species is a small (two to three inches), variably-colored anuran with warty skin and small dark spots. Arroyo Toads are found in the vicinity of rivers and streams that have shallow pools adjacent to sand/gravel terraces. Toadlets and adult toads may range up to 1.2 miles from the watercourse into the surrounding uplands (USFWS, 1999). Upland habitats frequently utilized include coastal sage scrub, chaparral, native and non-native grasslands, and oak woodlands.

Frey Creek, which runs along the western edge of the property, supports areas that could qualify as potential Arroyo Toad breeding habitat. The nearest known breeding areas for Arroyo Toad are approximately 3.8 miles to the southeast, between the subject property and the Pauma Valley Country Club, and approximately 3 miles to the northwest. It is also highly likely that Arroyo Toads reproduce in nearby areas of the San Luis Rey River (SLRR) floodway, which is located a short distance to the south of the Shadow Run Ranch project site, south of Highway 76. Arroyo Toads are known to move at least 1 km in all directions from breeding areas during dispersal. Even if not breeding in Frey Creek, specimens could easily move up this ephemeral drainage from its confluence with the San Luis Rey River during post-reproductive dispersal, where toads are expected to occur.

A series of six Arroyo Toad presence/absence field surveys, pursuant to the current USFWS protocol, was completed for the Shadow Run Ranch project site during April, May, and June of 2007. . An updated survey was completed in April, May, and June of 2012 (Attachment C). No Arroyo Toads were detected during any of the nocturnal surveys, and the

subject site is considered “unoccupied” by this federally-listed Endangered Species, as a breeding species, based on the results of the 2007 and 2012 field surveys. .

Arroyo Toads could utilize parts of the subject property for aestivation and as a post-reproductive dispersal corridor. However, this would be restricted to Frey Creek and the adjoining natural areas to the north and west. The agricultural areas of the site are unsuitable for aestivation and post-reproductive dispersal due to long-term management as a grove, including the use of herbicides, pesticides, changes in the soil chemistry, compaction, and other activities associated with maintenance of this area.

1.3.3 Habitat Evaluation – Least Bell’s Vireo

Least Bell’s Vireo *(Vireo bellii pusillus)*, a state-listed and federally-listed Endangered migratory songbird, occurs in dense willow-dominated riparian habitats similar to that found in patches along portions of Frey Creek. Least Bell’s Vireo is also known to nest in nearby upland areas, such as Black Mustard (*Brassica nigra*) thickets (D. Mayer, CDFW, personal communication). The nearest known reproducing populations of this rare species are approximately 3 miles to the northwest of the project site in the SLRR, which is located a short distance to the south of the property. In order to avoid the need for focused field surveys for this species, all of the riparian habitats on this site are considered potentially “occupied” by Least Bell’s Vireo and other riparian nesting species during the breeding season. However, it should be noted that no Least Bell’s Vireos have been observed on the Shadow Run Ranch property during any of the biological field surveys, which have taken place over the course of many years.

1.3.4 Habitat Evaluation – Southwestern Willow Flycatcher

Southwestern Willow Flycatcher *(Empidonax trailii extimus)* is a federally-listed Endangered migratory songbird that nests in mature riparian vegetation, most typically over running or standing water, with a specific understory structure. Portions of the habitat at the northern end of Frey Creek are marginally suitable for this species. The nearest known populations of this very rare species are approximately 3 miles to the northwest of the project site in the SLRR, which is located a short distance to the south of the property. In order to avoid the need for focused field surveys for this species, all of the riparian habitats on this site are considered potentially “occupied” by Southwestern Willow Flycatcher and other riparian nesting species during the breeding season. However, it should be noted that no Southwestern Willow Flycatchers have been observed on the Shadow Run Ranch property during any of the biological field surveys, which have taken place over the course of many years.

1.3.5 Habitat Evaluation – Quino Checkerspot Butterfly

Quino Checkerspot Butterfly *(Euphydryas editha quino)* is a federally listed “Endangered” butterfly known to occur in portions of San Diego, western Riverside County, and adjacent Baja California, Mexico. This distinctive, colorful, medium-sized butterfly is apparently restricted to open habitats supporting at least one of several larval food-plants, including Dot-seed Plantain *(Plantago erecta)*, Owl's Clover *(Orthocarpus purpurascens)*, Yellow Bush Penstemon *(Keckiella antirrhinoides)*, Chinese Houses *(Collinsia heterophylla),* and/or other plants in the Scrophulariaceae family.

The best understood Quino indicator is Dot-seed Plantain, a very common annual forb associated with numerous open habitats. *P. erecta* is normally associated with sandy, clay, or serpentine soils. This small plant occurs throughout the California Floristic Province (west of the deserts) from Oregon to Baja California, below about 2,300 feet MSL. It can be extremely abundant in Southern California in suitable habitats. Quino Checkerspot Butterfly is also apparently dependent on several specific habitat features, in addition to the presence of appropriate larval food-plants, such as nectaring sites for adult butterflies, specific physiographic features of the site, openings in the vegetation, and possibly cryptogamic crust soils. Our understanding of this species suggests that Quino is dependent on these site features. In their absence, it is unlikely that Quino would be a resident species.

The Shadow Run Ranch project site supports certain features that might constitute Quino "indicators", including "hilltopping" sites, openings in the brush, plants in the Scrophulariaceae family (including Dot-seed Plantain), etc. However, there are no recent records for Quino occurring in the Pauma Valley. Based in these factors, the probability for Quino to occur on this site is considered moderate. If present, specimens would generally be found in areas proposed for open space conservation. The probability of occurrence in the development area of the site is considered very low.

1.3.6 Directed Field Survey – Jurisdictional Wetland Delineation

A formal Jurisdictional Wetland Delineation, pursuant to the Unified Federal Method (1987), was conducted for the Shadow Run Ranch project site by URS in August and September of 2001. In addition, a directed Resource Protection Ordinance (RPO) wetland survey, pursuant to the County's revised (2007) RPO definitions, was completed by VS and JG in July and August of 2009. Portions of the site qualify as county, state, and federal jurisdictional wetlands. Although the RPO wetland survey did not include a formal delineation, each of the drainage areas identified in the URS delineation were examined during the survey and their jurisdictional statuses were updated based on current site conditions. The results of the RPO wetland survey have been incorporated into Section 1.4.7 and Figure 7 of this report.

1.4 Environmental Setting (Current Conditions)

Elevations on the property range between approximately 770 feet MSL at the site's southwestern corner and 1,620 feet MSL at the site's highpoint near the northeastern corner. Soil types found onsite include Soboba stony loamy sand (SsE) on slopes between 9 and 30 percent, Greenfield sandy loam (GrD) on slopes between 9 and 15 percent, Cieneba-Fallbrook rocky sandy loam (CnE2) on slopes between 9 and 30 percent, Cieneba-Fallbrook rocky sandy loam (CnG2) on slopes between 30 and 65 percent, and Stony land (SvE). These soil-types are not known to support significant populations of narrow endemics or other very rare plants or animals. The climate of Pauma Valley is characterized by hot, dry summers and cool, wet winters.

Existing land uses onsite include active agriculture, which covers the majority of the property, several trailers and single-family homes, which are located on the southern portion of the site, a reservoir located near the northeastern

property corner, and various dirt roads that cross the property. Areas of native upland vegetation are found on the northeastern and western portions of the site, on the southern flanks of Palomar Mountain. Native wetland vegetation is located along Frey Creek, a U.S.G.S. “blue-line” stream that runs along the western property boundary. Several other drainages cross the property in a north-south direction. All of these drainages are tributaries to the SLRR, which is located just south of the project site, across Highway 76.

The Shadow Run Ranch property is located in a rural part of San Diego County. Land uses on surrounding parcels include active agriculture (to the west and southeast), scattered homes (to the southeast), and undisturbed areas to the north, south, and southwest. All adjoining lands are under private ownership. No preserved lands adjoin or are contiguous with the project site.

1.4.1 Regional Context

In general, the regional context of the Shadow Run Ranch property can be described as follows: Within the context of San Diego County’s Multiple Species Conservation Program (MSCP) draft North County Subarea Planning area, the site has been designated as a Pre-approved Mitigation Area (PAMA). The draft North County MSCP Planning area is a proposed NCCP Subarea to the Subregional MSCP. The site has been designated in the draft North County MSCP plan as to be receiving “Take Authorization” for a suite of species associated with this portion of the County. As mentioned previously, the site is not directly adjacent to any preserved lands, national forest lands, or BLM lands, although the Cleveland National Forest is located a short distance to the north of the property. However, sovereign Native American lands adjoin the property, as the Pauma Indian Reservation is located immediately to the east of the site, and the Pala Indian Reservation adjoins part of the western property. Frey Creek constitutes a jurisdictional waterway, and portions of the site qualify as a part of the SLRR watershed. Furthermore, as mentioned above, the site is situated on the southern flanks of Palomar Mountain, and the native vegetation on the northern and western portions of the site is continuous with the large block of habitat associated with Palomar Mountain and the Cleveland National Forest. Please refer to Figures 1 and 4, which show the relationship of the project site with surrounding lands.

1.4.2 Habitat Types/Vegetation Communities

The Shadow Run Ranch property supports several native upland and wetland plant associations. Also present are developed and disturbed areas. The habitats found onsite, within the proposed road alignments, and generally surrounding the property consist of the following: Orchards and Vineyards, Chamise Chaparral, Diegan Coastal Sage Scrub, Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Floodway, Coast Live Oak Woodland, Open Water, Disturbed Habitat, Urban/Developed, and Field/Pasture. The Shadow Run Ranch property is relatively diverse in terms of habitats, species abundance (see Table 4), composition and vegetative structure. The most significant of the onsite habitats with respect to conservation value (in terms of regional and local importance relative to other areas of similar habitat offsite) are the riparian areas (Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, and Floodway) and the areas of

sage scrub, chaparral, and oak woodland (Diegan Coastal Sage Scrub, Chamise Chaparral, and Coast Live Oak Woodland). The least significant habitat-types from a regional and local importance context are the areas of Open Water, Orchards and Vineyards, Disturbed Habitat, Urban/Developed, and Field/Pasture. The approximate configuration of each of the onsite and portions of offsite habitats is shown on Figure 2. Habitat-types present onsite and offsite are described below. Portions of the site burned in the Poomacha Fire of October 2007. These areas, and the status of the habitats that they support, are also discussed below.

Orchards and Vineyards (Holland Code 18100) – 142.1 acres onsite + 0.8 acre offsite

Orchards and Vineyards (OV), in the form of active citrus (*Citrus* sp.) and Avocado (*Persea americana*) groves, covers the majority of the property. This habitat type is dominated by orchard trees, with an understory of occasional grove weeds, such as Spotted Spurge *(Chamaesyce maculata)*, White Tumbleweed *(Amaranthus albus)*, and others. Some ornamental plants, including Pomegranate *(Prunica granatum),* Peruvian Peppertree *(Schinus molle),* and other small trees and horticultural shrubs, are also associated with the OV. OV is present within the offsite access road. The biological resource value of this habitat-type is relatively low. OV is considered non-sensitive in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The OV onsite likely does not qualify as Sensitive Habitat Lands as defined by the Resource Protection Ordinance (RPO).

Chamise Chaparral (Holland Code 37200) – 0.5 acre

Chamise Chaparral (CC) vegetation covers the extreme northern edge of the Shadow Run Ranch property. Indicators in this dense, brushy habitat include Chamise *(Adenostoma fasciculatum),* Mission Manzanita *(Xylococcus bicolor),* and other hard-woody shrubs. Most of the onsite CC was formerly dense and relatively impenetrable, although most of this habitat was burned during the Poomacha Fire. It is currently regrowing. Chamise Chaparral continues offsite to the north. The biological resource value of the CC is moderate to high, based on its species composition and proximity to large-block areas to the north. CC is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The CC onsite likely qualifies as Sensitive Habitat Lands as defined by the RPO, insofar as it has a potential to support "the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq)" (RPO Section 86.602(n)).

Diegan Coastal Sage Scrub (Holland Code 32500) – 50.0 acres onsite

Diegan Coastal Sage Scrub (CSS) vegetation is found mostly on the northern and western portions of the site in association with south-facing slopes and the floodplain of Frey Creek. There are also several small patches of remnant or successional CSS associated with large rock outcrops scattered throughout the agricultural area. Indicators in this habitat include Flat-top Buckwheat *(Eriogonum fasciculatum)*, California Sagebrush *(Artemisia californica)*, California Brickellbush (*Brickellia californica*), Laurel Sumac (*Malosma laurina*), Our Lord's Candle (*Yucca whipplei*), and other soft-woody shrubs. The CSS in Frey Creek is interspersed with mature Coast Live Oaks (*Quercus agrifolia*), which are mapped as Coast Live Oak Woodland where the canopies of the trees are less than 100 feet apart. Small California Sycamores (*Platanus racemosa*) are also occasional in the CSS in Frey

Creek. The CSS on the northernmost portion of the property was burned in the Poomacha Fire. This area is re-generating and is expected to fully recover. The biological resource value of the large-block areas of CSS is high, based on the presence of sensitive species and habitat connectivity. The small patches of CSS located within the groves are of limited biological resource value. CSS is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The CSS onsite likely qualifies as Sensitive Habitat Lands as defined by the RPO, insofar as it has a potential to support "the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq)" (RPO Section 86.602(n)).

Southern Sycamore-Alder Riparian Woodland (Holland Code 62400) – 2.46 acres

The headwaters of Frey Creek, located on the northeastern-most portion of the property, support a substantial Southern Sycamore-Alder Riparian Woodland (SSARW). This habitat-type was burned in the October 2007 wildfire, but is re-generating vigorously. The canopy of the SSARW is currently open, although it is anticipated that it will close as this habitat-type recovers. Some areas are likely to remain fairly open, particularly at the western boundary of the SSARW where it converts to Southern Coast Live Oak Riparian Forest. Indicators in the SSRAW include White Alder (*Alnus rhombifolia*), Red Willow (*Salix laevigata*), and Black Cottonwood (*Populus trichocarpa*), re-sprouting California Sycamores and Coast Live Oaks, and herbaceous wetland species, such as Desert Grape (*Vitis girdiana*), California Blackberry (*Rubus ursinus*), and Poison Oak (*Toxicodendron diversilobum*). This habitat-type continues offsite to the northeast. The biological resource value of this wetland habitat-type is very high, based on its scarcity in the County of San Diego and its connectivity to other wetland habitat-types along Frey Creek. SSARW is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The SSARW onsite likely qualifies as Sensitive Habitat Lands as defined by the RPO, insofar as it has a potential to support "the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq)" (RPO Section 86.602(n)).

Southern Coast Live Oak Riparian Forest (Holland Code 61310) – 3.32 acres

The floodplain of Frey Creek immediately to the west of the SSARW supports Southern Coast Live Oak Riparian Forest (SCLORF). This habitat-type also burned in the Poomacha Fire and is currently re-generating. Due in part to the fire, the canopy of the SCLORF is very open. It is expected that more cover will be provided as the Coast Live Oaks and California Sycamores that form the overstory of this habitat-type re-grow, although it is unlikely that this area will ever support a completely closed canopy. Understory species in the SCLORF include scattered Mule Fat (*Baccharis glutinosa*), Douglas Sagewort (*Artemisia douglasiana*), and CSS species. The onsite SCLORF exhibits habitat connectivity with additional SCLORF offsite to the west and SSARW to the east. The biological resource value of this wetland habitat-type is high. SCLORF is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The SCLORF onsite likely qualifies as Sensitive Habitat Lands as defined by the RPO, insofar as it has a potential to support "the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California

Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq)" (RPO Section 86.602(n)).

Floodway (Holland Code 13200) – 2.05 acres

The floodway (i.e., incised channel) of Frey Creek qualifies as supporting Floodway habitat. This habitat-type consists mainly of bare sand, gravel, and small to very large boulders. Riparian species, such as Mule Fat, Arroyo Willow (*S. lasiolepis*), and Western Cottonwood (*Populus fremontii*), and upland scrub species are occasional in the Floodway. This habitat-type continues offsite to the southwest in the floodway of Frey Creek. Floodway is of high biological resource value. Floodway is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The Floodway onsite likely qualifies as Sensitive Habitat Lands as defined by the RPO, insofar as it has a potential to support "the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq)" (RPO Section 86.602(n)).

Coast Live Oak Woodland (Holland Code 71160) –23.8 acres onsite

Both Dense and Open Coast Live Oak Woodland (CLOW) are found onsite in areas where mature Coast Live Oak trees are dominant or co-dominant. Because these two habitat-types are so similar, and in places are difficult to distinguish from each other, they are both mapped simply as CLOW. CLOW occurs onsite within the floodplain of Frey Creek, on a north-facing slope on the northern portion of the property, and in several patches scattered throughout the groves. The understory of the CLOW within Frey Creek, on the northern portion of the property, and to the south of the reservoir consists mostly of CSS shrubs, Poison Oak, and other native species. The understory of the patches of CLOW located within the groves consists of citrus trees, weeds, and developed areas. Isolated Coast Live Oaks are also found scattered throughout the groves, but these trees are not mapped as part of the CLOW because they do not function as part of this habitat-type. CLOW occurs offsite to the west, east, and south. The biological resource value of the CLOW onsite is moderate to high, depending on patch size, habitat connectivity, and understory species composition. CLOW is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The CLOW onsite likely qualifies as Sensitive Habitat Lands as defined by the RPO, insofar as it has a potential to support "the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq)" (RPO Section 86.602(n)).

Open Water (Holland Code 13100) – 2.67 acres

The site's water storage reservoir supports Open Water (OW). This feature is man-made, and appears to be lined and heavily treated. It is not located in any watercourse. A single small stand of Cattails (*Typha latifolia*) is found at the edge of the reservoir and is mapped as part of the OW. The reservoir also supports aquatic macrophytes (submersed aquatic plants) in shallow areas as well as introduced game fish. A second water storage reservoir is located offsite along Adams Drive. This feature is also man-made, and appears to be lined and heavily treated. The water storage reservoir adjacent to Adams Drive will not be impacted by offsite road improvements. The biological

resource value of this habitat-type is low due to its man-made origin and ongoing maintenance. Nevertheless, OW is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The OW onsite likely does not qualify as Sensitive Habitat Lands as defined by the RPO.

Disturbed Habitat (Holland Code 11300) – 11.0 acres

Disturbed Habitat (DH) is found onsite in the form of dirt roads not directly associated with the existing grove activities and cleared areas. The DH consists mostly of bare dirt with occasional weedy species, such as Common Horseweed (*Conyza canadensis*), Perennial Mustard (*Brassica geniculata*), Stephanomeria (*Stephanomeria virgata*), and others. The biological resource value of this habitat-type is low. DH is considered non-sensitive in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The DH onsite likely does not qualify as Sensitive Habitat Lands as defined by the RPO.

Urban/Developed (Holland Code 12000) – 9.8 acres State Highway 76, which runs offsite along the southern property boundary, qualifies as supporting Urban/Developed (U/D) habitat. U/D is also found onsite in the form of several single family homes and trailers. Several paved agricultural roads bisect portions of the property; however, these are mapped as part of the OV for analysis purposes. The biological resource value of this habitat-type is low to non-existent. U/D is considered non-sensitive in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The U/D onsite likely does not qualify as Sensitive Habitat Lands as defined by the RPO.

Field/Pasture (Holland Code 18310) – 0.5 acre onsite

Field/Pasture (F/P) is located along the southern edge of the property to the south of SR 76, This area contains a narrow strip of Field/Pasture (F/P). The F/P continues offsite to the south, where it is grazed by hoof stock and supports mostly irrigated turf with weeds growing along its fringes. The biological resource value of this habitat-type is moderate, as it does provide open area for raptor foraging. F/P is considered sensitive in San Diego County, according to the County of San Diego Guidelines for Determining Significance pursuant to CEQA. The F/P onsite likely does not qualify as SHL as defined by the RPO because it does not appear to support rare or endangered species, and is not part of any wildlife corridor as defined by Section 15380 of the State CEQA Guidelines

1.4.3 Flora

One hundred and eighty-five species of vascular plants were detected on the Shadow Run Ranch property. The plant species observed typify the diversity normally found in agriculture, CSS, riparian habitats, and disturbed/developed areas in this part of San Diego County. A complete list of the plants detected, listed alphabetically, can be found in Table 4, attached. This list would be expected to represent at least 80 percent of the naturalized plants occurring on this site. The ornamental plants surrounding the existing homes and trailers were not inventoried and are not included in Table 4.

1.4.4 Fauna

Ninety species of animals were observed using the Shadow Run Ranch project site. These are mostly common species, abundant in the site's general vicinity. Animals observed onsite are listed in Table 5, attached. This list is generally representative of the native fauna that resides onsite, although many additional species are anticipated. In particular, the invertebrate fauna of this site is anticipated to consist of at least hundreds of species.

1.4.5 Sensitive Plant Species

No sensitive plant species were observed on the Shadow Run Ranch property during the field surveys. Sensitive plants are those listed as "Rare", "Endangered", "Threatened", "of Special Concern", or otherwise considered sensitive by the County of San Diego or any state or federal agency. A number of sensitive plant species are known from the general vicinity of this property, and some of these have the potential to occur onsite. These are listed in an annotated form in Table 6.

1.4.6 Sensitive Animal Species

Thirteen species of sensitive animal were observed on the Shadow Run Ranch project site during the field surveys. These are Cooper's Hawk, White-tailed Kite, Turkey Vulture, Yellow Warbler, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Great Blue Heron, Mountain Lion, Bobcat, Mule Deer, San Diego Desert Woodrat, Coastal Western Whiptail, and Orange-throated Whiptail. Sensitive animals are those listed as "Rare", "Endangered", "Threatened", "of Special Concern" or otherwise noteworthy by the County of San Diego or any state or federal agency.

Other sensitive animals known from the general vicinity of the property are listed in Table 7. A few of these probably occur onsite, at least on an occasional basis, particularly other wide-ranging foragers, such as various species of rare bats, raptors, reptiles, etc. Where applicable, CNDDB Forms for each of the resident sensitive species below can be found in Attachment C.

Cooper's Hawk / *Accipiter cooperii*
Listing: "Species of Local Concern" (Tate, 1986)
County status: San Diego County Sensitive Animal List, Group 1 (DPLU, 2006)
State status: "Watch List" (CDFW, 2008)
Federal status: Protected Raptor (16 U.S.C. 668-668d, 54 Stat. 250), as amended
Distribution: Occurs throughout most of North America, from northern Mexico to southern Canada.
Habitat(s): Inhabits a variety of woodlands, including oak woodlands, riparian and coniferous forests.
Status on Site: Several specimens observed flying over portions of the grove and open areas of Frey Creek. This species probably nests onsite in wooded areas. First reported from the site by URS in 2001.

Southern California Rufous-crowned Sparrow / *Aimophila ruficeps canescens*
Listing: "Declining" (Unitt, 1984)
County status: San Diego County Sensitive Animal List, Group 1 (DPLU, 2006)
State status: "Watch List" (CDFW, 2008)
Federal status: Former Federal Endangered Species Candidate, C2 (USFWS, 1996)

Distribution: From Ventura County south to northern Baja California.
Habitat(s): Almost wholly restricted to extensive areas of sage scrub and chaparral vegetation within the coastal lowland of Southern California.
Status on Site: Single specimen observed foraging near the western edge of the property along Frey Creek. First reported from the site by URS in 2001.

Great Blue Heron / *Ardea herodias*
Listing: "Species of Special Concern" (NAS, 1990)
County status: San Diego County Sensitive Animal List, Group 2 (DPLU, 2006)
Federal/State status: none
Distribution: Occurs throughout the United States in association with wetlands.
Habitat(s): Found in a variety of marshy habitats; lakes, ponds, river edges, other wetland areas.
Status on Site: Several specimens were observed foraging in the shallow water at the edge of the site's water storage reservoir and flying over the groves. First reported from the site by URS in 2001.

Red-shouldered Hawk / *Buteo lineatus*
Listing: "Blue List" (Tate, 1986)
County status: San Diego County Sensitive Animal List, Group 1 (DPLU, 2006)
State status: none
Federal status: Protected Raptor (16 U.S.C. 668-668d, 54 Stat. 250), as amended
Distribution: Central and southern California west of the Sierras. Also occurs in Mexico, southeastern Canada, and the eastern United States.
Habitat(s): Mainly inhabits a variety of woodland habitats, including oak woodlands and larger eucalyptus stands.
Status on Site: Several individuals were seen flying over the grove and wooded areas along Frey Creek. Specimens probably nest onsite. First reported from the site by URS in 2001.

Turkey Vulture / *Cathartes aura*
Listing: "Blue-list" (Tate, 1986)
"Declining" (Unitt, 1984)
County status: San Diego County Sensitive Animal List, Group 1 (DPLU, 2006)
Federal/State status: none
Distribution: Ranges from southern Canada to Argentina.
Habitat(s): Open areas, farmlands, grasslands. Usually seen soaring overhead or sometimes perched on poles, dead trees, or on the ground.
Status on Site: Several adult specimens were observed soaring over the property during the field surveys. Potential nesting habitat present onsite in steep, remote areas associated with the far northern edge of the property, although no nests were specifically detected. Roosting was observed on and adjoining the property. First reported from the site by URS in 2001.

Yellow Warbler / *Dendroica petechia brewsteri*
Listing: County status: San Diego County Sensitive Animal List, Group 2 (DPLU, 2006)
State status: "Species of Special Concern" (CDFW, 2008)
Federal status: none
Distribution: Nesting typically occurs in willow-dominated riparian areas from Canada to northern Mexico. Specimens over winter in the area from Mexico south to South America. Yellow warblers are found throughout San Diego County.
Habitat(s): Yellow Warblers breed during the summer in moist wooded habitats, however they can be found most everywhere during migration. In San Diego County, they are typically found in riparian thickets.
Status on Site: This species was reported from the site by URS in 2001. No additional information on numbers, locations, or onsite distribution is available.

White-tailed Kite / *Elanus leucurus*
Listing: County status: San Diego County Sensitive Animal List, Group 1 (DPLU, 2006)
State status: **"**Fully Protected" (CDFW, 2008)

Federal status: Protected Raptor (16 U.S.C. 668-668d, 54 Stat. 250), as amended
Distribution: White-tailed Kites breed primarily along the coastal lowland, and the species occurs over a broad area of the western U.S. through Mexico and into South America.
Habitat(s): Roost and nest in a variety of woodland habitats. Mainly riparian woodlands, oak groves, related habitats.
Status on Site: Single specimen observed foraging over Frey Creek. Kites may nest onsite, although nesting was not specifically detected.

Mountain Lion / *Felix concolor*
Listing: County status: San Diego County Sensitive Animal List, Group 2 (DPLU, 2006); "MSCP Indicator" (DPLU, 1993)
State status: Regulated Game Animal (CDFW, 2003); Regulated Furbearer (CDFW, 2003)
Federal status: none
Distribution: Most wide-ranging mammal in the western hemisphere; from the Canadian forests to Patagonia.
Habitat(s): Diversity of habitats in California, including chaparral, sage scrub, woodlands, and forests. Very secretive species, usually undetected.
Status on Site: Diagnostic tracks observed near the southwestern corner of the property within the floodplain of Frey Creek. Specimens apparently move down the creek to access the SLRR.

Bobcat / *Lynx rufus*
Listing: County status: none
State status: “Regulated Furbearer” (CDFW, 2003)
Federal status: none
Distribution: Southern Canada to central Mexico.
Habitat(s): Brushy areas, including chaparral, sage scrub, woodlands, and forests. Rarely seen during daylight hours. Secretive and often occurs on properties without being readily detected.
Status on Site: Scats and tracks observed in various areas, indicating movement throughout most of the property. First reported from the site by URS in 2001.

San Diego Desert Woodrat / *Neotoma lepida intermedia*
Listing: County status: County status: County of San Diego Sensitive Animals List, Group 2 (DPLU, 2006)
State status: “Species of Special Concern” (CDFW, 2008)
Federal status: none
Distribution: Coastal slopes areas of Southern California.
Habitat(s): Resident in xeric coastal sage scrub and adjoining chaparral where it constructs distinctive stick mounds.
Status on Site: This species was reported from the site by URS in 2001. No additional information on numbers, locations, or onsite distribution is available.
Comments: San Diego Desert Woodrats are declining primarily as a result of habitat loss through urbanization or agricultural conversion of coastal habitat areas.

Mule Deer / *Odocoileus hemionus*
Listing: County status: San Diego County Sensitive Animal List, Group 2 (DPLU, 2006); "MSCP Indicator" (DPLU, 1993)
State status: “Regulated Game Animal” (CDFW, 2003)
Federal status: none
Distribution: Much of western North America from Mexico to southern Canada. Fairly common in San Diego County foothills.
Habitat(s): Woodlands, chaparral, sage scrub, grasslands. Usually indicated by distinctive scats, occasionally by sightings of specimens themselves.
Status on Site: Scats and tracks observed onsite in various areas, mostly along the fringe of Frey Creek.

Orange-throated Whiptail / *Cnemidophorus hyperythrus beldingi*
Listing: County status: San Diego County Sensitive Animal List, Group 2 (DPLU, 2006)
State status: “Species of Special Concern” (CDFW, 2008)

Federal status: Former Federal Endangered Species Candidate, C2 (USFWS, 1996)
Distribution: Extreme southwestern California; from Orange and Riverside Counties south into northern Baja California.
Habitat(s): Inhabits coastal sage scrub, chaparral and areas of open brush with loose soils. May also be found in open, dry riparian areas. Sea level to about 1,800 feet MSL, occasionally higher on hot, south-facing slopes.
Status on Site: Several Orange-throated Whiptails were observed onsite in association with the CSS. This species is anticipated to be well-distributed onsite in open areas. First reported from the site by URS in 2001.

Coastal Western Whiptail / *Cnemidophorus tigris multiscutatus*
Listing: County status: San Diego County Sensitive Animal List, Group 2 (DPLU, 2006)
State status: none
Federal status: Former Federal Endangered Species Candidate, C2 (USFWS, 1996)
Distribution: Cismontane areas of southern California south into Baja California Norte, Mexico
Habitat(s): Mainly inhabits coastal sage scrub and chaparral where it occurs in areas of friable soils on hillsides and in canyons but also may be found in open, dry riparian areas.
Status on Site: A single Coastal Western Whiptail was observed on the northern portion of the site within the SCLORF. Anticipated to be a fairly common resident species.

As discussed in sections 1.3.3 and 1.3.4, it is assumed that the project site is potentially "occupied" by Least Bell's Vireo and Southwestern Willow Flycatcher during part of the year. In addition to these and the thirteen sensitive species listed above, there are seven other sensitive species with a high probability of occurrence on the Shadow Run Ranch project site (Table 7). These are Monarch Butterfly *(Danaus plexippus)*, San Diego Ringneck Snake (*Diadophis punctatus similis*), Coronado Skink *(Eumeces skiltonianus interparietalis)*, Northern Red Diamond Rattlesnake *(Crotalus ruber ruber)*, San Diego Coast Horned Lizard (*Phrynosoma coronatum blainvillei*), Coast Patched-nosed Snake *(Salvadora hexalepis virgultea)*, and Western Spadefoot *(Scaphiopus hammondii)*. Monarch Butterflies would occur in open areas of the site, resting on trees and possibly foraging on milkweed, etc. San Diego Ringneck Snake and Coronado Skink would occur in large numbers in many areas of the site, residing in most habitats except for the managed agricultural areas. Northern Red Diamond Rattlesnake, San Diego Coast Horned Lizard, Coast Patch-nosed Snake, and Western Spadefoot likely occur in association with the native upland habitats including the CSS, chaparral, and Frey Creek. Spadefoots may also breed in the riparian areas. The onsite populations of each of these species are not anticipated to be regionally significant, as all of these species occur throughout cismontane southern California in areas of suitable habitat.

1.4.7 Wetlands/Jurisdictional Waters

The Shadow Run Ranch property supports regionally-significant wetlands (Figure 7). Areas of the site that fall within the floodway of Frey Creek qualify as supporting federal (ACOE-defined), state (CDFW-defined), and county (RPO) wetlands, as well as "waters of the State" and "waters of the United States". Other federal and state jurisdictional areas onsite include the SCLORF and an unvegetated upland swale that drains the center of the site. A second unvegetated upland swale is present offsite near the project's southeastern corner. All of these areas likely qualify as state wetlands and state and federal "waters", but not federal or county wetlands. Although the Open Water of the reservoir supports wetland habitat, it does not qualify as jurisdictional wetlands or "waters" due to the fact that it is a man-made, lined,

agricultural feature that is constantly being maintained. The current definitions utilized by these agencies with respect to wetlands regulation are as follows:

Federal Wetland Definitions

The federal regulations that implement Section 404 of the Clean Water Act (CWA), which was enacted in 1977, define "wetlands" as follows:

"Those areas that are inundated or saturated by surface or ground water (hydrology) at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). Wetlands generally include swamps, marshes, bogs, and similar areas." (40 CFR 232.2(r).

Federal jurisdictional wetlands that are regulated by the ACOE under Section 404 of the CWA must exhibit all three of the above characteristics: hydrology, hydrophytes, and hydric soils (ACOE, 1987). Areas that may function as wetlands ecologically, but exhibit one or two of the three characteristics, do not currently qualify as federal jurisdictional wetlands, thus activities in these wetlands are not regulated under Section 404.

The ACOE also regulates the discharge of dredge and/or fill material into non-wetland "waters of the United States". The term "waters of the United States" is defined by Corps regulations at 33 CFR Part 328.3 9(a) as:

1) *All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
2) *All interstate waters including interstate wetlands;*
3) *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:*
   (i) which are or could be used by interstate or foreign travelers for recreational or other purposes; or
   (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
   (iii) which are used or could be used for industrial purpose by industries in interstate commerce;
4) *All impoundments of waters otherwise defined as waters of the United States under the definition;*
5) *Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;*
6) *The territorial seas;*
7) *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section.*

The ACOE also takes jurisdiction in non-tidal waters when wetlands are not present according to the ordinary high water mark (OHWM). This is defined as:

> *"…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."*

State Wetland Definitions

According to the definition used by the CDFW, wetlands are *"lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water,"* and they exist where any one of the following conditions are present:

A) Predominantly undrained hydric soils (soils with low concentrations of oxygen in the upper layers during the growing season);
B) a predominance, at least periodically, of hydrophytic plants (plants that have adapted to the low availability of oxygen and others stresses in saturated soils);
C) a nonsoil substrate (such as a rocky shore) that is saturated with water or covered by shallow water each year at some point during the growing season.

The California version of CWA is the Porter-Cologne Act, which established the State Water Resources Control Board and the California Regional Water Quality Control Boards (CRWQCB) to oversee use and protection of the "waters of the state". In California, all surface waters and groundwater are "waters of the state".

County Wetland Definitions

The County of San Diego's recently amended (2007) RPO defines "Wetlands" as follows:

(1) Lands having one or more of the following attributes are "wetlands":
(aa) At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
(bb) The substratum is predominantly undrained hydric soil; or
(cc) An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

(2) Notwithstanding paragraph (1) above, the following shall not be considered "Wetlands":
(aa) Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:
(i) Have negligible biological function or value as wetlands;
(ii) Are small and geographically isolated from other wetland systems;
(iii) Are not Vernal Pools; and,
(iv) Do not have substantial or locally important populations of wetland dependent sensitive species.
(bb) Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:
(i) Have negligible biological function or value as wetlands even if restored to the extent feasible; and,
(ii) Do not have substantial or locally important populations of wetland dependent sensitive species.

According to the current version of the "County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources" (DPLU, 2010), the County recognizes "non-wetland waters of the U.S." as a sensitive resource, requiring compensatory mitigation for impacts to this resource at a 1-to-1 ratio.

County Wetland Discussion

The only areas of the site that qualify as RPO wetlands are the floodway of Frey Creek (the area mapped as Floodway) and the associated Southern Sycamore-Alder Riparian Woodland. Certain other portions of the site qualify as state wetlands and federal and state "waters" but not as RPO wetlands. These areas are either: (1) natural, but fail to meet the requisite criteria pursuant to the RPO definitions, or (2) man-made, degraded, or of otherwise limited wetland function

and value, even if restored to the extent feasible. For a more detailed discussion of the RPO status of each of the onsite wetland areas, see below.

Description of Onsite Wetlands

The wetland habitat present on the Shadow Run Ranch project site and offsite within the proposed southerly road alignment consists of those areas that support Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Open Water, and Floodway, as well as two unvegetated upland swales. The wetland habitat can be described in terms of disturbance, canopy cover, species diversity, and connectivity to offsite habitat. It should be noted that the SSARW, SCLORF, and Floodway are currently being de-watered by the presence of an irrigation retention and pumping structure within Frey Creek where it enters the property at its eastern boundary.

The SSARW onsite currently supports an open canopy, due to the fact that it was burned in the Poomacha Fire of 2007. However, it is anticipated that the canopy of this habitat-type will close as it matures. This habitat-type is mostly undisturbed, besides the presence of the de-watering structure described above. The species diversity of the SSARW is high. This habitat-type is continuous with SCLORF to the west and additional SSARW to the west and northwest. The wetland associated with the SSARW qualifies as RPO wetlands because this resource supports a predominance of hydrophytes, and in some places its substratum may be predominantly undrained hydric soil. This habitat-type is natural and of high biological function and value as a wetland.

As described above, the SCLORF is characterized by a very open canopy, due in part to the fact that it was burned in 2007, although it is unlikely that the canopy will ever completely close. The presence of a de-watering structure within the creek upstream from this habitat-type likely contributes to its open nature. This habitat shows minimal signs of disturbance, however, and its species diversity is high. As discussed above, the SCLORF exhibits unbroken habitat connectivity with SCLORF offsite to the west and SSARW on and offsite to the east. The wetland associated with the SCLORF does not qualify as an RPO wetland because it does not support a predominance of hydrophytes, a substratum that is predominantly undrained hydric soil, or an ephemeral or perennial stream is present whose substratum is predominately non-soil.

The site's water storage reservoir supports Open Water. This man-made feature is lined and appears to be heavily treated with chemicals; it is therefore subject to a high degree of disturbance. It exhibits no connectivity to other wetland habitat-types, and its species diversity is limited to a small patch of Cattails, some aquatic macrophytes, and introduced game fish. The wetland associated with the Open Water onsite does not qualify as an RPO wetland because this resource is man-made and has negligible biological function or value as natural wetlands; it is small and geographically isolated from other wetland systems; it is not a vernal pool; and it does not support substantial or locally important populations of wetland dependent sensitive species.

As mentioned previously, Frey Creek, which runs along the western side of the property, supports high-value Floodway habitat with some signs of disturbance. The disturbance consists of several existing dirt crossings with

associated culverts and signs of old dumping, old water lines, and wells, etc. As discussed above, the floodway of Frey Creek is mostly unvegetated and its species diversity (with respect to hydrophytes) is relatively low. The floodway of the creek is of local and regional importance, particularly with respect to wildlife corridor function, and habitat connectivity to upstream and downstream hydrological units is present unbroken to the southwest and northeast. The wetland associated with the floodway of Frey Creek (the area mapped as Floodway) qualifies as an RPO wetland, as it supports an ephemeral or perennial stream whose substratum is predominately non-soil, and such lands contribute substantially to the biological functions or values of wetlands in the drainage system. This habitat-type is natural and of high biological function and value as a wetland.

Two unvegetated upland swales are found within the project footprint; one is onsite and the other offsite. The onsite swale drains through the center of the southern portion of the property. This drainage feature is channelized over its entire length, beginning as a dirt drainage ditch that eventually becomes rock-lined. The offsite unvegetated upland swale, which is present a short distance offsite to the southeast is also channelized and highly disturbed. Both of these features flow under the canopy of CLOW for parts of their length, although the drainages themselves are completely unvegetated and do not support hydric soils. Both upland swales have been highly manipulated and disturbed by past legal land disturbance activities to the point where they have negligible biological function or value as wetlands even if restored to the extent feasible. Furthermore, these swales do not support substantial or locally important populations of wetland dependent sensitive species. Therefore, neither swale qualifies as an RPO wetland. However, both drainages may qualify as state wetlands and state and federal "non-wetland waters of the U.S." because they drain into the SLRR to the south.

Wetland functions, including biophysical benefits, such as groundwater recharge and discharge, flow alteration, sediment stabilization, erosion control, toxicant retention, nutrient removal and cycling, and wildlife habitat for diversity and abundance, are provided, at least in part, by most of the wetland areas on the Shadow Run Ranch site with the exception of the unvegetated upland swales. Flood control functioning is generally limited to the floodway of Frey Creek. Wetland values provided by the segment of Frey Creek supported by Shadow Run Ranch are high, as the watercourse provides significant flowage into the SLRR to the south.

Dominant plant species in these areas are listed above in Section 1.4.2. Wildlife species present include a diversity of riparian birds, non-native fish, amphibians, and others. Frey Creek is a locally and regionally important waterway. It provides a corridor for regional wildlife movement and a nursery site for various native birds and amphibians. Additionally, the SLRR, which connects to Frey Creek a short distance to the south of the project site, is known to support Least Bell's Vireo, Southwestern Willow Flycatcher, and Arroyo Toad, all of which are listed species. The project site is considered potentially "occupied" by Least Bell's Vireo and Southwestern Willow Flycatcher.

1.4.8 Habitat Connectivity and Wildlife Corridors

The Shadow Run Ranch site provides both locally important and regionally important wildlife corridors. Local corridors facilitate wildlife movement from nesting or sheltering areas to nearby sources of food, water, or similar daily necessities. Regional corridors provide movement areas between large habitat blocks, facilitating animal

migration on a larger scale. Frey Creek functions as both a local and regional wildlife corridor, connecting the SLRR with the expansive, natural slopes on the south flanks of Palomar Mountain. This corridor extends along the western side of the property, beginning offsite to the north on forest service lands, and ending at the SLRR, where up-river/down-river dispersal and movement occurs (Figure 5).

Many species of wildlife are dependent on the ecological functions provided by the Shadow Run Ranch site. Numerous large mammals occur onsite, such as Mountain Lion (*Felis concolor*), Mule Deer (*Odocoileus hemionus*), Bobcat (*Lynx rufus*), Coyote *(Canis latrans)*, and Gray Fox (*Urocyon cinereoargenteus*). All of these species clearly utilize the wildlife corridor provided by Frey Creek. Various rodents and lagomorphs, scores of riparian and other birds, reptiles, and amphibians are also known to use resources found on the project site.

The entire Shadow Run Ranch property provides foraging habitat for raptors, although the most high-value areas, in terms of raptor foraging, are composed of the scrub and woodlands (depending on the raptor species). Raptor species present onsite include Cooper's Hawk (*Accipiter cooperii*), Red-shouldered Hawk (*Buteo lineatus*), Red-tailed Hawk (*Buteo jamaicensis*), and others. Additional raptor species likely occur onsite, at least on an occasional basis. Any of the tall trees onsite could support raptor nesting activities.

1.5 Applicable Regulations

Development of the Shadow Run Ranch property is subject to discretionary environmental review in compliance with CEQA, the RPO, FESA, CESA, the CWA and other applicable environmental regulations. The purpose of this review is to ensure that the project will not result in significant, adverse, unmitigated impacts to the environment. In this case, it applies specifically to endangered species, protected habitats, wetlands, and other sensitive biological resources.

2.0 PROJECT EFFECTS

Anticipated impacts to habitats were calculated by determining the acreage of each habitat affected by site development, including future grading, estimated fire clearing, road and home construction, and landscaping. These impact acreages are summarized below in Table 2. This analysis assumes full development/residential usage of all areas not specifically conserved within one of the three proposed open space easements, as shown on the project TM (Figures 2). The "impact neutral" column in Table 2 refers to habitats found within the required RPO wetland buffer.

Measurable impacts would result from the development of Shadow Run Ranch property. Direct impacts result from the removal of habitat, plants, and animals from the site through grading and brushing, clearing, or thinning for fire protection purposes, agriculture, etc. These direct impacts are considered permanent because they result in a conversion of habitats to landscaped areas, structures, roads, etc. Indirect impacts also affect plants, animals, and habitats that occur on or near a project site. These are not the direct result of grading or development, but are the result of changes in land

use as a by-product of adjacency. Examples of indirect impacts include the introduction of exotic species, human or pet intrusions into natural areas, lighting, traffic, and noise. Indirect impacts are often called "edge effects".

Species Impacts

Thirteen sensitive species were detected on the Shadow Run Ranch project site: Cooper's Hawk, White-tailed Kite, Turkey Vulture, Yellow Warbler, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Great Blue Heron, Mountain Lion, Bobcat, Mule Deer, San Diego Desert Woodrat, Coastal Western Whiptail, and Orange-throated Whiptail. The project site is considered potentially "occupied" by Least Bell's Vireo and Southwestern Willow Flycatcher. Seven additional sensitive species have a high probability of occurring onsite: Monarch Butterfly, San Diego Ringneck Snake, Coronado Skink, Northern Red Diamond Rattlesnake, San Diego Coast Horned Lizard, Coast Patched-nosed Snake, and Western Spadefoot. All resident sensitive species, as well as non-sensitive species, could be directly and/or indirectly impacted by the project. As mentioned, direct impacts result from the actual removal of plants and animals from the site as a product of the removal of their habitat. Indirect impacts would primarily consist of edge effects impacting natural areas onsite and adjoining offsite areas that are utilized by the resident plant and animal species.

Impacts to Wildlife Corridors, Linkages and Nursery Sites

The Shadow Run Ranch project will have minimal adverse impacts on wildlife corridors, linkages, or nursery sites. The project preserves the local and regional wildlife corridor functions along Frey Creek in biological open space. Reproduction areas (nursery sites) are also being conserved via the protection of the creek and the hillsides associated with Palomar Mountain.

Table 2. Habitat Impacts

Habitat	Existing Acres	Impacted Acres	Preserved (Mitigation) Acres in BOSE	Impact Neutral Acres in BOSE
Orchards and Vineyards	142.1 onsite + 0.8 offsite	95.8 onsite + 0.8 offsite	6.4	5.5
Chamise Chaparral	0.5	none	0.5	none
Diegan Coastal Sage Scrub	50.0	1.2	25.0	20.2
Southern Sycamore-Alder Riparian Woodland	2.46	none	none	2.46
Southern Coast Live Oak Riparian Forest	3.32	none	trace	3.29
Floodway	2.05	none	none	2.05
Coast Live Oak Woodland	23.8	3.0	7.5	9.6

Open Water	2.67	none	none	none
Disturbed Habitat	11.0	none	2.7	6.1
Urban/Developed	9.8	9.3	0.1	0.1
Field/Pasture	0.5	0.5	none	none
TOTALS [1]	248.2 onsite + 0.8 offsite	109.8 onsite + 0.8 offsite	42.2	49.3
(Non-Wetland Waters of the U.S.)	3.07	0.015	none	none

3.0 SPECIAL STATUS SPECIES

3.1 Guidelines for the Determination of Significance

Impacts to Special Status Species associated with the Shadow Run Ranch project are assessed as being either "significant" or "less than significant", as defined by CEQA. The determination of impact significance is based on the following criteria:

> *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Any of the following conditions would be considered significant:

3.1.A *The project would impact one or more individuals of a species listed as federally or state endangered or threatened.*

3.1.B *The project would impact the regional long-term survival of a County Group A or B plant species, or a County Group I animal species, or a species listed as a state Species of Special Concern.*

3.1.C *The project would impact the regional long-term survival of a County Group C or D plant species or a County Group II animal species.*

3.1.D *The project may impact Arroyo Toad aestivation or breeding habitat.*

3.1.E *The project would impact Golden Eagle habitat.*

3.1.F *The project would result in a loss of functional foraging habitat for raptors.*

3.1.G *The project would increase noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.*

3.1.H *The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.*

3.1.I *The project would increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species.*

3.1.J *The project would impact nesting success of sensitive animals (as listed in the Guidelines for Determining Significance) through grading, clearing, modification, and/or noise generating activities such as construction.*

[1] *Rounding to tenths of an acre, per County requirements, will prevent numbers from adding up precisely.*

3.2 Analysis of Project Effects

The Shadow Run Ranch project will result in **significant indirect impacts** to Special Status Species pursuant to the above significance guidelines for the following reasons:

3.1.A The site is considered potentially "occupied" by Least Bell's Vireo, a state and federally-listed Endangered Species, and Southwestern Willow Flycatcher, which is listed as federally endangered. Least Bell's Vireo and Southwestern Willow Flycatcher are not expected to occur in any of the areas proposed for development, but they could potentially be indirectly impacted by the noise associated with construction in the absence of seasonal restrictions on noise–generating activities.

3.1.I The project could increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species. Increased human use of the site could result in access, predation and/or competition impacts to special status species.

3.1.J The project could impact nesting success of sensitive animals through grading, clearing, modification, and/or noise generating activities such as construction.

The Shadow Run Ranch project will result in **less than significant impacts** to Special Status Species pursuant to the above significance guidelines for the following reasons:

3.1.B Although the project will impact Cooper's Hawk, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Turkey Vulture, and White-tailed Kite, all of which are County Group I animal species, those impacts will not affect the regional long-term survival of any of these species. This is because, although sensitive, all of these species are relatively widely distributed in San Diego County, occurring, in some cases, over hundreds of thousands of acres. Furthermore, habitat supporting these species, including the most biologically sensitive areas of the site, will be preserved in dedicated biological open space, thereby ensuring the long-term survival of these species on the project site.

3.1.C Although the project will impact Great Blue Heron, Yellow Warbler, Mountain Lion, San Diego Desert Woodrat, Mule Deer, Bobcat, Orange-throated Whiptail, and Coastal Western Whiptail, all of which are County Group II animal species, those impacts will not affect the regional long-term survival of any of these species. This is because, although sensitive, all of these species are relatively widely distributed in San Diego County, occurring, in some cases, over hundreds of thousands of acres. Furthermore, habitat supporting these species, including the most biologically sensitive areas of the site, will be preserved in dedicated biological open space, thereby ensuring the long-term survival of these species on the project site.

3.1.D Arroyo Toad does not occur as a breeding species on this site, based on the results of a protocol survey in 2007 and 2012. However, aestivation could take place here. The only areas of the site where this would take place (Frey Creek and adjoining lands to the north and west) are proposed for open space, as the agricultural areas of the site do not support any suitable toad aestivation habitat.

3.1.E Although the project could impact Golden Eagles foraging habitat, the most suitable foraging habitat, which coincides with the most biologically sensitive areas of the site, will be preserved in dedicated biological open space, thereby ensuring the long-term use of this site by this species.

3.1.F As discussed above, the whole site qualifies as supporting potential raptor foraging habitat. Therefore, the project will result in the loss of approximately 109.8 acres of potential raptor foraging habitat. This loss is not sufficient to result in regionally-significant, adverse impacts. This is because all of the raptor species found onsite are wide-ranging and are not anticipated to be dependent on resources provided solely by the Shadow Run Ranch project site. Furthermore, approximately 91.3-acres of the highest quality raptor foraging habitat will be preserved onsite in biological open space, thereby ensuring the continuing viability of much of the raptor foraging habitat onsite. Raptors will also be able to continue to forage in the 39.1-acre agricultural and 8.0-acre recreational open space lots.

3.1.G The project will not increase noise and/or nighttime lighting to a level that has been proven to adversely affect sensitive species.

The following significance guideline **does not apply** to the Shadow Run Ranch project for the following reasons:

3.1.H The project site does not constitute a core wildlife area.

3.3 Cumulative Impact Analysis

Although Special Status Species will be directly and indirectly impacted by the project, mitigation reducing impacts to a level that is below significance will ensure that approval of the Shadow Run Ranch project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource. This is because all of the Special Status Species onsite are relatively widely distributed in San Diego County, and no critical populations of these species would be supported by the Shadow Run Ranch project site or the sites of other proposed projects affecting some of these same species. Other proposed projects affecting some of the same Special Status Species found on the Shadow Run Ranch project site include TM 5499, TM 5540, TM 5263, TPM 21004, TM 5338, and MUP 05-014. All of these projects have either minimal impacts or have significant impacts that will be mitigated to a level that is less than significant.

3.4 Mitigation Measures and Design Considerations

Impacts to Special Status Species shall be mitigated through the preservation of the most biologically significant areas (supporting most specimens of the Special Status Species residing on this site) in a BOSE. This mitigation measure will require the preparation and approval of a Resource Management Plan (Attachment A - Resource Management Plan). Cumulative impacts, from a regional perspective, could be significant in the absence of cumulatively-adequate mitigation. However, the project provides cumulatively-adequate mitigation by conserving the most significant biological features of the site in a BOSE.

The Resource Management Plan (RMP) shall designate areas for biological preservation, eliminate future unauthorized intrusion into biologically sensitive areas, and maintain long-term habitat viability. The preparation of and implementation of recommendations contained within such document shall be made a Condition of Project Approval. The RMP will contain guidelines for the biological monitoring, perpetual stewardship, maintenance, funding, and overall management of the BOSE. The RMP will include, but not be limited to, methods to control human and animal encroachment, weed abatement, habitat and sensitive species monitoring, and restrictions to recreational use of the open space. Habitat supporting sensitive species, such as Cooper's Hawk, White-tailed Kite, Turkey Vulture, Yellow Warbler, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Great Blue Heron, Mountain Lion, Bobcat, Mule Deer, San Diego Desert Woodrat, Coastal Western Whiptail, Orange-throated Whiptail, Least Bell's Vireo, and Southwestern Willow Flycatcher, all of which are County Group I and II animal species, and others anticipated to occur onsite, such as Monarch Butterfly, San Diego Ringneck Snake, Coronado Skink, Northern Red Diamond Rattlesnake, San Diego Coast Horned Lizard, Coast Patched-nosed Snake, and Western Spadefoot. (all County Group I and II species), will be conserved in the BOSE, and the RMP will contain provisions to ensure long-term viability of the habitat for these and other sensitive species. The RMP will specify remediation as necessary, in perpetuity, to maintain habitat viability. Certain unavoidable losses associated with a greater human presence in the

vicinity of this property ("edge effects") will be minimized through implementation of the RMP, including provisions to erect vehicular access barrier fencing and other measures.

Because the project site is considered potentially "occupied" by Least Bell's Vireo and Southwestern Willow Flycatcher, no loud noises associated with grading or construction (in excess of 60 decibels) will be permitted during the breeding season of these species, which is generally defined as from mid March to the beginning of September, in order to avoid impacts to potentially nesting vireos, flycatchers, and/or other riparian obligate songbirds. This restriction may be waived if directed surveys for these two species are conducted on all areas within 300 feet of the proposed activity. The results of these surveys should be provided in a report to the Director of Planning & Development Services, and the Wildlife Agencies for concurrence with the conclusions and recommendations.

3.5 Conclusions

Implementation of the proposed mitigation measures will reduce the significance level of all significant impacts to Special Status Species to **less than significant**.

4.0 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITIES

4.1 Guidelines for the Determination of Significance

Impacts to Riparian Habitats or Other Sensitive Natural Communities associated with the Shadow Run Ranch project are assessed as being either "significant", or "less than significant". The determination of impact significance is based on the following criteria:

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Any of the following conditions would be considered significant:

4.1.A *Project-related construction, grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat on or off the project site.*

4.1.B *Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFG and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.*

4.1.C *The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.*

4.1.D *The project would increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats.*

4.1.E *The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.*

4.2 Analysis of Project Effects

The Shadow Run Ranch project will result in **significant direct impacts** to Riparian Habitats or Other Sensitive Natural Communities pursuant to the above significance guidelines for the following reasons:

4.1.A Project-related construction, grading, clearing, or other activities will permanently remove sensitive native or naturalized habitat on the project site. That is, the project will directly impact 0.5 acre of F/P, 1.2 acres of CSS, and 3.0acres of CLOW. Unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact, but will be mitigated at a higher ratio.

4.1.B Project-related construction, grading, clearing, or other activities will result in impacts to jurisdictional wetlands as defined by the ACOE and CDFW. Although most of the site's jurisdictional wetlands and all of the site's riparian habitats will be protected in biological open space, certain relatively minor impacts to the two unvegetated upland swales located within the project footprint are unavoidable. These impacts will consist of the construction of three drainage crossings associated with required road improvements. One of the drainage crossings is located near the center of the site; two crossings are located at the southern end of the site. Impacts to jurisdictional wetlands associated with the construction of these crossings may include grading, temporary obstruction or diversion of water flow, the placement of fill, the construction of road crossings, and the placement of culverts or other underground piping. These improvements will impact approximately 0.015 acre or 258 linear feet of state wetlands and state and federal "waters". The project will not impact riparian habitats or County (RPO) wetlands, as these are avoided by design.

4.1.D The project could increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats. However, all areas conserved in open space will be adequately protected per the requirements of an approved and implemented RMP, which will include measures to preclude such impacts.

The following significance guidelines **do not apply** to the Shadow Run Ranch project for the following reasons:

4.1.C The project will result in a net reduction in the amount of groundwater used on the SRR project site. This is because significant numbers of groundwater-irrigated citrus trees will be retired and the related groundwater usage (from wells) will be eliminated in the process. Therefore, impacts to groundwater-dependent habitats are not anticipated beyond any currently experienced as a result of the use of existing wells. Potable water will be provided from imported sources.

4.1.E The project includes wetland buffers that are adequate to protect the functions and values of existing wetlands. To that end, the project has been designed to incorporate wetland buffers that extend at least 50 feet from the outer edge of all RPO wetlands, with protection from future fire clearing through the dedication of 100-foot LBZs. Furthermore, as required by the RPO, the project provides up to a 200-foot wetland buffer in areas where CLOW adjoins the RPO wetlands over most of the length of Frey Creek.

4.3 Cumulative Impact Analysis

The Shadow Run Ranch project will contribute to the cumulative loss of Riparian Habitats or Other Sensitive Natural Communities. Project-related construction, grading, clearing, or other activities will permanently remove sensitive native or naturalized habitat on the project site. That is, the project will directly impact 0.5 acre of F/P, 1.2 acres of CSS, and 3.0 acres of CLOW. Unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact, but will be mitigated at a higher ratio. These vegetation-types are relatively well distributed in San Diego County, although both CSS and CLOW are sensitive and depleted. Therefore, the relatively minor impacts to these vegetation-types (from a regional perspective), although adverse and significant, are not "cumulatively considerable" when viewed in connection with the substantial acreages of scrub, pasture, and oak woodland vegetation remaining in the San Diego County region. Also, due to the extent of these habitats onsite and

the fact that all impacts to riparian habitats and sensitive natural communities will be mitigated to a level that is below significance, approval of the Shadow Run Ranch project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource. Other proposed projects affecting some of the same Riparian Habitats or Other Sensitive Natural Communities found on the Shadow Run Ranch project site include TM 5499, TM 5540, TM 5263, TPM 21004, TM5338, VTM 5254, TM 5354, TM 5508, and MUP 05-014. All of these projects have either minimal impacts or have significant impacts that will be mitigated to a level that is less than significant.

4.4 Mitigation Measures and Design Considerations

Impacts to 0.5 acre of F/P and 1.2 acres of CSS + 3.0 acres of CLOW will be mitigated for at ½-to-1, 2-to-1 and 3-to-1 ratios, respectively. An additional 2.3 acres of CSS as well as 0.14 acre of CLOW will be mitigated at 3-to-1 and 4-to-1 ratios due to unauthorized clearing. That is, 0.3 acre of F/P, 9.3 acres of CSS, and 9.6acres of CLOW must be preserved, either onsite in biological open space and/or offsite in County-approved location. The project will not conserve any of the F/P in a BOSE onsite; therefore, 0.3 acre of this habitat-type must be preserved offsite in a County-approved location, unless “out of kind” mitigation is accepted as mitigation for impacts to this habitat-type, which is strongly recommended in this case. The onsite F/P provides value only insofar as it provides some limited potential raptor foraging habitat. This loss can be mitigated by conserving similar open habitat that provides the same functions and values as the F/P being impacted. For example open CSS or NNG will provide similar open-land raptor foraging habitat. Offsite mitigation will take place at the Daley Ranch Conservation Bank ,the Red Mountain Conservation Bank, or other County-approved location. The onsite BOSE includes 25.0 acres of CSS and 7.5 acres of CLOW that are available for use as mitigation for project impacts. The project will therefore be able to accomplish all mitigation for impacts to CSS onsite as these acreages are in excess of the County’s minimal requirements. Mitigation for 7.5 acres of CLOW will be provided onsite. Therefore, an additional 2.1 acres of CLOW must be secured off site in a County-approved location, unless “out of kind” mitigation is accepted as mitigation for impacts to this habitat-type. At this time, the author is unaware of any County-approved conservation banks offering F/P, although this could change in the future as additional conservation banks are developed and come online.

As discussed in section 3.4, above, a final RMP shall be prepared and approved as a condition of project approval. The RMP will contain guidelines for the stewardship, maintenance, biological monitoring, and overall management of the onsite biological open space. Cumulative impacts, from a regional perspective, could be significant in the absence of cumulatively-adequate mitigation. However, the project provides cumulatively-adequate mitigation by conserving the most significant biological features of the site in biological open space.

4.5 Conclusions

Implementation of the proposed mitigation measures will reduce the significance level of all significant impacts to Riparian Habitat or Sensitive Natural Communities to **less than significant**.

5.0 FEDERAL JURISDICTIONAL WETLANDS AND WATERWAYS

5.1 Guidelines for the Determination of Significance

Impacts to Federal Jurisdictional Wetlands and Waterways associated with the Shadow Run Ranch project are assessed as being either "significant", or "less than significant" as defined by CEQA. The determination of impact significance is based on the following criteria:

Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?

Any of the following conditions would be considered significant:

5.1.B *Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFG and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.*

5.1.C *The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.*

5.1.E *The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.*

5.2 Analysis of Project Effects

The Shadow Run Ranch project will result in **significant direct impacts** to Federal Jurisdictional Wetlands and Waterways pursuant to the above significance guidelines for the following reasons:

5.1.B Project-related construction, grading, clearing, or other activities will result in impacts to federal jurisdictional wetlands as defined by the ACOE and CDFW. Although most of the site's federal jurisdictional wetlands and all of the site's riparian habitats will be protected in biological open space, certain relatively minor impacts to the two unvegetated upland swales located within the project footprint are unavoidable. These impacts will consist of the construction of three drainage crossings associated with required road improvements. One of the drainage crossings is located near the center of the site; two crossings are located at the southern end of the site Impacts to federal jurisdictional wetlands associated with the construction of these crossings may include grading, temporary obstruction or diversion of water flow, the placement of fill, the construction of road crossings, and the placement of culverts or other underground piping. These improvements will impact approximately 0.015 acre or 258 linear feet of state wetlands and state and federal "waters". The project will not impact County (RPO) wetlands, as these are avoided by design.

The following significance guidelines **do not apply** to the Shadow Run Ranch project for the following reasons:

5.1.C Any project-related use of groundwater will be monitored pursuant to approved County, state, and/or federal protocols, to ensure that the project will not draw down the groundwater table to the detriment of groundwater-dependent habitat beyond that which is currently being extracted. Therefore, impacts to groundwater-dependent habitats are not anticipated.

5.1.E The project includes wetland buffers that are adequate to protect the functions and values of existing wetlands. To that end, the project has been designed to incorporate wetland buffers that extend at least 50 feet from the outer edge of all RPO wetlands, with protection from future fire clearing through the

dedication of 100-foot LBZs. Furthermore, as required by the RPO, the project provides up to a 200-foot wetland buffer in areas where CLOW adjoins the RPO wetlands over most of the length of Frey Creek. Specifically, the project will provide a 100-tot native vegetation buffer, a 100-toot agricultural (citrus) buffer, and a 100-toot LBZ along the entire length of Frey Creek (RPO Wetland) with the exception of a pinch point on Lots 33-35 where the buffer would narrow to only 100 feet of native vegetation. Agriculture would not continue in the first 100 feet, and the trees in that area would be allowed to die. Existing agriculture could continue in the second 100 feet, but only as long as it remains in continuous operation; the owners could not expand the groves beyond the current extent, and once agricultural use has ceased, it can't be re-established in that buffer area.

5.3 Cumulative Impact Analysis

The Shadow Run Ranch project will contribute to the cumulative loss of Federal Jurisdictional Wetlands and Waterways. Project-related construction, grading, clearing, or other activities will permanently affect Wetlands and Waterways on the project site. That is, the project will directly impact 0.015 acres of non-wetland waters. However, due to the extent of these habitats onsite, the disturbed nature of the federal jurisdictional wetlands and "waters" being impacted, and the fact that all impacts to Wetlands and Waterways will be mitigated for to a level that is below significance, approval of the Shadow Run Ranch project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource. Other proposed projects affecting Federal Jurisdictional Wetlands and Waterways similar to those found on the Shadow Run Ranch project site include TM 5499, TM 5540, TM 5263, TPM 21004, TM 5338, and MUP 05-014. All of these projects have either minimal impacts or have significant impacts that will be mitigated for to a level that is less than significant.

5.4 Mitigation Measures and Design Considerations

The County requires mitigation for impacts to "non-wetland waters of the U.S." at a 1-to-1 ratio. According to the "County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources" (DPLU, 2010), mitigation for impacts to non-wetland waters may include onsite or offsite improvement or enhancement of water resources. The Shadow Run Ranch project proposes that mitigation for impacts to non-wetland waters of the U.S. take place onsite, via restoration and enhancement of wetland functions and values associated with Frey Creek. Wetland mitigation activities will require the preparation and implementation of an approved Wetland Mitigation Plan (Attachment D – Conceptual (outline) Wetland Mitigation Plan).

Because the project will impact state wetlands and state and federal "waters", it will likely be necessary to obtain certain Regulatory Agency permits as a condition of project approval. To that end, it is recommended that the applicant provide to the Director of Planning & Development Services proof of notification of the ACOE and the CRWQCB regarding Clean Water Act Section 404/401 Permits, or evidence that such notification is not required. Also recommended prior to recordation of the Final Map shall be proof provided to the Director that the applicant has obtained a 1600-series Streambed Alteration Agreement with the CDFW, or proof that such an agreement is not required. The details of any additional mitigation for impacts to federal jurisdictional wetlands and waterways will be established through the permitting process required to obtain 404/401 and 1600-series documents from the Regulatory Agencies.

As discussed in section 3.4, above, an RMP shall be prepared and approved as a condition of project approval. The RMP will contain guidelines for the stewardship, maintenance, biological monitoring, and overall management of the biological open space. Cumulative impacts, from a regional perspective, could be significant in the absence of cumulatively-adequate mitigation. However, the project provides cumulatively-adequate mitigation by conserving the most significant biological features of the site in biological open space.

5.5 Conclusions

Implementation of any Regulatory Agency mitigation measures will reduce the significance level of all significant impacts to Federal Jurisdictional Wetlands and Waterways to **less than significant**.

6.0 WILDLIFE MOVEMENT AND NURSERY SITES

6.1 Guidelines for the Determination of Significance

Impacts to Wildlife Movement and Nursery Sites associated with the Shadow Run Ranch project are assessed as being either "significant" or "less than significant" as defined by CEQA. The determination of impact significance is based on the following criteria:

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Any of the following conditions would be considered significant:

6.1.A *The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.*

6.1.B *The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.*

6.1.C *The project would create artificial wildlife corridors that do not follow natural movement patterns.*

6.1.D *The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site specific analysis of wildlife movement.*

6.1.E *The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.*

6.1.F *The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage.*

6.2 Analysis of Project Effects

The Shadow Run Ranch project will result in **less than significant impacts** to Wildlife Movement and Nursery Sites pursuant to the above significance guidelines for the following reasons:

6.1.A The project could prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction. However, most areas onsite that are used by wildlife will be protected in a BOSE. Wildlife use of the water storage reservoir is very limited, due to its very small

species diversity and the fact that it is chemically treated. Certain native birds and mammals probably use this feature for foraging or as a water source. However, the proposed project will not impact wildlife use of the reservoir, as this area will be included in a Recreational Open Space Easement and will not be directly impacted by development. This easement adjoins the BOSE to the north and east and an Agricultural Open Space Easement to the south, thereby buffering the reservoir from possible edge effects associated with development of the project site. Any potential impacts to wildlife access to foraging habitat, breeding habitat, water sources, or reproduction areas are expected to be negligible, and therefore less than significant.

6.1.D The project could increase noise and/or nighttime lighting in a wildlife corridor, linkage, or nursery. However, it is not expected that this increase would be to levels that could affect the behavior of the site's resident wildlife. A site specific analysis of wildlife movement was not conducted; however, the extensive field surveys of the property included observations regarding wildlife movement. These surveys identified Frey Creek as a local and regional wildlife corridor and nursery site. Frey Creek will be completely avoided by design, and the project includes a 200-foot biological buffer of Frey Creek along most of its length to ensure that noise and/or nighttime lighting from the proposed development will not increase to levels that could affect the behavior of the site's resident wildlife.

The following significance guidelines **do not apply** to the Shadow Run Ranch project for the following reasons:

6.1.B The project will not substantially interfere with connectivity between blocks of habitat and will not potentially block or substantially interfere with a local or regional wildlife corridor or linkage. The project preserves the local and regional wildlife corridor provided by Frey Creek, as this area will be conserved in biological open space.

6.1.C The project will not create artificial wildlife corridors that do not follow natural movement patterns.

6.1.E The project will maintain an adequate width for an existing wildlife corridor or linkage and will not further constrain an already narrow corridor.

6.1. F The project maintains adequate visual continuity within wildlife corridors or linkages.

6.3 Cumulative Impact Analysis

As stated above, the Shadow Run Ranch project will not result in significant adverse impacts to wildlife movement and nursery sites. Impacts that are less than significant on a project basis could still contribute to a significant cumulative impact. However, because the Shadow Run Ranch project preserves all important wildlife corridors and nurseries onsite, the approval of this project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource.

6.4 Mitigation Measures and Design Considerations

As discussed above, the project will have no significant impacts to wildlife movement or nursery sites. Therefore, no mitigation for impacts to Wildlife Movement or Nursery Sites is necessary.

6.5 Conclusions

As stated above, the project will **not** significantly impact Wildlife Movement or Nursery Sites.

7.0 LOCAL POLICIES, ORDINANCES, ADOPTED PLANS

7.1 Guidelines for the Determination of Significance

Impacts to Local Policies, Ordinances, and Adopted Plans in association with the Shadow Run Ranch project are assessed as being either "significant" or "less than significant" as defined by CEQA. The determination of impact significance is based on the following criteria:

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

Any of the following conditions would be considered significant:

7.1.A *For lands outside of the MSCP, the project would impact coastal sage scrub (CSS) vegetation in excess of the County's 5% habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.*

7.1.B *The project would preclude or prevent the preparation of the subregional Natural Communities Conservation Planning Process (NCCP). For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.*

7.1.C *The project will impact any amount of sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).*

7.1.D *The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the Natural Communities Conservation Planning Process (NCCP) Guidelines.*

7.1.E *The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.*

7.1.F *For lands within the Multiple Species Conservation Program (MSCP), the project would not minimize impacts to Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO).*

7.1.G *The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.*

7.1.H *The project does not maintain existing movement corridors and/or habitat linkages as defined by the Biological Mitigation Ordinance (BMO).*

7.1.I *The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.*

7.1.J *The project would reduce the likelihood of survival and recovery of listed species in the wild.*

7.1.K *The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).*

7.1.L *The project would result in the take of eagles, eagle eggs or any part of an actual eagle (Bald and Golden Eagle Protection Act).*

7.2 Analysis of Project Effects

The Shadow Run Ranch project will result in **significant** impacts to Local Policies, Ordinances, and Adopted Plans under the following guidelines for the following reasons:

7.1.C The project will impact a measurable amount of habitats that could be identified as "sensitive habitat lands" as defined by the RPO. That is, the project will directly impact 1.2 acres of CSS and 3.0 acres of CLOW. Unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact, which may also qualify as RPO "sensitive habitat lands"

impacts. However, the RPO's definition of "sensitive habitat lands" is imprecise, and it is therefore not possible to make a firm determination of impacts to RPO "sensitive habitat lands". The RPO defines "sensitive habitat lands" as "land which supports unique vegetation communities or the habitats of rare or endangered species or sub-species of animals or plants" (DPLU, 2007). According to this definition, it is possible to identify all of the onsite habitat-types as "sensitive habitat lands", because any of the onsite habitats-types could constitute "habitat for rare or endangered subspecies of animals or plants". However, designating an area of Disturbed Habitat as "sensitive habitat lands", for example, would not accurately reflect the biological resource value or long-term preservation value of that habitat. Furthermore, it should be noted that the majority of habitats that may qualify as RPO "sensitive habitat lands" will be preserved, and all impacts to likely RPO sensitive habitat lands will be mitigated for via the preservation of equal or greater value habitat to provide an equal or greater value to the affected species.

7.1.J The project could result in indirect impacts to the state and federally listed Least Bell's Vireo and the federally listed Southwestern Willow Flycatcher. However, these impacts will be avoided via the observance of seasonal restrictions on site development.

7.1.K The project could result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).

The Shadow Run Ranch project will result in **less than significant** impacts to Local Policies, Ordinances, and Adopted Plans under the following guidelines for the following reasons:

7.1.A The project site is located outside of the MSCP and would impact coastal sage scrub, but impacts would be far less than 5% of the CSS habitat loss threshold as defined by the Southern California Coastal Sage Scrub NCCP Guidelines. Impacts to 3.5 acres of CSS will be mitigated for pursuant to the issuance of Habitat Loss Permit, and subject to the Southern California Coastal Sage Scrub NCCP Conservation Guidelines.

7.1.B The project will not preclude or prevent the preparation of the subregional NCCP. Although the project site is identified as a Pre-approved Mitigation Area and major wildlife linkage in the County's draft North County MSCP, the majority of the development portion of the site is in active agriculture, disturbed, and/or fragmented. Furthermore, the project preserves all areas of the site that function as viable wildlife linkages in biological open space. Therefore, the project does not propose development within any areas that are critical to future habitat preserves.

7.1.D The project minimizes and mitigates all impacts to CSS habitat in accordance with Section 4.3 of the NCCP Guidelines. The project accomplishes this by preserving large blocks of CSS along the northern and western boundaries of the site and by minimizing development of the large block of CSS along the eastern property boundary. The project design maximizes the use of areas that are already developed, disturbed, and/or fragmented. Furthermore, the project will fully mitigate for all impacts to CSS habitat.

The following significance guidelines with respect to Local Policies, Ordinances, and Adopted Plans **do not apply** to the Shadow Run Ranch project for the following reasons:

7.1.E The project is not located in an area subject to the goals and requirements as outlined in any applicable HCP, HMP, SAMP, Watershed Plan, or similar regional planning effort.

7.1.F The project is not located within any MSCP Subarea Planning Area. Therefore, the project is not subject to the designation of BRCAs, as defined in the BMO.

7.1.G The project will not preclude connectivity between areas of high habitat values, as defined by the NCCP Guidelines.

7.1.H The project is not subject to the BMO.

7.1.I The project is not subject to the narrow endemic species provisions of the BMO. Furthermore, the project will not impact any core populations of narrow endemic species.

7.1.L The project site does not support eagles, eagle eggs, or any part of an actual eagle (Bald and Golden Eagle Protection Act).

7.3 Cumulative Impact Analysis

Due to the fact that all impacts to Local Policies, Ordinances, or Adopted Plans will be mitigated for to a level that is below significance, approval of the Shadow Run Ranch project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource. Other proposed projects affected by some of the same Local Policies, Ordinances, or Adopted Plans include TM 5499, TM 5540, TM 5263, TPM 21004, TM 5338, TM 5354, VTM 5424, TM 5508 and MUP 05-014. All of these projects have either minimal impacts or have significant impacts that will be mitigated for to a level that is less than significant.

7.4 Mitigation Measures and Design Considerations

Impacts to 1.2 acres of CSS and 3.0 acres of CLOW will be mitigated at a 2-to-1 and 3-to-1 ratio. An additional 2.3 acres of CSS as well as 0.14 acre of CLOW will be mitigated at a 3-to-1 and 4-to-1 ratio due to unauthorized clearing. That is, 9.3 acres of CSS and 9.6acres of CLOW must be preserved, either onsite in biological open space and/or offsite in County-approved location. The onsite BOSE includes 25.0 acres of CSS and 7.5 acres of CLOW that are available for use as mitigation for project impacts. The project will therefore be able to accomplish all mitigation for impacts to CSS onsite as these acreages are in excess of the County's minimal requirements. Mitigation for 7.5 acres of CLOW will be provided onsite. Therefore, an additional 2.1 acres of CLOW must be secured off site in a County-approved location. Offsite mitigation will take place at the Daley Ranch Conservation Bank, the Red Mountain Conservation Bank, or other County-approved location.

As discussed in section 3.4, above, a final RMP shall be prepared and approved as a condition of project approval. The RMP will contain guidelines for the stewardship, maintenance, biological monitoring, and overall management of the biological open space. Cumulative impacts, from a regional perspective, could be significant in the absence of cumulatively-adequate mitigation. However, the project provides cumulatively-adequate mitigation by conserving the most significant biological features of the site in biological open space.

Impacts to migratory birds and the destruction of active migratory bird nests and/or eggs will be prevented by the implementation of seasonal restrictions on the removal of potential nesting areas (trees and shrubs) in conjunction with site build-out. This will ensure consistency with the MBTA and the CFGC, and keep impacts to Local Policies, Ordinances, or Adopted Plans to a level that is less than significant.

Because the project site is considered potentially "occupied" by Least Bell's Vireo and Southwestern Willow Flycatcher, no construction or loud noises (in excess of 60 decibels) will be permitted during the breeding season of these species, which is generally defined as from mid March to the beginning of September, in order to avoid impacts to potentially nesting vireos, flycatchers, and/or other riparian obligate songbirds. This restriction may be waived by the Director of Planning & Development Services (PDS) if directed surveys for these two species are conducted on all areas within 300 feet of the proposed activity. The results of these surveys should be provided in a report to PDS and the Wildlife Agencies for concurrence with the conclusions and recommendations.

Pursuant to Habitat Loss Permit Ordinance #8365 of the San Diego County Code, the applicant may be required to obtain a Habitat Loss Permit (HLP) to "cover" impacts to the CSS habitat onsite. The site supports about 50 acres of this vegetation, with 3.5 acres of this total that will be impacted by development. The CSS onsite is considered "unoccupied" by California Gnatcatcher.

7.5 Conclusions

As discussed in the previous sections, future development of the project site, as presently proposed, could result in **significant** impacts to Local Policies, Ordinances, or Adopted Plans. However, all significant impacts to Local Policies, Ordinances, or Adopted Plans shall be mitigated for, reducing them to a level that is **less than significant**.

8.0 SUMMARY OF PROJECT IMPACTS AND MITIGATION

As discussed above, the following **significant** impacts are associated with the Shadow Run Ranch project:

- The site is considered potentially "occupied" by Least Bell's Vireo, a state and federally-listed Endangered Species, and Southwestern Willow Flycatcher, which is listed as federally endangered. Least Bell's Vireo and Southwestern Willow Flycatcher are not expected to occur in any of the areas proposed for development, but they could potentially be indirectly impacted by the noise associated with construction in the absence of seasonal restrictions on noise–generating activities. (Sec. 3.1.A)
- The project could increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species. (Sec. 3.1.I)
- The project could impact nesting success of sensitive animals through grading, clearing, modification, and/or noise generating activities such as construction. (Sec. 3.1.J)
- The project could increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats. However, all areas conserved in open space will be adequately protected per the requirements of an approved and implemented RMP, which will include measures to preclude such impacts. (Sec 4.1.D)
- Project-related construction, grading, clearing, or other activities will permanently remove sensitive native or naturalized habitat on the project site. That is, the project will directly impact 0.5 acre of F/P, 1.2 acres of CSS, and 3.0 acres of CLOW. (Sec. 4.1.A) Unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact.
- Project-related construction, grading, clearing, or other activities will result in impacts to federal jurisdictional wetlands as defined by the ACOE. Although most of the site's federal jurisdictional wetlands and all of the site's riparian habitats will be protected in biological open space, certain relatively minor impacts to the two unvegetated upland swales located within the project footprint are unavoidable. These impacts will consist of the construction of three drainage crossings associated with required road improvements. One of the drainage crossings is located near the center of the site; two of the crossings are located at the southern end of the site. Impacts to federal jurisdictional wetlands associated with the construction of these crossings may include grading, temporary obstruction or diversion of water flow, the placement of fill, the construction of road crossings, and the placement of culverts or other underground piping. These improvements will impact approximately 0.015 acre or 258 linear feet of state wetlands and state and federal "waters". The project will not impact County (RPO) wetlands or riparian habitats, as these are avoided by design. (Sec. 4.1.B & 5.1.B)
- The project will impact a measurable amount of habitats that could be identified as "sensitive habitat lands" as outlined in the RPO. That is, the project will directly impact 1.2 acres of CSS and 3.0 acres of CLOW, unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact, which may qualify as RPO "sensitive habitat lands". (Sec. 7.1.C)
- Potential indirect impacts to the state and federally listed Least Bell's Vireo and the federally listed Southwestern Willow Flycatcher will be avoided via the observance of seasonal restrictions on site development. (Sec 7.1.J)
- The project could result in the killing of migratory birds or destruction of active migratory bird nest and/or eggs (Migratory Bird Treaty Act). (Sec. 7.1.K)

Onsite mitigation for impacts to sensitive habitats and species shall include open space dedication and the preparation and implementation of an approved RMP, which shall contain provisions to ensure long-term viability of the onsite habitat and the site's resident sensitive species. This Plan shall specify remediation as necessary, in perpetuity, to maintain habitat viability within the onsite BOSE. Edge effects will be minimized through implementation of the RMP, including provisions to erect permanent fencing, vehicular and human access barriers, and other measures. The onsite BOSE is intended to preclude the removal or addition of any thing, including structures and vegetation. The management of the BOSE shall conform to the guidelines set out in the approved RMP. In order to prevent fire clearing impacts to the BOSE, suitable LBZs are required. These easements shall extend outward towards development from the BOSE boundaries and shall prohibit the construction of houses, barns, or other habitable structures that would require fire clearing into the BOSE.

The project could impact the nesting success of sensitive avifauna through grading, clearing, modification, and/or noise generating activities such as construction. Mitigation for this impact shall include seasonal restrictions on grading, clearing, modification, and construction and/or preconstruction breeding surveys of all areas within 500 feet of the proposed activities.

Because the project site is considered potentially "occupied" by Least Bell's Vireo and Southwestern Willow Flycatcher, no construction or loud noises (in excess of 60 decibels) will be permitted during the breeding season of these species, which is defined as from mid March to the beginning of September, in order to avoid impacts to potentially nesting vireos, flycatchers, and/or other riparian obligate songbirds. This restriction may be waived if directed surveys for these two species are conducted on all areas within 300 feet of the proposed activity. The results of these surveys should be provided in a report to the Director of Planning & Development Services and the Wildlife Agencies for concurrence with the conclusions and recommendations.

The project may require the securement of a Habitat Loss Permit (HLP) from the County of San Diego or a Section 10(a) ESA "take" Permit from the US Fish and Wildlife Service (or "coverage" under the County's anticipated future Subarea North County MSCP Plan IA). These permits will mitigate agency concerns, providing appropriate mitigation for all project-related impacts to future "covered" species.

Impacts to 0.5 acre of F/P and 1.2 acres of CSS+ 3.0 acres of CLOW will be mitigated for at ½-to-1, 2-to-1 and 3-to-1 ratios, respectively. An additional 2.3 acres of CSS as well as 0.14 acre of CLOW will be mitigated at a 3-to-1 and 4-to-1 ratio due to unauthorized clearing. That is, 0.3 acre of F/P, 9.3 acres of CSS, and 9.6 acres of CLOW must be preserved, either onsite in biological open space and/or offsite in County-approved location. The project will not conserve any of the F/P in a BOSE onsite; therefore, 0.3 acre of this habitat-type must be preserved offsite in a County-approved location, unless "out of kind" mitigation is accepted as mitigation for impacts to this habitat-type. The onsite F/P provides value only insofar as it provides some limited potential raptor foraging habitat. This loss can be mitigated by conserving similar open habitat that provides the same functions and values as the F/P being impacted. For example open CSS or NNG will provide similar open-land raptor foraging habitat. Offsite mitigation will take place at the Daley Ranch Conservation Bank, the Red Mountain Conservation Bank, or other County-approved location. The onsite BOSE

includes 25.0 acres of CSS and 7.5 acres of CLOW that are available for use as mitigation for project impacts. The project will therefore be able to accomplish all mitigation for impacts to CSS onsite. Mitigation for 7.5 acres of CLOW will be provided onsite. Therefore, an additional 2.1 acres of CLOW must be secured off site in a County-approved location. At this time, the author is unaware of any County-approved conservation banks offering F/P, although this could change in the future as additional conservation banks are developed and come online.

The County requires mitigation for impacts to "non-wetland waters of the U.S." at a 1-to-1 ratio. According to the "County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources" (DPLU, 2010), mitigation for impacts to non-wetland waters may include onsite or offsite improvement or enhancement of water resources. The Shadow Run Ranch project proposes that mitigation for impacts to non-wetland waters of the U.S. take place onsite, via restoration and enhancement of wetland functions and values associated with Frey Creek. Wetland mitigation activities will require the preparation and implementation of an approved Wetland Mitigation Plan (Attachment D).

Because the project will impact state wetlands and state and federal "waters", it will likely be necessary to obtain certain Regulatory Agency permits as a condition of project approval. To that end, it is recommended that the applicant provide to the Director of Planning & Development Services proof of notification of the ACOE and the CRWQCB regarding Clean Water Act Section 404/401 Permits, or evidence that such notification is not required. Also recommended prior to recordation of the Final Map shall be proof provided to the Director that the applicant has obtained a 1600-series Streambed Alteration Agreement with the CDFW, or proof that such an agreement is not required. The details of any additional mitigation for impacts to jurisdictional wetlands and waterways will be established through the permitting process required to obtain 404/401 and 1600-series documents from the Regulatory Agencies.

Table 3. Habitat Impacts and Mitigation Analysis

Habitat	Existing Acres	Impact Acres	Mitigation Ratio	Mitigation Required	Preserved Onsite	Impact Neutral	Mitigation Provided
Orchards and Vineyards[1]	142.9	96.6	n/a	none	6.4	5.5	n/a
Chamise Chaparral	0.5	none	n/a	none	0.5	none	avoidance
Diegan Coastal Sage Scrub[2]	50.0	3.5	2:1/3:1	9.3	25.0	20.2	9.3 onsite
Southern Sycamore-Alder Riparian Woodland	2.46	none	n/a	none	none	2.46	avoidance
Southern Coast Live Oak Riparian Forest	3.32	none	n/a	none	trace	3.29	avoidance
Floodway	2.05	none	n/a	none	none	2.05	avoidance
Coast Live Oak Woodland[3]	23.8	3.1	3:1/4:1	9.6	7.5	9.6	7.5 onsite 2.1 offsite
Open Water	2.67	none	n/a	none	none	none	n/a
Disturbed Habitat	11.0	none	none	none	2.7	6.1	n/a
Urban/Developed	9.8	9.3	none	none	0.1	0.1	n/a
Field/Pasture	0.5	0.5	0.5:1	0.3	none	none	0.3 offsite[3]
TOTAL	**249.0**	**113.0**	**--**	**19.2**	**42.2**	**49.3**	**19.2[4]**

[1] *Includes 0.8-acre of impacts due to offsite fire clearing*

[2] *Includes an additional 2.3 acres of CSS as well as 0.14 acres of CLOW impacts that will be mitigated at a 3-to-1 and 4-to-1 ratio due to unauthorized clearing.*

[3] *Mitigation shall take place offsite for this habitat-type unless "out of kind" mitigation is approved by the County and the Wildlife Agencies. It is strongly recommended that excess CSS be used as mitigation for impacts to the horse pasture.*

[4] *Includes RPO wetlands, buffers, and all habitats within the easement. The BOSE not only mitigates habitat and species impacts, but also preserves the functioning wildlife corridor through the property.*

9.0 REFERENCES

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10.0 LIST OF PREPARERS AND PERSONS/ORGANIZATIONS CONTACTED

Vincent Scheidt, MA
Certified Biological Consultant

TECHNICAL APPENDICIES/ATTACHMENTS

Figure 1. Regional Location
Figure 2. Biological Resources and Open Space Exhibit on Project Map
Figure 3. High Elevation Aerial Photo Showing Surrounding Lands
Figure 4. Low Elevation Aerial Photo Showing Wildlife Corridor
Figure 5. Open Space, Fencing, And Signage Exhibit
Figure 6. Cumulative Projects Exhibit
Figure 7. Jurisdictional Wetlands and “Waters” Exhibit
Table 1. Recent Field Surveys
Table 2. Habitat Impacts
Table 3. Habitat Impacts and Mitigation Analysis
Table 4. Observed Species List - Flora
Table 5. Observed Species List - Fauna
Table 6. Potential Sensitive Species – Flora
Table 7. Potential Sensitive Species – Fauna
Attachment A. Resource Management Plan
Attachment B. California Natural Diversity Database Forms
Attachment C. Signed Protocol Survey Reports
Attachment D. Conceptual Wetland Mitigation Plan

FIGURE 1. REGIONAL LOCATION
PORTION OF THE U.S.G.S. "PALA, CALIFORNIA" 7.5' QUADRANGLE

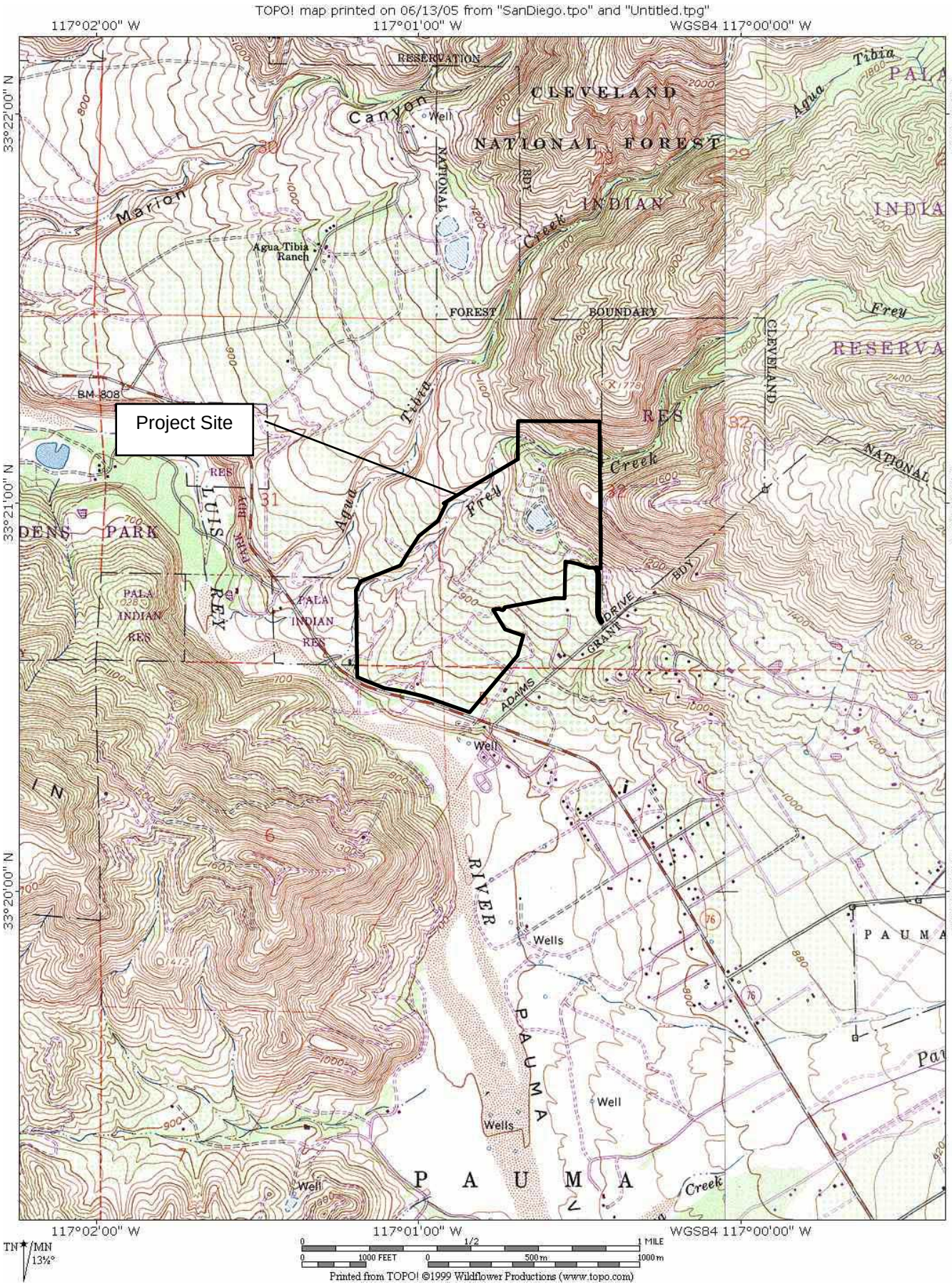


FIGURE 2. BIOLOGICAL RESOURCES AND OPEN SPACE EXHIBIT ON PROJECT MAP

(see 200'-scale exhibit, attached)

FIGURE 3. HIGH ELEVATION AERIAL PHOTO SHOWING SURROUNDING LANDS

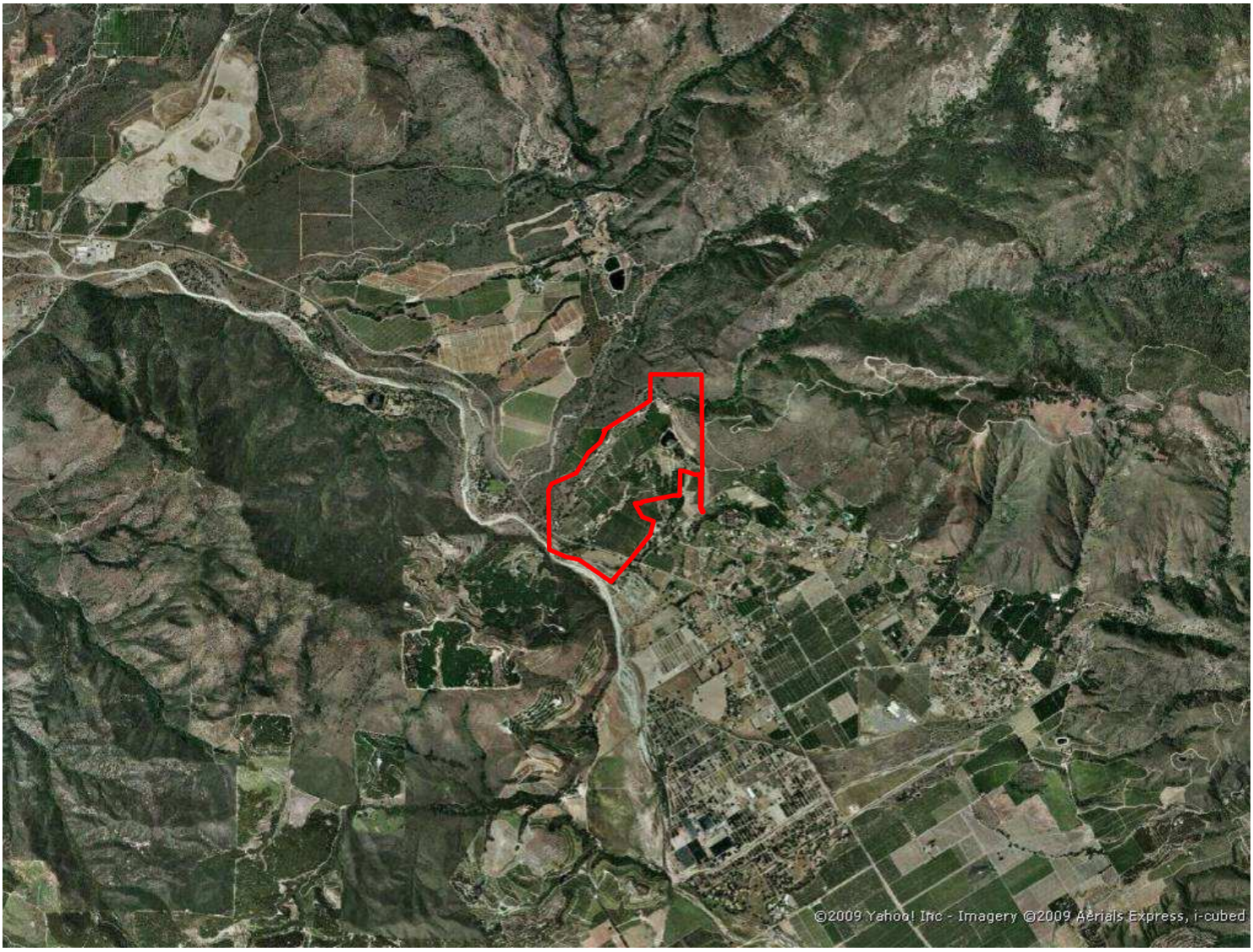
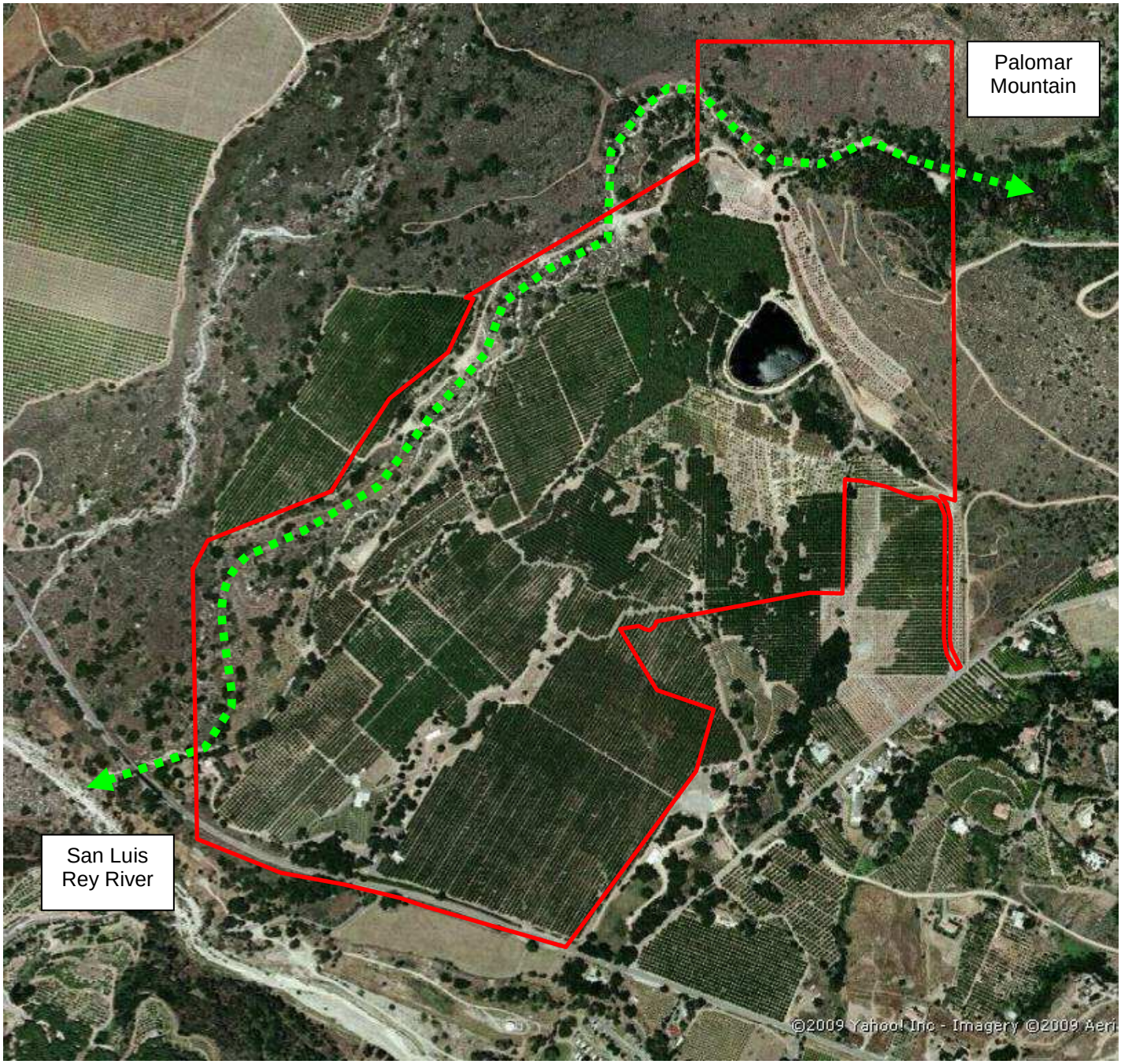


FIGURE 4. LOW ELEVATION AERIAL PHOTO SHOWING WILDLIFE CORRIDOR



LEGEND

= Local & Regional Wildlife Corridor

FIGURE 5. OPEN SPACE, FENCING, AND SIGNAGE EXHIBIT

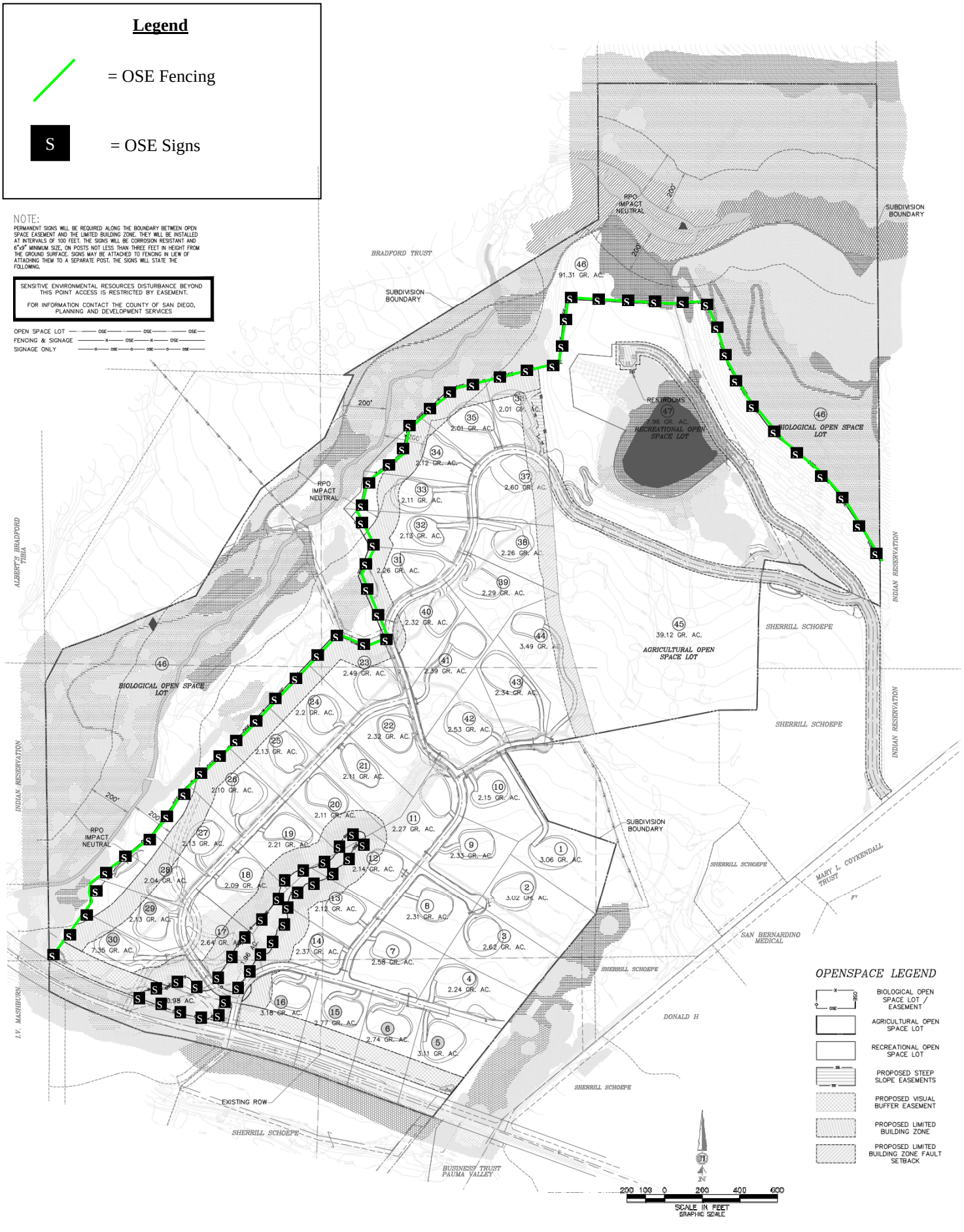


FIGURE 6. CUMULATIVE PROJECTS EXHIBIT

FIGURE 7. JURISDICTIONAL WETLANDS AND "WATERS" EXHIBIT

(see 11" x 17" exhibit, attached)

FIGURE 7. JURISDICTIONAL WETLANDS AND "WATERS"

LEGEND

= State wetlands and "waters";
Federal "waters"

= RPO wetlands;
State wetlands and "waters";
Federal "waters"

= RPO wetlands;
State wetlands and "waters";
Federal wetlands and "waters"

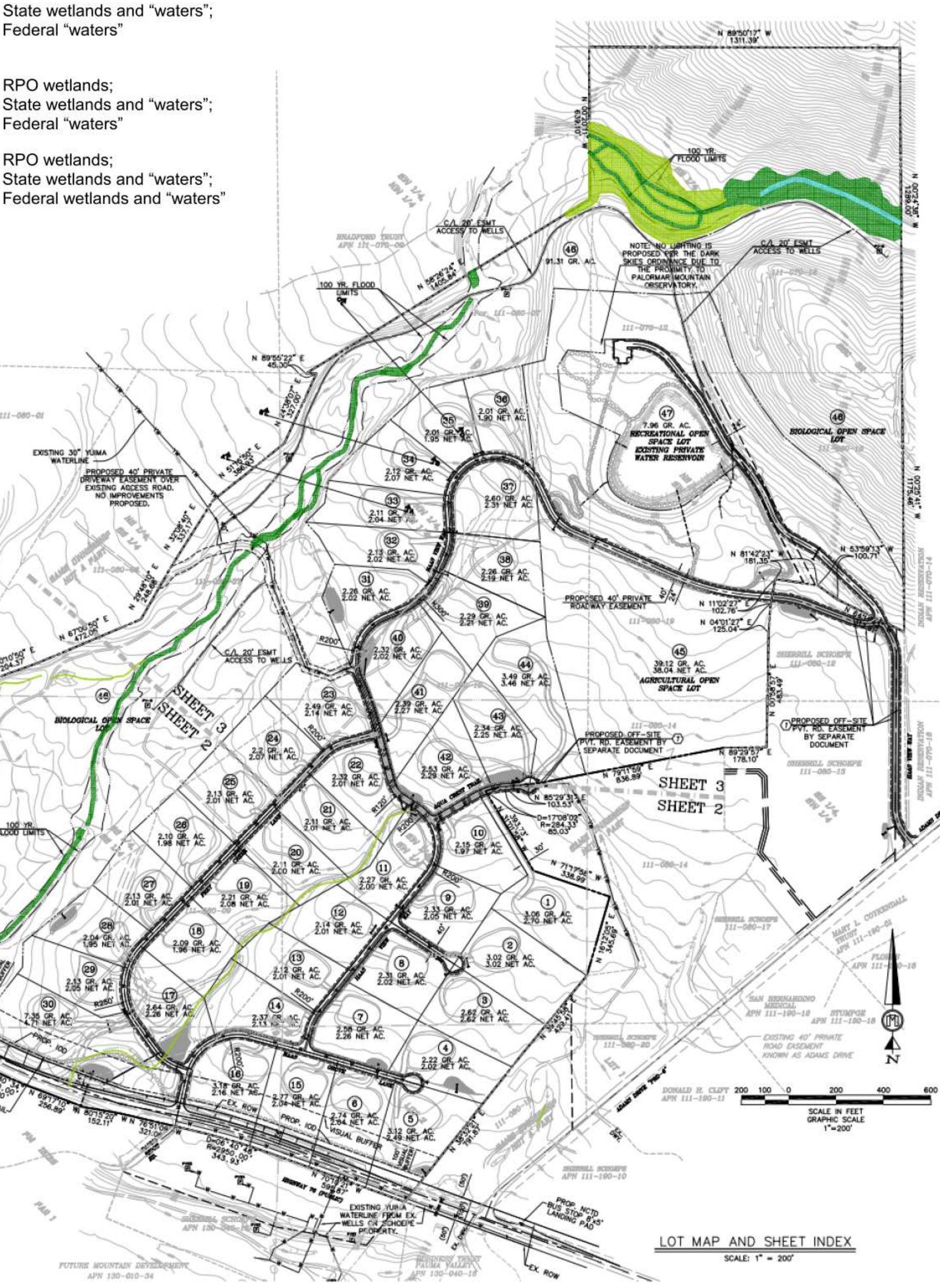


TABLE 4. OBSERVED SPECIES LIST – FLORA

Scientific Name	Common Name	Vegetation Community
Adenostoma fasciculatum	Chamise	U
Allophyllum glutinosum	Blue False-gilia	W
Allophyllum violaceum	Violet False-gilia	W
Alnus rhombifolia	White Alder	W
Amaranthus albus *	White Tumbleweed	N
Amaranthus blitoides	Prostrate Tumbleweed	U
Ambrosia acanthicarpa	Annual Burweed	W
Ambrosia confertiflora	Ragweed	D
Ambrosia psilostachya	Western Ragweed	W
Anagallis arvensis *	Scarlet Pimpernel	W
Antirrhinum nuttallianum	Nuttall's Snapdragon	U
Artemisia californica	California Sagebrush	U
Artemisia douglasiana	Douglas Sagewort	W
Artemisia dracunculus	Dragon Sagewort	U
Arundo donax *	Giant Wild Reed	W
Asclepias californica	California Milkweed	U
Avena barbata *	Slender Wild Oat	D
Avena fatua *	Wild Oat	D
Baccharis pilularis	Coyote Brush	U
Baccharis sarothroides	Broom Baccharis	U
Brassica geniculata *	Perennial Mustard	D
Brassica nigra *	Black Mustard	D
Brickellia californica	California Brickellbush	U
Bromus diandrus *	Ripgut Brome	D
Bromus mollis *	Soft Brome	U
Bromus rubens *	Foxtail Brome	U
Bromus tectorum *	Cheat Brome	U
Calystegia macrostegia	Morning Glory	U
Camissonia californica	False Mustard	U
Camissonia sp.	Primrose	U
Camissonia cheiranthifolia	Beach Evening Primrose	W
Carduus tenuiflorus	Thistle	D
Castilleja exserta ssp. *exserta*	Purple Owl's Clover	U
Castilleja foliolosa	Indian Paintbrush	U

TABLE 4. OBSERVED SPECIES LIST – FLORA

Scientific Name	Common Name	Vegetation Community
Ceanothus leucodermis	Buck-brush Lilac	U
Ceanothus tomentosus	Ramona Lilac	U
Centaurea melitensis *	Tocalote	D
Cerastium glomeratum *	Mouse-ear Chickweed	U
Cercocarpus betuloides	Mountain Mahogany	U
Chaenactis artemisiaefolia	White Pincushion	U
Chaenactis glabriuscula	Yellow Pincushion	U
Chamaesyce maculata *	Spotted Spurge	N
Chamaesyce sp.	Spurge	U
Cheilanthes newberryi	Cotton Fern	U
Chenopodium berlandieri	Pitseed Goosefoot	U
Chenopodium murale *	Goosefoot	D
Chenopodium sp.	Goosefoot	D
Chorizanthe staticoides	Turkish Rugging	U
Chrysanthemum coronarium *	Chrysanthemum	D
Cirsium occidentale var. *californicum*	California Thistle	U
Cirsium sp. *	Thistle	U
Citrus sp.	Citrus	N
Clarkia purpurea	Four-spot Clarkia	U
Clematis sp.	Clematis	U
Consolida ambigua	Rocket Delphinium	N
Conyza canadensis *	Common Horseweed	D
Conyza bonariensis *	Horseweed	D
Cordylanthus filifolius	Chaparral Bird's-beak	U
Corethrogyne filaginifolia var. *virgata*	Sand Aster	U
Coronopus didymus *	Swine Cress	N
Croton californicus	California Croton	U
Cryptantha intermedia	Common Cryptantha	U
Cryptantha micromeres	Minute-flowered Cryptantha	U
Cryptantha nevadensis	Nevada Cryptantha	U
Cucurbita foetidissima	Stinking Gourd	U
Cuscuta californica	California Dodder	U
Cynodon dactylon *	Bermuda Grass	D
Cyperus eragrostis	Tall Flatsedge	W
Cyperus sp. *	Sedge	W

TABLE 4. OBSERVED SPECIES LIST – FLORA

Scientific Name	Common Name	Vegetation Community
Datura meteloides	Jimsonweed	U
Dichelostemma pulchellum	Blue Dicks	U
Diplacus aurantiacus	San Diego Monkeyflower	U
Distichlis spicata	Desert Salt Grass	W
Dryopteris arguta	Coastal Wood Fern	U
Dudleya edulis	Edible Dudleya	U
Dudleya pulverulenta	Chalk Live-forever	U
Eleocharis sp.	Spike-rush	W
Epilobium sp.	Fireweed	W
Erigeron foliosus	Fleabane	U
Eriogonum sp.	Buckwheat	U
Eriogonum fasciculatum	Flat-top Buckwheat	U
Eriophyllum confertiflorum	Golden Yarrow	U
Erodium cicutarium *	Red-stem Stork's-bill	D
Erodium moschatum *	White-stem Stork's-bill	D
Erysimum capitatum	Wallflower	U
Eucrypta chrysanthemifolia	Common Eucrypta	U
Euphorbia lathyris *	Caper	N
Euphorbia peplus *	Petty Spurge	N
Festuca elatior *	Tall Fescue	N
Festuca megalura *	Foxtail Fescue	U
Filago californica	California Filago	U
Filago gallica *	Narrow-leaf Filago	U
Fraxinus sp.	Ash	W
Galium angustifolium	Narrow-leaf Bedstraw	U
Galium aparine *	Common Bedstraw	U
Galium nuttallii	Nuttall's Bedstraw	U
Gilia capitata	Blue Field Gilia	U
Gnaphalium bicolor	Bicolor Cudweed	U
Gnaphalium californicum	California Cudweed	U
Gnaphalium canescens	Fragrant Everlasting	U
Gnaphalium palustre	Cudweed	W
Gutierrezia sp.	Matchweed	U
Haplopappus squarrosus	Hazardia	U
Hedypnois cretica *	Hedypnois	D

TABLE 4. OBSERVED SPECIES LIST – FLORA

Scientific Name	Common Name	Vegetation Community
Helianthemum scoparium	Rock Rose	U
Hemizonia fasciculata	Common Tarplant	U
Heteromeles arbutifolia	Toyon	U
Heterotheca grandiflora *	Telegraph Weed	D
Hypochaeris glabra *	Smooth Cat's-tongue	D
Juncus bufonius var. *bufonius*	Common Toad Rush	W
Keckiella cordifolia	Climbing Bush Penstemon	U
Keckiella antirrhinoides	Yellow Bush Penstemon	U
Lactuca serriola *	Wild Lettuce	D
Lamarckia aurea *	Goldentop	U
Lepidium sp.	Peppergrass	U
Lepidospartum squamatum	Scale-broom	U
Lolium multiflorum *	Italian Ryegrass	W
Lonicera subspicata	Wild Honeysuckle	U
Lotus argophyllus	Silver Lotus	U
Lotus purshianus	Spanish Clover	U
Lotus scoparius	Deerweed	U
Lotus strigosus var. *strigosus*	Bishop's Lotus	U
Lupinus bicolor	Bicolor Lupine	U
Lupinus hirsutissimus	Stinging Lupine	U
Lupinus truncatus	Collar Lupine	U
Lythrum sp.	Loosestrife	W
Madia sp.	Madia	U
Malacothamnus fasciculatus	Bushmallow	U
Malosma laurina	Laurel Sumac	U
Malva parviflora *	Cheeseweed	D
Marah macrocarpus	Man Root	U
Marrubium vulgare *	Horehound	D
Medicago polymorpha *	Bur Clover	N
Melica frutescens	Tall Melic	U
Melica imperfecta	Coast Range Melic	U
Melilotus indicus *	Indian Sweet Clover	N
Microseris lindleyi	Silver Puffs	U
Mimulus brevipes	Wide-throated Yellow Monkeyflower	W
Mimulus cardinalis	Scarlet Monkeyflower	W

TABLE 4. OBSERVED SPECIES LIST – FLORA

Scientific Name	Common Name	Vegetation Community
Mimulus floribundus	Seep Monkeyflower	W
Mimulus guttatus	Monkeyflower	W
Mirabilis californica	Wishbone Bush	U
Muhlenbergia microsperma	Small-seed Muhly	U
Navarretia hamata	Skunkweed	U
Nemophila sp.	Blue-eyes	U
Nicotiana glauca *	Tree Tobacco	D
Olea europa *	European Olive	N
Opuntia ficus-indica *	Indian Fig	U
Opuntia littoralis	Prickly Pear	U
Opuntia sp. *	Prickly Pear	U
Oryzopsis miliacea *	Indian Rice Grass	D
Paeonia californica	California Peony	U
Pellaea andromedifolia	Coffee Fern	U
Pellaea mucronata	Bird's-foot Fern	U
Penstemon spectabilis	Showy Penstemon	U
Persea americana *	Avocado	N
Phacelia cicutaria hispida	Caterpillar Phacelia	U
Phacelia parryi	Parry's Phacelia	U
Phacelia ramosissima	Phacelia	U
Phacelia sp.	Phacelia	U
Physalis crassifolia	Thick-leaved Ground Cherry	U
Picris echioides *	Bristly Ox-tongue	W
Pityrogramma triangularis var. *triangularis*	Goldenback Fern	U
Plantago erecta	Plantain	U
Plantago lanceolata	Rib Grass	W
Platanus racemosa	California Sycamore	W
Poa sp.	Bluegrass	U
Polypodium californicum	California Polypody	U
Polypogon monspeliensis *	Rabbitfoot Grass	W
Populus fremontii	Western Cottonwood	W
Populus trichocarpa	Black Cottonwood	W
Portulaca sp.	Purslane	U
Pterostegia drymarioides	Thread Stem	U
Pyrocantha sp. *	Pyrocantha	N

TABLE 4. OBSERVED SPECIES LIST – FLORA

Scientific Name	Common Name	Vegetation Community
Quercus agrifolia	Coast Live Oak	W
Prunica granatum	Pomegranate	N
Prunus ilicifolia	Holly-leaf Cherry	U
Rhamnus californica var. *californica*	Coffee Berry	U
Rhamnus ilicifolia	Redberry	U
Ribes indecorum	Winter Currant	U
Ricinus communis *	Castor Bean	W
Rubus ursinus	California Blackberry	W
Rumex salicifolius	California Dock	W
Salix gooddingii	Southwestern Willow	W
Salix laevigata	Red Willow	W
Salix lasiolepis	Arroyo Willow	W
Salsola pestifer *	Russian Thistle	N
Salvia apiana	White Sage	U
Salvia columbariae	Chia	U
Sambucus mexicanus	Elderberry	U
Schinus molle *	Peruvian Peppertree	N
Schismus barbatus *	Schismus	U
Scirpus olneyi	American Bulrush	W
Scirpus sp.	Bulrush	W
Scrophularia californica ssp. *floribunda*	Bee Plant	U
Selaginella bigelovii	Bigelow's Spikemoss	U
Silene gallica *	Common Catchfly	U
Silene lanciniata	Indian Pink	U
Sisymbrium altissimum *	Tumble Mustard	D
Solanum nodiflorum *	White-flowered Nightshade	D
Sonchus oleraceus *	Sow Thistle	D
Spergularia rubra	Ruby Sand Spurry	U
Stephanomeria virgata	Stephanomeria	D
Stipa coronata	Giant Stipa	U
Stipa lepida	Foothill Stipa	U
Stipa pulchra	Purple Stipa	U
Tamarix parvifolia *	Salt Cedar	W
Tamarix sp. *	Salt Cedar	W
Thalictrum polycarpum	Bush Rue	U

TABLE 4. OBSERVED SPECIES LIST – FLORA

Scientific Name	Common Name	Vegetation Community
Thysanocarpus curvipes	Lacepod	U
Toxicodendron diversilobum	Poison Oak	W
Tribulus terrestris *	Puncture Vine	W
Trifolium obtusiflorum	Creek Clover	W
Trifolium sp. *	Clover	N
Turricula parryi	Sticky Nama	W
Typha latifolia	Cattails	W
Typha angustifolia	Narrow-leaf Cattails	W
Urtica dioica ssp. *holosericea* *	Hoary Nettle	W
Vitis girdiana	Desert Grape	W
Xanthium strumarium *	Cocklebur	W
Yucca whipplei	Our Lord's Candle	U

Total = 185 species of plants detected

* = non-native taxon

Vegetation community codes:

W – Wetland (SSARW, SCLORF, Floodway, OW)

U – Upland (CSS, CLOW, CC)

N – Non-native (OV, F/P)

D – Developed/Disturbed (DH, U/D)

TABLE 5. OBSERVED SPECIES LIST – FAUNA

Scientific Name	Common Name
Birds	
Accipiter cooperii	**Cooper's Hawk**
Agelaius phoeniceus	Red-winged Blackbird
Aimophila ruficeps	**Rufous-crowned Sparrow**
Aphelocoma coerulescens	Scrub Jay
Archilochus anna	Anna's Hummingbird
Archilochus costae	Costa's Hummingbird
Ardea herodias	**Great Blue Heron**
Baeolophus inornatus	Oak Titmouse
Bubo virginianus	Great Horned Owl
Buteo jamaicensis	Red-tailed Hawk
Buteo lineatus	**Red-shouldered Hawk**
Callipepla californica	California Quail
Carduelis psaltria	Lesser Goldfinch
Carpodacus mexicanus	Housefinch
Cathartes aura	**Turkey Vulture**
Ceryle alcyon	Belted Kingfisher
Chamaea fasciata	Wrentit
Colaptes auratus	Northern Flicker
Columbia fasciata	Band-tailed Pigeon
Corvus brachyrhynchos	American Crow
Dendrocopos nuttallii	Nuttall's Woodpecker
Dendroica coronata	Audubon's Warbler
Dendroica petechia	**Yellow Warbler**
Elanus leucurus	**White-tailed Kite**
Empidonax difficilis	Pacific-slope Flycatcher
Falco sparverius	American Kestrel
Geococcyx californicus	Greater Roadrunner
Hirundo pyrrhonota	Cliff Swallow
Icteria cucullaria	Hooded Oriole
Melanerpes formicivorus	Acorn Woodpecker
Melospiza melodia	Song Sparrow
Mimus polyglottos	Mockingbird
Myiarchus cinerascens	Ash-throated Flycatcher
Passerina amoena	Lazuli Bunting
Phainopepla nitens	Phainopepla

TABLE 5. OBSERVED SPECIES LIST – FAUNA

Scientific Name	Common Name
Birds (cont)	
Pipilo crissalis	California Towhee
Pipilo erythrophthalmus	Rufous-sided Towhee
Polioptila caerulea	Blue-gray Gnatcatcher
Psaltriparus minimus	Bushtit
Salpinctes mexicanus	Cañon Wren
Sayornis nigricans	Black Phoebe
Sayornis saya	Say's Phoebe
Sitta carolinensis	White-breasted Nuthatch
Spizella atrogularis	Black-chinned Sparrow
Sturnus vulgaris *	Starling
Thryomanes bewickii	Bewick's Wren
Toxostoma redivivum	California Thrasher
Troglodytes aedon	House Wren
Turdus migratorius	American Robin
Vermivora celata	Orange-crowned Warbler
Vireo huttoni	Hutton's Vireo
Wilsonia pusilla	Wilson's Warbler
Zenaida macroura	Mourning Dove
Mammals	
Canis latrans	Coyote
Felis concolor	**Mountain Lion**
Lynx rufus	**Bobcat**
Neotoma lepida intermedia	**San Diego Desert Woodrat**
Odocoileus hemionus	**Mule Deer**
Peromyscus sp.	Deer Mouse
Procyon lotor	Raccoon
Sylvilagus audubonii	Desert Cottontail
Thomomys bottae	Valley Pocket Gopher
Urocyon cinereoargenteus	Gray Fox
Fish	
Gambusia affinis *	Mosquito Fish
Lepomis cyanellus *	Green Sunfish
Micropterus dolomieu *	Smallmouth Bass

TABLE 5. OBSERVED SPECIES LIST – FAUNA

Scientific Name	Common Name
Amphibians	
Bufo boreas	Western Toad
Hyla cadaverina	California Treefrog
Hyla regilla	Pacific Treefrog
Rana catesbeiana *	Bullfrog
Reptiles	
Cnemidophorus hyperythrus beldingi	**Orange-throated Whiptail**
Cnemidophorus tigris multiscutatus	**Coastal Western Whiptail**
Hypsiglena torquata	San Diego Night Snake
Lampropeltis getulus	Common Kingsnake
Sceloporus occidentalis	Western Fence Lizard
Sceloporus orcuttii	Granite Spiny Lizard
Uta stansburiana	Side-blotched Lizard
Butterflies	
Apodemia mormo virgulti	Behr's Metalmark
Calephelis wrighti	Wright's Metalmark
Coenonympha californica	California Ringlet
Erynnis funeralis	Funereal Duskywing
Erynnis sp.	Duskywing
Hemiargus ceraunus gyas	Edward’s Blue
Leptotes marina	Marine Blue
Limenitis lorquini	Lorquin’s Admiral
Junonia coenia	Buckeye
Papilio eurymedon	Pale Swallowtail
Papilio rutulus	Western Tiger Swallowtail
Pontia protodice	Common White
Vanessa cardui	Painted Lady

Total = 90 animals (53 birds, 10 mammals, 3 fish, 4 amphibians, 7 reptiles, and 13 butterflies) detected

* = non-native taxon

bold = sensitive taxon (13 species)

TABLE 6. POTENTIAL SENSITIVE SPECIES – FLORA

Scientific Name	Common Name	Sensitivity Code & Status	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Verified Onsite / Focused Survey Results	Potential to Occur Onsite	Factual Basis for Determination
Brodiaea orcuttii	Orcutt's Brodiaea	County Group A			X	X	X	X								X				**Neg**	**L**	**1a**
Clarkia delicata	Campo Clarkia	County Group A					X													**Neg**	**M**	**3a**
Harpagonella palmeri	Palmer's Grappling Hook	County Group D	X		X			X												**Neg**	**L**	**3a**
Horkelia truncata	Ramona Horkelia	County Group A		X																**Neg**	**L**	**2a**
Monardella hypoleuca lanata	Felt-Leaved Rock Mint	County Group A		X				X												**Neg**	**L**	**1a**
Nolina cismontana	Chaparral Beargrass	County Group A		X				X												**Neg**	**L**	**1a**
Piperia leptopetala	Narrow-Petaled Rein Orchid	County Group D				X								X						**Neg**	**M**	**3a**
Piperia cooperi	Cooper's Rein Orchid	County Group D	X	X			X													**Neg**	**M**	**3a**
Polygala cornuta fishiae	Fish's Milkwort	County Group D		X				X												**Neg**	**M**	**2a**
Quercus engelmannii	Engelmann Oak	County Group D				X	X													**Neg**	**L**	**2a**
Senecio ganderi	Gander's Butterweed	State, County Group A		X				X												**Neg**	**L**	**1a**
Tetracoccus dioicus	Parry's Tetracoccus	County Group A		X				X												**Neg**	**L**	**1a**

Probability of Occurrence Codes for Table 6:

L – Low Probability; rare species in area. Most of these species occur in habitat not found on the Shadow Run Ranch site, including heavy clay lenses, vernal pools, etc. Thread-leaved Brodiaea and Spreading Navarretia are two examples of species that fit into this category. Both are very rare in southern California.

M – Moderate Probability. These species occur in habitat similar to that found onsite, although they may or may not utilize the Shadow Run Ranch property. Graceful Tarplant and Brewer's Calandrinia are examples of species that have a moderate probability of occurring onsite

O – Observed; see text for detailed discussion.

Factual Basis for Determination for Table 6:

1a - no significant habitat for plant;

2a - distinctive perennial that would not have been missed if present onsite

3a - ephemeral species known from the immediate vicinity, but seasonal in occurrence and difficult to detect

TABLE 7. POTENTIAL SENSITIVE SPECIES – FAUNA

Scientific Name	Common Name	Sensitivity Code & Status	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Verified Onsite / Focused Survey Results	Potential to Occur Onsite	Factual Basis for Determination
Accipiter cooperii	Cooper's Hawk	County	X	X	X	X	X	X	X	X							X			**Pos / Direct**	**O**	**--**
Accipiter striatus	Sharp-shinned Hawk	County	X	X		X	X	X	X	X										**Neg**	**M**	**2a**
Agelaius tricolor	Tricolored Blackbird	County			X	X						X								**Neg**	**L**	**2a**
Aimophila ruficeps canescens	Rufous-crowned Sparrow	County	X					X												**Pos / Direct**	**O**	**--**
Ammodramus savannarum	Grasshopper Sparrow	County				X														**Neg**	**L**	**1a**
Amphispiza belli belli	Bell's Sage Sparrow	County	X	X				X												**Neg**	**M**	**2a**
Anniella pulchra pulchra	Silvery Legless Lizard	County		X		X	X												X	**Neg**	**M**	**2a**
Antrozous pallidus	Pallid Bat	County		X	X	X	X	X	X	X	X	X		X	X			X		**Neg**	**M**	**2a**
Aquila chrysaetos	Golden Eagle	County	X	X	X		X	X	X	X	X									**Neg**	**M**	**2a**
Ardea herodias	Great Blue Heron	County			X							X							X	**Pos / Direct**	**O**	**--**
Bassariscus astutus	Ringtail	County		X				X												**Neg**	**M**	**2a**
Bufo microscaphus californicus	Arroyo Toad	Federal, County				X														**Neg**	**M**	**2a**

TABLE 7. POTENTIAL SENSITIVE SPECIES – FAUNA

Scientific Name	Common Name	Sensitivity Code & Status	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Verified Onsite / Focused Survey Results	Potential to Occur Onsite	Factual Basis for Determination
Buteo lineatus	Red-shouldered Hawk	County				X	X													**Pos / Direct**	**O**	**--**
Cathartes aura	Turkey Vulture	County	X	X	X	X	X	X	X	X										**Pos / Direct**	**O**	**--**
Chaetodipus californicus femoralis	Dulzura CA Pocket Mouse	County	X	X	X		X	X	X											**Neg**	**M**	**2a**
Charina trivirgata roseofusca	Coastal Rosy Boa	County	X	X			X	X												**Neg**	**M**	**2a**
Cnemidophorus hyperythrus	Orange-throated Whiptail	County	X	X	X	X		X												**Pos / Direct**	**O**	**--**
Cnemidophorus tigris multiscutatus	Coastal Western Whiptail	County		X		X	X	X												**Pos / Direct**	**O**	**--**
Coleonyx variegatus abbotti	San Diego Banded Gecko	County	X		X			X												**Neg**	**M**	**2a**
Corynorhinus townsendii	Townsend's Big-eared Bat	County		X	X	X	X	X	X	X	X		X	X			X			**Neg**	**M**	**2a**
Crotalus ruber ruber	N Red Diamond Rattlesnake	County	X	X				X			X		X							**Neg**	**H**	**3a**
Danaus plexippus	Monarch Butterfly	County		X	X		X										X			**Neg**	**H**	**3a**
Dendroica petechia brewsteri	Yellow Warbler	County					X													**Pos / Direct**	**O**	**--**
Diadophis punctatus similis	San Diego Ringneck Snake	County		X	X		X	X	X	X	X									**Neg**	**H**	**3a**

TABLE 7. POTENTIAL SENSITIVE SPECIES – FAUNA

Scientific Name	Common Name	Sensitivity Code & Status	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Verified Onsite / Focused Survey Results	Potential to Occur Onsite	Factual Basis for Determination
Dipodomys stephensi	Stephen's Kangaroo Rat	Fed, State, County	X		X															**Neg**	**L**	**1a**
Elanus caeruleus	White-tailed Kite	County			X	X														**Pos / Direct**	**O**	**--**
Empidonax trailii extimus	SW Willow Flycatcher	Federal, County				X														**Neg**	**L**	**2a**
Eremophila alpestris actis	Horned Lark	County			X												X			**Neg**	**M**	**2a**
Eumeces skiltonianus	Coronado Skink	County	X	X	X	X	X	X	X	X							X			**Neg**	**H**	**3a**
Eumops perotis californicus	Greater Western Mastiff Bat	County	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	**Neg**	**M**	**2a**
Felis concolor	Mountain Lion	County	X	X		X	X	X	X	X	X		X	X			X			**Pos / Indirect**	**O**	**--**
Lanius ludovicianus	Loggerhead Shrike	County	X		X	X	X						X	X						**Neg**	**M**	**2a**
Lepus californicus bennettii	SD Black-tailed Jackrabbit	County	X	X	X		X	X	X	X										**Neg**	**M**	**2a**
Myotis ciliolabrum	Small-Footed Myotis	County		X		X	X	X	X	X	X			X			X			**Neg**	**M**	**2a**
Myotis evotis	Long Eared Myotis	County		X		X	X	X	X	X	X						X			**Neg**	**M**	**2a**
Myotis thysanodes	Fringed Myotis	County		X		X	X	X	X	X	X						X			**Neg**	**M**	**2a**

TABLE 7. POTENTIAL SENSITIVE SPECIES – FAUNA

Scientific Name	Common Name	Sensitivity Code & Status	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Verified Onsite / Focused Survey Results	Potential to Occur Onsite	Factual Basis for Determination
Myotis volans	Long Legged Myotis	County		X		X	X	X	X	X	X						X			**Neg**	**M**	**2a**
Myotis yumanensis	Yuma Myotis	County	X	X	X	X	X	X	X	X	X	X			X	X	X		X	**Neg**	**M**	**2a**
Neotoma lepida intermedia	San Diego Desert Woodrat	County	X	X		X	X	X												**Pos / Direct**	**O**	**--**
Nyctinomops macrotis	Big Free-tailed Bat	County	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	**Neg**	**M**	**2a**
Nyctinomops femorosaccus	Pocketed Free-tailed Bat	County	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			**Neg**	**M**	**2a**
Odocoileus hemionus	Southern Mule Deer	County	X	X	X	X	X	X	X	X	X		X	X			X			**Pos / Indirect**	**O**	**--**
Onychomys torridus ramona	Southern Grasshopper Mouse	County	X	X	X			X												**Neg**	**L**	**1a**
Perognathus longimembris brevinasus	Los Angeles Little Pocket Mouse	County	X	X	X		X	X										X		**Neg**	**L**	**1a**
Phrynosoma coronatum blainvillei	San Diego Coast Horned Lizard	County	X	X	X			X												**Neg**	**H**	**3a**
Polioptila californica californica	California Gnatcatcher	Federal, County	X																	**Neg**	**L**	**2a**
Salvadora hexalepis virgultea	Coast Patch-nosed Snake	County	X	X				X			X									**Neg**	**H**	**3a**
Scaphiopus hammondii	Western Spadefoot	County	X	X	X	X	X	X	X	X							X			**Neg**	**H**	**3a**

TABLE 7. POTENTIAL SENSITIVE SPECIES – FAUNA

Scientific Name	Common Name	Sensitivity Code & Status	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Verified Onsite / Focused Survey Results	Potential to Occur Onsite	Factual Basis for Determination
Sialia mexicana	Western Bluebird	County				X	X		X											**Neg**	**M**	**2a**
Taxidea taxus	American Badger	County	X	X	X		X	X	X		X		X	X			X			**Neg**	**M**	**2a**
Vireo bellii pusillus	Least Bell's Vireo	Fed, State, County				X														**Neg**	**L**	**2a**

Probability of Occurrence Codes for Table 7:

L – Low Probability; rare species in area. Most of these species occur on habitat not found on the Shadow Run Ranch site, including vernal pools, coastal dunes, etc. California Red-legged Frogs and Yellow-billed Cuckoo are two examples of species that fit into this category. Both are extremely rare in California.

M – Moderate Probability. Most of these species occur in habitat similar to that found onsite, although they may or may not utilize the Shadow Run Ranch property. Native bats and uncommon but cryptic reptiles are examples of species that have a moderate probability of occurring onsite

H – High Probability. Most of these species are expected to use the site, but are difficult to reliably detect. Examples include fossorial reptiles and amphibians, wide-ranging birds, etc.

O – Observed; see text for detailed discussion.

Factual Basis for Determination for Table 7:

1a - no significant habitat for animal

2a - could be expected to occur onsite on at least an occasional basis, based on habitat quality

3a - nearly certain to occur onsite, but cryptic and/or difficult to detect;

ATTACHMENT A

Conceptual Resource Management Plan

RESOURCE MANAGEMENT PLAN

FOR THE

SHADOW RUN RANCH PROJECT

3100-5223 (TM) RPL#3
3300-00-030 (MUP)
3710-00-0205 (BC)
ENVIRONMENTAL LOG NO. 3910-00-02-035
PAUMA VALLEY, COUNTY OF SAN DIEGO

PREPARED FOR

MS. SHERRILL SCHOEPE
SHADOW RUN RANCH, LLC
P.O. BOX 1249
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MARCH 2014

VINCENT N. SCHEIDT, MA
CERTIFIED BIOLOGICAL CONSULTANT

PDS AUTHORIZED SIGNATURE

Lead Agency - THE COUNTY OF SAN DIEGO

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GLOSSARY OF ACRONYMS

BMP .....Best Management Practices

CCR .....Conditions, Covenants and Restrictions

CDFG ..... California Department of Fish and Game

DCAO .....Deputy Chief Administrative Officer

PDS ..... Planning & Development Services

DPR..... Department of Parks and Recreation

DPW .....Department of Public Works

FMP .....Framework Management Plan

MOU ..... Memorandum of Understanding

MSCP .....Multiple Species Conservation Program

MUP ..... Major Use Permit

PAMA ..... Pre-approved Mitigation Area

RMP ..... Resource Management Plan

USFWS .....United States Fish and Wildlife Service

GLOSSARY OF STANDARD TERMS

Adaptive Management: A systematic process for continually improving management policies and practices by learning from the outcomes of operational programs.

Biological Open Space Easement: An easement dedicated to the County of San Diego for the purposes of the preservation of natural resources.

California Department of Fish and Game (**CDFG):** a department of the California Resources Agency.

Conservation Easement: A legal agreement between a landowner and a land trust or government agency, such as the *CDFG*, that permanently limits uses of the land in order to protect its conservation values (California Government Code Section 27255).

Dedication: The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

Easement: Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

Exotic Species: A species of plant or animal that is not indigenous, native, or naturalized to the area where it is found.

GLOSSARY OF STANDARD TERMS

Habitat: The combination of environmental conditions of a specific place providing for the needs of a species or a population of such species.

Habitat Requirements: A specific set of physical and biological conditions that surround a single species, group of species, or community of species upon which the species or associations are dependent for their existence. In wildlife management the major components of habitat are considered to be food, water, cover and living space.

Listed Species: A taxon that is protected under the *FESA* or *CESA*. Listing categories include: Threatened, Endangered, Species of Special Concern, State Protected Species, Federally Proposed Threatened or Endangered, and Federally Petitioned Threatened or Endangered.

MSCP: A *Subregional* Plan. Also refers to the County of San Diego's Multiple Species Conservation Program *Subarea* Plan or City of San Diego's Multiple Species Conservation Program *Subarea* Plan.

Monitoring: The timed collection of information to determine the effects of resource management and to identify changing resource conditions or needs.

Native (Indigenous) Species: A species of plant or animal that naturally occurs in an area and that was not introduced by humans.

Plant Community: Assemblage of plant populations in a defined area or physical habitat; an aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape.

Resource Management Plan (RMP): An activity plan for wildlife resources for a specific geographical area of land. It identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

Sensitive Species: Plant or animal species listed as endangered, threatened, candidate, or sensitive by federal, state, or local governments.

Take: Under *FESA and CESA*: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct relative to a Listed Species.

United States Fish and Wildlife Service (FWS/USFWS): An agency of the United States Department of the Interior.

Vegetative Community: Refers to the species or various combinations of species which dominate or appear to dominate an area of habitat (see *plant community*).

Wildlife Agencies: The *USFWS* and *CDFG*, collectively.

EXECUTIVE SUMMARY

The Shadow Run Ranch (SRR) project, Tentative Map 3100-5223 (TM) RPL#3, consists of the subdivision of the approximately 248-acre Shadow Run Ranch property (APN 111-080-07, -08, -09, -10, -18, & -19, APN 111-070-12 & -13, and portions of APN 111-080-14, -15, & -16) into 44 legal residential lots, to be developed in the future with single family homes, and three open space lots. The three open space lots conserve biological resources, agricultural resources, and a recreational area. Approval and implementation of the SRR project will result in the entirety of the site that is not in open space being impacted or potentially impacted by grading for residential use, including necessary road construction and future build out, with homes, landscaping, fire clearing, and related site improvements. The project includes offsite road improvements from Adams Drive and State Route 76. Habitats presently found on the property and in the footprint of the proposed offsite road improvements are Orchards and Vineyards, Chamise Chaparral, Diegan Coastal Sage Scrub, Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Floodway, Coast Live Oak Woodland, Open Water, Disturbed Habitat, Urban/Developed, and Field/Pasture. Sensitive species present onsite are Cooper's Hawk, White-tailed Kite, Turkey Vulture, Yellow Warbler, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Great Blue Heron, Mountain Lion, Bobcat, Mule Deer, San Diego Desert Woodrat, Coastal Western Whiptail, and Orange-throated Whiptail. In addition to the biological resources present onsite, ten cultural resource sites are located on the property. In order to protect native habitats, sensitive species, and cultural resources onsite, approximately 91.3 acres of the SRR project site will be preserved under a dedicated Biological Open Space or Conservation Easement. Portions of the conserved lands will be significantly enhanced through wetlands restoration and habitat enhancement activities. This plan identifies methods to preserve the resources associated with those 91.3 acres in perpetuity.

1.0 INTRODUCTION

1.1 Purpose of Resource Management Plan

The SRR project consists of the subdivision of the Shadow Run Ranch property (APN 111-080-07, -08, -09, -10, -18, & -19, APN 111-070-12 & -13, and portions of APN 111-080-14, -15, & -16) into 44 legal residential lots, which will likely be built out in the future with single family homes, and three open space lots. Open Space Lot 45 is an Agricultural Open Space Easement located on the eastern portion of the site. Open Space Lot 46 is a Biological Open Space Easement located on the northern and western portions of the site. This lot contains Frey Creek and natural areas of the site associated with the southern flanks of Palomar Mountain. Open Space Lot 47 is a Recreational Open Space Easement located on the central northern portion of the site. The project includes offsite road improvements to the south and east. It is anticipated that each of the 44 new residential lots will be developed in the future with homes and related improvements.

The project includes the dedication of a Biological Open Space or Conservation Easement over 91.3 acres of the property (hereafter "SRR Preserve"), including its most biologically sensitive portions and up to seven archaeological sites. This encompasses all of Open Space Lot 46. A portion of the Preserve will be subject to wetland restoration and enhancement activities in order to mitigate for project impacts to jurisdictional wetlands and "waters". These activities will occur pursuant to an approved Wetland Mitigation Plan.

The purpose of this RMP is to guide the management of vegetation communities/habitats, plant and animal species, and cultural resources within the Preserve. This RMP serves as a descriptive inventory of vegetation communities/habitats, plant and animal species, and archaeological resources that occur within the Preserve. This RMP establishes the baseline conditions from which adaptive management will be determined and success will be measured. Additionally, this RMP provides an overview of the operation, maintenance, administrative, and personnel requirements necessary to implement management goals and serves as a budget planning aid.

1.1.1 Conditions and/or Mitigation Measures that Require an RMP

In order to minimize project-related impacts to sensitive biological resources, the County of San Diego (hereafter "County") has conditioned the project to require the preparation and implementation of a Resource Management Plan (RMP). This requirement is expressed in the County's "Report Format and Content Requirements: Biological Resources", which states, "a Resource Management Plan (RMP) shall be required when a project proposes open space totaling 50 acres or more…Projects shall be conditioned to submit the RMP for approval prior to any grading, clearing, or other development of the site" (DPLU, 2009). Furthermore, "A Biological Resources Survey Report for the Shadow Run Ranch

Project" states, "Impacts to Special Status Species shall be mitigated for through the preservation of the most biologically significant areas (supporting most specimens of the Special Status Species residing on this site) in a BOSE. This mitigation measure will require the preparation and approval of a Resource Management Plan" (Scheidt, 2012). The purpose of the requirement for an RMP is to define specific measures to ensure the long-term viability of the Preserve through monitoring and maintenance activities designed to protect the Preserve in perpetuity. This document satisfies that requirement.

1.1.2 Agency Review and Coordination

According to the County's "Report Format and Content Requirements: Biological Resources", "the only difference between an open space easement and a conservation easement is that the California Department of Fish and Game is named a Third Party to a conservation easement for enforcement purposes" (DPLU, 2009). The County shall accept guidance and input from the Wildlife Agencies (USFWS/CDFG) pursuant to the approval of this RMP. However, if the proposed Biological Open Space or Conservation Easement is granted to an agency other than the County or CDFG, review and approval by that agency shall be required.

1.2 Implementation

1.2.1 Responsible Parties and Designation of Resource Manager

Responsible Parties

The following organizations and individuals will be involved in the fulfillment of this RMP:

- Ms. Sherrill Schoepe, the current Land Owner, shall be responsible for granting a Biological Open Space or Conservation Easement over the Preserve to the County and the CDFG.

- The County, through the PDS, has the ultimate responsibility for all aspects of the RMP. The County may transfer responsibility to a different department, such as the DPR or DPW, if deemed appropriate.

- The Land Owner shall designate a Resource Manager who shall be responsible for the implementation of the RMP and shall carry out the specified requirements of the RMP.

- The County shall designate one of its staff members as the Preserve Administrator. The Resource Manager shall report directly to the Preserve Administrator on all issues, concerns, and questions, unless otherwise directed in writing by the Preserve Administrator.

- The Wildlife Agencies shall serve in an advisory capacity to the County in regards to implementation of the RMP.

Fee title to the Preserve shall be held by the Land Owner. However, this fee title may be transferred to a Resource Manager, as defined above, or other appropriate landowner (e.g., land trust, conservancy, or public agency). If the land is transferred in fee title to any other entity, the Biological Open Space or Conservation Easement must always include the County and/or another appropriate responsible agency as defined under Section 815 of the California Civil Code as a grantee or third-party beneficiary.

Designation of Resource Manager

The County shall only accept one of the following as a resource manager:

- Conservancy Group
- Natural resources land manager
- Professional natural resources consultant
- Professional habitat manager
- County DPR
- County DPW
- Federal or State Wildlife Agency (USFWS, CDFG)
- Federal Land Manager, such as Bureau of Land Management
- City Land Managers, including but not limited to DPR, Watershed Management, or DPW

The resource manager shall be approved in writing by the Director of the PDS, the Director of the DPW, or the Director of the DPR. Any change in the designated Resource Manager shall also be approved in writing by the appropriate director. The Resource Manager shall have the following qualifications:

- The Resource Manager shall have at least one staff member who possesses a B.S., B.A., or higher degree in ecology, zoology, botany, or biology or an MOU with a qualified person with such a degree. This individual should have a minimum of five years of experience in field biology in San Diego County.

- The Resource Manager shall have a cultural resource professional on staff or an MOU with a cultural consultant. The cultural consultant shall be on the County's approved consultants list.

- Fiscal stability, including preparation of an operational budget (using an appropriate analysis technique) for the management of this RMP.

- Demonstrated experience with similar projects or in projects requiring similar skills in San Diego County.

- The ability to carry out habitat monitoring or mitigation activities.

The Resource Manager's primary responsibility shall be to maintain the integrity of the conserved habitats and archaeological sites in the Preserve. In order to fulfill that responsibility, the Resource Manager shall:

- Be familiar with this RMP and all supporting documentation.

- Be responsible for all matters noted in this RMP that are required of the Resource Manager.

- Maintain all documents transferred by the Land Owner and her contractors (as noted above) and be knowledgeable of the resources and their locations addressed in these reports.

- Be responsive to any community concerns or problems regarding the Preserve.

- Document all field visits, notify the Preserve Administrator in a timely manner of any concerns or problems, and identify potential solutions.

As described above, a portion of the Preserve will be subject to wetland restoration and enhancement activities pursuant to an approved Wetland Mitigation Plan. Management responsibility for the restoration and enhancement areas shall remain with the restoration entity until these activities are completed. Upon County acceptance of the restoration and enhancement areas, management responsibility for these areas will be transferred to the Resource Manager.

At this time, *(to be determined)* has been identified as the Resource Manager responsible for implementation of the specified requirements of this RMP.

Land Owner Responsibilities

The Land Owner shall perform the following tasks in conjunction with approval of SRR and dedication of a Biological Open Space or Conservation Easement over the Preserve:

- Pay all recording and related costs

- Complete an initial clean-up of the Preserve, removing debris and all other items as deemed necessary by (and to the satisfaction of) the Resource Manager. The initial site clean-up

activities shall be done in such a manner so as to not adversely impact biological or cultural resources within the Preserve

- Remove exotics and weeds within the Preserve by approved personnel to the satisfaction of the Resource Manager

- Install permanent fencing, signs, and a gate between the Preserve and the development area of the project site

- Provide a permanent access easement for the Resource Manager to the Preserve, to the satisfaction of the Resource Manager

- Supply the Resource Manager with copies of all relevant reports prepared for the project (e.g., biology reports, cultural reports, soils reports, landscape plans, revegetation plans, etc.)

- Survey and stake the perimeter of the Preserve and provide the digital data (way/perimeter points) to the Resource Manager

The Land Owner shall implement the following measures to protect the Preserve from the development area of the site and all activities associated with project implementation:

- No staging of equipment or stockpiling of materials shall be allowed in or within 20 feet of the limits of the Preserve.

- Employment of a County-approved biologist to supervise activities associated with construction of the fence delineating the boundary between the development area and the Preserve. The biologist shall ensure that such activities do not impact additional areas of sensitive resources.

- Prevention of the introduction of invasive exotics. The County's Landscape Guidelines prohibit the purchase and planting of any invasive plant species, such as Tamarisk *(Tamarix* sp.*)*, Pampas Grass *(Cortaderia* sp.*)*, and others. Invasive plants shall not be planted in areas adjacent to the Preserve. Any project landscape planting palette shall be reviewed by the County prior to the issuance of any permits for the project. Any noxious invasives or potential noxious invasives found on the landscape palette shall be deleted from the project plans.

- All areas of the Preserve that are adjacent to the development area shall be protected in accordance with Storm Water Pollution Prevention Plan (SWPPP) measures, in order to reduce potential secondary impacts to habitats within the Preserve. To that end, the biologist shall inspect all SWPPP devices (silt fences, straw waddles, etc.) to make sure that they have been

properly installed, preventing erosion and/or siltation concerns, and document in writing that the SWPPP devices have remained in place during all grading, brushing, and/or clearing associated with project implementation. Evidence of this shall be provided in a letter to the PDS.

- Should construction activities result in the deposit of any debris within the Preserve, it shall be removed and cleaned up to the satisfaction of the Resource Manager and the Preserve Administrator. Furthermore, any additional harm caused by construction activities to the Preserve shall be immediately corrected. This may involve weed eradication, habitat rehabilitation, and/or revegetation, if deemed necessary by the Resource Manager and Preserve Administrator to restore the Preserve to its pre-construction condition. In the instance of significant or particularly egregious construction impacts, offsite mitigation shall be provided in addition to remediation within the Preserve. Any remediation work done by the landowner shall be supervised, directed, and/or all personnel should be trained by the Resource Manager to ensure that native habitat is not adversely affected.

- In the event that construction activities are to take place within 100 feet of the archaeological sites located within the Preserve, a County-approved temporary fencing plan shall be implemented to protect the archaeological sites. The temporary fence shall be installed under the supervision of a qualified archaeologist (who may be the Resource Manager) prior to commencement of grading, brushing, and/or clearing and shall be removed only after grading operations have been completed.

1.2.2 Financial Responsibility and Mechanism

The Land Owner shall post a one-time, non-wasting endowment, which is tied to the property, to be used by the Resource Manager to implement this RMP in perpetuity. The endowment shall be based on a Property Analysis Record (PAR) created for that purpose. The PAR-based endowment shall be maintained by a third-party 501(3)(c) corporation, such as the San Diego Foundation or other charitable foundation. A PAR has been prepared by for this property and is provided in Attachment A.

1.2.3 Cost Estimate/Budget

Table 2 provides details supporting the cost estimate.

1.2.4 Reporting Requirements

An Annual Operation Report shall be submitted to the PDS and the Wildlife Agencies, along with funds to cover County staff review time. Annual reports shall discuss the previous year's management and monitoring, as well as management and monitoring anticipated in the upcoming year. The annual report

shall provide a concise but complete summary of management and monitoring methods, identify any new management issues, and address the success or failure of management approaches (based on monitoring). The report shall include a summary of changes from baseline or the previous year's conditions for species and vegetation communities and address any monitoring and management limitations, including weather. The report shall also address any adaptive management (changes) resulting from previous monitoring results and provide a methodology for measuring the success of adaptive management. In addition, the annual report shall document the condition of the Preserve and provide specific recommendations, as necessary, to remediate any problems. If any habitats or sensitive species' populations appear to be declining, the annual report shall outline a plan for the recovery of the resource(s).

Site photographs from fixed photo-documentation points shall be provided in the annual report. These shall clearly depict the height and cover of the native vegetation, condition of the fences and signs, and any problems not needing an emergency response. The annual report shall summarize remediation required during the previous reporting period and make specific recommendations for future maintenance and monitoring. The report shall include copies of CNDDB forms submitted to the CDFG for any new sensitive species observations or significant changes to species occurrences or habitats previously reported. The report shall also include copies of invasive plant species forms submitted to the CDFG and the County, if applicable.

1.2.5 Signed Agreement/Memorandum of Understanding

Because this RMP is associated with a discretionary project, the County will require a Memorandum of Understanding (MOU) between the applicant, the County, and the Resource Manager, to be provided upon County acceptance of the final RMP. The MOU will state that the applicant agrees to implement the RMP, which includes a financing mechanism that provides perpetual funding (in this case, a non-wasting endowment) to pay the costs of all RMP management activities. The MOU shall provide a mechanism for the funds to transfer to the County in the event of the failure of the Resource Manager to meet the goals of the RMP. The MOU shall also provide that, prior to approval of SRR, the applicant shall demonstrate that all RMP funding has been provided or the funding mechanism has been established.

2.0 PROPERTY DESCRIPTION

2.1 Legal Description

The SRR project site consists of the approximately 248.26-acre Shadow Run Ranch property (APN 111-080-07, -08, -09, -10, -18, & -19, APN 111-070-12 & -13, and portions of APN 111-080-14, -15, & -16), as well as an approximately 3.6 acres offsite to the south and east that will be impacted by offsite road

improvements. The project site is located north of State Route 76 (Pala Road) and west of Adams Drive in the Pauma Valley of unincorporated San Diego County. Specifically, the project site is located in Township 9 South/Range 1 West/Section 32 on the "Pala" quadrangle of the USGS 7.5' topographic series map (Figure 1). This location can be found on page 409 of the Thomas Guide for San Diego County, Quad E6.

2.2 Geographical Setting

The SRR project site can be reached by taking Interstate 15 North to State Route (SR) 76 East. The project site takes access directly off of SR 76 via a private, gated driveway located immediately to the west of the intersection of SR 76 and Adams Drive. Figure 2 presents a regional location map identifying county and major state/federal highway access to the property.

The SRR site supports a segment of Frey Creek, which is a U.S.G.S. "blue-line" stream and an area targeted for proposed conservation planning. The site is also situated on the southern flanks of Palomar Mountain, and the native vegetation on the northern and western portions of the site is continuous with the large block of habitat associated with Palomar Mountain and the Cleveland National Forest. Within the context of San Diego County's Multiple Species Conservation Program (MSCP) draft North County Subarea Planning area, the site has been designated as a Pre-approved Mitigation Area (PAMA). The draft North County MSCP Planning area is a proposed NCCP Subarea to the Subregional MSCP. The site has been designated in the draft North County MSCP Subarea Plan as receiving "Take Authorization" for a suite of species associated with this portion of the County. The site is not directly adjacent to any preserved lands, national forest lands, or BLM lands, although the Cleveland National Forest is located a short distance to the north of the property. Sovereign Native American lands adjoin the property; the Pauma Indian Reservation is located immediately to the east of the site, and the Pala Indian Reservation adjoins the property along part of its western boundary. Frey Creek constitutes a jurisdictional waterway, and portions of the site qualify as a part of the San Luis Rey River (SLRR) watershed.

2.3 Land Use

Existing land uses on the SRR project site include active agriculture, which covers the majority of the property, several trailers and single-family homes, which are located on the southern portion of the site, a reservoir located near the northeastern property corner, and various dirt roads that cross the property. Areas of native upland vegetation are found on the northeastern and western portions of the site, on the southern flanks of Palomar Mountain. Native wetland vegetation is located along Frey Creek, a U.S.G.S. "blue-line" stream that runs along the northern and western property boundaries. The SRR property is located in a rural part of San Diego County. Land uses on surrounding parcels include active agriculture (to the west and southeast), scattered homes (to the southeast), and

undisturbed areas to the north, south, and southwest. All adjoining lands are under private ownership. No preserved lands adjoin or are contiguous with the project site.

2.4 Geology, Soils, Climate, Hydrology

The majority of the property slopes gently upward to the north, towards Palomar Mountain. A steep knoll is located along the eastern boundary of the site. The northernmost portion of the site is characterized by a steep, south-facing slope associated with the southern flanks of Palomar Mountain. A significant drainage feature (Frey Creek) crosses the northern portion of the site, separating the south-facing slope from the onsite knoll. Frey Creek also runs down the western edge of the property. Several other minor drainages are found onsite, as is a man-made reservoir that exhibits no hydrological connectivity. The site generally drains to the south and is located in the SLRR watershed. Elevations on the property range between approximately 770 feet MSL at the site's southwestern corner and 1,620 feet MSL at the site's highpoint near the northeastern corner.

Soil types found onsite include Soboba stony loamy sand (SsE) on slopes between 9 and 30 percent, Greenfield sandy loam (GrD) on slopes between 9 and 15 percent, Cieneba-Fallbrook rocky sandy loam (CnE2) on slopes between 9 and 30 percent, Cieneba-Fallbrook rocky sandy loam (CnG2) on slopes between 30 and 65 percent, and Stony land (SvE). These soil-types are not known to support significant populations of narrow endemics or other very rare plants or animals.

The climate of Pauma Valley is characterized by hot, dry summers, with average day-time temperatures in the 80's Fahrenheit, and mild, wetter winters, with average day-time temperatures in the 50's Fahrenhe it. Yearly precipitation averages between 18 and 30 inches, with most of this total occurring between November and March. This period also represents the main growing season of the area.

2.5 Trails

The SRR project application proposes the creation of a private trail, which will run through the Recreational Open Space Easement and the development portion of the site. This proposed trail will not be located immediately adjacent to the Preserve.

2.6 Easements or Rights

An existing easement to the Yuima Municipal Water District for the proposed Yuima Pauma Valley Northern Route Pipeline crosses the project site in an east-west direction. This easement crosses the western portion of the Preserve. SRR also proposes the creation of a 40-foot private driveway easement through the western portion of the Preserve, although this easement follows the alignment of an existing access road and no improvements are proposed. The project will not create any other easements that will

affect the Preserve other than dedication of the aforementioned Biological Open Space or Conservation Easement over the entirety of the Preserve.

2.7 Fire History

The northern portion of the site burned in the Poomacha Fire of October 2007. This impacted the Chamise Chaparral, Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, and portions of the Diegan Coastal Sage Scrub. All of these habitats were re-growing as of an updated field surveys in July and August of 2009, and all are expected to fully recover.

3.0 BIOLOGICAL RESOURCES DESCRIPTION

3.1 Vegetation Communities/Habitats

3.1.1 Description of Quality of Vegetation Communities/Habitats

Eleven relatively discrete vegetation communities (habitats) are present on the SRR project site and within the footprint of the proposed offsite road improvements (Figure 3). These are described in detail in the Biological Resources Survey Report (Scheidt, 2014) prepared for this project. The onsite habitats consist of the following: Orchards and Vineyards, Chamise Chaparral, Diegan Coastal Sage Scrub, Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Floodway, Coast Live Oak Woodland, Open Water, Disturbed Habitat, Urban/Developed, and Field/Pasture.

Orchards and Vineyards (Holland Code 18100), in the form of active citrus (*Citrus* sp.) and Avocado (*Persea americana*) groves, covers the majority of the property. This habitat-type is dominated by orchard trees, with an understory of occasional grove weeds, such as Spotted Spurge *(Chamaesyce maculata)*, White Tumbleweed *(Amaranthus albus)*, and others. Some ornamental plants, including Pomegranate *(Prunica granatum),* Peruvian Peppertree *(Schinus molle),* and other small trees and horticultural shrubs, are also associated with the Orchards and Vineyards (OV). OV is present within the northerly offsite road alignment. The biological resource value of this habitat-type is relatively low.

Diegan Coastal Sage Scrub (Holland Code 32500) is found mostly on the northern and western portions of the site in association with south-facing slopes and the floodplain of Frey Creek. There are also several small patches of remnant or successional Diegan Coastal Sage Scrub (CSS) associated with large rock outcrops scattered throughout the agricultural area. Indicators in this habitat include Flat-top Buckwheat *(Eriogonum fasciculatum)*, California Sagebrush *(Artemisia californica)*, California Brickellbush (*Brickellia californica*), Laurel Sumac (*Malosma laurina*), Our Lord's Candle (*Yucca whipplei*), and other soft-woody shrubs. The CSS in Frey Creek is interspersed with mature Coast Live

Oaks (*Quercus agrifolia*), which are mapped as Coast Live Oak Woodland where the canopies of the trees are less than 100 feet apart. Small California Sycamores (*Platanus racemosa*) are also occasional in the CSS in Frey Creek. The CSS on the northernmost portion of the property was burned in the Poomacha Fire. This area is re-generating and is expected to fully recover, although it currently supports mostly herbaceous species. The biological resource value of the large-block areas of CSS is high, based on the presence of sensitive species and habitat connectivity. The small patches of CSS located within the groves are of limited biological resource value.

Chamise Chaparral (Holland Code 37200) covers the extreme northern edge of the SRR property. Indicators in this dense, brushy habitat include Chamise *(Adenostoma fasciculatum),* Mission Manzanita *(Xylococcus bicolor),* and other hard-woody shrubs. The onsite Chamise Chaparral (CC) was formerly dense and relatively impenetrable, although most of this habitat was burned during the Poomacha Fire. It is currently regrowing. CC continues offsite to the north. The biological resource value of the CC is moderate to high, based on its species composition and proximity to large-block areas to the north.

Southern Sycamore-Alder Riparian Woodland (Holland Code 62400) occurs onsite in association with the headwaters of Frey Creek, located on the northeastern-most portion of the property. This habitat-type was burned in the October 2007 wildfire, but is re-generating vigorously. The canopy of the Southern Sycamore-Alder Riparian Woodland (SSARW) is currently open, although it is anticipated that it will close as this habitat-type recovers. Indicators in the SSRAW include White Alder (*Alnus rhombifolia*), Red Willow (*Salix laevigata*), and Black Cottonwood (*Populus trichocarpa*), re-sprouting California Sycamores and Coast Live Oaks, and herbaceous wetland species, such as Desert Grape (*Vitis girdiana*), California Blackberry (*Rubus ursinus*), and Poison Oak (*Toxicodendron diversilobum*). This habitat-type continues offsite to the northeast. The biological resource value of this wetland habitat-type is very high, based on its scarcity in the County of San Diego and its connectivity to other wetland habitat-types along Frey Creek.

Southern Coast Live Oak Riparian Forest (Holland Code 61310) is present in the floodplain of Frey Creek immediately to the west of the SSARW. This habitat-type also burned in the Poomacha Fire and is currently re-generating. Due in part to the fire, the canopy of the Southern Coast Live Oak Riparian Forest (SCLORF) is very open. It is expected that more cover will be provided as the Coast Live Oaks and California Sycamores that form the overstory of this habitat-type re-grow, although it is unlikely that this area will ever support a completely closed canopy. Understory species in the SCLORF include scattered Mule Fat (*Baccharis glutinosa*), Douglas Sagewort (*Artemisia douglasiana*), and CSS species. The biological resource value of this wetland habitat-type is high.

Floodway (Holland Code 13200) is found in the floodway (i.e., incised channel) of Frey Creek. This habitat-type consists mainly of bare sand, gravel, and small to very large boulders. Riparian species,

such as Mule Fat, Arroyo Willow (*S. lasiolepis*), and Western Cottonwood (*Populus fremontii*), and upland scrub species are occasional in the Floodway. Floodway is of high biological resource value.

Coast Live Oak Woodland (Holland Code 71160) occurs onsite in areas where mature Coast Live Oak trees are dominant or co-dominant, including the floodplain of Frey Creek, a north-facing slope on the northern portion of the property, and in several patches scattered throughout the groves. The understory of the Coast Live Oak Woodland (CLOW) within Frey Creek, on the northern portion of the property, and to the south of the reservoir consists mostly of CSS shrubs, Poison Oak, and other native species. The understory of the patches of CLOW located within the groves consists of citrus trees, weeds, and developed areas. Isolated Coast Live Oaks are also found scattered throughout the groves, but these trees are not mapped as part of the CLOW because they do not function as part of this habitat-type. CLOW occurs within the southerly offsite road alignment. The biological resource value of the CLOW onsite is moderate to high, depending on patch size, habitat connectivity, and understory species composition.

Open Water (Holland Code 13100) is supported by the site's water storage reservoir. This feature is man-made and appears to be lined and heavily treated. A single small stand of Cattails (*Typha latifolia*) is found at the edge of the reservoir and is mapped as part of the Open Water (OW). The reservoir also supports aquatic macrophytes (submersed aquatic plants) in shallow areas as well as introduced game fish. The biological resource value of this habitat-type is low due to its man-made origin and ongoing maintenance.

Field/Pasture (Holland Code 18310) is located along the southern edge of the property, to the south of SR 76. This area is grazed by hoof stock and supports mostly irrigated turf with weeds growing along its fringes. The biological resource value of this habitat-type is moderate, as it does provide open area for raptor foraging.

Disturbed Habitat (Holland Code 11300) is found onsite in the form of dirt roads not directly associated with the existing grove activities and cleared areas. The DH consists mostly of bare dirt with occasional weedy species, such as Common Horseweed (*Conyza canadensis*), Perennial Mustard (*Brassica geniculata*), Stephanomeria (*Stephanomeria virgata*), and others. DH is present within the southerly offsite road alignment. The biological resource value of this habitat-type is low.

Urban/Developed (Holland Code 12000) is present onsite in the form of several single family homes and trailers. SR 76, which runs along the southern property boundary, also qualifies as supporting Urban/Developed (U/D) habitat. Several paved agricultural roads bisect portions of the property; however, these are mapped as part of the OV for analysis purposes. The biological resource value of this habitat-type is low to non-existent.

Of the eleven identified onsite habitat-types above, Orchards and Vineyards, Diegan Coastal Sage Scrub, Chamise Chaparral, Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Floodway, Coast Live Oak Woodland, and Disturbed Habitat are included in the Preserve (Table 1).

3.2 Plant Species

3.2.1 Species Present and Correlation of Species with Habitat Onsite

One hundred and eighty-five species of plants are known from the project site. These typify the diversity normally found in agriculture, sage scrub, riparian areas, oak woodland, and disturbed/developed areas in the Pauma Valley area of San Diego County. A list of the plants observed onsite during the baseline site surveys may be found in the Biological Resources Survey Report for this project. This list is expected to represent at least 80 percent of the naturalized plants occurring on this site. The ornamental plants surrounding the existing homes and trailers were not inventoried and are not included in this list.

3.2.2 Rare, Threatened, or Endangered Plants

No sensitive plant species were detected onsite, and there are no additional sensitive plants species with a high potential of occurring onsite. For a more detailed discussion of the sensitive plant species known from the vicinity of the property and their potential to occur onsite, see the project biology report.

3.2.3 Non-native and/or Invasive Plant Species

Sixty-eight percent of the plants observed during the biological surveys of SRR are native species and thirty-two percent are non-native species. The majority of these non-native species are not invasive. Perennial invasive species found onsite include Giant Wild Reed (*Arundo donax*), Castor Bean (*Ricinus communis*), Peruvian Peppertree (*Schinus molle*), Salt Cedar (*Tamarix* sp), and Cocklebur (*Xanthium strumarium*).

3.3 Wildlife Species

3.3.1 Species Present and Correlation of Species with Habitat Onsite

Ninety species of animals are known from the project site. These typify the diversity normally found in agriculture, sage scrub, riparian areas, oak woodland, and disturbed/developed areas in the Pauma Valley area of San Diego County. A list of the animals observed onsite during the baseline site surveys may be found in the Biological Resources Survey Report for this project.

3.3.2 Rare, Threatened, or Endangered Wildlife

Thirteen sensitive animal species were detected on the SRR project site during the various field surveys completed on the property. These are Cooper's Hawk (*Accipiter cooperii*), White-tailed Kite (*Elanus leucurus*), Turkey Vulture (*Cathartes aura*), Yellow Warbler (*Dendroica petechia brewsteri*), Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*), Red-shouldered Hawk (*Buteo lineatus*), Great Blue Heron (*Ardea herodias*), Mountain Lion (*Felix concolor*), Bobcat (*Lynx rufus*), Mule Deer (*Odocoileus hemionus*), San Diego Desert Woodrat (*Neotoma lepida intermedia*), Coastal Western Whiptail (*Cnemidophorus tigris multiscutatus*), and Orange-throated Whiptail (*Cnemidophorus hyperythrus beldingi*).

It is assumed that the project site is potentially "occupied" by Least Bell's Vireo (*Vireo bellii pusillus*) and Southwestern Willow Flycatcher (*Empidonax trailii extimus*) during part of the year. The project site is currently considered "unoccupied" by Arroyo Toad (*Bufo californicus*) as a breeding species, although this species is known to breed in the SLRR and could move onto the site and forage and aestivate in the Frey Creek floodplain. An additional seven sensitive species have a high probability of occurring onsite. These are Monarch Butterfly *(Danaus plexippus)*, San Diego Ringneck Snake (*Diadophis punctatus similis*), Coronado Skink *(Eumeces skiltonianus interparietalis)*, Northern Red Diamond Rattlesnake *(Crotalus ruber ruber)*, San Diego Coast Horned Lizard (*Phrynosoma coronatum blainvillei*), Coast Patched-nosed Snake *(Salvadora hexalepis virgultea)*, and Western Spadefoot *(Scaphiopus hammondii)*. For a more detailed discussion of the sensitive animal species present or with the potential to occur onsite, see the project biology report.

3.3.3 Non-native and/or Invasive Wildlife Species

The majority of the animal species found onsite are native. Non-native wildlife species identified on the project site are limited to Starling (*Sturnus vulgaris*) and Bullfrog (*Rana catesbeiana*).

3.4 Overall Biological Value

The most significant of the onsite habitats with respect to conservation value (in terms of regional and local importance relative to other areas of similar habitat offsite) are the riparian areas (Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, and Floodway) and the areas of sage scrub, chaparral, and oak woodland (Diegan Coastal Sage Scrub, Chamise Chaparral, and Coast Live Oak Woodland). The least significant habitat-types from a regional and local importance context are the areas of Open Water, Orchards and Vineyards, Disturbed Habitat, Urban/Developed, and Field/Pasture.

Areas of the site supporting Southern Sycamore-Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Floodway, and portions of the Chamise Chaparral, Diegan Coastal Sage Scrub, and

Coast Live Oak Woodland are of high biological resource value. These habitats warrant preservation and long-term management. Preserving and managing these habitats could contribute to the future North County MSCP Subarea Plan preserve design and provide for the potential conservation of rare, threatened, and/or endangered species. The patches of Diegan Coastal Sage Scrub and Coast Live Oak Woodland located within the groves are of limited biological resource value. These habitats do not warrant preservation and long-term management, due to their small size and isolation from significant areas of native habitat.

The SRR site provides both locally important and regionally important wildlife corridors. Local corridors facilitate wildlife movement from nesting or sheltering areas to nearby sources of food, water, or similar daily necessities. Regional corridors provide movement areas between large habitat blocks, facilitating animal migration on a larger scale. Frey Creek functions as both a local and regional wildlife corridor, connecting the SLRR with the expansive, natural slopes on the south flanks of Palomar Mountain. This corridor extends along the western side of the property, beginning offsite to the north on forest service lands and ending at the SLRR, where up-river/down-river dispersal and movement occurs. The Preserve will conserve Frey Creek and its associated wildlife corridors, thereby contributing to wildlife movement in the vicinity of the project site in perpetuity.

Many species of wildlife are dependent on the ecological functions provided by the SRR site. Scores of large and small mammals, riparian obligate and other birds, reptiles, and amphibians are known to use resources provided by the project site. The entire SRR property provides foraging habitat for raptors, although the most high-value areas, in terms of raptor foraging, are composed of the scrub and woodlands (depending on the raptor species). Additionally, Frey Creek and the slopes of Palomar Mountain function as nursery sites for native wildlife. The Preserve will include all of the highest value areas of habitat onsite, thereby maintaining the viability of these areas for use by native wildlife, including sensitive species.

3.5 Enhancement and Restoration Opportunities

Enhancement and restoration opportunities exist onsite within and adjoining the floodway of Frey Creek. The SRR project proposes restoration and enhancement activities within these areas in order to mitigate for project impacts to jurisdictional wetlands and “waters”. All restoration and enhancement activities will occur pursuant to the requirements of an approved Wetland Mitigation Plan.

4.0 CULTURAL RESOURCES DESCRIPTION

4.1 Archaeological Resources

Cultural resources site surveys, inventories, and significance evaluations were completed for the SRR project site by Phillip de Barros of Professional Archaeological Services. The complete results of this study can be found in "Cultural Resource Survey and Evaluation of a 286-acre Parcel in Pauma Valley, the Shadow Run Ranch, North of State Route 76, San Diego County, California" (de Barros, 2010). As a result of this cultural resources study, ten archaeological sites were found (SDI-246, SDI-266, SDI-714, SDI-731, SDI-9906, SDI-9537/H, SDI-17501, SDI-17502, SDI-17503, and SDI-18368) and eight isolates. An additional five sites were recorded from the project vicinity but were not relocated and are believed to have been destroyed or to be located outside of the project site (SDI-715, SDI-722, SDI-723, SDI-5675, and SDI-5676).

Sites SDI-17501, SDI-17502, SDI-17503 and SDI-18368, the historic component of SDI-9537/H, and the eight isolates were determined to be not significant under CEQA guidelines or the County's Resource Protection Ordinance (RPO). Sites SDI-17501 and SDI-17503 will be included within the Preserve. Sites SDI-246, SDI-266, SDI-714, SDI-731, and SDI-9906 were excavated by previous researchers but no further work was completed on them during the current cultural resources survey. These sites will also be included in the Preserve. By placing these sites within open space, it is assumed that they are significant archaeological sites. The prehistoric component of site SDI-9537/H was determined to be significant under CEQA guidelines but not under the County's RPO. This site will be impacted by the proposed project; however, this impact will be mitigated for through data recovery excavations that implement a written research design. In order to prevent access to those archaeological sites located within the Preserve, temporary fencing is recommended during any grading activities within 100 feet of these sites.

4.2 Native American Consultation

A record search of the Sacred Lands Files was initiated with the Native American Heritage Commission. This search indicated that no recorded Native American sacred sites or land forms are located on the SRR project site.

5.0 MANAGEMENT ELEMENTS AND GOALS

5.1 Biological Element: Goals & Tasks

5.1.1 Goals

One of the long-range goals of the biological resource management of the Preserve shall be to preserve and manage its lands to the benefit of the flora, fauna, and native ecosystem functions reflected in the natural communities occurring within the Preserve. This goal shall be accomplished by controlling access

to the Preserve and implementing a proactive monitoring program. Natural areas supporting mostly undisturbed native vegetation require very little intervention, with the exception of the control of invasives, the removal of litter, and the maintenance of fencing and signage.

A second long-range goal shall be to manage the Preserve for the benefit of sensitive species and existing natural communities, without substantial efforts to alter or restrict the natural course of habitat development and dynamics. This goal shall be accomplished via periodic assessments of the known populations of sensitive species onsite, including focused surveys for specific sensitive species, as described below in Section 5.1.2. An adaptive management program (Section 5.1.4) shall be implemented to allow for management of the Preserve to change as necessary, based on any changes occurring within the Preserve due to the natural course of habitat development and dynamics.

A third long-range goal shall be to reduce, control and, where feasible, eradicate non-native, invasive flora and/or fauna known to be detrimental to the native species and ecosystems present within the Preserve. This goal shall be accomplished via annual monitoring of the Preserve by the Resource Manager for the occurrence of exotic plants. Exotic plants and/or animals shall be removed from the Preserve on an as-needed basis, as described below in Section 5.1.2.

5.1.2 Tasks

Baseline Inventory and Vegetation Mapping

A vegetation map showing current conditions shall be produced for the Preserve during the first year of biological monitoring. This exhibit shall include a table showing total acreages of all existing habitat-types. The locations of any sensitive plants or animals detected shall be noted on the vegetation map. Vegetation mapping shall be conducted at five years intervals in perpetuity.

A baseline species inventory shall also be compiled during the first year of biological monitoring. This shall consist of a complete list of all plant and animal species observed (either directly or indirectly by scats, tracks, etc.) during the periodic field surveys. The baseline species inventory shall be updated with any new species detected onsite during subsequent field surveys of the Preserve.

The vegetation map and baseline species inventory shall be included in the first annual report. This information shall be used as a baseline to measure habitat changes resulting from both natural causes and edge effects, as well as to evaluate the success of the management effort in the years that follow.

Monitoring

Biological monitoring shall begin once the RMP is approved, a Management Agreement is signed, the

Land Owner meets her obligations required prior to the long-term management, and the long-term management is funded.

Basic qualitative and quantitative monitoring shall be conducted on an annual basis. Because of the gradual nature of changes experienced by climax plant association lands, this is consistent with the regional planning efforts for this area. During annual site visits, to be conducted in the early spring, the Preserve shall be visually inspected for changes, including new occurrences of exotic species, changes in vegetative growth patterns, changes in floristic composition or diversity, and other factors relating to habitat viability. The monitor shall recognize the survey's limitations and shall adopt methodologies to maximize the detection of changes to the structure of the habitat, as appropriate. All plant and animal species observed shall be recorded during each site survey.

Any measurable changes within the Preserve that could affect the existing biological resources shall be monitored over time. Information obtained from tracking changes within the Preserve shall be used by the Resource Manager to determine specific remediation and recovery, as needed. All remediation/recovery activities shall be discussed with the Preserve Administrator and the Wildlife Agencies prior to implementation.

Any wetlands restoration and enhancement activities associated with Frey Creek will require five years of biological maintenance and monitoring on a specific schedule. This schedule will be detailed in an approved Wetland Mitigation Plan.

Removal of Invasive Species

The Resource Manager shall be responsible for assessing the occurrence of invasive or exotic plant species in the Preserve on an ongoing basis. This shall include annual monitoring of the Preserve by the Resource Manager for the occurrence of exotic plants. An exotics control section will be included in the annual report, if necessary. In addition, measures shall be undertaken to prevent the introduction of new invasive species into the Preserve.

Invasive species detected in the Preserve shall be immediately and completely removed under the direct supervision of the Resource Manager. Perennial and biennial exotic plants shall be removed by cutting their stems at or below ground level or pulling seedlings manually. Annual weeds shall be manually pulled prior to producing mature seed. All cuttings or pulled weeds shall be exported from the Preserve and disposed of properly. The use of herbicides/pesticides for weed/vector control shall be avoided and shall be implemented only if authorized by the Preserve Administrator in coordination with the Resource Manager.

Exotic plants that must be removed from the Preserve, if found, include Hottentot Fig *(Carpobrotus*

edule), Mexican Fan Palm *(Washingtonia robusta)*, Pampas Grass *(Cortaderia* sp.*)*, Giant Wild Reed, Castor Bean, Peruvian Peppertree, Salt Cedar, Cocklebur, and any plants ranked as “high” priority species in the *California Invasive Plant Inventory* prepared by the California Invasive Plant Council (Cal-IPC, 2006).

Part of the existing grove adjoining and within Frey Creek will be allowed to die back in order to provide an adequate biological buffer to the sensitive areas along this regional wildlife corridor. This may require additional weed management and/or passive habitat restoration as identified by the Resource Manager. Part of this pertains to the presence of an additional 100 foot ag buffer area adjacent to the biological buffer in certain locations. The ag buffer will not be managed under this RMP, although weed management in this area may be identified by the Resource Manager in consultation with the property owner. Also, a "third" open space easement separate from the bio open space easement and the Ag/LBZ easement may be recorded. Once agricultural operations ceased in the buffer area, they cannot be reestablished. However, the open space fencing will not be moved to encompass the area allowed to revert to native habitat unless determined appropriate by the Resource Manager in consultation with the property owner and the PDS.

Predator Control

The control of exotic animals usually presents more of a challenge than does the task of controlling exotic plants. Certain exotic animals, such as Argentine ants *(Iridomyrmex humili*s*)* and European Earwigs *(Forficula auricularia)*, may already occur in areas near the Preserve. Preventing these very common species from occurring in areas adjacent to disturbed lands is infeasible. Most vertebrates can be controlled, however, particularly feral or uncontrolled pet animals. Dogs and cats are major predators of native species. Exotic animal control is not anticipated to represent a major issue in the management of the Preserve.

Exotic animal control shall be initiated on a case-by-case basis, as follows:

- Predator/pest control shall only be implemented to address a specific, identified problem situation.

- The trapping of non-native predators/pests shall be limited to strategic locations where determined most feasible to accomplish the goal of removing these animals from the Preserve.

- All predator/pest control shall be considered a temporary, short-term activity.

- Predator/pest control methods shall be humane. Adequate shade shall be provided, and all traps shall be checked twice daily. Any domestic animals trapped during predator/pest control

shall be taken to the nearest animal shelter.

- The Resource Manager shall report to the County Animal Control Officers if persistent and chronic problems occur with respect to particular uncontrolled pets being found in the Preserve.

Sensitive Species Surveys and Management

The Resource Manager shall be responsible for evaluating the status of the sensitive species in the Preserve and for implementing protective measures, if necessary. Monitoring of sensitive species shall include the use of specific survey protocols and methodologies, fixed monitoring locations or transects, and species-specific data collection and analysis. The Resource Manager shall monitor all of the sensitive species that are recorded from the SRR project site. Any additional sensitive species detected in the Preserve during the regular monitoring periods shall be incorporated into future monitoring reports.

The status of all sensitive species' populations onsite shall be assessed at least once every five years. This assessment shall include protocol presence/absence surveys for Least Bell's Vireo and Southwestern Willow Flycatcher, as the site is considered potentially "occupied" by both of these listed species. The protocol Southwestern Willow Flycatcher surveys must be conducted by a federally-permitted biologist and can coincide with other site assessments. Least Bell's Vireo surveys do not require a federal permit; however, they must be conducted pursuant to the current federal survey protocol by an approved biologist who is experienced in surveying for this species. Least Bell's Vireo surveys may also coincide with other site assessments.

Surveys for any other sensitive species detected within the Preserve shall be included with the above, if appropriate. The Resource Manager shall be responsible for evaluating the status of the onsite populations of sensitive species and any edge effects or other issues that may reduce the perpetual viability of these populations.

It is possible that Arroyo Toad surveys may be required depending on discussions with the Wildlife Agencies. Arroyo Toad surveys do not require a federal permit but would be conducted pursuant to the current federal survey protocol by an approved biologist who is experienced in surveying for this species. Because they must be completed at night, the protocol Arroyo Toad surveys would not coincide with other site assessments.

Habitat Restoration

The Resource Manager, in consultation with the Preserve Administrator, may allow seed collecting from plants in the Preserve for the expressed purpose of revegetating degraded Preserve areas. Any

such seed collecting shall be performed under the direct supervision of the Resource Manager, during the dry season, and under a written agreement specifying the amounts and locations of collectible materials. The collecting of seed stock shall be limited to the minimum necessary for the revegetation effort and shall not seriously deplete the existing vegetation.

Wetlands restoration and enhancement activities associated with Frey Creek may require seed collecting or taking cuttings from plants within the Preserve. Any such activities will follow the requirements of an approved Wetland Mitigation Plan. As mentioned above, wetlands restoration and enhancement activities will require additional maintenance and monitoring activities. These activities will be detailed in the approved Wetland Mitigation Plan.

Noise Management

Because the project site is considered potentially "occupied" by Least Bell's Vireo and Southwestern Willow Flycatcher, no loud noises associated with project construction (in excess of 60 decibels) will be permitted during the breeding season of these species, which is defined as from mid March to the beginning of September, in order to avoid impacts to potentially nesting vireos, flycatchers, and/or other riparian obligate songbirds. This restriction may be waived if directed surveys for these two species are conducted on all areas within 300 feet of the proposed activity. The results of these surveys should be provided in a report to the County and the Wildlife Agencies for concurrence with the conclusions and recommendations.

5.1.3 Management Constraints

There are no internal or external management constraints that may affect meeting the RMP goals.

5.1.4 Adaptive Management

This RMP has been developed to facilitate an adaptive management strategy. The overall goal of an adaptive management strategy is to improve the quality of management decisions, based on the best available information. Monitoring will be used to assess the success of adaptive management. If monitoring indicates that the biological resource management goals are not being met, it may be necessary to modify this RMP between regularly scheduled updates. If changes to the RMP are determined to be necessary, the proposed changes shall be submitted to the County and Wildlife Agencies for approval, as required (see section 5.3.2).

5.2 Cultural Resources Element: Goals & Tasks

5.2.1 Goals

The main long-range goal of the management of cultural resources within the Preserve shall be to provide adequate protection for historic and prehistoric sites that are known now and that may be identified in the future.

5.2.2 Tasks

The primary task related to the management of the archaeological sites known from the Preserve shall be to restrict access to them as much as is feasible. This shall be accomplished via the tasks outlined in Section 5.3.2. In addition, monitoring of the status of the cultural resource sites by the cultural resource specialist once a year is required. Also, any habitat maintenance tasks that could affect cultural sites should be coordinated with the cultural resource specialist to minimize impacts.

5.2.3 Management Constraints

There are no internal or external management constraints that may affect meeting the RMP goals.

5.3 Operations, Maintenance, and Administrative Element: Goals & Tasks

5.3.1 Goals

The main long-range goal of the operations and maintenance of the Preserve shall be to provide facilities and the maintenance thereof that support the biological and cultural resources management goals. This goal shall be primarily accomplished by controlling Preserve access. Natural areas supporting mostly undisturbed native vegetation require very little intervention, with the exception of the control of invasives, the removal of litter, and the maintenance of fencing and signage.

5.3.2 Tasks

Annual Monitoring Reports

As discussed in Section 1.2.4, above, annual reports shall be prepared that summarize the condition of the Preserve, the results of the previous year's management and monitoring, and recommendations for the upcoming year's management and monitoring. Copies of these reports shall be provided to the County and Wildlife Agencies, along with funds to cover County staff review time.

Review of RMP

At five-year intervals, the Resource Manager shall meet with the Preserve Administrator and the Wildlife

Agencies to discuss whether changes in management of the Preserve are needed. The Resource Manager shall review and update the RMP at his discretion in the event that the Preserve Administrator and/or Wildlife Agencies are unable to meet. Any necessary changes in management will be reflected in updates of this RMP. Updates shall be based on findings and determinations made during the ongoing biological monitoring of the Preserve, changes in site conditions, and recommended modifications to maintenance efforts.

Trash/Graffiti Removal and Vandalism Repair

The Resource Manager shall be responsible for the general condition of the Preserve by directing the removal of any illegally dumped materials, the clean-up of any litter, and the removal of any graffiti. Any vandalism resulting in damage to the fences, signs, or resources within the Preserve must be remediated immediately. These tasks shall occur during the annual monitoring visits or as often as necessary and approved by the Resource Manager.

Removal of Hazardous Materials

When identified, hazardous materials must be removed per County-approved procedures. The Resource Manager shall contact the County's Environmental Health Services Department hazardous materials team for details.

Encampments and Unauthorized Encroachments

Encampments are prohibited in all open space areas in the County. The Resource Manager shall survey the site for encampments during monitoring visits and report them to the Sheriff's Department and the County. All encampments shall be removed from the Preserve upon vacation of the property by the unauthorized persons. Improper or illegal encroachments must be removed as soon as possible, on an as needed basis.

Lighting, Fencing, Gates, and Signs

Lighting is not necessary and shall not be installed within the Preserve. Any lighting associated with the development area of SRR shall be directed downward and away from the Preserve.

The Preserve shall be protected from adjacent development by a professionally-installed permanent fence. This should limit encroachment from development without impeding wildlife movement within the Preserve. The fence shall be placed along the borders of the Preserve that adjoin the proposed development area of the site (Figure 4) prior to the commencement of construction activities associated with project implementation. The fence shall be placed on the development side and should result in no

vegetation loss within the Preserve. The fence shall have a minimum six-foot height with a single entry gate maintained with a lock for access by the Resource Manager. The purpose of the fence is to prevent intrusion into the Preserve and to avoid an attractive nuisance.

Evidence that permanent fencing and signage have been properly installed shall consist of a signed, stamped statement from a California Registered Engineer or licensed surveyor verifying that the permanent fence has been put in place around the perimeter of the Preserve. Photographs and a brief description of design and materials used shall be submitted along with the statement from the California Registered Engineer or licensed surveyor. It is recommended that the fence segments be constructed of chain link or other suitable material in order to prevent unauthorized intrusion into the Preserve. The specific construction materials and fence designs are subject to approval by the PDS and the Wildlife Agencies.

Permanent, high-visibility metal signs shall be installed at 100-foot intervals along the permanent fence. These signs shall read the equivalent of:

SENSITIVE ENVIRONMENTAL RESOURCES
Disturbance Beyond this Point is Restricted
by Easement
Information:
Contact County of San Diego, PDS
Ref: TM 5223, Env. Log. 3910-00-02-035

Signs must be in good condition at all times and must be replaced, repaired, and/or cleaned as often as deemed necessary by the Resource Manager. The Land Owner shall be responsible for the installation of the permanent fencing, signs, and gate. The Resource Manager shall be responsible for the long-term maintenance and repair of the fencing, signs, and gate.

Access

The Land Owner shall be responsible for providing a permanent access easement for the Resource Manager to the Preserve. The Resource Manager shall be responsible for the long-term maintenance of the access road. The Preserve's access gate and lock must be maintained in working order at all times to prevent unauthorized entry into the Preserve. Under normal circumstances, only the Resource Manager and other authorized agents will be allowed into the actual Preserve. Exceptions to this shall be in an emergency or as otherwise specified by the Resource Manager in consultation with the Preserve Administrator. Access to the Preserve (other than for monitoring) shall primarily occur during the dry season to avoid potential damage to sensitive biological resources.

Wetlands restoration and enhancement activities associated with Frey Creek will necessitate access to that portion of the Preserve by the personnel responsible for conducting these activities. Therefore, these entities must also be provided with access to that portion of the Preserve. Maintenance, monitoring, and personnel associated specifically with wetlands restoration and enhancement will be specified in an approved Wetland Mitigation Plan.

Archaeological Site Confidentiality

The Resource Manager shall maintain the confidentiality of all archaeological sites located within the Preserve.

Coordination with Adjacent Land Managers

The Resource Manager shall coordinate with land managers of nearby preserved lands on management practices and tasks related to the preservation and maintenance of the sub-regional open space system. This shall include activities such as removing exotic and pest species and ensuring compatibility with the goals of the overall open space management plan to be prepared for the County as part of the North County MSCP.

Coordination with Other Agencies

The Resource Manager shall coordinate with the relevant local and County agencies on an as-needed basis, including, but not limited to:

- Coordination with Department of Environmental Health for vector control and herbicide use, although the use of herbicides/pesticides for weed/vector control shall be avoided and shall be implemented only if authorized by the Preserve Administrator in consultation with the Resource Manager

- Coordination with law enforcement

- Coordination with emergency services, such as the local fire department

5.3.3 Prohibited Activities

Within the Preserve, the following shall be prohibited:

- Grading, excavation, or the placement or movement of any soil, sand, rock, gravel, or any other material, except for approved wetlands creation, restoration, and/or enhancement

activities or other habitat or species restoration determined to be necessary as a result of adaptive management

- The clearing or thinning of any vegetation, except for the removal of exotic plant species as determined by the Resource Manager to be necessary and selective clearing of vegetation by hand to the extent required by written order of the fire authorities for the express purpose of reducing an identified fire hazard. While clearing for fire management is not anticipated with the creation of this easement, such clearing may be deemed necessary in the future for the safety of lives and property. All fire clearing shall be pursuant to the uniform Fire Code and the Memorandum of understanding dated February 26, 1997 between the Wildlife Agencies and the fire districts and any subsequent amendments thereto

- Proactive landscape maintenance activities, such as watering, pruning, or fertilization of the native species, unless determined by the Resource Manager to be necessary

- The construction, erection, or placement of any building or structure, with the exception of the required permanent fence, which is located just outside the SRR Preserve boundary in the development area

- Vehicular activities other than those associated with the use of a 40-foot private road easement providing access to the Yuima waterline which will be used for waterline maintenance purposes and other associated purposes identified in the easement language as granted to the Yuima Water District.

- Dumping of any kind, including the dumping of landscape materials, trash, hazardous waste, or any other materials

- Planting of any vegetation except as pursuant to an approved Revegetation Plan, Wetland Mitigation Plan, or for other habitat enhancement as described in this RMP

- Use for any purpose other than those specifically designated in this RMP

- The collecting, removal, or relocation of any natural resource from the Preserve (e.g., plants, animals, rocks, etc.)

- Hunting of any kind

Anyone attempting such activities shall be informed of the restrictions by the Resource Manager in a non-confrontational manner. The Resource Manager shall report any serious confrontational situations

and any chronic offenders to the Preserve Administrator and the Sheriff's Department.

The Resource Manager, in consultation with the Preserve Administrator, shall determine the appropriateness of any proposed uses not specifically designated in this RMP. All activities authorized by the Resource Manager must be consistent with the goals and objectives of this RMP and must be approved by the Preserve Administrator. To limit impacts to sensitive biological resources, activities within the Preserve are restricted to:

- Wildlife surveys conducted as part of the ongoing biological monitoring review process

- Weeding, trash removal, or other maintenance activities (described in detail in this RMP)

- Habitat creation, restoration, and/or enhancement activities as described in an approved Revegetation Plan

- Emergency response by the Resource Manager and the appropriate agencies in case of fires, floods, earthquakes, or other natural disasters

6.0 RESOURCE MANAGEMENT PLAN SUMMARY AND BUDGET

6.1 Operations and Budget Summary

Table 2 presents an Operations and Budget Summary worksheet. This includes all estimated operation costs associated with management of the Preserve. The summary also provides specific information required for annual budget preparation.

7.0 REFERENCES

Burt, W.H. and R.P. Grossenheider. 1996 A field guide to the mammals. Houghton Mifflin Company, 1966. 289p

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Figure 1. Vicinity Map – SRR Project Site
Portion of the USGS "Pala, California" 7.5' Quadrangle

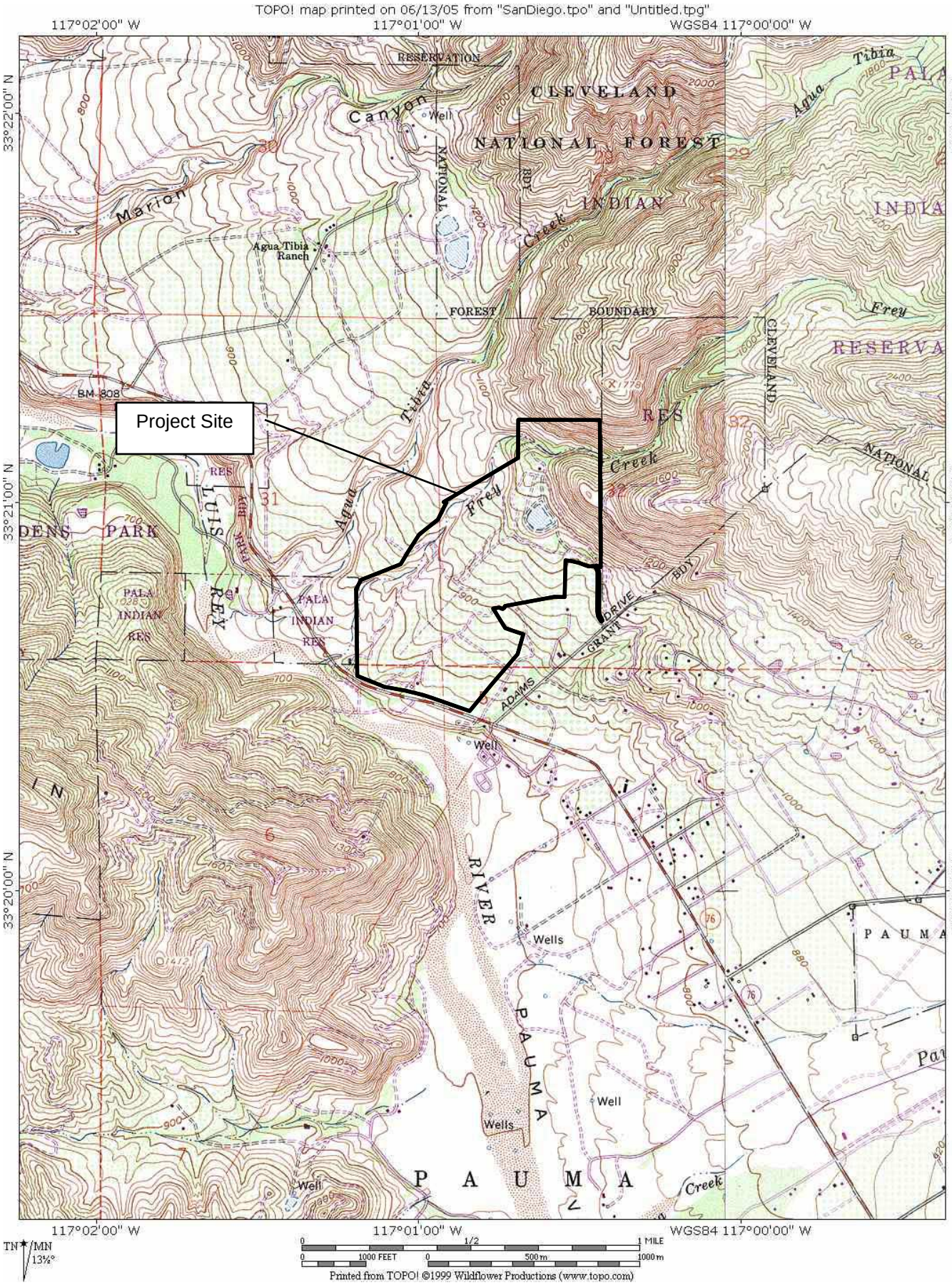

Figure 2. Regional Location Map – SRR Project Site

Figure 3. Biological Resources Exhibit - SSR Project

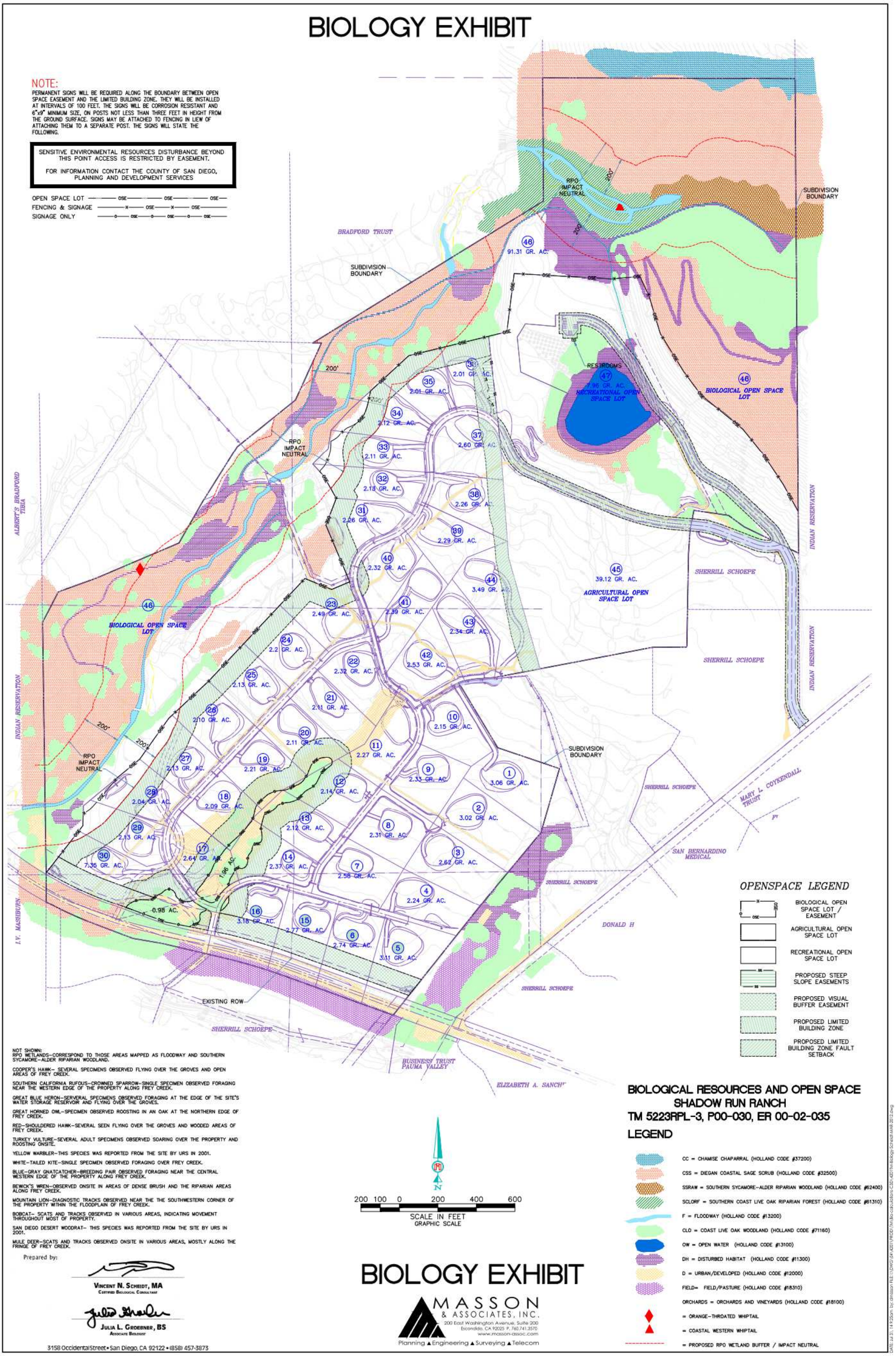

Figure 4. Preserve and Fencing Exhibit - SSR Project

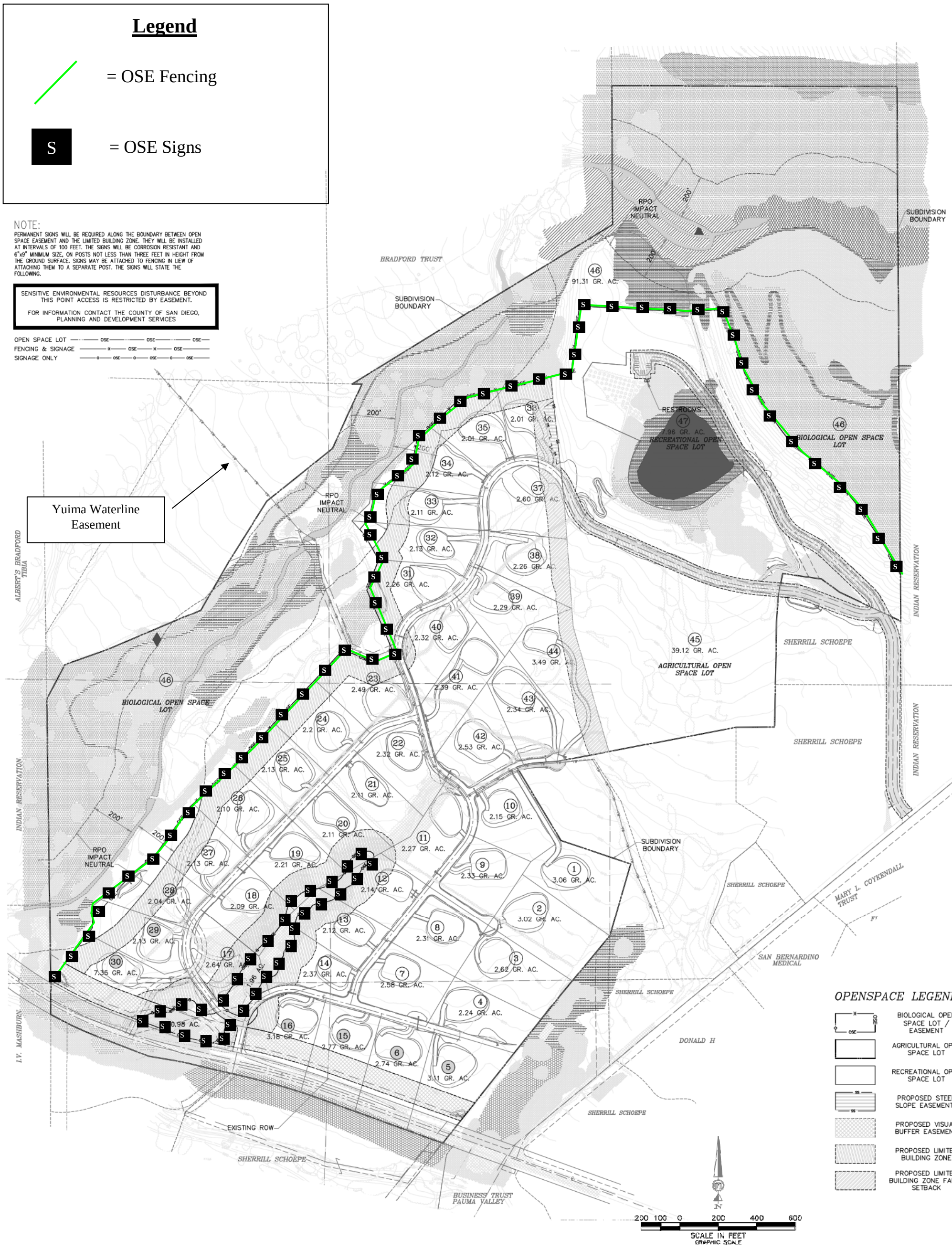

Table 1. Habitats within the Preserve – SRR Project Site

Habitat-type	Total Acres Onsite	Acres Preserved
Orchards and Vineyards	142.1	11.9
Chamise Chaparral	0.5	0.5
Diegan Coastal Sage Scrub	50.0	45.2
Southern Sycamore-Alder Riparian Woodland	2.46	2.46
Southern Coast Live Oak Riparian Forest	3.32	3.29
Floodway	2.05	2.05
Coast Live Oak Woodland	23.8	17.1
Open Water	2.67	none
Disturbed Habitat	11.0	8.8
Urban/Developed	9.8	0.2
Field/Pasture	0.5	none
Total	**248.2**	**91.3**[6]

[6] *Rounding to tenths of an acre, per County requirements will prevent numbers from adding up precisely.*

Table 2. Operations and Budget Summary – SRR Project Site

Task	Frequency	Unit	Cost/Unit	One-time Cost	On-going Cost
Biological Tasks					
Update vegetation mapping	Every 5 years	Hours	$75/hour	$3,000	$3,000 every 5 years
Removal of invasive species	As-needed	Hours	$35/hour	n/a	$500/yr
Predator control	As-needed	Hours	$35/hour	n/a	$500/yr
Sensitive Species Surveys					
- Southwestern Willow Flycatcher	Every 5 years	Hours	$75/hour	$5,500	$5,500 every 5 years
- Least Bell's Vireo	Every 5 years	Hours	$75/hour	$5,500	$5,500 every 5 years
- Arroyo Toad	Every 5 years	Hours	TBD	TBD	TBD
- Other sensitive species	Every 5 years	Hours	$75/hour	$2,500	$2,500 every 5 years
Operations, Maintenance, and Administrative Tasks					
Write and submit annual report to County	Annual	Hours	$75/hour	$3,000	$3,000/yr
Submit review fees for County review of annual report	Annual	$500	$500/year	$500	$500/yr
Review and, if necessary, update RMP	Every 5 years	Hours	$75/hour	$1,500	$1,500 every 5 years
Construct permanent signs	One-time	65 signs	$25/sign	$1,625	n/a
Replace signs	As-needed	--	$25/sign	n/a	TBD
Construct permanent fencing/gates	One-time	6,300 feet	$1.15/foot	$7,245	n/a
Maintain permanent fencing/gates	As-needed	--	$2.30/foot	n/a	TBD
Access road maintenance	As-needed	Hours	$25/hour	n/a	TBD
TOTAL	--	--	--	--	TBD

Attachment A

FINAL PROPERTY ANALYSIS RECORD (PAR)

(to be prepared prior to final approval)

ATTACHMENT B

CALIFORNIA NATURAL DIVERSITY DATA BASE FORMS
AS SUBMITTED TO THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 07/10/2009

For Office Use Only

Source Code _____ Quad Code _____

Elm Code _____ Occ. No. _____

EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Cnemidophorus tigris multiscutatus*

Common Name: Coastal Western Whiptail

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Vince Scheidt

Address: 3158 Occidental Street
San Diego CA 92122

E-mail Address: vince@san.rr.com

Phone: (858) 457-3873

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

1 # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: San Diego Landowner / Mgr.: Private

Quad Name: Pala, CA Elevation: 1,100'

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Iphone 4s

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☑

Coordinates: 33°21'9.47"N
117° 0'39.61"W

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

Specimen observed within rocky creekbed (Frey Creek), within the floodplain. Adjoing habitat is oak riparian forest dominated by Coast Live Oak (Quercus agrifolia), California Sycamore (Platanus racemosa), and others.

Other rare taxa seen at THIS site on THIS date:
(separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use:

Visible disturbances: none

Threats:

Comments:

Determination: *(check one or more, and fill in blanks)*

- ☐ Keyed (cite reference): _____
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 05/09/2007

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Felix concolor*

Common Name: Mountain Lion

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals tracks Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Vince Scheidt
Address: 3158 Occidental Street
San Diego CA 92122
E-mail Address: vince@san.rr.com
Phone: (858) 457-3873

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

1 # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description *(please attach map AND/OR fill out your choice of coordinates, below)*

County: San Diego Landowner / Mgr.: Private
Quad Name: Pala, CA Elevation: 700'
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Iphone 4s
DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ *OR* Geographic (Latitude & Longitude) ☑
Coordinates: 33°20'36.64"N
-117° 1'16.34"W

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

Fresh tracks observed in mud along a rocky creekbed (Frey Creek). Specimen had moved up the creek from an underpass beneath SR 76. Creek connects to the San Luis Rey River.

Other rare taxa seen at THIS site on THIS date:
(separate form preferred)

Site Information

Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use:

Visible disturbances: Adjoining agricultural use

Threats:

Comments: Tracks only

Determination: *(check one or more, and fill in blanks)*
☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 07/10/2009

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Cnemidophorus hyperythrus beldingi*

Common Name: Orange-throated Whiptail

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 3+ Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Vince Scheidt
Address: 3158 Occidental Street
San Diego CA 92122
E-mail Address: vince@san.rr.com
Phone: (858) 457-3873

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

3 # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: San Diego Landowner / Mgr.: Private
Quad Name: Pala, CA Elevation: 700'
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Iphone 4s
DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☑
Coordinates: 33°20'36.64"N
-117° 1'16.34"W

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

Specimens observed along a dirt road paralleling a rocky creekbed (Frey Creek). Specimens within the floodplain. Adjoining habitat is coastal sage scrub, dominated by California Sagebrush (Artemisia californica), Flat-top Buckwheat (Eriogonum fasciculatum), California Bricklebush (Brickellia californica), Laurel Sumac (Malosma laurina), and others. Gentle south-draining creekbed.

Other rare taxa seen at THIS site on THIS date: Aimophila ruficeps canescens
(separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use:

Visible disturbances: Adjoining agricultural use

Threats:

Comments:

Determination: *(check one or more, and fill in blanks)*

☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 07/10/2009

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Aimophila ruficeps canescens*

Common Name: Southern California Rufous-crowned Sparrow

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Vince Scheidt
Address: 3158 Occidental Street
San Diego CA 92122
E-mail Address: vince@san.rr.com
Phone: (858) 457-3873

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

1 # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: San Diego Landowner / Mgr.: Private
Quad Name: Pala, CA Elevation: _____
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Iphone 4s
DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☑
Coordinates: 33°21'3.33"N
-117° 0'50.98"W

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

Single specimen observed foraging in the coastal sage scrub along a rocky creekbed (Frey Creek). Dominants include California Sagebrush (Artemisia californica), Flat-top Buckwheat (Eriogonum fasciculatum), California Bricklebush (Brickellia californica), Laurel Sumac (Malosma laurina), and others. Gentle south-draining creekbed.

Other rare taxa seen at THIS site on THIS date: Cnemidophorus hyperythrus beldingi
(separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use:

Visible disturbances: Adjoining agricultural use

Threats:

Comments:

Determination: *(check one or more, and fill in blanks)*

☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 04/27/2005

For Office Use Only

Source Code _____ Quad Code _____

Elm Code _____ Occ. No. _____

EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Elanus leucurus*

Common Name: White-tailed Kite

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Vince Scheidt

Address: 3158 Occidental Street
San Diego CA 92122

E-mail Address: vince@san.rr.com

Phone: (858) 457-3873

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

1 # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description *(please attach map AND/OR fill out your choice of coordinates, below)*

County: San Diego Landowner / Mgr.: Private

Quad Name: Pala, CA Elevation: 970'

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Iphone 4s

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ *OR* Geographic (Latitude & Longitude) ☑

Coordinates: 33°21'1.01"N
-117° 0'52.29"W

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

Single specimen observed soaring over the coastal sage scrub along a rocky creekbed (Frey Creek). Dominants include California Sagebrush (Artemisia californica), Flat-top Buckwheat (Eriogonum fasciculatum), California Bricklebush (Brickellia californica), Laurel Sumac (Malosma laurina), and others. Gentle south-draining creekbed.

Other rare taxa seen at THIS site on THIS date:
(separate form preferred)

Site Information

Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use:

Visible disturbances: Adjoining agricultural use

Threats:

Comments:

Determination: *(check one or more, and fill in blanks)*

- ☐ Keyed (cite reference): _____
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

ATTACHMENT C

SIGNED 45-DAY SURVEY REPORTS FOR
ARROYO (SOUTHWESTERN) TOAD, 2007
CALIFORNIA GNATCATCHER, 2009
AS SUBMITTED TO THE U.S FISH AND WILDLIFE SERVICE

Shadow Run Ranch: 45-Day Survey Results for Arroyo Toad *(Bufo californicus),* Pauma Valley, California						
Location:	Site is located north of State Highway 76 (Pala Road) and west of Adams Drive in the Pauma Valley area of unincorporated San Diego County, California.					
Habitat Description:	Frey Creek, a USGS "blue-line" stream and tributary to the San Luis Rey River, runs parallel to the western property edge. The northerneastern portion of Frey Creek supports Southern Sycamore-Alder Riparian Woodland (SSARW), with indicators including White Alder (*Alnus rhombifolia*), California Sycamore (*Platanus racemosa*), willows (*Salix*), and herbaceous wetland species. Much of the canopy is closed, although some fairly open areas are present, particularly where the woodland converts to Southern Coast Live Oak Riparian Forest (SCLORF). SCLORF vegetation is found along the floodplain of Frey Creek immediately to the west of the SSARW. This habitat is indicated by mature Coast Live Oaks (*Quercus agrifolia*) and California Sycamores over an understory of scattered Mule Fat (*Baccharis glutinosa*), Douglas Sagewort (*Artemisia douglasiana*), and CSS species. The floodway (i.e., incised channel) of Frey Creek qualifies as supporting Floodway habitat. This habitat-type consists mainly of bare sand, rocks, and various sized boulders. Riparian species, such as Mule Fat, Arroyo Willow (*S. lasiolepis*), and Western Cottonwood (*Populus fremontii*), and scrub species are occasional in the Floodway. This habitat-type continues offsite to the southwest in the floodway of Frey Creek.					
Survey Methodologies	Pursuant to survey protocol recommendations, specimens were visually searched for utilizing hand-held Coleman® lanterns to assist with detections, and the trills characteristic of this species were listened for at all times. Weather conditions were conducive to toad surveying on each of the selected dates with mostly dark skies and no wind or rain. Particular attention was paid to areas that had the highest probability of supporting toads. The entirety of the drainage was surveyed as were adjacent upland areas supporting suitable substrates.					
Name of personnel	Vince Scheidt & Brandon Myers	Vince Scheidt & Patrick Maher	Vince Scheidt & Brandon Myers	Vince Scheidt & Brandon Myers	Vince Scheidt & Brandon Myers	Vince Scheidt & Brandon Myers
Acres surveyed	~ 2.5 acres	~ 2.5 acres	~ 2.5 acres	~ 2.5 acres	~ 2.5 acres	~ 2.5 acres
Date of survey	04-Apr-12	26-Apr-12	08-May-12	24-May-12	05-June-12	18-Jun-12
Time	5:30-11:20 PM	6:30-11:50 PM	7:00-10:50 PM	7:30-11:10 PM	8:00-11:00 PM	8:00-10:50 PM
Temperature	Clear, mid 60's, no wind	Clear, low 60's , no wind	Clear becoming overcast, low 60's, no wind	Clear, low 60's, northerly breeze ~3 mph	Clear, mid 60's, no wind	Clear, mid 60's, westerly breeze ~3 mph
# of *Bufo boreas*	0	0	0	0	0	0
# of *Rana catesbeiana*	0	0	0	0	0	0
# of *Scaphiopus hammondii*	0	0	0	0	0	0
# of *Hyla regilla*	calls	0	calls	calls	0	calls
# of *Hyla cadaverina*	2 + calls	0	2 + calls	1 + calls	0	2 + calls
# of Arroyo Toads	**0**	**0**	**0**	**0**	**0**	**0**

Vince Scheidt, TE788133

Shadow Run Ranch (TM 5223): 45-Day Survey Results for California Gnatcatcher (*Polioptila californica*), Pauma Valley, California			
Location:	The site is the approximately 248-acre Shadow Run Ranch property located north of State Highway 76 (Pala Road) and west of Adams Drive in the Pauma Valley area of unincorporated San Diego County, California.		
Habitat Description:	Diegan Coastal Sage Scrub (CSS) vegetation is found mostly on the northern portion of the site in association with extremely steep south-facing slopes and on the western portion of the site in association with the floodplain of Frey Creek, a U.S.G.S. "blue-line" stream that flows down the western side of the property. There are also several small patches of remnant or successional CSS associated with large rock outcrops scattered throughout the agricultural area. Indicators in this habitat include Flat-top Buckwheat *(Eriogonum fasciculatum)*, California Sagebrush *(Artemisia californica)*, California Brickellbush (*Brickellia californica*), Laurel Sumac (*Malosma laurina*), Our Lord's Candle (*Yucca whipplei*), and other soft-woody shrubs. The CSS in Frey Creek is interspersed with mature Coast Live Oaks (*Quercus agrifolia*) and occasional California Sycamores (*Platanus racemosa*). The CSS on the northernmost portion of the property was burned in the wildfire of October 2007. This area is re-generating and is expected to fully recover, although it currently supports mostly herbaceous species. CSS is also present offsite to the west, southwest, and east. Gnatcatcher habitat quality onsite is considered moderate.		
Survey Methodologies	All accessible areas of the site slowly walked. Taped vocalizations used sparingly. Steep slopes or areas of dense brush surveyed with binoculars, where possible. Extremely steep, inaccessible slopes not included in the survey.		
Name of personnel	Vince Scheidt (VS), TE 788133; Julia Groebner (JG), in training	VS, JG	VS, JG
Acres surveyed	approx. 23 acres	approx. 23 acres	approx. 23 acres
Date of survey	July 10, 2009	July 27, 2009	August 19, 2009
Weather	Clear skies with high, thin clouds, temps low 80's to low 90's, no wind	Clear skies, temps high 70°s to low 90°s, no wind	Cloudy skies clearing mid-morning, temps high 60°s to mid 80°s, no wind
Temperature (Start/Stop)	83/92	77/93	67/85
Tape vocalizations	15 times	12 times	10 times
# of gnatcatchers	none	none	none
Age	n/a	n/a	n/a
Sex	n/a	n/a	n/a

ATTACHMENT D

OUTLINE – Conceptual Wetland Mitigation Plan

Conceptual Wetland Mitigation Plan (OUTLINE) – Shadow Run Ranch Subdivision

OVERVIEW

The Resolution of Approval for the Shadow Run Ranch project will require that certain mitigation measures be implemented prior to or as part of recordation of a Final Map for this project. With respect to biological resources, one of these measures will be the preparation and implementation of a **Wetland Mitigation Plan** in order to offset project-related impacts to 0.015 acre of state wetlands and state and federal "waters".

In order to mitigate for impacts to jurisdictional wetlands and "waters" associated with Shadow Run Ranch, the onsite segment of Frey Creek will be subject to wetland restoration and enhancement activities. This will include the removal of invasive exotics and agricultural plantings from Frey Creek and surrounding otherwise natural areas. These areas will then be replanted with native species, including California Sycamores (*Platanus racemosa*), Coast Live Oaks (*Quercus agrifolia*), and others, under a design that will be subject to the approval of a formal, final **Wetland Mitigation Plan**. All restored/enhanced habitat will require no less than five years of biological monitoring and reporting, as well as Regulatory Agency permitting, as discussed in the biology report for this project.

The onsite portion of Frey Creek and a minimum 50-foot wetland buffer on either side of Frey Creek are proposed for protection under a dedicated Biological Open Space or Conservation Easement. This entire open space area will be managed in the future by an approved land-use manager pursuant to the approval of a Resource Management Plan. This plan shall be prepared and implemented to the satisfaction of the Director of Planning & Development Services, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the California Department of Fish and Wildlife, and the California Regional Water Quality Control Board.

REVEGETATION PLAN CONCEPTS

The Final Wetland Mitigation Plan prepared for Shadow Run Ranch shall address, at a minimum, the following:

- <u>The purpose for restoration and enhancement</u>

The Wetland Mitigation Plan provides a mechanism to mitigate for impacts to jurisdictional wetlands and "waters" associated with Shadow Run Ranch. The Plan provides a framework and defines a program that will maximize habitat values of conserved biological open space on the Shadow Run Ranch site, including habitat that is restored/enhanced as a function of the Plan.

- All specific, improvement-related impacts

As currently designed, the Shadow Run Ranch project impacts approximately 0.015 acre of jurisdictional wetlands and "waters". Precise acreages of impacts will be refined once the Final Map has been prepared via a determination of Substantial Conformance.

- Agency concerns and requirements

The Shadow Run Ranch project will require the securement of various permits and agreements, including; (1) a Habitat Loss Permit (HLP) from the County of San Diego in concert with the Wildlife Agencies, (2) a U.S. Army Corps of Engineers Individual Section 404 Permit pursuant to the Clean Water Act (CWA) (1990, as amended), and/or qualification under one of the Nationwide Permits pursuant to Section 404 of the Act; (3) A Section 1600-series Streambed Alteration Agreement with the California Department of Fish and Wildlife in compliance with the California Fish and Game Code; and (4) CWA Section 401 Water Quality Certification as issued by the California Regional Water Quality Control Board. These documents will mitigate agency concerns, defining acceptable onsite and/or offsite mitigation for project-related impacts.

- Define a specific mitigation area

The final design of the mitigation area would be specified in the Final Wetland Mitigation Plan. At this time, it is proposed that the mitigation area include portions of Frey Creek and areas adjacent to Frey Creek that will be protected in open space but that are currently being used for agriculture.

- Specify site preparation activities

Restoration/enhancement activities will include the removal of agricultural plantings, dead vegetation, weedy annuals, perennial exotics, old fences, irrigation lines, and other surface debris from the mitigation area. Any necessary soil preparation, including the export of soil materials, use of pesticides, etc., shall be discussed in detail in the Plan.

- Engineered line-drawings, planting profiles, and irrigation system layout

The Plan will contain drawings that show how the Grading and Improvement Plans reconcile with the mitigation areas and how the development area will be physically separated from sensitive areas. Open space areas will be clearly shown on all exhibits.

- Types of materials to be used including container sizes, species ratios, total quantities, etc.

Restoration/enhancement activities will include the replanting of portions of the mitigation areas with native species. Native seed and plant stock sources will be specified, plant palettes are to be compatible with indigenous vegetation, etc. Plant materials shall be obtained from site-collected stock.

- Specify planting program and habitat protection measures

Temporary construction fencing of the mitigation areas shall be discussed. Permanent fencing/signage shall be discussed as it relates to the Conditions of Approval of the biological open space.

- Specify biological monitoring periods and success criteria

Monitoring shall occur no less than quarterly the first year, semiannually for years 2 and 3, and annually for years 4 and 5. Monitoring reports shall be submitted on an annual basis, with informal reports on an ongoing basis.

- Specify required maintenance activities

Maintenance shall consist of fencing maintenance, construction monitoring, trash removal, weeding, etc. on an ongoing basis.

The creation of a **Final Wetland Mitigation Plan** should be made a Specific Condition of Project Approval and Final Map recordation. The Wetland Mitigation Plan must be prepared by a County-approved Revegetation Planner. The final Plan shall be consistent in form and content to the conceptual Wetland Mitigation Plan outline provided herein and the County's Revegetation Plan Guidelines.

ATTACHMENT E

Unauthorized Clearing Memorandum

VINCENT N. SCHEIDT

Biological Consultant

3158 Occidental Street • San Diego, CA • 92122-3205 • 858-457-3873 • 858-336-7106 cell • email: vince@san.rr.com

Memorandum

To: Mr. Mark Thompson, TRS Consultants

From: Vince Scheidt, Consulting Biologist

Date: June 21, 2012

RE: Recent Clearing Impacts - Shadow Run Ranch

In response to your request, I have inspected the area that was recently cleared on the Shadow Run Ranch Property in Pauma Valley. The attached photos illustrate this clearing. Based on our calculations, approximately 2.3 acres of Diegan Coastal Sage Scrub were recently removed in the northern area of the site along with approximately 0.14 acre of Coast Live Oak understory. The area cleared of sage scrub has been prepared for planting with irrigation lines clearly visible. This constitutes an expansion of the existing agriculture into a formerly natural area.

Also impacted by clearing is an area of Coast Live Oak Woodland. In this instance, understory was removed and the trees were "lolly-popped" by removing the lower branches. One or two mature trees were apparently cut down also.

Attached is an aerial photograph showing the area of sage scrub that was cleared (prior to clearing), along with the aforementioned photos illustrating where the habitat has been removed.

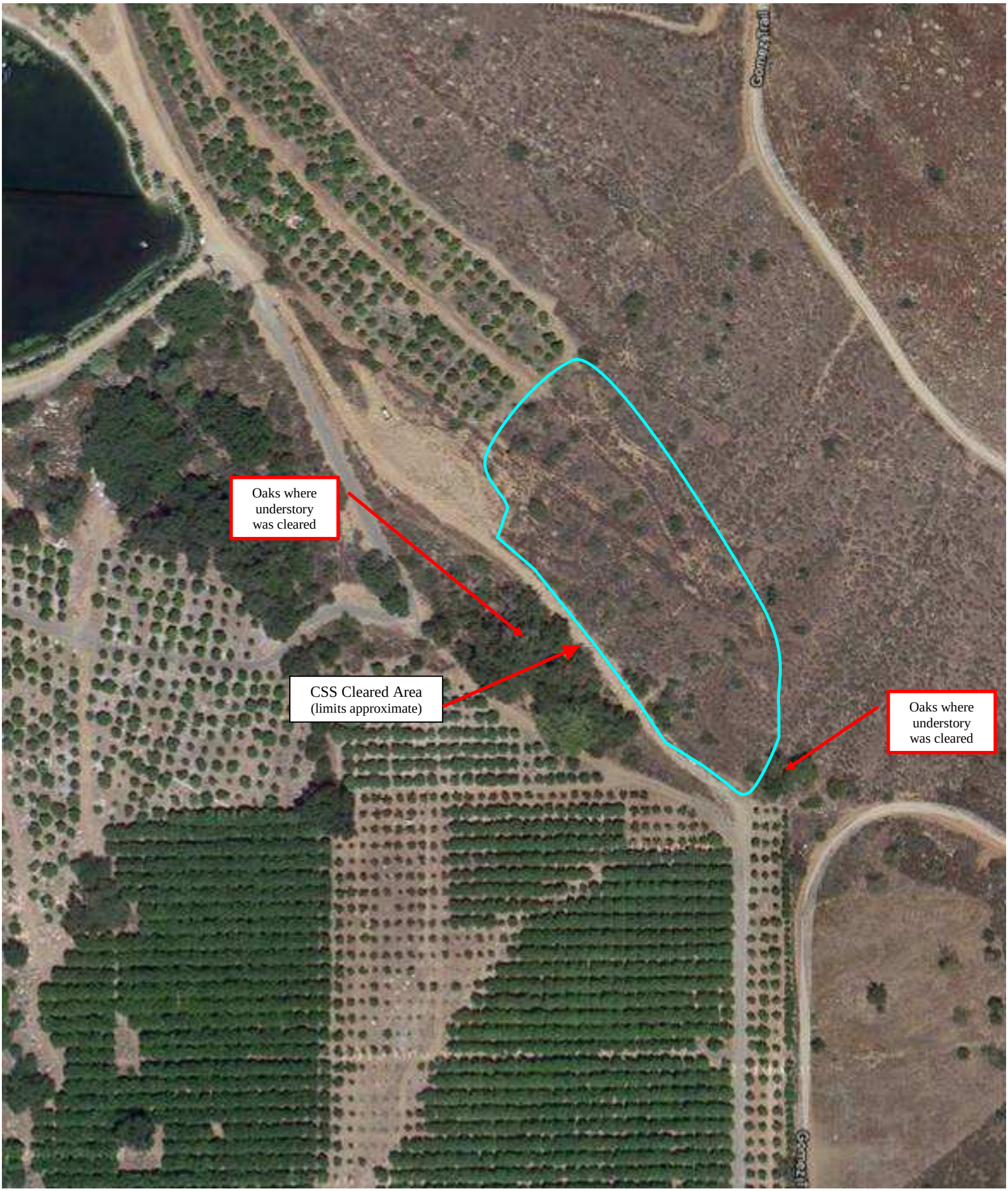
Oaks where understory was cleared
CSS Cleared Area (limits approximate)
Oaks where understory was cleared

Photo 1: Cleared Diegan Coastal Sage Scrub. Red line indicates upper limits.

Photo 2: View of cleared sage scrub looking northeast.

Photo 3: View from East boundary of clearing looking north.

Photo 4: View from east boundary of property showing clearing of oak understory.

Photo 5: Uncleared, adjoining hillside showing habitat condition prior to clearing.

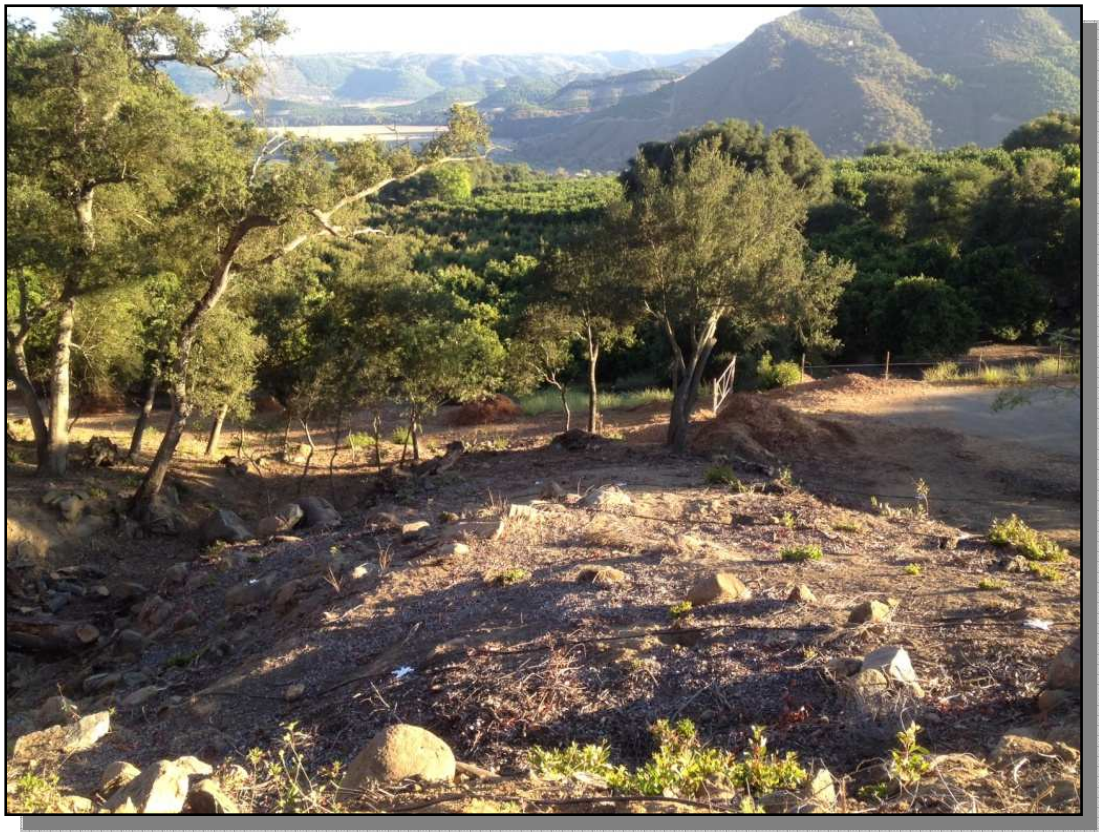

Photo 6: Clearing of Coast Live Oak Woodland. At least one tree was removed here.

Photo 7: Irrigation lines through cleared open space.

Photo 8: Mulched material that was formerly Coastal Sage Scrub.