

Appendix C

Biological Resources Technical Report

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Dignity Health Medical Campus Project Folsom Plan Area Specific Plan

Sacramento County, California

Prepared For:

Ascent Environmental, Inc.

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ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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LIST OF ABBREVIATIONS AND ACRONYMS

BO	Biological Opinion
CDFW	California Department of Fish and Wildlife
City	City of Folsom
CWA	Clean Water Act
Eagle	Westland Eagle Specific Plan Amendment
EIR/EIS	Environmental Impact Report/Environmental Impact Statement
FPASP	Folsom Plan Area Specific Plan
HCP	Habitat Conservation Plan
IS/MND	Initial Study/Mitigated Negative Declaration
Project	Dignity Health Medical Campus
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VELB	Valley Elderberry Longhorn Beetle

1.0 PROJECT LOCATION

The Dignity Health Medical Campus Project, including associated off-site infrastructure areas (collectively referred to as the "Project") is located south of U.S. Highway 50, west of Placerville Road, and north of White Rock Road, in Sacramento County, California in the City of Folsom (Figure 1. *Project Location and Vicinity*). The Project is within the larger 3,500-acre Folsom Plan Area Specific Plan (FPASP). The Project corresponds to a portion of Sections 8, 9, 16, and 17; Township 09 North, Range 08 East (Mount Diablo Base and Meridian) of the "Folsom SE, California" and "Clarksville, California" 7.5-minute quadrangles (U.S. Geological Survey [USGS] 1953 [photo revised 1973] and 1967 [photo revised 1980], respectively) (Figure 1). The approximate center of the Project site is located at latitude 38.64032° and longitude -121.111751° (NAD83).

2.0 REGULATORY CONTEXT AND OVERVIEW

The following sections summarize the regulatory permits and approvals for the Project. The Project spans three permit areas within the overall FPASP. These permit areas include the following: Carpenter Ranch Permit (SPK-2006-00984), Backbone Permit (SPK-2007-02159), and Mangini Permit (SPK-2013-00486). All three permit areas have obtained the majority of regulatory permits and authorizations. A few surrounding projects (which have already begun construction) overlap with the Project area. Portions of the Project that overlap with these adjacent projects have been fully mitigated as part of those projects. As such, these areas are referred to as "Already Mitigated Area" in Figure 2. *Biological Resources*. These areas have been excluded from the Project impact calculations presented in this Report and are not discussed further in this document.

2.1 U.S. Army Corps of Engineers Individual Permit

A USACE Section 404 Permit was originally issued for the Mangini Ranch property on August 6, 2014 (Mangini Ranch 404 permit; SPK-2013-00486), modified on May 2, 2016, April 6, 2017, June 21, 2017, June 20, 2018, and extended on July 1, 2019. A USACE Section 404 Permit was issued for the Carpenter Ranch property on July 25, 2014 and modified and extended on July 11, 2019 (Carpenter Ranch 404 permit; SPK-2006-00984). In addition to these permits, impacts associated with the Project also fall within the Backbone Infrastructure Permit (Backbone 404 permit; SPK-2007-02159, dated June 6, 2014, amended on March 17, 2017, and extended on January 26, 2019) The Mangini Ranch 404 permit, Carpenter Ranch 404 permit, and Backbone 404 permit outline several special conditions required for projects to be constructed within these permit boundaries. The Project is required to comply with the applicable conditions of all the 404 permits.

2.2 Section 7 Consultation

A Biological Opinion (BO) for the FPASP was issued by the U.S. Fish and Wildlife Service (USFWS) on April 2, 2014 (81420-2010-F-0620-1). The BO assessed potential effects to vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), slender Orcutt grass (*Orcuttia tenuis*), and Sacramento Orcutt grass (*Orcuttia viscida*). The BO outlines mitigation measures required for each project located within the FPASP.

The Project encompasses three properties addressed in the BO: Folsom South (which includes the Mangini Ranch property), Carpenter Ranch, and Backbone Infrastructure. Per the BO, no federally listed species occur within the Mangini Ranch (a.k.a. Folsom South property). The Backbone Infrastructure and Carpenter Ranch projects both require mitigation for impacts to species; however, the portion of these properties that occur within the Project do not contain any of these species. Therefore, no mitigation or requirements per the BO are expected for these portions of the Project.

2.3 Section 401 Water Quality Certification

Clean Water Act Section (CWA) 401 Technically Conditioned Water Quality Certification (401 Certification) was issued by the Central Valley Regional Water Quality Control Board for all three permit areas within the limits of the Project: Mangini Ranch (WDID#5A34CR00581, dated April 10, 2014), Carpenter Ranch (WDID#5A34CR00533, dated July 11, 2014), and Backbone Infrastructure (WDID#5A34CR00519, dated October 18, 2013). The 401 Certifications outline several technical conditions that are required for Project implementation.

2.4 California Department of Fish and Wildlife Lake or Streambed Alteration Agreement

A Master Streambed Alteration Agreement (MSAA) for the FPASP was issued by the California Department of Fish and Wildlife (CDFW) on February 11, 2014 (1600-2012-0198-R2). The MSAA outlines several required conditions for all projects located within the FPASP, including the Project. As required by the MSAA, the Project is required to obtain subnotification authorization from CDFW prior to Project construction. CDFW issued a subnotification approval for the Project on October 17, 2019 (1600-2012-0198-0010-R2). Since that time, the Project impact limits have been updated to accommodate engineering constraints associated with the offsite detention basin and access road. There is no change to the onsite components. The new impact limits resulted in a change to impacts associated with CDFW-regulated features (CDFW habitat), thus necessitating a major amendment to the original Sub-Notification. ECORP has submitted the major amendment request to CDFW for review and approval.

3.0 BIOLOGICAL RESOURCES

During the permitting process, many biological resource surveys were conducted within the Project area to support obtaining permits and approvals (e.g., aquatic resource delineations, special-status species surveys). Biological resources identified within the Project area include Waters of the U.S., Swainson's hawk (*Buteo swainsoni*) foraging habitat, tricolored blackbird (*Agelaius tricolor*) foraging habitat, needlegrass grassland, riparian vegetation, and oak woodlands (Figure 2).

The list of potentially occurring special-status species in the Project area was recently reviewed, as of March 2021, to ensure no additional occurrences have been documented in the Project. Table 1 summarizes the evaluation of all special-status species that were evaluated for the Project area.

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
Plants									
	Jepson's onion	<i>Allium jepsonii</i>			1B.2	Serpentinite or volcanic soils in chaparral, cismontane woodland, and lower montane coniferous forests (984'–4,331').	April-August	Absent. No suitable habitat present onsite.	
	Sanborn's onion	<i>Allium sanbornii</i> var. <i>sanbornii</i>			4.2	Chaparral, cismontane woodland, and lower montane coniferous forests, usually with gravelly, serpentinite soils (853'–4,954').	May-September	Absent. No suitable habitat present onsite.	
	lone manzanita	<i>Arctostaphylos myrtifolia</i>	FT	-	1B.2	lone Formation soils (acidic, clay or sandy) in chaparral and cismontane woodland (197 - 1,902')	November-March	Absent. No suitable habitat present onsite.	
	Big-scale balsamroot	<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	-	-	1B.2	chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils (295' - 5,102')	March-June	Low potential to occur. Suitable habitat available in grassland; however, the probability of occurrence is low because typically found in serpentine soils.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Valley brodiaea	<i>Brodiaea rosea</i> spp. <i>vallicola</i>			4.2	old alluvial terraces and silt, sandy, or gravelly soils in vernal pools within Valley and foothill grassland (33'–1,100')	April-May(June)	Low potential to occur. Marginal habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Brassy bryum	<i>Bryum chryseum</i>			4.3	Openings in chaparral, cismontane woodland, and valley and foothill grassland (164' – 1,969')	-	Potential to occur. Suitable habitat present onsite	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Brewer's calandrinia	<i>Calandrinia breweri</i>			4.2	Sandy or loamy soils, disturbed sites, and burns within chaparral and coastal scrub (33'–4,003').	March-June	Absent. No suitable habitat present onsite.	
	Stebbins' morning-glory	<i>Calystegia stebbinsii</i>	FE	CE	1B.1	gabbroic or serpentinite soils in chaparral (openings) and cismontane woodland (607' - 3,576')	April-July	Absent. No suitable habitat present onsite.	
	Chaparral sedge	<i>Carex xerophila</i>			1B.2	Serpentinite or gabbroic soils within chaparral, cismontane woodland, and lower montane coniferous forest (1,444'–2,526').	March-June	Absent. No suitable habitat present onsite.	
	Fresno ceanothus	<i>Ceanothus fresnensis</i>			4.3	Cismontane woodland openings and lower montane coniferous forests (2,953'–6,900').	May-July	Absent. No suitable habitat present onsite.	
	Pine Hill ceanothus	<i>Ceanothus roderickii</i>	FE	CR	1B.1	serpentine or gabbro soils in chaparral and cismontane woodland (804' - 2,067')	April-June	Absent. No suitable habitat present onsite.	

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
	Red Hills soaproot	<i>Chlorogalum grandiflorum</i>	-	-	1B.2	serpentine or gabbro soils in chaparral, cismontane woodland, and lower coniferous forest (804' - 3,068')	May-June	Absent. No suitable habitat present onsite.	
	Hispid bird's-beak	<i>Chloropyron molle ssp. hispidum</i>	-	-	1B.1	alkaline meadows and seeps, playas, and valley and foothill grassland (3' - 509')	June-September	Absent. No suitable habitat present onsite.	
	Brandegee's clarkia	<i>Clarkia biloba ssp. brandegeae</i>			4.2	Chaparral, cismontane woodlands, and lower montane coniferous forest often along roadcuts (246'–3,002').	May-July	Absent. No suitable habitat present onsite.	
	Streambank spring beauty	<i>Claytonia parviflora ssp. grandiflora</i>			4.2	Occurs in rocky cismontane woodland (820'–3,937').	February-May	Absent. No suitable habitat present onsite.	
	Dwarf downingia	<i>Downingia pusilla</i>	-	-	2B.2	vernal pools and mesic areas in valley and foothill grassland (3' - 1,460')	March-May	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Starved daisy	<i>Eriogonum miser</i>			1B.3	Rocky, granitic outcrops of upper montane coniferous forests (6,037'– 8,596').	June-October	Absent. No suitable habitat present onsite.	
	lone buckwheat	<i>Eriogonum apricum var. apricum</i>	FE	CE	1B.1	lone Formation soils in openings in chaparral (197' - 476')	July-October	Absent. No suitable habitat present onsite.	
	Irish Hill buckwheat	<i>Eriogonum apricum var. prostratum</i>	FE	CE	1B.1	lone Formation soils in openings in chaparral (295' - 394')	June-July	Absent. No suitable habitat present onsite.	
	Jepson's woolly sunflower	<i>Eryngium pinnatisectum</i>			4.3	Chaparral, cismontane woodland, and coastal scrub, sometimes on serpentinite (656'–3,363').	April-June	Absent. No suitable habitat present onsite.	
	Tuolumne button-celery	<i>Eryngium pinnatisectum</i>	-	-	1B.2	vernal pools and mesic areas in cismontane woodland and lower montane coniferous forest (230' - 3,002')	May-August	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Pine Hill flannelbush	<i>Fremontodendron decumbens</i>	FE	CR	1B.2	serpentine or gabbro rock outcrops in chaparral and cismontane woodland (1,394' - 2,493')	April-July	Absent. No suitable habitat present onsite.	
	Stinkbells	<i>Fritillaria agrestis</i>			4.2	Clay and sometimes serpentinite soils in chaparral, cismontane woodland, Pinyon and juniper woodland, and valley and foothill grassland (33'–5,102').	March-June	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	El Dorado bedstraw	<i>Galium californicum ssp. sierrae</i>	FE	CR	1B.2	gabbro soils in chaparral, cismontane woodland, and lower montane coniferous forest (328' - 1,919')	May-June	Absent. No suitable habitat present onsite.	

Table 1. Evaluation of Special-Status Species

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
	Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	-	CE	1B.2	clay soils in vernal pools and in marshes and swamps on lake margins (33' - 7,792')	April-August	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Bisbee Peak rush-rose	<i>Helianthemum (Crocانthemum) suffrutescens</i>	-	-	3.2	chaparral, often on serpentine, gabbro, or lone formation soil (148' - 2,756')	April-June	Absent. No suitable habitat present onsite.	
	Parry's horkelia	<i>Horkelia parryi</i>	-	-	1B.2	chaparral and cismontane woodland, especially on lone formation soils (263' - 3,396')	April-September	Absent. No suitable habitat present onsite.	
	Ahart's dwarf rush	<i>Juncus leiospermus</i> var. <i>ahartii</i>	-	-	1B.2	mesic areas in valley and foothill grassland (98' - 751')	March-May	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Red Bluff dwarf rush	<i>Juncus leiospermus</i> var. <i>leiospermus</i>	-	-	1B.1	vernally mesic areas in chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps, and vernal pools (115' - 3,346')	March-May	Absent. No suitable habitat present onsite.	
	Legenere	<i>Legenere limosa</i>	-	-	1B.1	vernal pools (3' - 2,887')	April-June	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Humboldt lily	<i>Lilium humboldtii</i> ssp. <i>humboldtii</i>			4.2	Occurs in openings within chaparral, cismontane woodland, and lower montane coniferous forest (295'–4,199').	May-August	Absent. No suitable habitat present onsite.	
	Hoary navarretia	<i>Navarretia eriocephala</i>			4.2	Vernally mesic areas in cismontane woodland and valley and foothill grassland (345'–1,312').	May-June	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Pincushion navarretia	<i>Navarretia myersii</i> ssp. <i>myersii</i>	-	-	1B.1	vernal pools, often on acidic soils (66' - 1,083')	April-May	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Adobe navarretia	<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>			4.2	Clay and sometimes serpentinite soils in vernal mesic valley and foothill grasslands and sometimes in vernal pools (328'–3,281).	April-June	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
									Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Slender Orcutt grass	<i>Orcuttia tenuis</i>	FT	CE	1B.1	Often gravelly vernal pools (115' - 5,774')	May-October	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Sacramento Orcutt grass	<i>Orcuttia viscida</i>	FE	CE	1B.1	vernal pools (98' - 328')	April-July	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Layne's ragwort	<i>Packera layneae</i>	FT	CR	1B.2	serpentine or gabbro outcrops in chaparral and cismontane woodland (656' - 3,281')	April-August	Absent. No suitable habitat present onsite.	
	Sanford's arrowhead	<i>Sagittaria sanfordii</i>	-	-	1B.2	assorted shallow freshwater marshes and swamps (0' - 2,133')	May-October	Potential to occur. Suitable habitat present onsite.	Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006 and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Eagle 85A (ECORP 2019).
	Hernandez bluecurls	<i>Trichostema rubisepalum</i>			4.3	Volcanic or serpentine, gravelly soils within broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and vernal pools (984'-4,708').	June-August	Absent. No suitable habitat present onsite.	
	El Dorado County mule-ears	<i>Wyethia reticulata</i>	-	-	1B.2	clay or gabbro soils in chaparral, cismontane woodland, and lower montane coniferous forest (607' - 2,067')	April-August	Absent. No suitable habitat present onsite.	
Invertebrates									
	Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	FE	-	-	vernal pools/wetlands	November-April	Potential to occur	No conservancy fairy shrimp found during Folsom South 2006-07/2007-08 wet season and 2007 dry season (EcoAnalyst 2007, Foothill 2007 and 2009b) and Carpenter Ranch 2007, 2008.
	Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	-	-	vernal pools/wetlands	November-April	Potential to occur	No vernal pool fairy shrimp found during Folsom South 2006-07/2007-08 wet season and 2007 dry season (EcoAnalyst 2007, Foothill 2007 and 2009b) and Carpenter Ranch 2007, 2008.

Table 1. Evaluation of Special-Status Species									
Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
	Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	FE	-	-	vernal pools/wetlands	November-April	Potential to occur	No vernal pool tadpole shrimp found during Folsom South 2006-07/2007-08 wet season and 2007 dry season (EcoAnalyst 2007, Foothill 2007 and 2009b) and Carpenter Ranch 2007, 2008, and 2009 wet season surveys.
	Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT, FPD	-	-	elderberry shrubs	any season	Potential to occur	Absent. No elderberry shrubs within the Project area (USFWS 2014)
Fish									
	Chinook salmon (Central Valley spring-run ESU)	<i>Oncorhynchus tshawytscha</i>	FT	CT	-	undammed rivers, streams, creeks		Absent-the Project watershed is above Nimbus Dam.	
	Chinook salmon (Sacramento River winter-run ESU)	<i>Oncorhynchus tshawytscha</i>	FE	CE	-	undammed rivers, streams, creeks		Absent-the Project watershed is above Nimbus Dam.	
	Steelhead (CA Central Valley ESU)	<i>Oncorhynchus mykiss</i>	FT	-	-	undammed rivers, streams, creeks		Absent-the Project watershed is above Nimbus Dam.	
	Delta smelt	<i>Hypomesus transpacificus</i>	FT	CE	-	Sacramento-San Joaquin delta		Absent-the Project watershed is above Nimbus Dam.	
Amphibians									
	California tiger salamander (Central California DPS)	<i>Ambystoma californiense</i>	FT	CT	CSC	Uses vernal pools, wetlands and adjacent grassland or oak woodland; needs underground refuge, usually ground squirrel or gopher burrows. Uses vernal pools, ponds, and seasonal wetlands for breeding. Largely terrestrial as adults.	March-May	Absent-the nearest known occurrence is 15 miles to the south; the species has not been detected north of the Cosumnes River (USFWS 2004)	
	Western spadefoot	<i>Spea hammondi</i>	-	-	CSC	A California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March-May	Potential to occur-suitable habitat is present onsite.	No previous surveys have targeted this species; however, pre-construction surveys conducted for other projects within the FPASP have not found this species where suitable habitat is present.
	California red-legged frog	<i>Rana draytonii</i>	FT	-	CSC	Found historically in the Coast Ranges from Mendocino County south to Baja California, and inland from the northern Sacramento Valley to Sierra Nevada foothills, south to Tulare County. Currently occurs in lowlands or foothills at waters with dense shrubby or emergent riparian vegetation. Larvae require 11 to 20 weeks to transform, sometimes overwintering. Adults must have aestivation habitat to endure summer dry down.	May 1-November 1	Absent-presumed extirpated from the Central Valley floor. Nearest reproducing population is approximately 30 miles east near Pollock Pines, CA.	

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Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
Reptiles									
	Northwestern pond turtle	<i>Actinemys marmorata</i>	-	-	CSC	The only extant freshwater turtle in California. The northwestern and southwestern subspecies intergrade in central California. This turtle requires basking sites and upland habitats up to 0.5 KM from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April-October	Potential to occur. Suitable habitat present onsite.	No previous surveys have targeted this species; however, pre-construction surveys conducted for other projects within the FPASP have not found this species where suitable habitat is present.
	Giant garter snake	<i>Thamnophis gigas</i>	FT	CT	-	A large, aquatic snake of freshwater ditches, sloughs, and marshes in the Central Valley. Almost extinct from the southern parts of its range.	April-October	Absent-no suitable habitat present onsite; the Project is not within the known current or historic distribution of the species.	
Birds									
	Double-crested cormorant (nesting colony)	<i>Phalacrocorax auritus</i>	-	-	CDFW WL	breeds near ponds, lakes, artificial impoundments, slow-moving rivers, lagoons, estuaries, and open coastlines and typically forages in shallow water. Non-nesters are found in many coastal and inland waters.	April-July	Absent-no suitable nesting and foraging habitat present onsite.	
	White-tailed kite (nesting)	<i>Elanus leucurus</i>	-	-	CFP	breeding occurs within trees in low elevation grassland, agricultural, wetland, oak woodland, riparian, savannah, and urban habitats.	March-June	Potential to Occur. Suitable nesting and foraging habitat is present throughout the Project site.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	Bald eagle (nesting and wintering)	<i>Haliaeetus leucocephalus</i>	Delisted	CE	CFP, BCC	typically breeds in forested areas near large bodies of water in the northern half of California; they nest in trees and rarely on cliffs usually absent of human disturbance; wintering habitat includes forest and woodland communities near waterbodies (e.g. rivers, lakes), wetlands, flooded agricultural fields, open grasslands	nests (February-July); winters CV (October-March)	Absent-no suitable nesting habitat present onsite.	
	Northern harrier (nesting)	<i>Circus cyaneus</i>	-	-	CSC	breeds on the ground in open wetlands, marshy meadows, wet/lightly grazed pastures, (rarely) freshwater/brackish marshes, tundra, grasslands, prairies, croplands, desert, shrub-steppe, and (rarely) riparian woodland communities.	April-September	Potential to Occur. Suitable nesting and foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	Cooper's hawk (nesting)	<i>Accipiter cooperii</i>	-	-	CDFW WL	nests in trees in riparian woodlands in deciduous, mixed and evergreen forests, as well as urban landscapes	April-July	Potential to Occur. Suitable nesting and foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.

Table 1. Evaluation of Special-Status Species

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
	Swainson's hawk (nesting)	<i>Buteo swainsoni</i>	-	CT	BCC	nesting occurs in trees in agricultural, riparian, oak woodland, scrub, and urban landscapes. Forages over grassland, agricultural lands, particularly during disking/harvesting, irrigated pastures	March-August	Potential to Occur. Suitable nesting and foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	Ferruginous hawk (wintering)	<i>Buteo regalis</i>	-	-	BCC, CDFW WL	Rarely breeds in California (Lassen County); winter range includes grassland and shrubsteppe habitats from Northern California (except northeast and northwest corners) south to Mexico and east to Oklahoma, Nebraska, and Texas.	November-February	Potential to Occur. Suitable winter foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species if present.
	Golden eagle (nesting and wintering)	<i>Aquila chrysaetos</i>	-	-	BCC, CFP	Breeding range include mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/savannah, and chaparral. Nesting occurs on cliff ledges, riverbanks, trees, human-made structures (e.g. windmills, platforms, transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter.	nest (February-August); wintering in Central Valley (October-February)	Potential to Occur. Suitable nesting and foraging habitat onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	California black rail	<i>Laterallus jamaicensis coturniculus</i>	-	CT	BCC, CFP	salt marsh, shallow freshwater marsh, wet meadows, and flooded grassy vegetation. In California, primarily found in coastal and Bay-Delta communities, but also in Sierran foothills (Butte, Yuba, Nevada, Placer counties)	March-July	Absent-no suitable nesting or foraging habitat present onsite.	
	Burrowing owl (burrow sites)	<i>Athene cunicularia</i>	-	-	BCC, CSC	breeds in burrows or burrow surrogates in open, treeless, areas within grassland, steppe, and desert biomes. Often with other burrowing mammals (e.g. prairie dogs, California ground squirrels). May also use human-made habitat such as agricultural fields, golf courses, cemeteries, roadside, airports, vacant urban lots, and fairgrounds.	March-August	Potential to Occur. Suitable nesting and foraging habitat onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	Merlin (wintering)	<i>Falco columbarius</i>	-	-	CDFW WL	breeds in Oregon, Washington north into Canada. Winters in southern Canada to South America, including California. Breeds near forest openings, fragmented woodlots, riparian areas. Wintering habitat includes wide variety, open forests, grasslands, tidal flats, plains, and urban settings.	September-April	Potential to Occur. Suitable winter foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.

Table 1. Evaluation of Special-Status Species

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
	Loggerhead shrike	<i>Lanius ludovicianus</i>	-	-	BCC, CSC	Found throughout California in open county with short vegetation, pastures, old orchards, grasslands, agricultural areas, open woodlands. Not found in heavily forested habitats.	March-July	Potential to Occur. Suitable nesting and foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	Purple martin (nesting)	<i>Progne subis</i>	-	-	CSC	In California, breeds along coast range, Cascade-northern Sierra Nevada region and isolated population in Sacramento. Nesting habitat includes montane forests, Pacific lowlands with dead snags; the isolated Sacramento population nests in weep holes under elevated highways/bridges. Winters in South America.	April-August	Absent. No suitable habitat present onsite.	
	Bank swallow (nesting)	<i>Riparia riparia</i>	-	CT	-	Nests colonially along coasts, rivers, streams, lakes, reservoirs, and wetlands in vertical banks, cliffs, and bluffs in alluvial, friable soils. May also nest in sand, gravel quarries and road cuts. In California, breeding range includes northern and central California.	May-July	Absent. No suitable nesting habitat present onsite.	
	Lark sparrow (nesting)	<i>Chondestes grammacus</i>	-	-	CNDDDB	in California, breeds from Siskiyou Co east to Nevada state line, south to Nevada Co., from Central Valley to Pacific Coast, except humid northwest; also, Riverside Co. and the Owens and Antelope valleys. Nesting habitat includes open habitats and ecotones, orchards, park-like woodlands, grasslands, savannah, shrub-steppe, mesquite grasslands, and fallow fields with brushy edges.	year round res. (nests April-May)	Potential to Occur. Suitable nesting and foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	Grasshopper sparrow	<i>Ammodramus savannarum</i>	-	-	CSC	In California, breeding range includes most coastal counties south to Baja California; western Sacramento Valley and western edge of Sierra Nevada region. Nests in moderately open grasslands and prairies with patchy bare ground. Avoids grasslands with extensive shrub cover; more likely to occupy large tracts of habitat than small fragments; removal of grass cover by grazing often detrimental.	May-July	Potential to Occur. Suitable nesting and foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.

Table 1. Evaluation of Special-Status Species

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
	Song sparrow "Modesto"	<i>Melospiza melodia heermanni</i>	-	-	BCC, CSC	resident in central and southwest California, including Central Valley; nests in marsh, scrub habitat	April-June	Potential to Occur. Suitable nesting and foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
	Tricolored blackbird (nesting colony)	<i>Agelaius tricolor</i>	-	CE-emergency listing Dec 2014	BCC, CSC	breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta Cos south to San Bernardino, Riverside and San Diego Counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen Counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	April-June	Potential to Occur. Suitable foraging habitat present onsite.	No previous surveys have targeted this species. Pre-construction nesting bird surveys will be conducted prior to ground disturbance to protect this species.
Mammals									
	Townsend's big-eared bat	<i>Corynorhinus townsendii townsendii</i>	-	CC	CSC	distribution strongly correlated to presence of caves and cave-like roosting habitat, including abandoned mines; may also roost in buildings, bridges, rock crevices and tree hollows; forages in edge habitat along streams, adjacent to and within woodland habitat.	April-September	Low Potential. Suitable roosting cave/mine habitat present within the FPASP area.	No previous surveys have targeted this species. Pre-construction roosting habitat surveys will be conducted prior to ground disturbance to protect this species if present.
	Pallid bat	<i>Antrozous pallidus</i>	-	-	CSC	roosts in crevices in mines, man-made structures, rock outcrops, tree cavities, exfoliating bark in a variety of deciduous and coniferous trees, man-made structures, bridges, buildings; they forage over open shrub-steppe grasslands, oak savannah grasslands, open pine forests, talus slopes, gravel roads, orchards and vineyards.	April-September	Low Potential. Suitable foraging habitat present onsite, and limited roosting habitat in the oak woodland.	No previous surveys have targeted this species. Pre-construction roosting habitat surveys will be conducted prior to ground disturbance to protect this species if present.
	Ringtail	<i>Bassariscus astutus</i>	-	-	CFP	rock outcrops, canyons, talus slopes, and riparian in arid and semi-arid country, deserts, chaparral, oak woodlands, pinyon pine woodlands, juniper woodlands, and montane conifer forests.; typically near water.	any season	Absent. No suitable habitat present onsite	

Table 1. Evaluation of Special-Status Species

Common Name		Scientific Name	Federal ESA Status	California ESA Status	California Other Status	Habitat Description	Approximate Survey Dates	Potential for Occurrence Onsite	Previous Surveys Survey Year, Results
	American badger	<i>Taxidea taxus</i>	-	-	CSC	friable soils in open vegetation communities, annual grassland	any season	Potential to Occur. Suitable habitat present onsite.	No previous surveys have targeted this species; however, pre-construction surveys conducted for other projects within the FPASP have not found this species where suitable habitat is present.

Status Codes:

FE	Federal ESA listed, Endangered.	CDFW WL	California Department of Fish and Wildlife Watch List
FT	Federal ESA listed, Threatened.	1A	California Rare Plant Rank/Presumed extinct.
FPE	Formally Proposed for federal ESA listing as Endangered.	1B	California Rare Plant Rank/Rare or Endangered in California and elsewhere.
FPT	Formally Proposed for federal ESA listing as Threatened.	2A	California Rare Plant Rank/Presumed extirpated in California, more common elsewhere.
FPD	Listed under Federal ESA, but formally proposed for delisting.	2B	California Rare Plant Rank/Rare or Endangered in California, more common elsewhere.
Fd	Formally Delisted (delisted species are monitored for 5 years).	3	California Rare Plant Rank/Plants About Which More Information is Needed - A Review List.
FC	Candidate for federal ESA listing as Threatened or Endangered.	4	California Rare Plant Rank/Plants of Limited Distribution - A Watch List.
NMFS	NOAA/NMFS species of concern	CNDDb	Species that is tracked by CDFW's Natural Diversity Database but does not have any of the above special-status designations otherwise.
BCC	U. S. Fish and Wildlife Service Bird of Conservation Concern (USFWS, 2008)		
CE	California ESA or Native Plant Protection Act listed, Endangered.		
CT	California ESA or Native Plant Protection Act listed, Threatened.		
CR	California ESA or Native Plant Protection Act listed, Rare.		
CC	Candidate for California ESA listing as Endangered or Threatened.		
CFP	Fish and Game Code of California Fully Protected Species (§3511-birds, §4700-mammals, §5050-reptiles/amphibians).		
CSC	California Department of Fish and Wildlife Species of Special Concern.		

4.0 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology utilized to analyze and determine the proposed Project's potential impacts related to biological resources.

4.1 Standards of Significance

Consistent with Appendix G of the California Environmental Quality Act Guidelines, the City's General Plan, and professional judgment, a significant impact would occur if the proposed Project would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other local, regional, or State HCP.

4.2 Method of Analysis

This analysis of impacts on biological resources resulting from implementation of the proposed Project is based on review of existing biological resources documented on or near the Project area, as listed previously in this Report, information obtained from the regulatory permits and authorizations, and the three CEQA documents that cover this Project:

- The Mitigation and Monitoring and Reporting Plan from the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Folsom South of U.S. Highway 50 Specific Plan Project;
- The Westland Eagle Specific Plan Amendment Environmental Review (Eagle Amendment); and
- The MMRP for the Initial Study/Mitigated Negative Declaration (IS/MND) for the South of 50 Backbone Infrastructure Project.

Overall, all three CEQA documents outline very similar mitigation measures with only slight differences in requirements (i.e., timing on preconstruction surveys). On occasion, the Eagle Amendment and/or IS/MND provide additional measures to protect biological resources that were not specifically addressed in the EIR/EIS.

All biological resources are analyzed at Project-level detail based on the Project land use plan. Please note, impacts for the Project site are analyzed based on current land use planning detail and are subject to change if grading plans are adjusted.

4.3 Project-Specific Impacts and Mitigation Measures

The following discussion of biological resources impacts is based on implementation of the proposed Project in comparison to existing conditions, the standards of significance presented above, and the biological resource impacts outlined in the EIR/EIS. Similar measures outlined in the Eagle Amendment and/or IS/MND are cross referenced (where applicable) or added as needed. The status of the EIR/EIS, Eagle Amendment and IS/MND biological resources mitigation measures as they relate to the Project is summarized in Attachment A.

4.3.1 *EIR/EIS Impact 3A.3-1: Loss and degradation of Waters of the U.S., including wetlands and Waters of the State. Impact is less than significant with mitigation implemented.*

Implementation of the Project would result in direct impacts from the loss of Waters of the U.S./State, including wetlands, resulting from the placement of fill material. Waters of the U.S./State that would be filled onsite consist of 0.037 acre of vernal pools, 0.571 acre of seasonal wetland swale, 0.439 acre of creek/channel, 0.116 acre of seep, 0.073 acre of ditch, and <0.001 acre of intermittent drainage (Figure 2.). In addition to direct impacts, the Project would result in indirect effects on wetlands from increased urbanization and population, including reduction in water quality caused by urban runoff, erosion, and siltation, intrusion of humans and domestic animals, and introduction of invasive plant species that could result in habitat degradation. Wetlands and other waters would be indirectly affected by substantial grading and creation of impervious surfaces proposed for adjacent uplands. The majority of the Project area, except the designated conservation area, would be subject to contour grading, which could affect wetland hydrology and water quality. Overall site topography would be substantially altered to achieve level ground for development. These earthmoving activities and resulting gradient changes across the Project area could alter hydrologic patterns and adversely affect wetlands and drainage channels retained within the Project area, as well as within the immediate vicinity, by altering hydration periods, peak flows, runoff volumes, and runoff durations.

The current Project, as designed, will result in impacts to Waters of the U.S., including wetlands, as originally analyzed in the EIR/EIS, Eagle Amendment and IS/MND. Implementation of Mitigation measures EIR/EIS 3A.3-1a and 3A.3-1b, Eagle Amendment 3A.3-1a and 3A.3-1b, and IS/MND IV-14 are still applicable to reduce impacts to Waters of the U.S. to a less than significant level.

4.3.2 EIR/EIS Impact 3A.3-2. Loss and Degradation of Habitat for Special-Status Wildlife Species and Potential Direct Take of Individuals. Impact is less than significant with mitigation measures implemented.

Valley Elderberry Longhorn Beetle (VELB)

The VELB is federally listed as threatened. According to the USFWS BO, there are no elderberry shrubs (*Sambucus* sp.) identified within Folsom South property and no elderberry shrubs were identified within the portions of the Project that occur within the Carpenter Ranch property (Figure 2). Therefore, the Project would result in no impacts to VELB.

Vernal Pool Crustaceans

The Project area contains vernal pools, seasonal wetlands, and seasonal wetland swales that are considered potential habitat for vernal pool fairy shrimp, conservancy fairy shrimp, and vernal pool tadpole shrimp. Vernal pool tadpole shrimp and conservancy fairy shrimp are federally listed as endangered, and vernal pool fairy shrimp is federally listed as threatened.

Two years of protocol-level wet season surveys and one protocol-level dry season survey have been completed for the Folsom South property. No listed invertebrate species have been found within the Folsom South portion of the Project area to date (EcoAnalysts 2007; Foothill 2008 and 2009b). Additionally, the USFWS BO issued for the FPASP concluded that no vernal pool crustaceans or cysts were detected within the Folsom South property, and therefore, the Folsom South project would not result in impacts to vernal pool crustaceans (USFWS 2014). Three years of protocol-level wet seasons surveys have been completed for the Carpenter Ranch property. No listed invertebrate species were found during the wet-season surveys (Gibson & Skordal 2007, 2008, 2009b). Additionally, the USFWS BO concluded that no vernal pool crustaceans were detected for the Carpenter Ranch property, and therefore, the Carpenter Ranch project would not result in impacts to vernal pool crustaceans. Since no vernal pool crustaceans occur within the Project, there are no impacts to these species.

Western Spadefoot

Impacts to western spadefoot were not originally analyzed under the EIR/EIS for the land portion of the FPASP project. However, it is addressed in the Eagle Amendment (Mitigation Measure 4.4-2) and the IS/MND (Mitigation Measure IV-4). Western spadefoot surveys have not been conducted for the Project area; however, they are known to occur in Mather Regional Park, more than five miles from the Project area. Western spadefoot may be present in vernal pools or other seasonal wetlands within the Project area. Implementation of the Project would permanently remove potential habitat for western spadefoot. Western spadefoot, if they occur within the Project area, could be indirectly affected by an increase in vehicular traffic on the site, which could result in mortality during dispersal or seasonal movements between aquatic and upland habitats. As a result, direct and indirect impacts to western spadefoot are considered potentially significant.

The current Project, as designed, may result in impacts to western spadefoot habitat as outlined in the Eagle Amendment and IS/MND. Implementation of Eagle Amendment 4.4-2 and IS/MND IV-4 are still applicable to reduce impacts to western spadefoot to a less than significant level.

Northwestern Pond Turtle

Impacts to northwestern pond turtle were not originally analyzed under the EIR/EIS for the land portion of the FPASP project. However, it is addressed in the Eagle Amendment (Mitigation Measure 4.4-3) and the IS/MND (Mitigation Measure IV-5). Focused surveys for northwestern pond turtles have not been conducted for the Project area. Suitable habitat for northwestern pond turtle occurs in some intermittent drainages within the Project area; however, these drainages provide marginal habitat as they are dry most of the year. Implementation of the Project would fill intermittent drainages within the Project area. Although the drainages provide marginally suitable habitat, there is still potential for northwestern pond turtles to occur. Thus, direct and indirect impacts to northwestern pond turtle are considered potentially significant.

The current Project, as designed, may result in impacts to northwestern pond turtle habitat as outlined in the Eagle Amendment and IS/MND. Implementation of Eagle Amendment 4.4-3 and IS/MND IV-4 are still applicable to reduce impacts to northwestern pond turtle to a less than significant level.

Swainson's Hawk, Burrowing Owl, and Other Raptors

The Project area provides foraging habitat for Swainson's hawk and other raptors, including burrowing owl. Specifically, the Project will result in impacts to 57.562 acres of Swainson's hawk foraging habitat (Figure 3. *Swainson's Hawk*). Additionally, the trees onsite may provide suitable nesting habitat for Swainson's hawk and other raptors, and the grassland may provide suitable nesting habitat for burrowing owl. Implementation of the Project could have an adverse effect on nesting and foraging habitat for raptors, including Swainson's hawk. A project-specific Swainson's Hawk Foraging Habitat Mitigation Plan consistent with the approved Swainson's Hawk Mitigation Plan for the FPASP (ECORP 2017a) has been prepared for the Project and will be implemented prior to construction.


The current Project, as designed, will result in impacts to Swainson's hawk foraging habitat and may potentially result in impacts to nesting raptors and burrowing owl. Swainson's hawk foraging habitat and nesting habitat were address in the original EIR/EIS, and nesting burrowing owls and other raptors were also addressed in the Eagle Amendment and IS/MND. Implementation of EIR/EIS 3A.3-2a and 3A.3-2b, Eagle Amendment 4.4-4 and 4.4-5, and IS/MND IV-6(a), IV-6(b) are still applicable to reduce impacts to Swainson's hawk foraging and nesting habitat to a less than significant level. Implementation of Eagle Amendment 4.4-6 and IS/MND IV-8 are still applicable to reduce impacts to burrowing owl (and other raptors) to a less than significant level.

Tricolored Blackbird

Potential tricolored blackbird nesting habitat is limited to emergent vegetation that may occur along intermittent drainages and seasonal wetland swales throughout the Project area; however, no tricolored blackbirds have been observed nesting within the Folsom Plan Area. Because some suitable nesting habitat occurs within the Project area, construction activity within the Project area could disturb nesting




Map Features

 Already Mitigated Area
Mitigation is completed in these areas and is excluded from the Dignity project totals

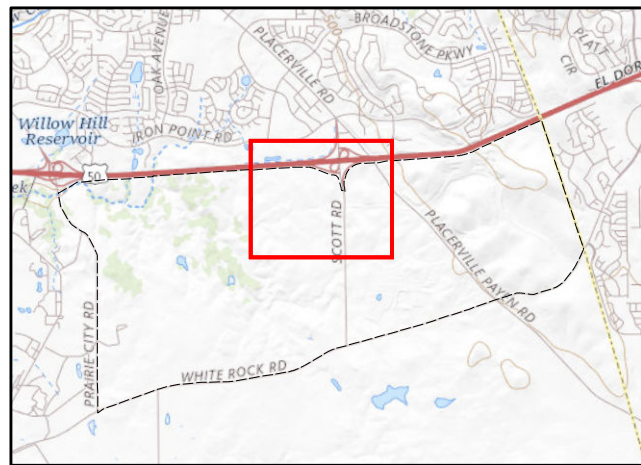
 Dignity Project - 92.19 ac.

Swainson's Hawk

 Foraging Habitat - 57.562 ac.

Impact calculations are based on the best available information to date.
The acreage value for each feature has been rounded to the nearest 1/1000 decimal.
Summation of these values may not equal the total acreage reported.

Sources: ESRI, USGS, NAIP (2020), MSCE



ECORP: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\Draft_Maps_Data\2021-03-01_Parcel85A_Dignity_Impacts\SWHA_Impacts\20210303.mxd (JDS)-JSwager 3/23/2021



Map Date: 3/23/2021
ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

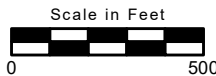


Figure 3. Swainson's Hawk

2021-013 Dignity Health Medical Campus

tricolored blackbirds if an active tricolored blackbird nesting colony were to be present during ground-disturbing activities. Disturbance during construction could result in nest abandonment and loss of eggs or young. The Project could directly impact tricolored blackbird nesting habitat, and indirect impacts could occur to suitable nesting habitat within 500 feet of the Project area.

The current Project, as designed, may result in impacts to tricolored blackbird nesting habitat as originally analyzed in the EIR/EIS, Eagle Amendment, and IS/MND. Implementation of EIR/EIS 3A.3-2c, Eagle 3A.3-2c, and IS/MND IV-7 are still applicable to reduce impacts tricolored blackbird nesting colonies to a less than significant level.

Nesting Birds

Other nesting and migratory birds have potential to occur within the Project area that are protected under the Migratory Bird Treaty Act and California Fish and Game Code. While a potential loss of a few individuals is not likely to result in a substantial effect on their populations, if nesting individuals are present during construction, adverse impacts to individuals could occur. Thus, direct and indirect impacts of Project implementation on these species are considered potentially significant. A specific mitigation measures for nesting birds was not included in the original EIR/EIS, but both the Eagle Amendment and IS/MND provide mitigation measures to reduce impacts to nesting birds (other than raptors).

The current Project, as designed, may result in impacts to nesting birds as outlined in the Eagle Amendment and IS/MND. Implementation of Eagle 4.4-7 and IS/MND IV-9 are still applicable to reduce impacts to nesting birds to a less than significant level.

Special-Status Bats

Two special-status bat species have potential to occur within the vicinity of the Project area: pallid bat, and Townsend's big-eared bat. These species may forage over woodland and open grassland areas; however, roosting habitat is typically a limiting factor to bat distribution. The trees in the oak woodland may support roosting habitat for several special-status bats. There are mine shafts within the FPASP area that could provide potential roosting habitat for Townsend's big-eared bat; however, the mine shafts do not occur within the Project area.

The current Project, as designed, could result in potential impacts to special-status bat species as originally analyzed in the EIR/EIS, Eagle Amendment, and IS/MND. Implementation of EIR/EIS 3A.3-2d, Eagle 3A.3-2d, and IS/MND IV-10 are still applicable to reduce impacts to special-status bat species to a less than significant level.

American Badger

The American badger is a wide-ranging species that uses grassland and oak woodland habitats. Nearly the entire SPA provides suitable habitat. It is unknown if the species currently occurs within the Project area; however, none have been observed during any biological or preconstruction survey efforts. Although implementation of the Project would result in loss of habitat for the American badger, the loss of habitat from the Project would not be likely to cause loss of individuals because there would still be adequate suitable foraging and denning habitat in the area to support the local population. A specific

mitigation measures for American badger was not included in the original EIR/EIS or Eagle Amendment, but the IS/MND provides a mitigation measure to reduce impacts to American badger.

The current Project, as designed, may result in impacts to American badger as outlined in the IS/MND. Implementation of IS/MND IV-11 is still applicable to reduce impacts to American badger to a less than significant level.

4.3.3 EIR/EIS Impact 3A.3-3: Potential Loss or Degradation of Special-Status Plant Populations and Habitat. Impact less than significant with mitigation measures implemented.

Loss of suitable habitat as a result of Project development could result in direct removal or mortality of special-status plants, if they are present. Project development could also result in indirect impacts on special-status plants including impacts caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of changes in land use and management practices, altered hydrology from the construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

As stated above, protocol-level focused surveys for special-status plants have been conducted for the Folsom South portion of the Project in 2006 and 2009, (Foothill 2006, 2009a) and the Carpenter Ranch property in 2009 (Gibson & Skordal 2009a) in compliance with EIR/EIS 3A.3-3 and IS/MND IV-1. No special-status plant species were found during these surveys. Additional plant surveys were conducted for the majority of the Project area in 2019 (ECORP 2019), and no special-status plants were found. Minor modifications to the offsite components of the Project resulted in an adjusted Project area. As such, the remainder of the Project area will be surveyed prior to construction. Thus, there are no direct or indirect impacts on special-status plants as a result of the proposed Project's development and the impact to these species are considered less than significant. However, if special-status plants are found in the updated preconstruction survey, implementation of EIR/EIS 3A.3-3 and IS/MND IV-1 will reduce impacts to a less than significant level.

4.3.4 Impact 3A.3-4. Loss of Sensitive Natural Communities (not Already Covered under Other Impacts). Impact less than significant with mitigation measure implemented.

CDFW Habitat

Habitat subject to Section 1600 of the California Fish and Game Code is present within the Project area and will be impacted by the Project (Figure 2). While there have been changes to the Project design since the EIR/EIS, Eagle Amendment and IS/MDN, the Project, as designed, will result in impacts to CDFW habitat as originally analyzed in the EIR/EIS, Eagle Amendment and IS/MDN. Implementation of EIR/EIS 3A.3-4a, Eagle Amendment 3A.3-4A, and IS/MND IV-12 are still applicable to reduce impacts CDFW habitat to a less than significant level.

Valley Needlegrass Grassland

In compliance with the EIR/EIS, Eagle Amendment, and IS/MND, Valley needlegrass grassland surveys were conducted for the Project in by ECORP in spring of 2015. A total of 0.015 acre of Valley needlegrass grassland will be impacted by the Project (Figure 2). Impacts to Valley needlegrass grassland have already been mitigated via transplantation in consultation with the City and success monitoring is ongoing.

The current Project, as designed, results in impacts to Valley needlegrass grassland as outlined in the EIR/EIS, Eagle Amendment and IS/MND. Implementation of EIR/EIS 3A.3-4b, Eagle Amendment 3A.3-4b, and IS/MND IV-13 are still applicable to reduce impacts to Valley needlegrass grassland to a less than significant level.

4.3.5 *Impact 3A.3-5. Loss of Blue Oak Woodland. Impact less than significant with mitigation measure implemented.*

Blue oak woodland is present within the western portion of the Project area within the offsite infrastructure component of the Project. The Project will impact 1.279 acres of blue oak woodland (Figure 2). The loss and degradation of blue oak woodland that would occur with Project implementation constitutes an adverse effect on a sensitive natural community regulated by the City under Section 10.2.3 of the FPASP. An Oak Tree Mitigation Plan consistent with the approved Conceptual Oak Tree Mitigation and Monitoring Plan for the FPASP (ECORP 2017b) is required to be prepared for the Project in consultation with the City of Folsom.

The current Project, as designed, results in impacts to oak woodland as outlined in the EIR/EIS, Eagle Amendment and IS/MND. Implementation of EIR/EIS 3A.3-5, Eagle Amendment 3A.3-5, and IS/MND IV-15 are still applicable to reduce impacts to oak woodland to a less than significant level.

4.3.6 *Impact 3A.3-6. Potential Interference with Wildlife Movement. Impact is considered less than significant.*

Wildlife corridors are features that provide connections between two or more areas of habitat that would otherwise be isolated and unusable. Often drainages, creeks, or riparian areas are used by wildlife as movement corridors as these features can provide cover and access across a landscape. Intermittent drainages flow throughout the Project area that may provide wildlife movement corridors. Due to the existing residential development in El Dorado County to the east and southeast and the City to the north of the Project site, the likelihood of wildlife species using the area as a migratory corridor is low. Although migratory wildlife use throughout the site is expected to be relatively low, the adjacent open space to the south of the Project site (south of White Rock Road) and the Alder Creek corridor, in conjunction with the preserved open spaces within the entire FPASP, would provide adequate opportunities for wildlife to avoid the proposed development areas. Areas to the north (the City, U.S. Highway 50) and east (Gencorp/Aerojet development) of the Project are already developed and do not provide natural habitat areas for wildlife. Regionally common wildlife species, such as coyote, fox, raccoon, skunk, and opossum, are expected to continue to use the Alder Creek corridor after Project implementation. There are no established migratory routes through the Project area that are vital for the movement of any resident or

migratory fish or wildlife species or population. Therefore, direct and indirect impacts on wildlife movement from the Project are considered less than significant.

**4.3.7 EIR/EIS Impact 3A.3-7. Conflict with an Adopted Habitat Conservation Plan.
No Impact.**

The Project area is not within the boundaries of an adopted habitat conservation plan. Thus, the Project would not conflict with an adopted habitat conservation plan and no impacts would occur.

5.0 CONCLUSION

While there have been changes to the land use plan for the Project, the mitigation measures from the EIR/EIS, Eagle Amendment, and IS/MND will still reduce impacts to biological resources to a less than significant level. This includes the additional mitigation measures recommended to further reduce impacts to special-status species not originally analyzed in the EIR/EIS (i.e., western spadefoot, northwestern pond turtle, and nesting birds). Overall, significance of biological resources impacts analyzed in the EIR/EIS have not changed and all impacts can be mitigated to a less than significant level. The biological resources mitigation measures outlined in the EIR/EIS, Eagle Amendment, and IS/MND are still applicable and will be implemented during Project construction.

6.0 REFERENCES

- City of Folsom and U.S. Army Corps of Engineers (USACE). 2011. Folsom South of U.S. 50 Specific Plan Project Final EIR/EIS Vol. I. May 2011.
- _____. 2010. Folsom South of U.S. 50 Specific Plan Project Draft EIR/EIS Vol. I. June 2010.
- EcoAnalysts, Inc. 2007. Results of Analysis of Soil Samples Collected from the Proposed Folsom South Project Site. October 1, 2007.
- ECORP Consulting, Inc. 2019. Special-status Plant Survey Memo. Prepared for Eagle. July 2019.
- _____. 2017a. Swainson's Hawk Mitigation Plan for the Folsom Plan Area Specific Plan. Prepared for City of Folsom. May 2, 2017.
- _____. 2017b. Conceptual Oak Tree Mitigation and Monitoring Plan for the Folsom Plan Area Specific Plan. Prepared for City of Folsom. January 24, 2017.
- _____. 2016. Conceptual Valley Needlegrass Grassland Mitigation and Monitoring Plan for the Folsom Plan Area Specific Plan. Prepared for City of Folsom. October 6, 2016.
- _____. 2006. Results of a Focused Plant Survey on the Folsom South Site, Located in Sacramento County, California. June 22, 2006.
- Foothill. 2009a. Results of a Focused Plant Survey on the Folsom South Site, Located in Sacramento County, California. Prepared for MJM Consulting. July 2.
- _____. 2009b. 90-Day Report, 2008-2009 Wet-Season Survey for Listed Vernal Pool Branchiopods. Folsom South Property, Sacramento County, California. Prepared for MJM Consulting. July 24.
- _____. 2007. 90-Day Report, 2006-2007 Wet-Season Survey for Listed Vernal Pool Branchiopods. Folsom South Property, Sacramento County, California. Prepared for MJM Consulting. July 17.
- _____. 2006. Results of a Focused Plant Survey on the Folsom South Site, Located in Sacramento County, California. Prepared for MJM Consulting. June 22.
- Gibson & Skordal, LLC. 2009a. Special Status Plant Survey for Carpenter Ranch. August 2009.
- _____. 2009b. Listed Vernal Pool Branchiopod Wet Season Survey 90-Day Report for Carpenter Ranch. June 2009.
- _____. 2008. Listed Vernal Pool Branchiopod Wet Season Survey 90-Day Report for Carpenter Ranch. August 2008.
- _____. 2007. Listed Vernal Pool Branchiopod Wet Season Survey 90-Day Report for Carpenter Ranch. August 2007.
- USFWS. 2014. Formal Consultation on the Proposed Folsom Plan Area Specific Plant Project (Corps # SPK-2007-02159), Sacramento County, California. Prepared for U.S. Army Corps of Engineers.

- USGS. 1967a. "Buffalo Creek, California" 7.5-minute quadrangle. Geological Survey. Denver, Colorado.
Photorevised 1980.
- _____. 1967b. "Folsom, California" 7.5-minute quadrangle. Geological Survey. Denver, Colorado.
Photorevised 1980.
- _____. 1954. "Folsom SE, California" 7.5-minute quadrangle. Geological Survey. Denver, Colorado.
Photorevised 1980.
- _____. 1953. "Clarksville, California" 7.5-minute quadrangle. Geological Survey. Denver, Colorado.
Photorevised 1980.

Status of Biological Resources Mitigation Measures

**MMRP Biological Resources Mitigation Measures – Folsom South of U.S. Hwy 50
Specific Plan Project (EIR/EIS) and Westland Eagle Specific Plan
Amendment Environmental Review (Eagle)**

Mitigation Measure	Compliance Action	Status
EIR/EIS 3A.3-1a	Design Stormwater Drainage Plans and Erosion and Sediment Control Plans to avoid and minimize erosion and runoff to all wetlands and other waters that are to remain within the Project area and use low impact development features.	Pending; will be including in the Rough Grading Plans to the City.
EIR/EIS 3A.3-1b Eagle 3A.3-1b	Secure Clean Water Act Section 404 Permit and implement all permit conditions; ensure no net loss of functions and waters of the U.S. and waters of the State.	<p>Complete</p> <ul style="list-style-type: none"> 404 – Individual Permits issued by USACE on August 6, 2014 (SPK-2006-00486), July 25, 2014 (SPK-2006-0098), and June 6, 2014 (SPK-207-02159). All permit conditions must be met prior to impacting Waters of the U.S. 401 – Water Quality Certification issued by the Central Valley RWQCB on July 11, 2014 (WDID#5A34CR00533), October 18, 2013 (WDID#5A34CR00519), and April 10, 2014 (WDID#5A34CR00581). All permit conditions must be met prior to impacting Waters of the U.S. <p>Pending. Special conditions within the Permits are in various stages of completion and will be finished prior to construction.</p>
EIR/EIS 3A.3-2a Eagle 4.4-4 Eagle 4.4-6 Eagle 4.4-7	Avoid direct loss of Swainson's Hawk and other raptor nests and nesting birds.	Pending. Pre-construction surveys for nesting birds and raptors to be conducted prior to the onset of construction activities.
EIR/EIS 3A.3-2b Eagle 4.4-5	Prepare a Swainson's Hawk Mitigation Plan.	<p>Complete. A Swainson's Hawk Mitigation Plan for the Project, in compliance with the approved Swainson's Hawk Mitigation Plan for the FPASP (ECORP 2017) has been prepared.</p> <p>Pending. Implementation of the Plan will be completed prior to construction.</p>

Mitigation Measure	Compliance Action	Status
EIR/EIS 3A.3-2c Eagle 3A.3-2c	Avoid and minimize impacts to Tricolored Blackbird nesting colonies.	Not applicable. No suitable nesting habitat for tricolored blackbirds occurs on-site. However, pre-construction surveys will be conducted concurrently with nesting bird surveys under MM 3A.3-2a to ensure no nesting tricolored blackbirds occur on-site. A Tricolored Blackbird Mitigation Plan was submitted to CDFW as part of the Sub-notification process.
EIR/EIS 3A.3-2d Eagle 3A.3-2d	Avoid and minimize impacts to special-status bat roosts.	Pending. Pre-construction surveys of potential bat roosting habitat will be conducted within 14 days of the onset of construction activities.
EIR/EIS 3A.3-2e	Obtain an Incidental Take Permit (ITP) under Section 10(a) of the federal Endangered Species Act (ESA); develop and implement a Habitat Conservation Plan (HCP) to compensate for the loss of vernal pool habitat.	Not applicable. The current land use plan for the Project requires a CWA Section 404 permit, which involves a federal action and eliminates the need for a Section 10 ITP and HCP. See Mitigation Measure 3A.3-2g.
EIR/EIS 3A.3-2f	Obtain an ITP under Section 10(a) of the federal ESA; develop and implement an HCP to compensate for the loss of Valley Elderberry Longhorn Beetle (VELB) habitat.	Not applicable. The current land use plan for Project requires a CWA Section 404 permit, which involves a federal action and eliminates the need for a Section 10 ITP and HCP. See Mitigation Measure 3A.3-2h.
EIR/EIS 3A.3-2g	Secure take authorization for federally listed vernal pool invertebrates and implement all permit conditions.	Complete. On April 2, 2014, the U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion (BO) for the FPASP, which includes the Project. The BO concluded that no federally-listed vernal pool invertebrate habitat is present with the Project; therefore, no mitigation for impacts is necessary.
EIR/EIS 3A.3-2h Eagle 3A.3-2h	Secure take authorization for federally listed VELB and implement all permit conditions.	Complete. On April 2, 2014, the U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion (BO) for the FPASP, which includes the Project. The BO concluded that no federally-listed VELB is present with the Project; therefore, no mitigation for impacts is necessary.
EIR/EIS 3A.3-3	Conduct special-status plant surveys; implement avoidance and mitigation measure or compensatory mitigation.	Complete. Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006a and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Dignity Health Project (ECORP 2019).
EIR/EIS 3A.3-4a Eagle 3A.3-4a	Secure and implement Section 1602 Streambed Alteration Agreement (SAA).	Complete. A Master SAA for the FPASP (including the Project) was issued on February 2014. All conditions of the FPASP Master LSAA will be met (see Master Agreement Conditions Mitigation, Monitoring, and Reporting Plan, see Item 6).
EIR/EIS 3A.3-4b Eagle 3A.3-4b	Conduct surveys to identify and map valley needlegrass grassland; implement avoidance and minimization measures or compensatory mitigation.	Complete. A Valley needlegrass grassland survey was conducted by ECORP in 2015. A Valley Needlegrass Grassland Plan has been prepared and transplantation of the plants has already taken place. Pending: Success monitoring is ongoing.
EIR/EIS 3A.3-5 Eagle 3A.3-5	Conduct tree survey, prepare and implement oak woodland mitigation plan, replace native oak trees removed, and implement measures to avoid and minimize indirect impacts on oak trees retained on-site.	Pending. Oak woodland will be impacted by implementation of the offsite components of the Project. An oak tree mitigation plan will be prepared in coordination with the City.

Mitigation Measure	Compliance Action	Status
3B.3-1a* *applies to the "water" components of the Specific Plan	Secure Clean Water Act Section 404 Permit and implement all permit conditions; ensure no net loss of functions and waters of the U.S. and waters of the State.	Not applicable. Waterline alignment is not part of the Project.
3B.3-1b*	Maximum use of trenchless technology for conveyance pipeline design.	Not applicable. Waterline alignment is not part of the Project.
3B.3-1c*	Restore all waters impacted by trenching and temporary construction staging areas to pre-project contours and conditions.	Not applicable. Waterline alignment is not part of the Project.
EIR/EIS 3B.3-2* Eagle 4.4-2 Eagle 4.4-3	Conduct pre-construction survey for western spadefoot toad and western pond turtle and if found, implement avoidance and compensation measures.	Pending. Pre-construction surveys for western spadefoot and western pond turtle will be conducted prior to any ground-breaking construction activities.
EIR/EIS 4.4-1	Conduct Environmental Awareness Training for construction employees.	Pending. WEAP trainings will be provided to construction workers, and WEAP training materials will be kept onsite.

MMRP Biological Resources Mitigation Measures – Folsom South of 50 Backbone (IS/MND)

Mitigation Measure	Compliance Action	Status
IV-1	Conduct special-status plant surveys; develop a mitigation and monitoring plan including any compensatory mitigation.	Complete. Absent. Not found on Folsom South in 2006 and 2009 (Foothill 2006a and 2009b) or Carpenter Ranch in 2009 (Gibson & Skordal 2009a) or Dignity Health Project (ECORP 2019).
IV-2	Implement conditions of the Biological Opinion (BO) for federally listed vernal pool invertebrates.	Complete. On April 2, 2014, the U.S. Fish and USFWS issued a BO for the FSASP, which the Project. The BO concluded that no federally-listed vernal pool invertebrates are present onsite; therefore, no mitigation for impacts is necessary.
IV-3	Implement conditions of the Biological Opinion (BO) for impacts on valley elderberry longhorn beetle (VELB).	Complete. On April 2, 2014, the U.S. Fish and USFWS issued a BO for the FSASP, which the Project. The BO concluded that no federally-listed VELB are present onsite; therefore, no mitigation for impacts is necessary.
IV-4	Conduct pre-construction surveys for western spadefoot and if found, implement avoidance and mitigation measures.	Pending. Pre-construction surveys for western spadefoot will be conducted prior to any ground-breaking construction activities.
IV-5	Conduct pre-construction surveys for western pond turtle and if found, implement avoidance and mitigation measures.	Pending. Pre-construction surveys for western pond turtle will be conducted prior to any ground-breaking construction activities.
IV-6(a)	Conduct pre-construction surveys for Swainson's hawk and if found, implement avoidance and mitigation measures.	Pending. Pre-construction surveys for Swainson's hawk will be conducted between 14 to 30 days before the initiation of construction activities.
IV-6(b)	If necessary, prepare a Swainson's Hawk Mitigation Plan.	Complete. A Swainson's Hawk Mitigation Plan for the Project, in compliance with the approved Swainson's Hawk Mitigation Plan for the FPASP (ECORP 2017). Implementation of the plan will be completed prior construction.

Mitigation Measure	Compliance Action	Status
IV-7	Conduct pre-construction surveys for tricolored blackbirds and avoid and minimize impacts to tricolored blackbird nesting colonies.	Not applicable. No suitable nesting habitat for tricolored blackbirds occurs onsite. However, pre-construction surveys will be conducted concurrently with nesting bird surveys to ensure no nesting tricolored blackbirds occur onsite. Additionally, a Tricolored Blackbird Mitigation Plan has been prepared and submitted to CDFW.
IV-8	Conduct pre-construction surveys for nesting raptors and if found, implement avoidance and mitigation measures.	Pending. Pre-construction surveys for nesting raptors will be conducted between 14 to 30 days before the initiation of construction activities.
IV-9	Conduct pre-construction surveys for nesting birds and if found, implement avoidance and mitigation measures.	Pending. Pre-construction surveys for nesting birds will be conducted prior to any construction activities that will occur between March 1 and August 31.
IV-10	Avoid and minimize impacts to special-status bat roosts.	Pending. Pre-construction surveys of potential bat roosting habitat will be conducted within 14 days of the onset of construction activities.
IV-11	Conduct pre-construction surveys for American badger, and if found, implement avoidance and mitigation measures.	Pending. Pre-construction surveys for American badger will be conducted within 48 hours of the initiation of construction activities.
IV-12	Implement section 1602 Master Streambed Alteration Agreement.	Complete. A Master SAA for the FPASP (including the Project) was issued on February 2014. All conditions of the FPASP Master LSAA will be met prior to construction.
IV-13	Conduct surveys to identify and map valley needlegrass grassland; implement avoidance and minimization measures or compensatory mitigation.	<p>Complete. A Valley needlegrass grassland survey was conducted by ECORP in 2015. A Valley Needlegrass Grassland Plan was prepared and translocation has already taken place.</p> <p>Pending. Success monitoring is ongoing.</p>
IV-14	Secure Clean Water Act Sections 401 and 404 Permits and implement all permit conditions; ensure no net loss of functions and Waters of the U.S. and Waters of the State.	<p>Complete</p> <ul style="list-style-type: none"> 404 – Individual Permits issued by USACE on August 6, 2014 (SPK-2006-00486), July 25, 2014 (SPK-2006-0098), and June 6, 2014 (SPK-207-02159). 401 – Water Quality Certification issued by the Central Valley RWQCB on July 11, 2014 (WDID#5A34CR00533), October 18, 2013 (WDID#5A34CR00519), and April 10, 2014 (WDID#5A34CR00581). <p>Pending. Special conditions within the Permits are in various stages of completion and will be finished prior to construction.</p>
IV-15	Conduct surveys for oak trees and implement an Oak Woodland Mitigation Plan.	Pending. Oak woodland will be impacted by implementation of the offsite components of the Project. An oak tree mitigation plan will be prepared in coordination with the City.