Appendix A

PLANT SPECIES OBSERVED

Appendix A
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons			
Adoxaceae	*Sambucus nigra* ssp. *caerulea*	blue elderberry	DCSS
Aizoaceae	*Aptenia cordifolia**	heartleaf iceplant	CLOW
Anacardiaceae	*Malosma laurina*	laurel sumac	CLOW, NNG, SMC
	Rhus integrifolia	lemonadeberry	DCSS, EUCF, EUCW, NNG, SMC
	*Schinus molle**	Peruvian pepper tree	CLOW, EUCF, EUCW, NNV, SRF
	*Schinus terebinthifolius**	Brazilian pepper tree	CLOW, DEV, EXAG, SWS
	Toxicodendron diversilobum	poison oak	CLOW
Apiaceae	*Apium graveolens**	celery	EUCF, FWM, SRW
	*Conium maculatum**	poison-hemlock	CLOW, SRF
	*Foeniculum vulgare**	fennel	NNG
Apocynaceae	*Nerium oleander**	oleander	DEV
	*Vinca major**	greater periwinkle	CLOW, EUCF
Asclepiadaceae	*Asclepias fascicularis*	narrow-leaf milkweed	EXAG, NNG
Asteraceae	*Ambrosia psilostachya*	western ragweed	DW, EUCF, EXAG, NNG
	Artemisia californica	California sagebrush	DCSS, SMC
	Baccharis pilularis	coyote brush	EUCF, NNG, SMC
	Baccharis salicifolia	mule fat	MFS, SRF
	Baccharis sarothroides	broom baccharis	DCSS
	*Bidens pilosa**	common beggar's tick	ORCH
	Brickellia californica	California brickellbush	SMC
	*Carduus pycnocephalus**	Italian thistle	CLOW, NNG, SRF, SRW
	*Centaurea melitensis**	star thistle	DCSS, NNG, SMC
	Corethrogyne filaginifolia	California-aster	NNG, SMC
	*Cotula coronopifolia**	African brass-buttons	FWM

Appendix A (cont.)
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons (cont.)			
Asteraceae (cont.)	*Deinandra fasciculata*	fascicled tarplant	DCSS
	*Erigeron canadensis**	horseweed	CLOW, DH, NNG, ORCH
	Eriophyllum confertiflorum	golden yarrow	SMC
	Euthamia occidentalis	western goldenrod	HW, SRF
	*Gazania linearis**	gazania	NNG
	*Glebionis coronaria**	garland daisy	DH
	Grindelia camporum	gum plant	NNG
	Hazardia squarrosa var. *grindelioides*	saw-toothed goldenbush	DCSS, NNG, SMC
	*Hedypnois cretica**	Crete weed	EXAG
	Helianthus gracilis	slender sunflower	NNG
	*Helminthotheca echioides**	bristly ox-tongue	DW, EUCF, EXAG, HW, NNG, SRW
	Heterotheca grandiflora	telegraph weed	NNG
	*Hypochaeris glabra**	smooth cat's-ear	NNG
	Isocoma menziesii	goldenbush	EUCF, NNG
	*Lactuca serriola**	wild lettuce	EUCF, EXAG, NNG
	*Matricaria discoidea**	pineapple weed	NNG
	Osmadenia tenella	osmadenia	NNG
	*Senecio vulgaris**	common groundsel	NNG
	*Silybum marianum**	milk thistle	CLOW, NNG
	*Sonchus asper**	prickly sow thistle	ORCH, SRF
	*Sonchus oleraceus**	common sow thistle	CLOW, NNG
	Stylocline gnaphaloides	everlasting nest straw	NNG
	*Tragopogon dubius**	salsify	NNG
	Uropappus lindleyi	silver puffs	NNG, SMC
	Xanthium strumarium	cocklebur	EUCF
Bignoniaceae	*Catalpa speciosa**	northern catalpa	EUCF, EUCW
Boraginaceae	*Amsinckia intermedia*	rancher's fiddleneck	NNG
	Heliotropium curassavicum var. *occulatum*	salt heliotrope	DW, NNG, EUCF
	Phacelia cicutaria	caterpillar phacelia	SMC

Appendix A (cont.)
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons (cont.)			
Brassicaceae	*Brassica nigra**	black mustard	EXAG, NNG
	*Hirschfeldia incana**	shortpod mustard	DCSS, DH, EXAG, NNG
	Nasturtium officinale	water cress	DW,SRF, SWS
	*Raphanus sativus**	wild radish	DW, EUCF, EXAG, HW, NNG, SRF
	Sisymbrium sp.*	mustard	EXAG
Cactaceae	*Opuntia ficus-indica**	Indian-fig	DH
	Opuntia littoralis	coastal prickly pear	DCSS
Caprifoliaceae	*Lonicera subspicata*	southern honeysuckle	NNG, SMC
Caryophyllaceae	*Cerastium glomeratum**	mouse-ear chickweed	EUCW
	*Polycarpon tetraphyllum**	polycarp	DH
	*Silene gallica**	windmill pink	DH
	*Stellaria media**	common chickweed	CLOW
Chenopodiaceae	*Amaranthus albus**	white tumbleweed	ORCH
	*Atriplex prostrata**	hastate orache	EUCF, NNG, SRW
	*Atriplex semibaccata**	Australian saltbush	EXAG, NNG
	*Salsola tragus**	Russian thistle	EXAG, NNG
Cistaceae	*Helianthemum scoparium*	rock rose	SMC
Convulvulaceae	*Convolvulus arvensis**	bindweed	NNG
Crassulaceae	*Crassula ovata**	jade plant	EUCW
Cucurbitaceae	*Marah macrocarpa*	wild cucumber	DCSS, CLOW, EUCW
Ericaceae	*Xylococcus bicolor*	mission manzanita	SMC
Euphorbiaceae	*Chamaesyce maculata**	spotted spurge	ORCH
	Croton setigerus	dove weed	NNG
	*Euphorbia peplus**	petty spurge	CLOW, NNG
	*Ricinus communis**	castor-bean	DH
Fabaceae	*Acacia baileyana**	cootamundra wattle	NNV
	*Acacia longifolia**	golden wattle	NNV, SRF
	Acmispon americanus	Spanish lotus	DCSS
	Acmispon glaber	deerweed	SMC

Appendix A (cont.)
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons (cont.)			
Fabaceae (cont.)	*Medicago polymorpha**	bur-clover	NNG
	*Trifolium hirtum**	rose clover	EXAG
	*Vicia villosa**	winter vetch	NNG
Fagaceae	*Quercus agrifolia* var. *agrifolia*	coast live oak	CLOW, DH, EUDF, NNG, ORCH, SMC, SRF, SRW, SWS
Gentianaceae	*Zeltnera venusta*	canchalagua	SMC
Geraniaceae	*Erodium botrys**	long-beak filaree	DCSS, NNG
	*Erodium moschatum**	green-stem filaree	DH, NNG, ORCH
	*Geranium carolinianum**	Carolina geranium	NNG
Juglandaceae	*Carya illinoinensis**	pecan	SRF
Lamiaceae	*Marrubium vulgare**	horehound	NNG, SRF
	Salvia apiana	white sage	EXAG, NNG
	Salvia mellifera	black sage	CLOW, DCSS, NNG, SMC
	Stachys ajugoides	hedge nettle	SMC
Lauraceae	*Persea americana**	avocado	ORCH
Malvaceae	*Malva parviflora**	cheeseweed	EXAG, NNG
	Sidalcea malviflora	checkerbloom	CLOW
Myrtaceae	*Eucalyptus camaldulensis**	red gum	EUCF, SRW
	Eucalyptus sp.*	eucalyptus	DH, EUCW
Oleaceae	*Fraxinus uhdei**	shamel ash	SRF
	*Olea europaea**	olive	CLOW, DH, EUCF, NNV
Onagraceae	*Clarkia purpurea* ssp. *quadrivulnera*	wine-cup clarkia	EXAG, NNG
	Epilobium ciliatum ssp. *ciliatum*	willow herb	DW, NNG, SRF
	Oenothera elata ssp. *hirsutissima*	great marsh evening-primrose	CLOW, HW
Oxalidaceae	*Oxalis pes-caprae**	Bermuda-buttercup	NNG
Papaveraceae	*Eschscholzia californica*	California poppy	NNG
Phrymaceae	*Mimulus aurantiacus*	monkey-flower	DCSS, SMC

Appendix A (cont.)
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons (cont.)			
Plantaginaceae	*Antirrhinum nuttallianum*	Nuttall's snapdragon	SMC
	Penstemon sp.	penstemon	SMC
	Plantago erecta	dwarf plantain	SMC
	*Plantago lanceolata**	English plantain	NNG
	*Plantago major**	common plantain	EUCF
Plumbaginaceae	*Limonium sinuatum**	Mediterranean sea-lavender	DCSS, NNG
Polygonaceae	*Eriogonum fasciculatum*	buckwheat	DCSS, NNG
	*Rumex conglomeratus**	dock	SRW
	*Rumex crispus**	curly dock	DW, EUCF, EXAG, HW, NNG, SWS
	Rumex salicifolius	willow dock	EUCF
Portulacaceae	*Claytonia perfoliata* ssp. *perfoliata*	miner's lettuce	CLOW, EUCW
Primulaceae	*Anagallis arvensis**	scarlet pimpernel	CLOW, EXAG, NNG
Proteaceae	*Grevillea robusta**	silk-oak	EUCF
Rhamnaceae	*Ceanothus tomentosus*	Ramona ceanothus	NNG, SMC
	Rhamnus crocea	spiny redberry	SMC
	Rhamnus ilicifolia	holly-leaf redberry	CLOW, SMC
Rosaceae	*Adenostoma fasciculatum*	chamise	NNG, SMC
	Cercocarpus betuloides	mountain mahogany	SMC
	Heteromeles arbutifolia	toyon	CLOW, SMC
Rubiaceae	*Galium aparine*	prickly bedstraw	CLOW
Rutaceae	*Citrus* sp.*	citrus	ORCH
	Cneoridium dumosum	bush-rue	SMC
Salicaceae	*Salix gooddingii*	Goodding's black willow	SRF, SRW
	Salix laevigata	red willow	SRF, SRW, SWS
	Salix lasiolepis	arroyo willow	EUCF, SRF, SRW, SWS
Saururaceae	*Anemopsis californica*	yerba mansa	HW, SRF
Saxifragaceae	*Jepsonia parryi*	coast jepsonia	CLOW
Scrophulariaceae	*Scrophularia californica*	California figwort	DCSS

Appendix A (cont.)
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons (cont.)			
Simaroubaceae	*Ailanthus altissima**	tree of heaven	NNG, SRF
Solanaceae	*Nicotiana glauca**	tree tobacco	DCSS, SRF
	*Solanum elaeagnifolium**	white horse-nettle	DH
	Solanum parishii	Parish nightshade	NNG
Tamaricaceae	*Tamarix* sp.*	tamarisk	TS
Urticaceae	*Urtica dioica* ssp. *holosericea*	stinging nettle	SRF
	*Urtica urens**	dwarf nettle	NNG
Verbenaceae	*Lantana camara**	lantana	DEV
Vitaceae	*Vitis girdiana*	desert wild grape	SRF
Monocotyledons			
Arecaceae	*Phoenix canariensis**	Canary Island date palm	EUCF, NNG
	*Washingtonia robusta**	Mexican fan palm	DH, EUCF, HW, NNV, SRF, SRW, SWS
Cyperaceae	*Bolboschoenus maritimus* ssp. *paludosus*	prairie bulrush	EUCF
	Cyperus eragrostis	tall flatsedge	DW, HW, SWS
	Cyperus sp.	umbrella sedge	EUCF, SRF
	Eleocharis macrostachya	pale spike-rush	EUCF
	Eleocharis montevidensis	slender creeping spike-rush	SRW
	Schoenoplectus californicus	California bulrush	SRF
Iridaceae	*Sisyrinchium bellum*	blue-eyed grass	NNG
Juncaceae	*Juncus bufonius*	toad rush	NNG
	Juncus mexicanus	Mexican rush	HW, NNG
	Juncus phaeocephalus	brown-headed rush	SRW
	Juncus rugulosus	wrinkled rush	HW
Lemnaceae	*Lemna sp.*	duckweed	FWM
Liliaceae	*Aloe vera**	aloe vera	EUCF
	Calochortus splendens	splendid mariposa lily	NNG
Melanthiaceae	*Toxicoscordion fremontii*	star lily	NNG

Appendix A (cont.)
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Monocotyledons (cont.)			
Poaceae	*Arundo donax**	giant reed	SRW
	*Avena barbata**	slender wild oat	EXAG, NNG, SRW
	*Avena fatua**	wild oat	NNG
	Avena sp.*	oats	CLOW, DCSS, DW, NNG
	*Brachypodium distachyon**	purple falsebrome	EXAG, NNG
	*Bromus diandrus**	common ripgut grass	CLOW, EUCW, EXAG, NNG, SMC
	*Bromus hordeaceus**	soft chess	CLOW, DCSS, NNG
	*Bromus madritensis**	foxtail chess	EXAG, NNG
	Cortaderia sp.*	pampas grass	CLOW, SRF
	*Cynodon dactylon**	Bermuda grass	CLOW, DH, EUCF, NNG, SRF, SRW
	Distichlis spicata	saltgrass	EXAG, HW, NNG
	*Festuca myuros**	fescue	EXAG, NNG
	*Festuca perennis**	Italian ryegrass	DW, EXAG, NNG, SRF
	Hordeum sp.*	barley	CLOW, NNG
	Leptochloa fusca subsp. *uninervia*	Mexican sprangle-top	DW
	Muhlenbergia rigens	deergrass	CLOW
	*Paspalum dilatatum**	dallis grass	EUCF
	*Polypogon monspeliensis**	annual beard grass	DW
	Stipa cernua	nodding needlegrass	EXAG, NNG
	*Stipa miliacea**	smilo grass	EUCF, NNG, SWS
Themidaceae	*Dichelostemma capitatum*	blue dicks	EXAG, NNG, SMC
Typhaceae	*Typha domingensis*	southern cattail	DW, FWM, SRF, SWS
	Typha latifolia	broad-leaved cattail	SRF

Appendix A (cont.)
PLANT SPECIES OBSERVED – VALIANO

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Monocotyledons (cont.)			
Typhaceae (cont.)	*Typha* sp.	cattail	SRF, FWM
Gymnosperms			
Pinaceae	*Pinus* sp.*	pine	EUCF

*Non-native species
**CLOW=coast live oak woodland; DCSS=Diegan coastal sage scrub; DH=disturbed habitat; DW=disturbed wetland; EUCF=eucalyptus forest; EUCW=eucalyptus woodland; EXAG=extensive agriculture; FWM=freshwater marsh; HW=herbaceous wetland; MFS=mule fat scrub; NNG=non-native grassland; NNV=non-native vegetation; ORCH=orchard; SMC=southern mixed chaparral; SRF=southern riparian forest; SRW=southern riparian woodland; SWS=southern willow scrub; TS=tamarisk scrub

Appendix B

ANIMAL SPECIES OBSERVED OR DETECTED

Appendix B
ANIMAL SPECIES OBSERVED OR DETECTED
VALIANO PROJECT

TAXON	FAMILY	SCIENTIFC NAME	COMMON NAME
INVERTEBRATES			
Hymenoptera	Apidae	*Apis mellifera*	European honey bee
Lepidoptera	Pieridae	*Pieris rapae*	cabbage white
		Pontia protodice	checkered white
		Anthocharis sara	Sara orangetip
	Nymphalidae	*Nymphalis antiopa*	mourning cloak
		Vanessa cardui	painted lady
		Junonia coenia grisea	common buckeye
		Limenitis lorquini	Lorquin's admiral
		Polygonia satyrus	satyr anglewing
		Danaus plexippus	monarch
	Papilionidae	*Papilio rutulus*	western tiger swallowtail
VERTEBRATES			
Amphibians			
Anura	Hylidae	*Pseudacris regilla*	Pacific tree frog
Reptiles			
Squamata	Phrynosomatidae	*Sceloporus occidentalis*	western fence lizard
		Uta stansburiana	common side-blotched lizard
	Colubridae	*Pituophis catenifer*	gopher snake
	Lampropelidae	*Lampropeltis getula*	California kingsnake
Birds			
Accipitriformes	Cathartidae	*Cathartes aura*	turkey vulture†
Aphodiformes	Trochilidae	*Calypte anna*	Anna's hummingbird
		Calypte costae	Costa's hummingbird

Appendix B (cont.)
ANIMAL SPECIES OBSERVED OR DETECTED
VALIANO PROJECT

TAXON	FAMILY	SCIENTIFC NAME	COMMON NAME
VERTEBRATES (cont.)			
Birds (cont.)			
Apodiformes (cont.)	Apodidae	*Aeronautes saxatalis*	white-throated swift
Charadriiformes	Charadriidae	*Charadrius vociferus*	killdeer
Columbiformes	Columbidae	*Columba livia*	rock pigeon
		Columbina passerine	common ground dove
		Zenaida macroura	mourning dove
Cuculiformes	Cuculidae	*Geococcyx californianus*	greater roadrunner
Falconiformes	Accipitridae	*Accipiter cooperii*	Cooper's hawk†
		Buteo jamaicensis	red-tailed hawk
		Buteo lineatus	red-shouldered hawk†
		Circus cyaneus	northern harrier†
		Elanus leucurus	white-tailed kite†
	Falconidae	*Falco mexicanus*	prairie falcon†
		Falco sparverius	American kestrel
Strigiformes	Strigidae	*Bubo virginianus*	great horned owl
Anseriformes	Anatidae	*Anas platyrhynchos*	mallard
Galliformes	Odontophoridae	*Callipepla californica*	California quail
Gruiformes	Rallidae	*Fulica americana*	American coot
Passeriformes	Aegithalidae	*Psaltriparus minimus*	bushtit
	Cardinalidae	*Passerina caerulea*	blue grosbeak
		Pheucticus melanocephalus	black-headed grosbeak
	Corvidae	*Aphelocoma californica*	western scrub jay
		Corvus brachyrhynchos	American crow
		Corvus corax	common raven
	Emberizidae	*Ammodramus savannarum*	grasshopper sparrow†
		Chondestes grammacus	lark sparrow
		Melospiza melodia	song sparrow
		Pipilo crissalis	California towhee
		Pipilo maculatus	spotted towhee
		Zonotrichia leucophrys	white-crowned sparrow
	Fringillidae	*Carduelis psaltria*	lesser goldfinch
		Carpodacus mexicanus	house finch

Appendix B (cont.)
ANIMAL SPECIES OBSERVED OR DETECTED
VALIANO PROJECT

TAXON	FAMILY	SCIENTIFC NAME	COMMON NAME
VERTEBRATES (cont.)			
Birds (cont.)			
Passeriformes (cont.)	Hirundidae	*Petrochelidon pyrrhonota*	cliff swallow
		Stelgidopteryx serripennis	northern rough-winged swallow
	Icteridae	*Agelaius phoeniceus*	red-winged blackbird
		Euphagus cyanocephalus	Brewer's blackbird
		Icterus bullockii	Bullock's oriole
		Molothrus ater	brown-headed cowbird
		Sturnella neglecta	western meadowlark
	Mimidae	*Mimus polyglottos*	northern mockingbird
	Paridae	*Baeolophus inornatus*	oak titmouse
	Parulidae	*Geothlypis trichas*	common yellowthroat
		Setophaga coronata	yellow-rumped warbler
		Setophaga petechia	yellow warbler†
		Vermivora celata	orange-crowned warbler
	Passeridae	*Passer domesticus*	house sparrow
	Ptilogonatidae	*Phainopepla nitens*	phainopepla
	Regulidae	*Regulus calendula*	ruby-crowned kinglet
	Sturnidae	*Sturnus vulgaris*	European starling
	Timaliidae	*Chamaea fasciata*	wrentit
	Troglodytidae	*Thryomanes bewickii*	Bewick's wren
		Troglodytes aedon	house wren
	Turdidae	*Sialia mexicana*	western bluebird†
	Tyrannidae	*Contopus sordidulus*	western wood pewee
		Myriarchus cinerascens	ash-throated flycatcher
		Sayornis nigricans	black phoebe
		Tyrannus vociferans	Cassin's kingbird
	Vireonidae	*Vireo gilvus*	warbling vireo
Pelicaniformes	Ardeidae	*Ardea alba*	great egret

Appendix B (cont.)
ANIMAL SPECIES OBSERVED OR DETECTED
VALIANO PROJECT

TAXON	FAMILY	SCIENTIFC NAME	COMMON NAME
VERTEBRATES (cont.)			
Birds (cont.)			
Piciformes	Picidae	*Colaptes auratus*	northern flicker
		Melanerpes formicivorus	acorn woodpecker
		Picoides nuttallii	Nuttall's woodpecker
Suliformes	Phalacrocoracidae	*Phalacrocorax auritus*	double-crested cormorant
Mammals			
Artiodactyla	Cervidae	*Odocoileus hemionus fuliginata*	southern mule deer†
Carnivora	Canidae	*Canis latrans*	coyote
	Felidae	*Felis rufus*	bobcat
	Mephitidae	*Mephitis mephitis*	striped skunk
	Procyonidae	*Procyon lotor*	raccoon
Lagomorpha	Leporidae	*Sylvilagus audubonii*	desert cottontail
Rodentia	Geomyidae	*Thomomys bottae*	Botta's pocket gopher
	Heteromyidae	*Dipodomys* sp.	kangaroo rat
	Muridae	*Neotoma macrotis*	big-eared woodrat
	Sciuridae	*Spermophilus beecheyi*	California ground squirrel

†Sensitive species

Appendix C

SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR

Appendix C
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR
VALIANO PROJECT

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FT/SE CRPR 1B.1 County List A	April –June	Very low. Occurs on friable clay soils, often in open areas within grasslands. Clay soils not present on site.
California adolphia (*Adolphia californica*)	--/-- CRPR 2.1 County List B	December - May	Very low. Occurs on clay soils in dry canyons and washes in coastal sage scrub and chaparral. Clay soils not present on site.
San Diego ambrosia (*Ambrosia pumila*)	FE/-- CRPR 1B.1 County List A	April – October	Low. Generally found along creeks or seasonal drainages along the periphery of willow riparian areas that are limited on site.
Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*)	FE/-- CRPR 1B.1 County List A	December - June	Very low. Occurs in coastal San Diego County in maritime chaparral on sandy soils. Maritime chaparral not present on this inland site.
Rainbow manzanita (*Arctostaphylos rainbowensis*)	--/-- CRPR 1B.1 County List A	December - March	Very low. Southern mixed chaparral is preferred habitat. Very little suitable habitat on site; species would likely have been observed if present.
San Diego sagewort (*Artemisia palmeri*)	--/-- CRPR 4.2 County List D	February - September	Moderate. Stream courses, often within coastal sage scrub and southern mixed chaparral
Encinitas baccharis (*Baccharis vanessae*)	FT/SE CRPR 1B.1 County List A	August - November	Low/Moderate. Occurs in southern maritime and southern mixed chaparrals.
San Diego goldenstar (*Bloomeria clevelandii*)	--/-- CRPR 1B.1 County List A	April - May	Low. Occurs in valley grasslands, particularly near mima mound topography or in the vicinity of vernal pools. Also on clay soils on dry mesas and hillsides in coastal sage scrub or chaparral. No clay soils or vernal pools on site.

Appendix C (cont.)
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR
VALIANO PROJECT

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
Thread-leaved brodiaea (*Brodiaea filifolia*)	FT/SE CRPR 1B.1 County List A	March - June	Very low. Occurs in coastal sage scrub, cismontane woodlands, grassland, and vernal pools with clay soils. No clay soils or vernal pools on site.
Orcutt's brodiaea (*Brodiaea orcuttii*)	--/-- CRPR 1B.1 County List A	May – July	Very low. Occurs on clay soils in vernally moist grasslands, mima mound topography, and vernal pool peripheries. Occasionally will grow on streamside embankments. Clay soils not present on site.
Wart stemmed ceanothus (*Ceanothus verrucosus*)	--/-- CRPR 2.2 County List B	December - May	Moderate. Occurs in chaparral. Detectable at the time of the surveys. Species would have been observed if present.
Southern tarplant (*Centromadia parryi* ssp. *australis*)	--/-- CRPR 1B.1 County List A	May - November	Very low. Occurs in seasonally moist (saline) grasslands. Mesic areas in valley and foothill grasslands, alkaline locales, and peripheral salt marsh are utilized. Potential habitats not present on site.
Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)	--/-- CRPR 1B.2 County List A	April - June	Moderate. Occurs in chaparral. Large shrub visible all year. Species would have been observed if present.
Variegated dudleya (*Dudleya variegata*)	--/-- CRPR 1B.2 County List A	April - June	Low/Moderate. Occurs in openings in sage scrub and chaparral, in isolated rocky substrates in open grasslands, and in proximity to vernal pools and mima mound topography.
Sticky dudleya (*Dudleya viscida*)	--/-- CRPR 1B.2 County List A	May - June	Very low. Grows predominantly on very steep north-facing slopes in shady, mesic conditions. Potential habitat not present on site. No dudleyas observed that could be this species.

Appendix C (cont.)
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR
VALIANO PROJECT

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
Palmer's goldenbush (*Ericameria palmeri* ssp. *palmeri*)	--/-- CRPR 2.2 County List B	July – November	Low. Typically occurs in chaparral and along coastal drainages. No *Ericameria* shrubs observed.
San Diego button-celery (*Eryngium aristulatum* var. *parishii*)	FE/SE CRPR 1B.1 County List A	April - June	Very low. Occurs in vernal pools or mima mound areas with vernally moist conditions that are not present on site.
San Diego barrel cactus (*Ferocactus viridescens*)	--/-- CRPR 2.1 County List B	May - June	Low. Optimal habitat for this cactus appears to be Diegan coastal sage scrub hillsides, often at the crest of slopes and growing among cobbles. Potential habitat limited on site. Succulent perennial visible all year.
Palmer's grapplinghook (*Harpagonella palmeri*)	--/-- CRPR 4.2 County List D	March - May	Very low. Occurs in chaparral, coastal sage scrub, and grasslands on clay soils. Clay soils not present on site.
San Diego marsh-elder (*Iva hayesiana*)	--/-- CRPR 2.2 County List B	April - October	Low. Occurs along stream courses. Shrub identifiable all year. Species would have been observed if present.
Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)	--/-- CRPR 1B.2 County List A	January – July	Low. This annual herb grows in openings in chaparral and sage scrub at the coastal and foothill elevations. Typically observed in relatively dry, exposed locales rather than beneath a shrub canopy or along creeks. Potential habitat is limited on site.
Sea dahlia (*Leptosyne* [*Coreopsis*] *maritima*)	--/-- CRPR 2.2 County List B	March - May	None. Species range is west of this site.

Appendix C (cont.)
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR
VALIANO PROJECT

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
Felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*)	--/-- CRPR 1B.2 County List A	June - August	Low. Typically occurs in the understory of mature stands of chamise in xeric situations. Very little suitable habitat on site and species was not observed.
Spreading navarretia (*Navarretia fossalis*)	FT/-- CRPR 1B.1 County List A	April - June	Very low. Occurs in vernal pools, playas, freshwater marshes, and chenopod scrub. No suitable habitat on site.
Engelmann oak (*Quercus engelmannii*)	--/-- CRPR 4.2 County List D	March - June	None. Tree species that would have been observed if present during site surveys.
Parry's tetracoccus (*Tetracoccus dioicus*)	--/-- CRPR 1B.2 County List A	April - May	Low. A robust shrub that occurs in chamise chaparral with a preference for Las Posas soils. Habitat conditions are typically quite xeric with only limited annual growth. Very little chaparral is present on site and only a small portion of the site contains Los Posas soils (extreme southeast corner). This area of the site is developed with equestrian facilities. Species would have been observed during surveys if present.

Appendix D

SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

Appendix D SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR VALIANO PROJECT		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
INVERTEBRATES		
San Diego fairy shrimp (*Branchinecta sandiegonensis*)	FE/-- County Group 1	Very low. Occurs in seasonally astatic pools, which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral. No suitable habitat on site.
Hermes copper (*Lycaena hermes*)	Candidate/-- County Group 1	Very low. Occurs in southern mixed chaparral and coastal sage scrub with mature specimens of its larval host plant, spiny redberry (*Rhamnus crocea*). Spiny redberry is present on site, but the chaparral and sage scrub communities are patchy and limited in extent on site. The nearest and most recent observation of the species is from Elfin Forest in 2002, but that area was burned in 2007, and the status of the population is unknown (USFWS 2011). Two other nearby reported populations, San Marcos Creek/Questhaven Road and Lake Hodges, are both presumed extirpated (USFWS 2011).
VERTEBRATES		
Amphibians and Reptiles		
Arroyo toad (*Anaxyrus californicus*)	FE/SSC County Group 1	Very low. Found on banks with open-canopy riparian forest characterized by willows, cottonwoods, or sycamores; breeds in areas with shallow, slowly moving streams, but burrows in adjacent uplands during dry months. Potential habitat on site very limited or absent.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Amphibians and Reptiles (cont.)		
Orange-throated whiptail (*Aspidoscelis hyperythra*)	--/SSC County Group 2	Moderate to high. Coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements include open, sunny areas, shaded areas, and abundant insect prey base, particularly termites (*Reticulitermes* sp.).
Coastal whiptail (*Aspidoscelis tigris stejnegeri*)	--/-- County Group 2	Moderate to high. Open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter, and an abundance of insects, spiders, or scorpions.
Red-diamond rattlesnake (*Crotalus ruber*)	--/SSC County Group 2	Moderate. Found in chaparral, coastal sage scrub, along creek banks, particularly among rock outcrops or piles of debris with a supply of burrowing rodents for prey.
San Diego banded gecko (*Coleonyx variegatus abbotti*)	--/-- County Group 1	Very low. Chaparral and coastal sage scrub in areas with rock outcrops. Rock outcrops are not present on site.
San Diego ringneck snake (*Diadophis punctatus similis*)	--/-- County Group 2	Low to moderate. Generally occurs in moist habitats such as oak woodlands and canyon bottoms, but is also sometimes encountered in grassland, chaparral, and coastal sage scrub; generally restricted to leaf litter and rarely crosses open areas.
Western pond turtle (*Emys marmorata*)	--/SSC County Group 1	Low. Almost entirely aquatic; occurs in freshwater marshes, creeks, ponds, rivers and streams, particularly where basking sites, deep water retreats, and egg laying areas are readily available. Potential habitat is very limited on site.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Amphibians and Reptiles (cont.)		
Coastal rosy boa (*Charina* [*Lichanura*] *trivirgata* [*roseofusca*])	--/-- County Group 2	Moderate. Occurs among rocky outcrops in coastal sage scrub, chaparral, and desert scrub. A few rock outcrops are present on site, providing potentially suitable habitat.
Coast horned lizard (*Phrynosoma blainvillii*)	--/SSC County Group 2	Moderate. Occurs in coastal sage scrub, chaparral, open oak woodlands, and open coniferous forests. Important habitat components include basking sites, adequate scrub cover, areas of loose soil, and an abundance of harvester ants (*Pogonomyrmex* sp.), a primary prey item.
Coronado skink (*Plestiodon* [*Eumeces*] *skiltonianus interparietalis*)	--/SSC County Group 2	Moderate. Occurs in grasslands, coastal sage scrub, and open chaparral where there is abundant leaf litter or low herbaceous growth.
Coast patch-nosed snake (*Salvadora hexalepis virgultea*)	--/SSC County Group 2	Low to moderate. Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains (CaliforniaHerps.com 2012).
Western spadefoot (*Spea hammondii*)	--/SSC County Group 2	Low. Occurs in open coastal sage scrub, chaparral, and grassland, along sandy or gravelly washes, floodplains, alluvial fans, or playas; requires temporary pools for breeding and friable soils for burrowing; generally excluded from areas with bullfrogs (*Rana catesbiana*) or crayfish (*Procambarus* sp.).
California red-legged frog (*Rana* [*aurora*] *draytonii*)	FT/SSC County Group 1	Very low. Found in dense, shrubby riparian vegetation with deep, slow-moving water. Potential habitat not present on site.
Two-striped garter snake (*Thamnophis hammondii*)	---/SSC County Group 1	Moderate. Typical habitat is along permanent and intermittent streams bounded by dense riparian vegetation; also found associated with vernal pools and stock ponds.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Birds		
Cooper's hawk (*Accipiter cooperii*)	--/WL County Group 1	Present. Tends to inhabit lowland riparian areas and oak woodlands in proximity to suitable foraging areas such as scrublands or fields. One individual observed on multiple days in riparian forest and oak woodland habitats in the northeastern portion of the site.
Sharp-shinned hawk (*Accipiter striatus*)	--/WL County Group 1	Low. Usually observed in areas with tall trees or other vegetative cover but can be observed in a variety of habitats. In San Diego County occurs in small numbers and only in winter.
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	--/WL County Group 1	Low. Occurs in coastal sage scrub on rocky hillsides and in canyons; also found in open sage scrub/grassy areas of successional growth. Potential habitat on site is patchy and limited in extent.
Grasshopper sparrow (*Ammodramus savannarum*)	--/SSC County Group 1	Present. Typical habitat is dense grasslands that have little or no shrub cover. One individual detected in grassland on site.
Bell's sage sparrow (*Amphispiza belli belli*)	--/WL County Group 1	Very low. Occurs in sunny, dry stands of coastal sage scrub or chaparral. Potential habitat on site is patchy and limited in extent.
Golden eagle (*Aquila chrysaetos*)	BCC, BGEPA/ WL, Fully Protected County Group 1	Low. Typical foraging habitat includes grassy and open, shrubby habitats. Generally nests on remote cliffs; requires areas of solitude at a distance from human habitation. Potential foraging habitat occurs on site but has limited value due to the current levels of habitat fragmentation.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Birds (cont.)		
Long-eared owl (*Asio otus*)	--/SSC County Group 1	Low. In San Diego County is a rare resident in shady oak woodlands and broad riparian forests. Ideal habitat includes a closed canopy near open habitats for foraging and a supply of abandoned raptor or corvid nests or debris platforms for nesting (Unitt 2004).
Burrowing owl (*Athene cunicularia*)	BCC/SSC County Group 1	Very low. Typical habitat is grasslands, open scrublands, agricultural fields, and other areas where there are ground squirrel burrows or other areas in which to burrow. All records of burrowing owl in northwestern San Diego County are prior to 1997 (Unitt 2004).
Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegonensis*)	BCC/SSC County Group 1	Very low. Occurs in coastal sage scrub with large cacti for nesting. No suitable habitat occurs on site.
Turkey vulture (*Cathartes aura*)	--/-- County Group 1	Present. Species occurs throughout much of San Diego County with the exception of extreme coastal San Diego where development is heaviest. Foraging habitat includes most open habitats with breeding occurring in crevices among boulders. Species observed soaring over the site.
Northern harrier (*Circus cyaneus*)	--/SSC County Group 1	Present. Within San Diego County, distribution is primarily scattered throughout lowlands but can also be observed in foothills, mountains, and desert. Typical habitat consists of open grassland and marsh. At least two individuals (male and female) were observed foraging over grassland in the east-central portion of the site.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Birds (cont.)		
Yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	Candidate, BCC/ SE County Group 1	Very low. Generally occurs along larger river systems, where it nests in riparian forest dominated by willows and cottonwoods.
Yellow warbler (*Setophaga brewsteri*)	--/SSC County Group 2	Present. Species observed in riparian forest habitat on site.
Southwestern willow flycatcher (*Empidonax trailii extimus*)	FE/SE County Group 1	Very low. Breeds within thickets of willows or other riparian understory usually along streams, ponds, lakes, or canyons. One of the most important characteristics of the habitat appears to be the presence of dense vegetation, usually throughout all vegetation layers present. Almost all breeding habitats are within close proximity of water or very saturated soil. Very little potential habitat is present on site and is unlikely to support this species.
California horned lark (*Eremophila alpestris actia*)	--/WL County Group 2	High. Found on sandy beaches and in agricultural fields, grassland, and open areas.
Prairie falcon (*Falco mexicanus*)	BCC/WL County Group 1	Observed. Nests on cliffs or bluffs and forages over open desert scrub or grassland. Potential foraging habitat, only, occurs on site. One individual was observed perching on a fence post in the southern portion of the site on a single survey day.
Yellow-breasted chat (*Ictera virens*)	--/SSC County Group 1	Low to moderate. Prefers mature riparian woodlands.
Loggerhead shrike (*Lanius ludovicianus*)	BCC/SSC County Group 1	Low to moderate. Typical habitat includes open habitats including grasslands, shrublands, and ruderal areas with adequate perching locations.
White-faced ibis (*Plegadus chihi*)	--/WL County Group 1	Very low. Occurs in large marshes, with nesting colony hidden in inaccessible reedbed or willow-covered area. Potential habitat absent from the site.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Birds (cont.)		
Coastal California gnatcatcher (*Polioptila californica californica*)	FT/SSC County Group 1	Low. Occurs in coastal sage scrub and very open chaparral. Potential habitat on site is very patchy and limited in extent. Protocol surveys conducted in 2013 were negative.
Least Bell's vireo (*Vireo bellii pusillus*)	FE/SE County Group 1	Low. Inhabits riparian woodland and is most frequent in areas that combine an understory of dense, young willows or mule fat with a canopy of tall willows. Potential habitat on site is very limited. Protocol surveys conducted in 2013 were negative.
Mammals		
Pallid bat (*Antrozous pallidus*)	--/SSC County Group 2	Low to moderate. Locally common species of low elevations in California. Prefers rocky outcrops, cliffs, and crevices with open habitats for foraging.
Ringtail (*Bassariscus astutus*)	--/-- County Group 2	Low. Found in a mixture of shrubland and forest habitats at low to middle elevations in close association with rocky areas and riparian habitats. Potential habitat on site is limited.
Dulzura pocket mouse (*Chaetodipus californicus femoralis*)	--/SSC County Group 2	Low. Primarily associated with mature chaparral. It has, however, been trapped in mule fat scrub and is known to occur in coastal sage scrub. Potential habitat on site is limited in extent.
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	--/SSC County Group 2	Moderate. Occurs in open areas of coastal sage scrub and weedy growth, often on sandy substrates that are present on site.
Stephens' kangaroo rat (*Dipodomys stephensi*)	FE/ST County Group 1	Low. Species range includes San Jacinto Valley and adjacent areas of western Riverside County as well as San Bernardino and northwestern San Diego counties. Habitat includes sparsely vegetated habitats of sagebrush or annual grasses. Species has not been found in the Project vicinity.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Mammals (cont.)		
Spotted bat (*Euderma maculatum*)	--/SSC County Group 2	Very low. Prefers sites with adequate roosting habitat (i.e., cliffs); feeds over water and along washes. Rare in California (Zeiner, et al. 1990).
Western mastiff bat (*Eumops perotis californicus*)	--/SSC County Group 2	Low to moderate. Suitable habitat consists of extensive open areas with abundant roost locations (crevices in cliff faces, high buildings, trees, tunnels).
Mountain lion (*Felis concolor*)	--/-- County Group 2	Low. Requires extensive areas of riparian vegetation and brushy stages of various habitats with interspersed irregular terrain, rocky outcrops, and tree/brush edges. Main prey is mule deer, which was observed on site.
Western yellow bat (*Lasiurus xanthinus*)	--/SSC --	Very low. Found in wooded areas and desert scrub, particularly in palm trees. Rare visitor to San Diego County (Bats of San Diego County 2012).
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	--/SSC County Group 2	High. Found primarily in open habitats including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas if there is at least some shrub cover present.
California leaf-nosed bat (*Macrotus californicus)*	--/SSC County Group 2	Very low. Prefers rocky, rugged terrain; roosts by day in caves, abandoned mines, and tunnels. Forages over nearby flats and washes. Potential habitat not present on site.
Small-footed myotis (*Myotis ciliolabrum*)	--/-- County Group 2	Low to moderate. Occurs in arid, upland habitats. Prefers open stands in forests and woodlands as well as brushy habitats. Feeds over and drinks from streams, ponds, springs, and stock tanks.

Appendix D (cont.)
SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR
VALIANO PROJECT

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
VERTEBRATES (cont.)		
Mammals (cont.)		
Long-eared myotis (*Myotis evotis*)	--/-- County Group 2	Low. Found in brush, woodland, and forest habitats, but coniferous woodlands and forests seem to be preferred. Roosts in rock crevices, buildings, under bark, and in snags. Feeds along habitat edges, in open habitat, and over water.
Fringed myotis (*Myotis thysanodes*)	--/-- County Group 2	Low. Occurs in a wide variety of habitats, but optimal habitats are oak and juniper forests and desert scrub. Roosts in caves, mines, buildings, and crevices. Forages in open habitats, streams, lakes, and ponds; requires water.
Long-legged myotis (*Myotis volans*)	--/-- County Group 2	Moderate. Feeds over water and over open habitats using denser woodland and forests for reproduction. Drinks regularly. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves.
Yuma myotis (*Myotis yumanensis*)	--/-- County Group 2	Moderate. Open forests and woodland are optimal habitat. Closely tied to bodies of water for foraging and drinking. Roosts in buildings, mines, crevices, caves, and under bridges.
San Diego desert woodrat (*Neotoma lepida intermedia*)	--/SSC County Group 2	Moderate. Occurs in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	--/SSC County Group 2	Very low. Prefers desert habitats with high cliffs or rock outcrops. Suitable habitat not present on site.
Big free-tailed bat (*Nyctinomops macrotis*)	--/SSC County Group 2	Very low. A rare species in California (Zeiner et al. 1990). Prefers rugged, rocky canyons. Often forages over water. Roosts in crevices in high cliffs or rock outcrops not present on site.

Appendix D (cont.) **SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR** **VALIANO PROJECT**		
SPECIES	**LISTING OR SENSITIVITY***	**POTENTIAL TO OCCUR**
VERTEBRATES (cont.)		
Mammals (cont.)		
Southern grasshopper mouse (*Onychomys torridus ramona*)	--/SSC County Group 2	Low. Desert habitat is preferred, but it also occurs in coastal scrub and mixed chaparral. It is uncommon in valley foothill and montane riparian habitats.
Townsend's western big-eared bat (*Corynorhinus townsendii*)	--/SSC County Group 2	Low. Most abundant in mesic habitats. Considered uncommon in California (Zeiner, et al. 1990). Drinks water and requires caves, mines, tunnels, buildings, or other man-made structures for roosting.
American badger (*Taxidea taxus*)	--/SSC County Group 2	Low. Uncommon resident in California that occurs in herbaceous, shrub, and open stages of most habitats with dry, friable soils (Zeiner et al. 1990).

Appendix E

EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

Appendix E
EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

FEDERAL, STATE, AND LOCAL CODES

U.S. Fish and Wildlife Service (USFWS)

FE	Federally listed endangered
FT	Federally listed threatened
BCC	Birds of Conservation Concern (discussed in more detail, below)
BGEPA	Bald and Golden Eagle Protection Act (discussed in more detail below)

California Department of Fish and Wildlife (CDFW)

SE	State listed endangered
SR	State listed rare
ST	State listed threatened
SSC	State species of special concern
WL	Watch List

Fully Protected — Fully Protected species refer to all vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFW.

County of San Diego

Plant sensitivity:

Group A	Plants rare, threatened, or endangered in California or elsewhere
Group B	Plants rare, threatened, or endangered in California but more common elsewhere
Group C	Plants that may be quite rare, but more information is needed to determine rarity status
Group D	Plants of limited distribution and are uncommon, but not presently rare or endangered

Animal sensitivity:

County Sensitive — Animals considered under California Environmental Quality Act (CEQA) review of projects.

Multiple Species Conservation Program (MSCP) Covered

Multiple Species Conservation Program covered species for which the County has take authorization within the MSCP area.

MSCP Narrow Endemic (NE)

Narrow endemic species are native species that have "restricted geographic distributions, soil affinities, and/or habitats." The MSCP participants' subarea plans have specific conservation measures to ensure impacts to narrow endemics are avoided to the maximum extent practicable.

OTHER CODES AND ABBREVIATIONS

USFWS Bald and Golden Eagle Protection Act (BGEPA)

In 1782, Continental Congress adopted the bald eagle as a national symbol. During the next one and a half centuries, the bald eagle was heavily hunted by sportsmen, taxidermists, fisherman, and farmers. To prevent the species from becoming extinct, Congress passed the Bald Eagle Protection Act in 1940. The Act was extremely comprehensive, prohibiting the take, possession, sale, purchase, barter, or offer to sell, purchase, or barter, export or import of the bald eagle "at any time or in any manner."

In 1962, Congress amended the Eagle Act to cover golden eagles, a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. The golden eagle, however, is accorded somewhat lighter protection under the Act than the bald eagle. Another 1962 amendment authorizes the Secretary of the Interior to grant permits to Native Americans for traditional religious use of eagles and eagle parts and feathers.

USFWS Birds of Conservation Concern (BCC)

This report from 2002 aims to identify accurately the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS' highest conservation priorities and draw attention to species in need of conservation action. USFWS hopes that by focusing attention on these highest priority species, the report will promote greater study and protection of the habitats and ecological communities upon which these species depend, thereby ensuring the future of healthy avian populations and communities. The report is available online at http://migratorybirds.fws.gov/reports/bcc2002.pdf.

EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

OTHER CODES AND ABBREVIATIONS (cont.)

California Rare Plant Rank (CRPR) Codes

Lists

1A = Presumed extinct.

1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.

2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.

3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.

4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

List/Threat Code Extensions

.1 – Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

.2 – Fairly endangered in California (20 to 80 percent occurrences threatened)

.3 – Not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known)

A "CA Endemic" entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.

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Appendix F

RESULTS OF A FOCUSED SURVEY FOR THE LEAST BELL'S VIREO AND COASTAL CALIFORNIA GNATCATCHER (KONECNY BIOLOGICAL SERVICES)

Konecny Biological Services
Biological Consulting, Research, Conservation

August 23, 2013

Helix Environmental Planning, Inc.
7578 El Cajon Blvd., Suite 200
La Mesa, CA 91942

Attn: Dr. Steve Neudecker

Re: Results of a Focused Survey for the Least Bell's Vireo and Coastal California Gnatcatcher at the Valiano Property Site, San Diego County, California, 2013.

Dear Dr. Neudecker:

This letter report presents the results of focused surveys for the least Bell's vireo (*Vireo bellii pusillus*) (LBV) and coastal California gnatcatcher (*Polioptilla californica californica*) (CAGN) at the Valiano property site in San Diego County, California. The LBV is listed as an endangered species by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). The CAGN is listed as a threatened species by the USFWS. The CDFW considers the CAGN to be a California Species of Special Concern (CSSC).

Surveys for the LBV were conducted following methodology approved by the USFWS (2001). Surveys for the gnatcatcher were conducted following protocol approved by the USFWS (USFWS 1997), for jurisdictions participating in the Natural Communities Conservation Program (NCCP) and the Endangered Species Act section 4(d) process. The surveys were conducted by wildlife biologist John Konecny, and authorized by USFWS section 10(a) permit number TE837308-5, and a CDFG Memorandum of Understanding (MOU). No LBV or CAGN were detected at the Valiano site in 2013.

INTRODUCTION

The LBV is a small greenish-gray songbird with a white underbelly, two white wingbars, and white spectacles across the lores. The LBV was once widespread throughout the Central Valley and other low elevation river valleys of California. Historically, the LBVs breeding range extended from the interior of northern California to northwestern Baja California. The LBV typically prefers riparian areas dominated by willows (*Salix* sp.) of mixed age composition. These areas frequently include other trees such as western cottonwood (*Populus freemontii*) and California sycamore (*Platanus racemosa*), with a dense understory of young willows, mule-fat (*Baccharis salicifolia*), California primrose (*Rosa californica*), and a variety of other shrubby species.

Loss and degradation of breeding habitat has been the greatest contributor to the decline of the LBV in California. Habitat conversion for agricultural purposes has removed much of the original riparian woodland, and flood control measures and channelization have further depleted the riparian habitats used by the LBV as well as other riparian birds. The significant reduction in the population size and range of the LBV resulted in it being listed as a state endangered species in June 1980, and federally listed as endangered in May 1986 (USFWS 1986).

The CAGN is a small gray songbird that is an obligate resident of coastal sage scrub (CSS) dominated plant communities. Its range occurs from approximately 30 degrees north latitude in Baja California, Mexico, northward to southern Ventura County in southern California, and includes the Counties of San

Diego, Riverside, Orange, Los Angeles, Ventura, and San Bernardino (Atwood 1992). United States populations of the CAGN have undergone decline due to the loss and fragmentation of CSS habitat resulting from urban development and agricultural activities.

CAGNs usually begin to molt into breeding plumage in early February (Grishaver *et al* 1998). Males select the site for nesting, and nest building begins two to four weeks after the molt. The nest is constructed primarily by the male, and takes between four and eleven days to complete. If there is persistent predation, up to ten nests can be constructed. Eggs are incubated for twelve days, and nestlings fledge at 13 days. Young remain with their parents for three to five weeks after fledging.

CSS is composed of relatively low growing, dry season deciduous, and succulent plants. Diegan CSS is a wide spread coastal sage scrub of southern California from Los Angeles to Baja California, Mexico (Holland 1986). Diegan CSS is dominated by California sagebrush (*Artemisia californica*) and flat-top buckwheat (*Eriogonum fasciculatum*). Other characteristic species include white sage (*Salvia apiana*), laurel sumac (*Malosma laurina*), California encelia (*Encelia californica*), black sage (*Salvia melifera*), lemonadeberry (*Rhus integrifolia*), and deerweed (*Lotus scoparius*).

PROJECT LOCATION

The Valiano site is located immediately west of the City of Escondido, north of the Community of Harmony Grove, and south of the City of San Marcos in north-central San Diego County (Figure 1). The Valiano site is in a configuration of two polygons. The southern polygon, being squarish is bordered on the east side by Country Club Drive and on the north by Mount Whitney Road. The northern polygon is bordered on its south side by Mount Whitney Road and on the east by the western perimeter of section 19 of the Ranch Santa Fe quadrangle map. Specifically, the Valiano site is located within Township 12 South, Range 2 West, and Section 19 of the Rancho Santa Fe, CA. 7.5-minute quadrangle map.

PROJECT SITE DESCRIPTION

The Valiano site is a mosaic of habitat types typical of inland north-central San Diego County. The western half of the northern polygon is predominantly citrus and avocado orchard and nonnative grasslands, characterized by slender oat (*Avena barbata*), rip-gut grass (*Bromus diandrus*), black mustard (*Brassica nigra*), and sweet fennel (*Foeniculum vulgare*). A thin strip of southern riparian forest runs east to west across the northern half. This area is characterized by arroyo willow (*Salix lasiolepis*), red willow (*S.laevigata*), and coast live oak (*Quercus agrifolia*).

Diegan CSS is present on the Valiano site in three disjuct areas. The largest of the three is present on the north side of the southern riparian forest in the northern polygon. It is characterized California sagebrush and flat-top buckwheat. The other two patches of Diegan CSS are located in the southern polygon and are very small. One is located on the east side of the site adjacent to County Club Lane, and the other is located inside of the Harmony Grove Equestrian Center on the south end of the site.

The entire eastern border of the Valiano site is a residential community. The elevation of the Valiano site is approximately 670-feet (204-meters) to 900-feet (274 meters) above mean sea level.

METHODS

Helix Environmental conducted the first LBV survey on May 9, 2013. Konecny Biological Services conducted seven LBV surveys between May 19th and July 21st, 2013. Three surveys for the CAGN were conducted concurrently with those for the LBV, beginning on June 8th, 2013. A summary of the environmental conditions on the seven survey dates is provided in Table 1 below.

Table 1. Summary of Weather Conditions During Seven Surveys for the Least Bell's Vireo, that Included Three Surveys for the Coastal California Gnatcatcher at the Valiano Site, San Diego County, California, 2013.

Survey #	Date	Surveyor (Species)*	Time	Weather Conditions
1	05/19/2013	JK (LBV)	0630-1000	100% overcast, 59-65°F, wind 3-5 mph
2	05/29/2013	JK (LBV)	0620-0940	100% overcast, 561-65°F, wind 3-5 mph
3	06/08/2013	JK, (LBV)(CAGN)	0620-1150	50% overcast, 60-73°F, wind 3-5 mph
4	06/23/2013	JK (LBV)(CAGN)	0620-1120	10% overcast, 59-67°F, wind 1-3 mph
5	06/30/2013	JK (LBV)	0615-0920	10% overcast, 60-68°F, wind 3-5 mph
6	07/07/2013	JK (LBV)	0625-0935	100% overcast, 63-74°F, wind 3-5 mph
7	07/21/2013	JK (LBV)(CAGN)	0600-1100	100% overcast, 64-74°F, wind 5-7 mph

* JK-John Konecny; LBV-Least Bell's Vireo; CAGN-Coastal California Gnatcatcher

The LBV surveys were conducted by slowly walking through appropriate southern riparian forest habitat and listening for LBV. LBV surveys were conducted passively, without the use of a call prompt. A response was listened for before proceeding to the next portion of habitat in the survey area.

CAGN surveys were conducted by walking around the perimeter of each of the three Diegan CSS polygons and listenening and watching for CAGN. If CAGNs were not detected passively, a digital vocalization (call-prompt) of the species "mew" call was played for approximately 15-seconds with an MP3 player and amplified speakers. A response was listened for in the next two-minute interval. If CAGN were not detected, this procedure was repeated once again before proceeding to the next polygon. LBV and CAGN surveys were typically initiated between 0600 and 0700, and lasted approximately four hours.

RESULTS AND DISCUSSION

No LBV or CAGN were detected at the Valiano site during the 2013 surveys. The southern riparian forest on the site is a tenuous strip of willows and coast live oaks with little to no understory. The area may have been grazed by cattle at one time that removed most of the understory. In its present condition, the southern riparian forest is of a very low quality for the LBV. The three patches of Diegan CSS are very isolated and small. The species composition is that which is preferred by the CAGN, but the small size and isolation makes it low quality CAGN habitat.

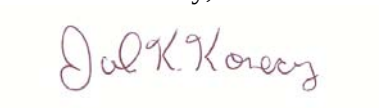
One CDFW CSSC, the northern harrier (*Circus cyaneus*) was detected foraging across the northern portion of the site. Northern harriers were detected three different times in this area. Both male and female were detected. Three other species considered sensitive by San Diego County were detected on the site. A single prairie falcon (*Falco mexicanus*) was observed perched on a fence post at the equestrian center on the south end of the site. A Cooper's hawk (*Accipiter cooperii*) was detected in the southern riparian forest in the north end of the site on each of the seven survey events. This species is likely a resident at that location. A red-shouldered hawk (*Buteo lineatus*) was detected in the oak woodland, north of the southern riparian forest.

No other federal or state listed endangered or threatened species or other CDFW CSSC were detected on the site. A total of eleven species of mammals, 50 species of birds, and three reptile species were detected during the course of the surveys (Table 2). The mammals, birds, and reptiles detected on and around the site are typical of those inhabiting San Diego County in May, June, and July.

CERTIFICATION

I certify that the information in this survey report and attached exhibits fully and accurately represent my work. The results of focused surveys for listed species are typically considered valid for one year by the USFWS and CDFG. If you have any questions or require additional information, please call me at (760) 489-5276.

Sincerely,



John K. Konecny
Wildlife Biologist
TE-837308-5

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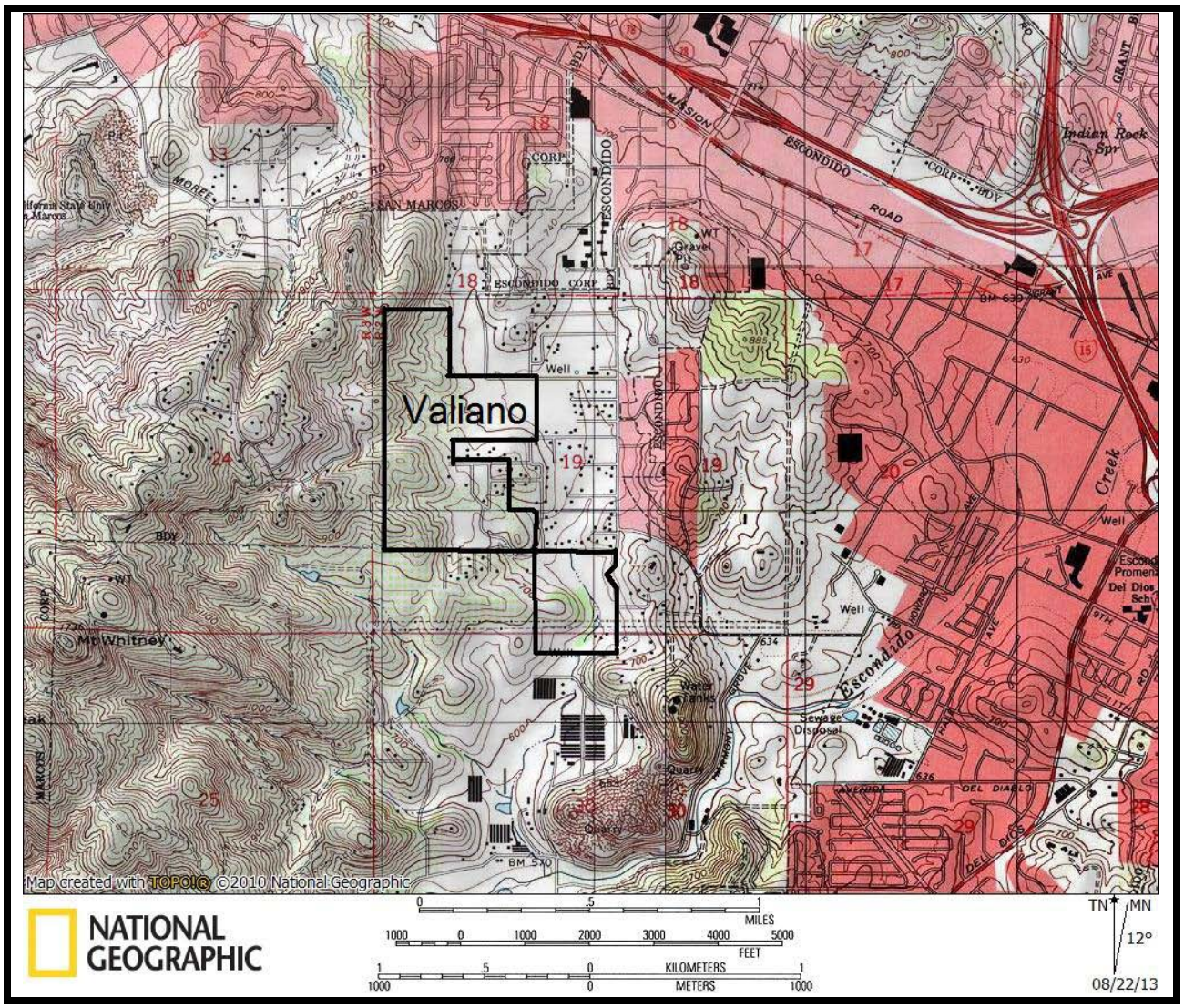

Figure 1. Location of the Valiano Project Site (shown in black line), San Diego County, California, 2013.

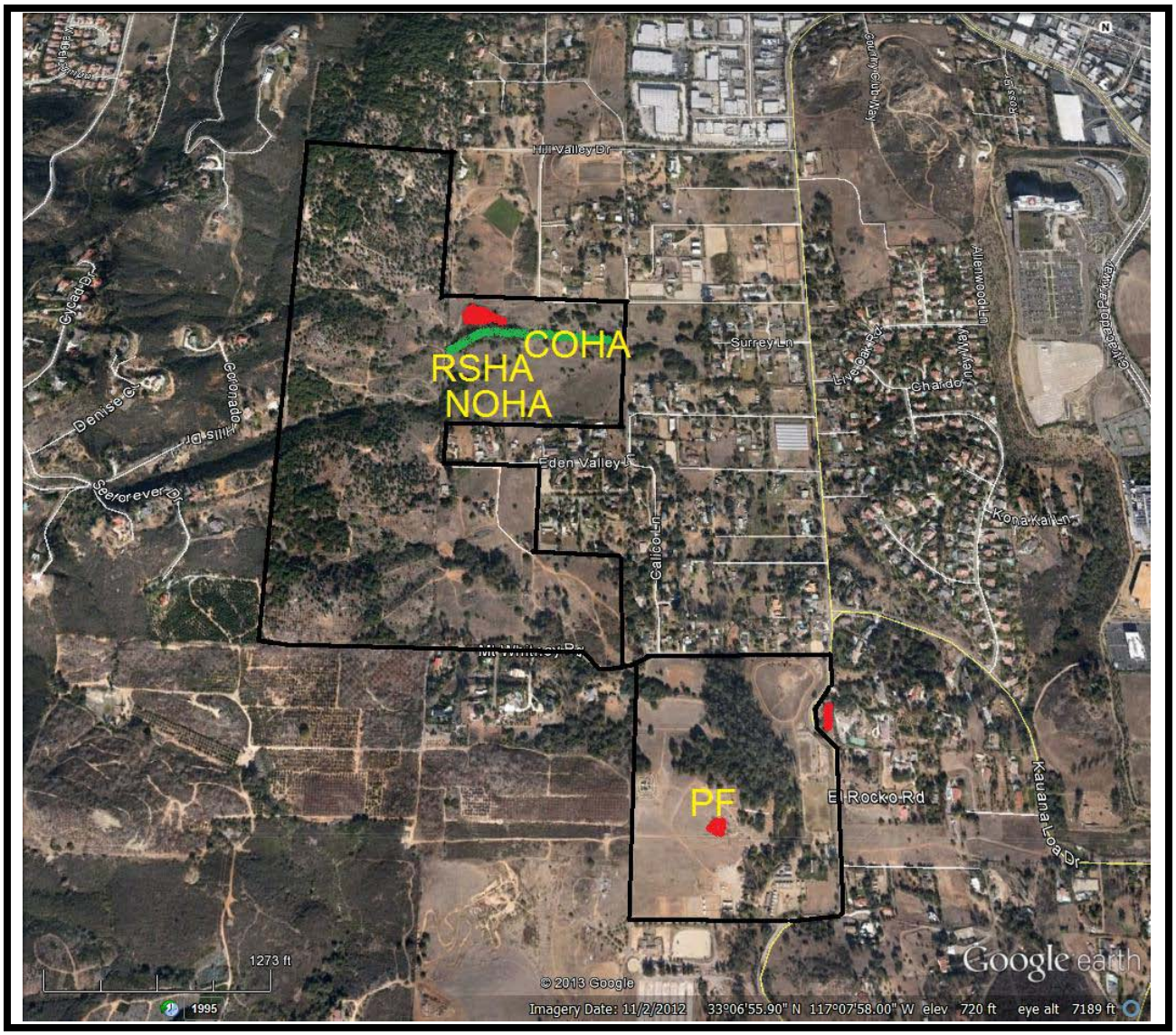

Figure 2. Location of the Least Bell's Vireo Survey Area (green) and Coastal California Gnatcatcher Survey Area (red); and Location of the Prairie Falcon (yellow PF), Cooper's Hawk (yellow COHA), Red-shouldered Hawk (yellow RSHA), and Northern Harrier (yellow NOHA) Detections at the Valiano Project Site, San Diego County, California, 2013.

Table 2. Animal Species Detected During Surveys of Riparian and Coastal Sage Scrub Habitat on the Valiano Site, San Diego County, 2013.

Class Mammalia	
Family Cervidae	
Mule Deer	*Odocoileus hemionus*
Family Canidae	
Coyote	*Canis latrans*
Domestic Dog	*Canis domesticus*
Family Felidae	
Bobcat	*Felis rufus*
Family Procyonidae	
Raccoon	*Procyon lotor*
Family Mustelidae	
Striped Skunk	*Mephitis mephitis*
Family Sciuridae	
Beechy Ground Squirrel	*Spermophilus beecheyi*
Family Leporidae	
Audubon's Cottontail	*Sylvilagus auduboni*
Family Geomyidae	
Botta Pocket Gopher	*Thomomys bottae*
Family Cricetidae	
Big-eared Woodrat	*Neotoma macrotis*
Family Heteromyidae	
Kangaroo Rat	*Dipodomys* sp.
Class Aves	
Family Phasianidae	
California Quail	*Callipepla californica*
Family Catharidae	
Turkey Vulture	*Cathartes aura*
FamilyAccipitridae	
Red-tailed Hawk	*Buteo jamaicensis*
Cooper's Hawk	*Accipiter cooperii*
Red-shouldered Hawk	*Buteo lineatus*
Northern Harrier	*Circus cyaneus*

Family Falconidae	
American Kestrel	*Falco sparverius*
Praire Falcon	*Falco mexicanus*
Family Columbidae	
Mourning Dove	*Zenaida macroura*
Common Ground Dove	*Columbina passerine*
Rock Pigeon	*Columba livia*
Family Cuculidae	
Greater Roadrunner	*Geococcyx californianus*
Family Apodidae	
White-throated Swift	*Aeronautes saxatalis*
Family Trochilidae	
Anna's Hummingbird	*Calypte anna*
Costa's Hummingbird	*Calypte costae*
Family Picidae	
Nuttall's Woodpecker	*Picoides nuttallii*
Northern Flicker	*Colaptes auratus*
Family Tyrannidae	
Western Wood Pewee	*Contopus sordidulus*
Ash-throated Flycatcher	*Myriarchus cinerascens*
Black Phoebe	*Sayornis nigricans*
Cassin's Kingbird	*Tyrannus vociferus*
Family Vireonidae	
Warbling Vireo	*Vireo gilvus*
Family Corvidae	
Western Scrub Jay	*Aphelocoma coerulescen*
Common Raven	*Corvus corax*
American Crow	*Corvus brachyrhynchos*
Family Hirundinidae	
Northern Rough-winged Swal	*Stelgidopteryx serripennis*
Cliff Swallow	*Petrochelidon pyrrhonota*
Family Paridae	
Oak Titmouse	*Baeolophus inornatus*
Family Aegithalidae	
Bushtit	*Psaltiparus minimus*
Family Timaliidae	
Wrentit	*Chamaea fasciata*

Family Troglodytidae
- Bewick's Wren *Thryomanes bewickii*
- House Wren *Troglodytes aedon*

Family Sturnidae
- European Starling *Sturnus vulgaris*

Family Turdidae
- Western Bluebird *Sialia mexicanus*

Family Mimidae
- Northern Mockingbird *Mimus polyglottos*

Family Parulidae
- Common Yellowthroat *Geothlypis trichas*
- Orange-crowned Warbler *Vermivora celata*

Family Emberizidae
- Spotted Towhee *Pipilo maculates*
- California Towhee *Pipilo crassalis*
- Song Sparrow *Melospiza melodia*
- Lark Sparrow *Chondestes grammacus*

Family Cardinalidae
- Black-headed Grosbeak *Pheucticus melanocephalus*
- Blue Grosbeak *Passerina caerulea*

Family Icteridae
- Brewer's Blackbird *Euphagus cyanocephalus*
- Brown-headed Cowbird *Molothrus ater*
- Bullock's Oriole *Icterus bullockii*
- Western Meadowlark *Sturnella neglecta*

Family Fringillidae
- Lesser Goldfinch *Carduelis psaltria*
- House Finch *Carpodacus mexicanus*

Class Reptilia

Family Lampropelidae
- California Kingsnake *Lampropeltis getula*

Family Colubridae
- Gopher Snake *Pituophis catenifer*

Family Iguanidae
- Western Fence Lizard *Sceloporus occidentalis*

Appendix G

DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 17 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 1

Investigator(s): W.L. Sward and E. Harris Section, Township, Range: S 18, T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): none Slope (%): 2-3%

Subregion (LRR): C Lat: 33°07'43.76"N Long: 117°08'15.15"E Datum:

Soil Map Unit Name: Vista coarse sandy loam, 5-9% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Sample point located in a drainage next to La Moree Road. CORPS, CDFG and RPO jurisdictional.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' X 60')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	30	Yes	FACW
2.			
3.			
4.			
	30% = Total Cover		
Sapling/Shrub Stratum (Plot size: 30'X40')			
1. Salix lasiolepis	70	Yes	FACW
2. Washingtonia robusta	20	Yes	FACW
3.			
4.			
5.			
	90% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Nasturtium officinale	6	No	OBL
2. Typha domingensis	30	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
	36% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 50% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Disturbed southern willow scrub.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR2/1	100%					SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ✔ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Sediment over rip-rap; refusal at 8". Soil likely recently deposited and may not have had time to develop hydric soil indicators. Sample Point regarded as problem area for soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✔ No ___ Depth (inches): >1 in

Water Table Present? Yes ✔ No ___ Depth (inches): 2 in

Saturation Present? (includes capillary fringe) Yes ✔ No ___ Depth (inches): 0 in

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Rained heavily 2 days ago (15 Feb 2012).
FAC-neutral Test: w:u = 4:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 17 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 2

Investigator(s): W.L. Sward and E. Harris Section, Township, Range: S 18, T 12S, R 2W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 5-7%

Subregion (LRR): C Lat: 33°07'43.05"N Long: 117°08'15.53"E Datum:

Soil Map Unit Name: Vista coarse sandy loam, 9-15% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Upland. Sample point located on slope above drainage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=20')			
1. Baccharis pilularis	2	No	UPL
2.			
3.			
4.			
5.			
	2% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Sisyrinchium bellum	2	No	FACW
2. Medicago polymorpha	5	No	UPL
3. Geranium carolinianum	50	Yes	UPL
4. Helminthotheca echioides	+	No	FACU
5. Avena barbata	+	No	UPL
6. Festuca myuros	20	Yes	UPL
7. Ambrosia psilostachya	2	No	FACU
8. Convolvulus arvensis	+	No	UPL
	79% = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0%	x 1 = 0
FACW species 2%	x 2 = 4
FAC species 0%	x 3 = 0
FACU species 2%	x 4 = 8
UPL species 77%	x 5 = 385
Column Totals: 81% (A)	397 (B)

Prevalence Index = B/A = 4.9

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Non-native grassland

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR3/2	100%					SaCL	
6-16	2.5Y4.5/3	99%	10YR5/8	<1%			SaC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators
FAC-neutral Test: w:u = 0:2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 17 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 3

Investigator(s): W.L. Sward and E. Harris Section, Township, Range: S 18, T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): none Slope (%): 2-3%

Subregion (LRR): C Lat: 33°07'41.91"N Long: 117°08'14.68"E Datum:

Soil Map Unit Name: Vista coarse sandy loam, 9-15% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Corps non-wetland WUS. CDFG jurisdictional and County RPO wetland.
Sample point located off site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 18' X 60')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	40	Yes	FACW
2.			
3.			
4.			
	40% = Total Cover		
Sapling/Shrub Stratum (Plot size: 18' X 40')			
1. Salix lasiolepis	60	Yes	FACW
2.			
3.			
4.			
5.			
	60% = Total Cover		
Herb Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0% = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 80% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Southern willow scrub

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR2/2	100%					SaCL	
7-18	10YR3/2	100%					SaL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes ✔ No _____ Depth (inches): 10"

Saturation Present? (includes capillary fringe) Yes ✔ No _____ Depth (inches): 3"

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology present.
FAC-neutral Test: w:u = 2:0
Heavy rain 2 days prior to today.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 4

Investigator(s): W.L. Sward and T. Baxter Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 1%

Subregion (LRR): C Lat: 33°06'50.31"N Long: 117°08'03.42"E Datum:

Soil Map Unit Name: Vista coarse sandy loam, 5-9% slopes NWI classification: PFOA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Sample Point located in a small (12'X12') excavated basin. It is in a low area but not associated with a drainage or OHWM. CDFG, Corps, and RPO jurisdictional habitat.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 12'X12')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 12'X12')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: 5'X5')			
1. Typha domingensis	50%	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50% = Total Cover		
Woody Vine Stratum (Plot size: 12'X12')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Freshwater marsh

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

No pit dug. Hydric soil presumed based on strong wetland vegetation and hydrology indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✔ No _____ Depth (inches): 3"

Water Table Present? Yes ✔ No _____ Depth (inches): +3"

Saturation Present? (includes capillary fringe) Yes ✔ No _____ Depth (inches): 0"

Wetland Hydrology Present? Yes ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology present
FAC-neutral Test: w:u = 1:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 5

Investigator(s): W.L. Sward and T. Baxter Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): none Slope (%): 4-5%

Subregion (LRR): C Lat: Long: Datum:

Soil Map Unit Name: Vista coarse sandy loam, 5-9% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No	**Is the Sampled Area within a Wetland?** Yes No ✔
Hydric Soil Present?	Yes	No ✔	
Wetland Hydrology Present?	Yes ✔	No	

Remarks:

Upland. Wetland vegetation present but independent of any wetland landscape position.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 25'X40')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=15')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Distichlis spicata	90	Yes	FAC
2. Juncus mexicanus	3	No	FACW
3. Avena barbata	+	No	UPL
4.			
5.			
6.			
7.			
8.			
	93% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

Prevalence Index is ≤3.0[1]

Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No

Remarks:

Meets dominance test but only with a FAC species.
Grassland

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR3/3	100%					SiL	
6-15	10YR3/2	70%	5YR3/4	30%			L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

No hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? **Yes** ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-neutral Test: w:u = 0:0

C3 thought to remnant from when agricultural pond existed and water seeped downhill to this location.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 6

Investigator(s): W.L. Sward and T. Baxter Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 5-7%

Subregion (LRR): C Lat: 33.112659° Long: -117.134307° Datum: WGS84

Soil Map Unit Name: Vista coarse sandy loam, 5-9% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology ✔ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Sample point located on hillslope outside of any drainage.
Corps and CDFG jurisdictional, and RPO wetland, although hydrology likely due to grove irrigation in watershed to the west.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' X 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0%	= Total Cover	
Sapling/Shrub Stratum (Plot size: r=15')			
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	
Herb Stratum (Plot size: r=5')			
1. Juncus mexicanus	60	Yes	FACW
2. Euthamia occidentalis	10	No	FACW
3. Distichlis spicata	30	Yes	FAC
4.			
5.			
6.			
7.			
8.			
	100%	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Herbaceous wetland.

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR2/2	95%	7.5YR4/6	5%	C	M	L	
3-7	10YR 3/2	85%	7.5YR3/4	15%	C	M	SaCL	
7-16	2.5Y5/2	98%	7.5YR4/4	2%	C	M	C	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology likely due to seepage from grove irrigation: No seeps shown on USGS maps for area.
FAC-neutral Test: w:u = 1:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 7

Investigator(s): W.L. Sward and T. Baxter Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): None Slope (%): 3-4%

Subregion (LRR): C Lat: 33°06'50.21"N Long: 117°08'04.35"E Datum:

Soil Map Unit Name: Vista coarse sandy loam, 5-9% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Upland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=15')			
1. Baccharis pilularis	2	Yes	UPL
2. Isocoma menziesii	3	Yes	FAC
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: r=5')			
1. Distichlis spicata	60	Yes	FAC
2. Ambrosia psilostachya	40	Yes	FACU
3. Helminthotheca echioides	+	No	FACU
4.			
5.			
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	63	x 3 =	189
FACU species	40	x 4 =	160
UPL species	2	x 5 =	10
Column Totals:	105 (A)		359 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Grassland.

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7.5	5YR3/2	100%					SaL	
7.5-17	7.5YR4/6	100%					L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** ✔

Remarks:

No hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators
FAC-neutral Test: w:u = 0:2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 8

Investigator(s): W.L. Sward and E. Harris Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 3-4%

Subregion (LRR): C Lat: 33°06'52.23"N Long: 117°08'06.23"E Datum:

Soil Map Unit Name: Vista coarse sandy loam, 5-9% slopes NWI classification: PFOA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Sample point located along poorly defined drainage. CDFG jurisdictional habitat. Presence of wetland perennial species and upland herbaceous species may indicate a habitat in transition due to increasingly xeric hydrological conditions.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalyptus camaldulensis	25	Yes	FAC
2. Salix laeviagata	35	Yes	FACW
3. Washingtonia robusta	+	No	FACW
4.			
	60%	= Total Cover	
Sapling/Shrub Stratum (Plot size: r=15)			
1. Salix lasiolepis	10	Yes	FACW
2. Quercus agrifolia	5	No	UPL
3. Arrundo donax	25	Yes	FACW
4.			
5.			
	40%	= Total Cover	
Herb Stratum (Plot size: r=5')			
1. Helminthotheca echioides	22	Yes	FACU
2. Carduus pycnocephalus	10	Yes	UPL
3. Juncus phaeocephalus	+	No	FACW
4. Rumex conglomeratus	+	No	FACW
5. grass sp.	7	No	UPL
6. Avena barbata	5	No	UPL
7.			
8.			
	45%	= Total Cover	
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Disturbed southern riparian woodland

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5Y2.5/2	100%					L	
2-6	7.5YR3/2	75%	7.5YR4/6	25%	C	M	CL	
6-16	10YR3/2	80%	5YR3/4	20%	C	M	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** ✔

Remarks:

No hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

In sufficient wetland hydrology indicators.
FAC-neutral Test: w:u = 3:2
No evidence of recent surface hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 9

Investigator(s): W.L. Sward and T. Baxter Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): pond bottom Local relief (concave, convex, none): none Slope (%): 1%

Subregion (LRR): C Lat: 33°06'52.71"N Long: 117°08'05.36"E Datum:

Soil Map Unit Name: Vista coarse sandy loam, 5-9% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Sample point is located on the floor of an agricultural pond, the dam of which has been breached. CDFG and RPO jurisdictional habitat. Not Corps jurisdictional area based on landscape position outside of any OHWM or defined drainage and insufficient wetland indicators.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=15')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Juncus rugulosus	90	Yes	OBL
2. Rumex crispus	1	No	FAC
3. Raphanus sativus	2	No	UPL
4. Helminthotheca echioides	1	No	FACU
5.			
6.			
7.			
8.			
	94% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Herbaceous wetland.
Perennial wetland species likely holdover from when area ponded seasonally.

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR2.5/2	70%	7.5YR4/6	30%	C	M	SiL	
9-16	7.5YR3/4	97%	5YR4/3	3%	C	M	SaC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** ✔

Remarks:

Wetland soil indicators are likely historic from when sample point was the floor of an agricultural pond that flooded seasonally. Hydrology necessary to produce these features is no longer present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-neutral Test: w:u = 1:0

Evidence of drift deposits at breach in dam but not in Sample Point area.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 10

Investigator(s): W.L. Sward and T. Baxter Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 3%

Subregion (LRR): C Lat: 33°07'03.73"N Long: 117°08'11.42"E Datum:

Soil Map Unit Name: Fallbrook-Vista sandy loams, 9-15% NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Sample point is located on 1st terrace above low flow channel. Low flow channel is unvegetated. Corps non-wetland WUS. CDFG habitat and RPO wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	60%	Yes	FACW
2.			
3.			
4.			
	60% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=15')			
1. Salix lasiolepis	40%	Yes	FACW
2. Quercus agrifolia	+	No	UPL
3.			
4.			
5.			
	40% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Cyperus eragrostis	5%	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	5% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 15% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Southern willow scrub

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR3/3	100%					CL	
3-11	10YR3/2	99%	7.5YR3/4	1%	C	M	SaCL	
11-14	10YR3/3	97%	10YR3/6	3%	C	M	SaCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ **No** ✔

Remarks:

No hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sufficient wetland hydrology indicators present.
FAC-neutral Test: w:u = 3:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 29 Feb 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 11

Investigator(s): W.L. Sward and T. Baxter Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 3%

Subregion (LRR): C Lat: 33°07'03.85"N Long: 117°08'16.19"E Datum:

Soil Map Unit Name: Cienaba rocky coarse sandy loam, 9-30% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Sample Point on terrace above deeply incised low flow channel; no vegetation rooted in channel. Corps non-wetland WUS in channel. CDFG jurisdictional habitat.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 20'X60')	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	3%	No	FACW
2.			
3.			
4.			
	3% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=15')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Oenothera elata ssp. hirsutissima	70%	Yes	FACW
2. Euthamia occidentalis	+	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	70% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum <5% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Herbaceous wetland

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR2/2	95%	7.5YR4/6	5%	C	M	SaL	
5-18	10YR3/3	96%	7.5YR4/6	4%	C	M	SaL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient wetland hydrology indicators present.
FAC-neutral Test: w:u = 1:0
Drift deposits present in adjacent incised channel; not on terrace where soil pit was located.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 12

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 2%

Subregion (LRR): C Lat: 33.117023° Long: -117.135073° Datum: WGS84

Soil Map Unit Name: Fallbrook/Vista sandy loams, 9-15% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Upland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	16%	yes	FACW
2.			
3.			
4.			
	16% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=15')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Rumex crispus	13%	no	FAC
2. Heliotropium curassavicum var. o.	3	no	FACU
3. Rhaphanus sativus	5	no	UPL
4. Bromus diandrus	3	no	UPL
5. Bromus hordeaceus	60	yes	FACU
6.			
7.			
8.			
	84% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum <5% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	16	x 2 =	32
FAC species	13	x 3 =	39
FACU species	63	x 4 =	252
UPL species	8	x 5 =	40
Column Totals:	100 (A)		363 (B)

Prevalence Index = B/A = 3.63

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Non-native grassland

SOIL

Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR3/2.5	100%					CL	
2-16	7.5YR2.5/2	100%					SaCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient wetland hydrology indicators.
FAC-neutral Test: w:u = 1:1

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 13

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): none Slope (%): 2-3%

Subregion (LRR): C Lat: 33.1208529° Long: -117.133481° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Corps Wetland 20' wide; CDFG and RPO habitat.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	10%	yes	FACW
2.			
3.			
4.			
	10% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=20')			
1. Salix lasiolepis	10%	yes	FACW
2. Ailanthus altissima	2	no	FACU
3.			
4.			
5.			
	12% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Urtica dioica	25%	yes	FAC
2. Epilobium ciliatum	1	no	FACW
3. Typha domingensis	3	no	OBL
4. Sonchus asper	+	no	FAC
5. Cyperus sp.	+	no	FACW+
6.			
7.			
8.			
	29% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 40% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Herbaceous wetland understory, southern riparian forest overstory.

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR2/1	100%					SiL	
3-5	7.5YR2.3/2	70%	7.5YR3/4	30%	C	M	SaL	
5-20	7.5YR2/2	80%	7.5YR2/3	20%	C	M	SaCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ✔ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Meets definition of a wetland soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ✔ No ___ Depth (inches): 6"

Saturation Present? (includes capillary fringe) Yes ✔ No ___ Depth (inches): 0"

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sufficient wetland hydrology indicators present.
FAC-neutral Test: w:u = 2:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 14

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): broad swale Local relief (concave, convex, none): none Slope (%): 2-3%

Subregion (LRR): C Lat: 33.1208529° Long: -117.133481° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

No Corps jurisdiction or RPO wetlands. CDFG habitat.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0%	= Total Cover	
Sapling/Shrub Stratum (Plot size: r=20')			
1. Quercus agrifolia	12%	yes	UPL
2.			
3.			
4.			
5.			
	12%	= Total Cover	
Herb Stratum (Plot size: r=5')			
1. Rhaphanus sativus	90%	yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	90%	= Total Cover	
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 5% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	102	x 5 =	510
Column Totals:	102 (A)		510 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Plot located in area that is considered souther riparian forest on the vegetation map.

SOIL

Sampling Point: 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR2/1	100%					SiL	
3-10	7.5YR2.5/2	100%						
10-16	7.5YR3/2	100%						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-neutral Test: w:u = 0:2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 15

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 3+%

Subregion (LRR): C Lat: 33.108919° Long: -117.129614° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: PFOA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

CDFG and RPO habitat.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	15%	yes	FACW
2. Eucalyptus camaldensis	15	yes	FAC
3. Washingtonia robusta	5	no	FACW
4. Schinus molle	5	no	FACU
	40%	= Total Cover	
Sapling/Shrub Stratum (Plot size: r=20')			
1. Schinus molle	2%	yes	FAC
2. Olea europea	1	no	UPL
3. Eucalyptus camaldensis	5	yes	FAC
4.			
5.			
	8%	= Total Cover	
Herb Stratum (Plot size: r=5')			
1. Atriplex prostrata	48%	yes	FACW
2. Anemopsis	30	yes	OBL
3. Apium graveolens	2	no	FACW
4.			
5.			
6.			
7.			
8.			
	80%	= Total Cover	
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 5% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Herbaceous wetland understory, eucalyptus forest overstory

SOIL

Sampling Point: 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR3/1	100%					SaL	
4-13	10YR3/2	60%					CL	
	10YR2/1	40%					CL	
13-18	10YR3/1	80%	2.5YR4/8	20	RM	PL	SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators present.
FAC-neutral Test: w:u = 3:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 16

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): low flow channel Local relief (concave, convex, none): none Slope (%): 2%

Subregion (LRR): C Lat: 33.108919° Long: -117.129614° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Sample point located in drainage bottom. Corps and CDFG jurisdictional, and RPO wetland.
Potential problem area for difficulty in confirmation of hydric soil indicator. Corps jurisdiction based on strong hydrology and vegetation indicators.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 4'X60')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 4'X40')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: 4'X10')			
1. Atriplex prostrata	60%	yes	FACW
2. Anemopsis californica	15	yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
	75% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 5% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Herbaceous wetland understory, eucalyptus forest overstory. No trees or shrubs rooted in low flow channel.

SOIL

Sampling Point: 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR2/2	100%					SiL	
3-18	10YR3/1	92%	7.5YR4/6	8%	M	PL	SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ✔ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Potentially Dark Surface/A12. Pit depth insufficient for this conclusion.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sufficient hydrology indicators present.
FAC-neutral Test: w:u = 2:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 17

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): shore of pond Local relief (concave, convex, none): none Slope (%): 1-2%

Subregion (LRR): C Lat: 33.1100831° Long: -117.1274531° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: PFOA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Non-wet WUS; CDFG jurisdictional habitat and RPO wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 20'X60')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix gooddingii	20	yes	FACW
2. Salix laevigata	30	yes	FACW
3. Eucalyptus camaldulensis	15	yes	FAC
4.			
	65%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20'X30')			
1. Washingtonia robusta	2	no	FACW
2.			
3.			
4.			
5.			
	0%	= Total Cover	
Herb Stratum (Plot size: 5'X5')			
1. Eleocharis montevidensis	35	yes	FACW
2. Apium graveolens	40	yes	FACW
3. Atriplex prostrata	+	no	FACW
4. Cynodon dactylon	25	yes	FACU
5.			
6.			
7.			
8.			
	100%	= Total Cover	
Woody Vine Stratum (Plot size: 20'X20'')			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Southern riparian woodland.

SOIL

Sampling Point: 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR2/2	100%					SiL	
9-17	10YR2/2	100%					L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

No hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✔ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sample point located below culvert inlet that drains pond.
FAC-neutral Test: w:u = 4:1

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 18

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): shore of pond Local relief (concave, convex, none): none Slope (%): 1-2%

Subregion (LRR): C Lat: 33.1102411° Long: -117.1274522° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: PFOA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Corps and CDFG jurisdictional habitat, and RPO wetland.
Potential problem area for soils.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 20'X30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 20'X30')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: 5'X5')			
1. Typha domingensis	40	yes	OBL
2. Apium graveolens	5	no	FACW
3. Cotula coronopifolia	3	no	FAC
4.			
5.			
6.			
7.			
8.			
	48% = Total Cover		
Woody Vine Stratum (Plot size: 5'X10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 45% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Freshwater marsh

SOIL

Sampling Point: 18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR2/1	100%					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ✔ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Potentially Dark Surface/A12. Pit depth insufficient for this conclusion.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✔ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sample point located below culvert inlet that drains pond.
FAC-neutral Test: w:u = 1:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 19

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 3-4%

Subregion (LRR): C Lat: 33.1103056° Long: -117.1274518° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Upland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 20'X60')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus agrifolia	40%	yes	UPL
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 20'X30')			
1. Quercus agrifolia	5%	yes	UPL
2. Schinus molle	1	no	FACU
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: 5'X5')			
1. Cynodon dactylon	2%	no	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	2% = Total Cover		
Woody Vine Stratum (Plot size: 15'X15')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 15% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 =
FACW species 0	x 2 =
FAC species 0	x 3 =
FACU species 3	x 4 = 12
UPL species 45	x 5 = 225
Column Totals: 48 (A)	237 (B)

Prevalence Index = B/A = 4.9

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Coast live oak woodland.
Abundant oak leaf litter.

SOIL

Sampling Point: 19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR3/2	100%					SaL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators.
Refusal at 10" due to dense oak roots.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators.
FAC-neutral Test: w:u = 0:2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills City/County: San Marcos/San Diego Sampling Date: 27 Nov 2012

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 20

Investigator(s): W.L. Sward Section, Township, Range: S 19, T 12S, R 2W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 2%

Subregion (LRR): C Lat: 33.111681° Long: -117.126904° Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification: PFOA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Upland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalyptus camaldensis	70%	yes	FAC
2. Washingtonia robusta	2	no	FACW
3.			
4.			
	72% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=20')			
1. Eucalyptus camaldensis	10%	yes	FAC
2. Washingtonia robusta	5	yes	FACW
3.			
4.			
5.			
	15% = Total Cover		
Herb Stratum (Plot size: r=5')			
1. Atriplex prostrata	80%	yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	80% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Eucalyptus forest; sample point comprised of invasive species.

SOIL

Sampling Point: 20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR3/3	100%					LSa	
8-16	10YR2.5/2	100%					SaL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators present.
FAC-neutral Test: w:u = 2:0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills/Valiano City/County: San Marcos/San Diego Sampling Date: 22 July 2013

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 21

Investigator(s): S. Nigro & G. Aldridge Section, Township, Range: S , T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage bottom Local relief (concave, convex, none): none Slope (%): <1%

Subregion (LRR): C Lat: Long: Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No ✔	**Is the Sampled Area within a Wetland?** Yes No ✔
Hydric Soil Present?	Yes	No ✔	
Wetland Hydrology Present?	Yes	No ✔	

Remarks:

Non-wetland waters

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=25')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=25')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=10')			
1. Heliotropium curassavicaum	20	yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	20% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 35% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No ✔

Remarks:

Upland vegetation present.

SOIL

Sampling Point: 21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR3/3	100%					Lmy Sand	
4-18	10YR2/1	100%					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

Ph 2-3

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators present.

FAC-neutral Test: w:u = 0:1

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills/Valiano City/County: San Marcos/San Diego Sampling Date: 22 July 2013

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 22

Investigator(s): S. Nigro & G. Aldridge Section, Township, Range: S , T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage bottom Local relief (concave, convex, none): none Slope (%): <1%

Subregion (LRR): C Lat: Long: Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No ✔	**Is the Sampled Area within a Wetland?** Yes No ✔
Hydric Soil Present?	Yes	No ✔	
Wetland Hydrology Present?	Yes ✔	No	

Remarks:

Non-wetland waters

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=25')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=25')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=10')			
1. Stipa miliaceum	3	yes	UPL
2. Carduus pycnocephalus	+		UPL
3. Helminthotheca echioides	+		FACU
4. Malva parviflora	+		UPL
5. Atriplex prostrata	2	yes	FACW
6. Apium graveolens	+		UPL
7. Cynodon dactylon	2	yes	FACU
8. Plantago major	2	yes	FAC
	10% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 40% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	2	x 3 =	6
FACU species	2.25	x 4 =	9
UPL species	3.75	x 5 =	18.75
Column Totals:	10 (A)		37.75 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No ✔

Remarks:

Upland vegetation present.

+=trace amount (< 1 %)

SOIL

Sampling Point: 22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR3/3	100%					Lmy Sand	
3-21	10YR2/1	100%					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ **No** ✔

Remarks:

No hydric soil indicators present.

Ph 6-7

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2 secondary hydrology indicators present.

FAC-neutral Test: w:u = 1:2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills/Valiano City/County: San Marcos/San Diego Sampling Date: 22 July 2013

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 23

Investigator(s): S. Nigro & G. Aldridge Section, Township, Range: S , T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage bottom Local relief (concave, convex, none): none Slope (%): <1%

Subregion (LRR): C Lat: Long: Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

Non-wetland waters

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=25')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=25')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=10')			
1. Stipa miliaceum	+		UPL
2. Plantago major	+		FAC
3. Cynodon dactylon	+		FACU
4. Xanthium strumarium	+		FAC
5. Rumex crispus	+		FACW
6.			
7.			
8.			
	<5% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 75% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: - (A)

Total Number of Dominant Species Across All Strata: - (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: N/A (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	2.25	x 3 =	6.75
FACU species	1	x 4 =	4
UPL species	1	x 5 =	5
Column Totals:	4.25 (A)		15.75 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

Unvegetated drainage (vegetative cover less than 5%). Few individuals of scattered vegetation present.

+=trace amount (< 1 %)

SOIL

Sampling Point: 23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR2.5/2	100%					Lmy Sand	
5-17	10YR3/4	100%					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

Ph 8-9

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators present.

FAC-neutral Test: w:u = 0:2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills/Valiano City/County: San Marcos/San Diego Sampling Date: 22 July 2013

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 24

Investigator(s): S. Nigro & G. Aldridge Section, Township, Range: S , T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage bottom Local relief (concave, convex, none): none Slope (%): <1%

Subregion (LRR): C Lat: Long: Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No ✔	**Is the Sampled Area within a Wetland?** Yes No ✔
Hydric Soil Present?	Yes	No ✔	
Wetland Hydrology Present?	Yes	No ✔	

Remarks:

Non-wetland waters

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=25')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=25')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=10')			
1. Cynodon dactylon	30	yes	FACU
2. Rumex crispus	10	yes	FAC
3. Brachypodium distachyon	+		UPL
4.			
5.			
6.			
7.			
8.			
	40% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	30	x 4 =	120
UPL species	0.25	x 5 =	1.25
Column Totals:	40.25 (A)		151.25 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No ✔

Remarks:

Upland vegetation present.

+=trace amount (< 1 %)

SOIL

Sampling Point: 24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR3/2	100%					Loam	
13-15	10YR4/3	100%					Lmy Sand	
15-18	10YR3/3	100%					Silty Lm	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

No hydric soil indicators present.

Ph 10-12

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? **Yes** ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Two secondary hydrology indicators present.
FAC-neutral Test: w:u = 0:1

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills/Valiano City/County: San Marcos/San Diego Sampling Date: 22 July 2013

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 25

Investigator(s): S. Nigro & G. Aldridge Section, Township, Range: S , T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage bottom Local relief (concave, convex, none): none Slope (%): <1%

Subregion (LRR): C Lat: Long: Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No ✔	**Is the Sampled Area within a Wetland?** Yes No ✔
Hydric Soil Present?	Yes	No ✔	
Wetland Hydrology Present?	Yes	No ✔	

Remarks:

Non-wetland waters

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=25')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=25')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=10')			
1. Atriplex prostrata	+		FACW
2. Sonchus oleraceus	+		UPL
3. Plantago major	+		FAC
4.			
5.			
6.			
7.			
8.			
	1% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: - (A)

Total Number of Dominant Species Across All Strata: - (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: N/A (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0.25	x 2 =	0.5
FAC species	0.25	x 3 =	0.75
FACU species	0	x 4 =	0
UPL species	0.25	x 5 =	1.25
Column Totals:	0.75 (A)		2.25 (B)

Prevalence Index = B/A = 3.3

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No ✔

Remarks:

Unvegetated drainage (vegetative cover less than 5%). Few individuals of scattered vegetation present.

+=trace amount (< 1 %)

SOIL

Sampling Point: 25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR3/3	100%					Silt Loam	
3-9	10YR4/3	100%					Lmy Sand	
9-14	10YR3/3	100%					Sdy ClyLm	
14-18	10YR3/2	100%					Sdy ClyLm	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

Ph 13-15

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills/Valiano City/County: San Marcos/San Diego Sampling Date: 22 July 2013

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 26

Investigator(s): S. Nigro & G. Aldridge Section, Township, Range: S , T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage bottom Local relief (concave, convex, none): none Slope (%): <1%

Subregion (LRR): C Lat: Long: Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

Non-wetland waters

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=25')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0%	= Total Cover	
Sapling/Shrub Stratum (Plot size: r=25')			
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	
Herb Stratum (Plot size: r=10')			
1. Heliotropium curassavicum	3	yes	FACU
2. Rumex crispus	2	yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	5%	= Total Cover	
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	2	x 3 =	6
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	5 (A)		18 (B)

Prevalence Index = B/A = 3.6

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

Upland vegetation present.

SOIL

Sampling Point: 26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR2/2	100%					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

Ph 16-17

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators present.
FAC-neutral test: W:U=0:1

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eden Hills/Valiano City/County: San Marcos/San Diego Sampling Date: 22 July 2013

Applicant/Owner: Integral Communities; IPQ-08 State: CA Sampling Point: 27

Investigator(s): S. Nigro & G. Aldridge Section, Township, Range: S , T 12S, R 2W

Landform (hillslope, terrace, etc.): drainage bottom Local relief (concave, convex, none): none Slope (%): <1%

Subregion (LRR): C Lat: Long: Datum: WGS84

Soil Map Unit Name: Visalia sandy loams, 2-5% slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No ✔	**Is the Sampled Area within a Wetland?** Yes No ✔
Hydric Soil Present?	Yes	No ✔	
Wetland Hydrology Present?	Yes	No ✔	

Remarks:

Non-wetland waters

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=25')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: r=25')			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: r=10')			
1. Stipa miliaceum	2		UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	<5% = Total Cover		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: - (A)

Total Number of Dominant Species Across All Strata: - (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: N/A (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	2	x 5 =	10
Column Totals:	2 (A)		10 (B)

Prevalence Index = B/A = 5.0

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No ✔

Remarks:

Unvegetated drainage (vegetative cover less than 5%). Few individuals of scattered vegetation present.

SOIL

Sampling Point: 27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR4/3	100%					Sndy Lm	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

No hydric soil indicators present.

Ph 16-17

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Insufficient hydrology indicators present.