

6

BIOLOGICAL RESOURCES

6.1 INTRODUCTION

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the Whitehawk I (WHI) and Whitehawk II (WHII) project sites, as well as biological resources known to occur in off-site areas where off-site project work may occur. This chapter describes potential impacts to those resources, and identifies measures to reduce those impacts to less-than-significant levels. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the project area.

The information contained in this analysis is primarily based on the biological resource assessments prepared for WHI¹ and WHII² as well as bird surveys prepared for WHI³ and WHII,⁴ arborist reports prepared for WHI⁵ and WHII,⁶ and rare plant surveys prepared for WHI⁷ and WHII.⁸ All of the aforementioned documents are included as Appendix D to this EIR. Further information was sourced from the Placer County General Plan,⁹ the Placer County General Plan EIR,¹⁰ and the Granite Bay Community Plan (GBCP).¹¹

6.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the existing environmental setting related to biological resources occurring in the area of the project sites.

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- ¹ Salix Consulting, Inc. *Biological Resources Assessment for the 17-Acre Beaver Creek Study Area*. December 2014.
 - ² Salix Consulting, Inc. *Biological Resources Assessment for the 33-Acre Creekside Oaks Study Area*. December 2014.
 - ³ Salix Consulting, Inc. *Memorandum: Pre-Fuel Load Reduction bird survey – Whitehawk I property, Granite Bay*. May 26, 2016.
 - ⁴ Salix Consulting, Inc. *Memorandum: Pre-Fuel Load Reduction bird survey – Whitehawk II property, Granite Bay*. May 26, 2016.
 - ⁵ Abacus Consulting Arborists. *Preliminary Arborist Report & Oak Tree Inventory & Assessment for GB17*. October 15, 2014.
 - ⁶ Abacus Consulting Arborists. *Preliminary Arborist Report & Oak Tree Inventory & Assessment for GB33*. October 15, 2014.
 - ⁷ Salix Consulting, Inc. *Whitehawk I Project Rare Plant Survey*. January 14, 2016.
 - ⁸ Salix Consulting, Inc. *Whitehawk II Project Rare Plant Survey*. January 22, 2016.
 - ⁹ Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
 - ¹⁰ Placer County. *Countywide General Plan EIR*. July 1994.
 - ¹¹ Placer County. *Granite Bay Community Plan*. Adopted February 28, 2012.

Regional Setting

The project sites are located north of the City of Roseville, in an unincorporated portion of western Placer County, within the GBCP area. The GBCP experiences a Mediterranean type climate with cool, wet winters, and hot, dry summers. Annual precipitation in the region averages approximately 10 inches.

The project sites, and the GBCP area, occur on the lower edge of the western foothills of the Sierra Nevada mountain range. The portion of the GBCP encompassing the project sites is located in the Dry Creek Watershed, which is within the Sacramento River Basin. The North Fork of the American River and Folsom Lake are located to the east of the GBCP area.

Habitat types within the GBCP generally include oak woodland, riparian woodland, annual brome grasslands, and agricultural land. Portions of the GBCP have been developed with varying densities of residential and commercial land uses. In general, however, the GBCP is characterized by rural, low-density development. The rural nature of development within the GBCP allows for the retention of scattered woodland areas throughout the GBCP. Varying topography throughout the GBCP area has led to the formation of small ponds and wetland features throughout the GBCP area. Areas lacking woodland cover are generally dominated by annual grasslands.

Project Setting

The WHI project site is 18.09 acres and the WHII project site is 32.97 acres. The project sites are comprised primarily of woodland type habitats. Both Whitehawk project sites are unusual in that they actually have two distinctly different oak woodlands that reflect different land use history. The woodland differs in composition and structure depending on whether or not it occurs within areas that were placer mined during the early part of the 20th century. The primary difference between the two areas is that the non-mined area has generally natural topography and soil profiles, whereas the mined area terrain is highly irregular and consists of mining debris and tailings. Elevations at the project sites range between 255 and 295 feet above sea level. Site topography is variable due to the presence of dredge tailings from historic on-site mining activity. Prior to disturbance related to on-site mining activities, the project sites were likely characterized by open grasslands, oak savannah/foothill woodlands, and riparian scrub/forest along Strap Ravine. The environmental differences and disturbance history appear to have contributed to the preponderance of relatively poor quality multi-stemmed oaks and the presence of a large component of cottonwoods within the mined area.¹²

Strap Ravine, a regionally intermittent stream, runs through the central portion of both project sites, from east to west. Residential subdivisions exist to the north of both project sites, and to the west of the WHI site (buffered by an open space parcel owned by the adjacent homeowners

¹² Richard R. Harris. *Oak Woodland Impact Assessment: Whitehawk 1 Development, Granite Bay, CA*. January 2016.
Richard R. Harris. *Oak Woodland Impact Assessment: Whitehawk 2 Development, Granite Bay, CA*. January 2016.

association [HOA]), while rural residences exist adjacent to the south of both project sites and east of the WHII site.

In addition to proposed development within the project sites, the WHII project would require off-site infrastructure improvements related to the intersection of Seeno Avenue and Douglas Boulevard, as well as off-site disturbance related to temporary construction areas and an Emergency Vehicle Access (EVA) area. The EVA and temporary construction access areas would be located in the eastern portion of the WHII site, south of Lot 45. The 20-foot EVA road would extend within a 25-foot, off-site easement for approximately 500 feet east to Quartzite Circle, a privately-maintained public road southeast of the site, for a total area of 0.33 acre. The temporary construction area would be located adjacent to the EVA easement and would occupy approximately 0.10-acre. The areas consist primarily of dense and shrubby woodland. Taken together, both project sites, as well as the off-site improvement area and the EVA for WHII, represent the study area analyzed throughout this chapter of the EIR.

On-Site Vegetation Communities/Habitats

Three vegetation communities and two types of wetland habitats exist within the project sites. The vegetation communities are foothill woodland, cottonwood stands, and riparian woodland, while the wetland habitats include wetlands and the Strap Ravine intermittent stream. In addition to the three main vegetation communities within the study area, the WHII project site includes some areas of annual grassland habitat. Table 6-1 presents the amount of acreage of each vegetation community or habitat type present within each project site. Due to the previous mining activity that has occurred within the project site, Table 6-1 presents the areas of each vegetation community that were subject to historic mining, as well as those portions not subject to historic mining.

Table 6-1 Vegetation Communities (acres)			
Vegetation Community/Habitat Type	WHI	WHII¹	Total
Riparian Woodland	0.00	2.70	2.70
Riparian Woodland (Mined)	3.90	0.00	3.90
Cottonwood Stands	0.00	0.10	0.10
Cottonwood Stands (Mined)	1.00	5.30	6.30
Foothill Woodland	7.00	14.80	21.80
Foothill Woodland (Mined)	5.40	9.20	14.60
Strap Ravine	1.03	0.46	1.49
Wetlands	0.35	2.03	2.38
Grassland	0.00	1.20	1.20
¹ Includes vegetation communities within EVA and temporary construction areas.			
<i>Source: Salix Consulting, Inc., 2018.</i>			

Further descriptions of each vegetation type are provided below.

Foothill Woodland

Combined, mined and unmined Foothill Woodland comprises a total of 66.4 percent of the WHI project site and 67.1 percent of the WHII project site. Variability exists across the project sites with respect to the density of trees and canopy coverage. Tree density tends to be highest in the central and southeastern portions of each project site. The areas of increased tree density generally correspond to the portions of each project site nearest to Strap Ravine. The dominant tree species within the foothill woodlands on the project sites include interior live oak (*Quercus widlizeni*) and blue oak (*Quercus douglasii*). In addition to the foregoing species, Valley oak (*Quercus lobate*) and gray pine (*Pinus sabiniana*) occur in a few locations throughout the study area.

Where present, the understory shrub layer includes poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), toyon (*Heteromeles arbutifolia*), buckbrush (*Ceanothus cuneatus*), Himalayan blackberry (*Rubus armeniacus*), oak saplings, and an occasional olive tree (*Olea europaea*). Common herbaceous species within the understory include field hedge parsley (*Torilis arvensis*), Italian thistle (*Carduus pycnocephalus*), yellow star thistle (*Centaurea solstitialis*), Italian rye grass (*Festuca perennis*), hedgehog dogtail (*Cynosurus echinatus*), soap plant (*Chlorogalum pomeridianum*), vetch (*Vicia* species), wild oat (*Avena fatua*), and ripgut brome (*Bromus diandrus*).

Large portions of the foothill woodland vegetation community across the study area have been mined. Unmined portions of the foothill woodland vegetation community have retained natural topography and soil profiles, and are characterized by mature blue, Valley, and live oaks with an understory of annual grassland. Trees in unmined portions of the foothill woodland vegetation community are generally in better condition, and the understory of annual grassland provides for a lower fuel load within such portions of the study area.

Irregular terrain within mined areas of the foothill woodland vegetation community has led to similarly irregular hydrologic conditions. Vegetation within mined areas of the foothill woodland vegetation community consists primarily of small, multi-stemmed interior live oaks and a dense understory of native and introduced shrubs. As a result of the presence of native and introduced shrubs in mined portions of the study area, the understory is more dense than unmined portions of the foothill woodland vegetation community, and the overall structure provides for a high fuel load that is conducive to more intense wildfire conditions. Moreover, many of the oak trees within mined portions of the foothill woodland vegetation community exhibit poor structure.

Cottonwood Stands

A total of 6.4 acres of mature Fremont cottonwood (*Populus fremontii*) stands occur within the southern portions of the study area, with one acre occurring in the WHI project site and 5.4 acres occurring within the WHII project site. The majority of the cottonwood stands, 6.3 acres, are within mined areas of the study area. The 0.1 acre of unmined cottonwood stand is located within the WHII project site. Stands in mined portions of the study area exist apart from Strap Ravine, and appear to be reliant on localized water sources related to dredge hollows from previous mining activities within the study area.

Riparian Woodland

The WHI project site contains 3.9 acres of riparian woodland, all of which has been historically mined, while the WHII project site contains 2.7 acres of riparian woodland, none of which has been mined. Riparian woodland vegetation communities within the study area include a mixed overstory of mature Fremont cottonwoods, Gooding's willow (*Salix goodingii*), red willow (*S. laevigata*), sandbar willow (*S. exigua*), and Valley oak. Himalayan blackberry is the most prevalent understory species. Previous mining activity within the study area has heavily influenced some reaches of Strap Ravine, creating highly variable terrain within the riparian woodland areas of the study area. In some reaches adjacent to the channel, wide fringe wetlands support herbaceous marsh species including cocklebur (*Xanthium strumarium*), willow weed (*Persicaria lapathifolia*), water plantain (*Alisma triviale*), broad-leaved cattail (*Typha latifolia*), and black sand spikerush (*Eleocharis pachycarpa*). Moisture persists in the fringe wetlands well into the dry season.

Annual Grassland

The southeastern portion of the WHII project site contains a small area of annual grassland. The annual grassland exists within a clearing in the dominant foothill woodland vegetation community, and supports non-native herbaceous vegetation similar to the understory of the unmined foothill woodland vegetation community. Typical species include ripgut brome, wild oat, Italian rye grass, and yellow star thistle.

Aquatic Features

The study area contains areas identified as wetlands as well as Strap Ravine, which intermittently flows through both project sites.

Wetlands

Seasonal wetlands that exist within the study area are primarily associated with previous mining activity. Generally, such wetlands are located between tailings piles from previous placer mining activity, within areas of the foothill woodland, riparian woodland, and cottonwood stands vegetative communities. Wetland formation between tailings piles occurs due to the concentration of fine-grained soil material that has collected sufficient to impede the percolation of stormwater. Common species within the wetlands include broad-leaved cattail (*Typha latifolia*), spikerush (*Eleocharis pachycarpa*), Mexican rush (*Juncus mexicanus*), iris-leaf rush (*Juncus xiphioides*), clustered field-sedge (*Carex praegracilis*), and cocklebur (*Xanthium strumarium*), curly dock (*Rumex crispus*), baltic rush (*Juncus balticus*), tall flatsedge (*Cyperus eragrostis*), along with many other wetland generalist species.

Approximately 0.35 acre of wetlands exist within WHI, while 2.03 acres of wetlands exist within the WHII site, including the EVA and temporary construction areas.

Strap Ravine

Strap Ravine is an intermittent stream that runs through both project sites. Runoff from existing developments upstream of the study area feed Strap Ravine; however, such inputs are insufficient to sustain year-round flow, and Strap Ravine generally stops flowing in the summer. Within the WHI project site, the channel of Strap Ravine is relatively shallow, ranging from five to 15 feet wide, and is bounded on both sides by Himalayan blackberry, willows, cottonwoods, and oaks. Within the WHII project site Strap Ravine is between five and six feet wide with fringe wetlands.

Aquatic Functions

As discussed previously, mining activities within the study area have resulted in large amounts of site disturbance. Such disturbance altered the natural hydrology of Strap Ravine and the habitats associated with Strap Ravine. For instance, dredge tailings from previous mining activities re-routed Strap Ravine and interrupted the natural course of water through the site. Such affects are particularly noticeable on the WHII project site where localized flooding occurs during large storm events.

Both project sites include pits that were used to allow fine particles to settle out of water. The fine particles that were left in the pits following the cessation of mining activity on the project sites create a restrictive layer, inhibiting percolation of rainwater through the soil. Such pits are generally isolated from Strap Ravine and overflow into the intermittent stream during large storm events. In the absence of the pits, water that is currently trapped in the pits would instead flow to Strap Ravine or percolate through the surface to regenerate groundwater. Although some wetland vegetation has been able to establish around these pits, the pits mostly support an overstory canopy. Although the pits have been mapped as seasonal wetlands, the pits lack the native herbaceous vegetation that is typically associated with seasonal wetlands.

Wildlife

The forest type vegetative communities within the study area provide habitat for a variety of wildlife, which find roosting and nesting habitat as well as a means of escape and thermal refuge in the existing on-site trees. In addition, Strap Ravine provides a source of seasonal water for local wildlife and may facilitate movement between habitats on- and off-site. Cavities in existing trees as well as overstory trees provide nesting habitat for many avian species. In fact, nesting bird surveys of the project site in 2016 identified active Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), and red-shouldered hawk (*Buteo lineatus*) nests within the project sites.

The following animals have been observed within the study area: acorn woodpecker (*Melanerpes formicivorus*), black phoebe (*Sayornis nigricans*), California quail (*Callipepla californica*), northern flicker (*Colaptes auratus*), white-breasted nuthatch (*Sitta carolinensis*), wild turkey (*Meleagris gallopavo*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), orange-crowned warbler (*Vermivora celata*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), Anna's hummingbird (*Calypte anna*), western scrub jay

(*Aphelocoma californica*), bushtit (*Psaltriparus minimus*), song sparrow (*Melospiza melodia*), Bewick's wren (*Thryomanes bewickii*), ash-throated flycatcher (*Myiarchus cinerascens*), red-shouldered hawk, Cooper's hawk, red-tailed hawk, black-tailed jackrabbit (*Lepus californicus*), raccoon (*Procyon lotor*), mule deer (*Odocoileus hemionus*), Sierra chorus frog (*Pseudacris sierrae*) and great-horned owl (*Bubo virginianus*).

Strap Ravine is not likely to support anadromous fish, including Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead (*Oncorhynchus mykiss irideus*) due to low instream flows and previous channel disturbance. Nearby tributaries within the Dry Creek system that are known to support salmon and steelhead include Miner's Ravine and Secret Ravine. During the wet season when flow is sufficient, reaches of Strap Ravine may support resident trout and warm-water fish species.

Special-Status Species

Special-status species are species that have been listed as "threatened" or "endangered" under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered special-status due to declining populations, vulnerability to habitat change, or restricted distributions. A description of the criteria and laws pertaining to special-status classifications is described below.

Special-status plant species may meet one or more of the following criteria:

- Plants listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species);
- Plants that are candidates for possible future listing as threatened or endangered under the FESA (64 FR 205, October 25, 1999; 57533-57547);
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5);
- Plants that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (CEQA Guidelines, Section 15380); or
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (Lists 1A, 1B, and 2 species in CNPS [2001]).

Special-status wildlife species may meet one or more of the following criteria:

- Wildlife listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed wildlife and various notices in the Federal Register for proposed species);
- Wildlife listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5);
- Wildlife that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA Guidelines, Section 15380);
- Wildlife species of special concern (SSC) to the California Department of Fish and Wildlife (CDFW) (Remsen [1978] for birds; Williams [1986] for mammals); and/or

- Wildlife species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Several species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered “rare” and are vulnerable to extirpation as the State’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described below, State and federal laws have provided the CDFW and the United State Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the State. A number of native plants and animals have been formally designated as threatened or endangered under State and federal endangered species legislation. Others have been designated as “candidates” for such listing. Still others have been designated as “species of special concern” by the CDFW. In addition, the CNPS has developed a set of lists of native plants considered rare, threatened, or endangered. Collectively, these plants and animals are referred to as “special-status species.”

To determine potentially occurring special-status species, the standard databases from the USFWS, CDFW (the California Natural Diversity Database [CNDDDB]), and the CNPS were queried and reviewed. The searches provided a comprehensive list of regionally-occurring special-status species and were used to determine which species have some potential to occur within or near the project site. In addition to the database searches, pedestrian field surveys were conducted of both project sites by Salix Consulting, Inc.

Listed and Special-Status Plants

The database searches identified 20 special-status plant species with the potential to occur within the project region. Table 6-2 below summarizes the 20 special-status plant species that appeared on the queries of the CNDDDB and USFWS species list and have the potential to occur in the vicinity of the project sites. Information including common and scientific name, habitat requirements, and an assessment of potential for occurrence within the project area are detailed in the table. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability of the study area, and field observations.

Potential for occurrence within the project sites was assigned according to the following categories:

- **Present:** The species is known to occur on either project site, based on CNDDDB records and/or detection on either project site during field surveys.
- **High:** Either project site supports suitable habitat for the species and the species is known to occur within close proximity to either project site (from CNDDDB records), *or* the species is expected to occur on either site or nearby based on professional judgment regarding species requirements and site characteristics, with suitable habitat for the species on either site.
- **Moderate:** The species is known from records within the vicinity of the project sites but only moderately suitable habitat occurs within the project sites.

- **Low:** The species is known to occur in the vicinity to the project sites, but the project sites provide only marginal habitat, *or* although suitable habitat is present, the species is not known to occur in the vicinity of either project site.
- **Absent/No Habitat Present:** The project sites do not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted on-site, or the site is outside the known range of the species.

Common and Scientific Name	Fed / State / CNPS Status ²	Habitat Requirements	Potential for Occurrence
Big-scale balsamroot <i>Balsamorhiza macrolepis</i>	-- / -- / 1B.2	Chaparral, cismontane woodland, and valley and foothill grasslands, sometimes on serpentine soils at elevations between 295 and 5,100 feet.	Low. Marginally suitable habitat is present in the grassland area of the WHII project site and in unmined foothill woodland areas of the WHI and WHII project sites.
Stebbins' morning-glory <i>Calystegia stebbinsii</i>	FE / CE / 1B.1	Chaparral (openings), cismontane woodland (serpentinite or gabbroic) between 700 to 7,131 feet.	No Habitat Present. Study area lacks gabbro and serpentine soils.
Chaparral sedge <i>Carex xerophila</i>	-- / -- / 1B.2	Chaparral, cismontane woodland, lower montane coniferous forest (serpentinite or gabbroic) between 900 and 2,530 feet.	No Habitat Present. Study area lacks gabbro and serpentine soils.
Pine Hill ceanothus <i>Ceanothus roderickii</i>	FE / CR / 1B.1	Chaparral, cismontane woodland, (serpentinite or gabbroic) between 850 and 2,050 feet.	No Habitat Present. Study area lacks gabbro and serpentine soils.
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	-- / -- / 1B.2	Chaparral, cismontane woodland (serpentinite or gabbroic) between 804 and 5,545 feet.	No Habitat Present. Study area lacks gabbro and serpentine soils.
Hispid salty bird's beak <i>Chloroyrom molle ssp. Hispidium</i>	-- / -- / 1B.1	Damp alkaline soils, especially in meadows, seeps, playas, valley and foothill grassland between 17 and 510 feet.	No Habitat Present. Study area lacks saline soils.
Dwarf downingia <i>Downingia pusilla</i>	-- / -- / 2B.2	Mesic sites in valley and foothill grasslands, vernal lake and pool margins between 3 and 1,460 feet.	No Habitat Present. Study area lacks suitable vernal pool habitat.
Tuolumne button-celery <i>Eryngium pinnatisectum</i>	-- / -- / 1B.2	Mesic areas within cismontane woodland, lower montane coniferous forest, vernal pools habitats between 105 and 5,580 feet.	No Habitat Present. Study area lacks suitable habitat.
Pine Hill flannelbush	FE / -- / 1B.2	Chaparral, cismontane woodland (serpentinite or gabbroic) between 1,300 to 6,600 feet.	No Habitat Present. Study area lacks gabbro and serpentine soils.

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**Table 6-2
 Special-Status Plants with Potential to Occur within Project Sites¹**

Common and Scientific Name	Fed / State / CNPS Status²	Habitat Requirements	Potential for Occurrence
<i>Fremonteodendron decumbens</i>			
El Dorado bedstraw <i>Galium californicum ssp. Sierra</i>	FE / CR / 1B.2	Chaparral, cismontane woodland, lower coniferous forest (serpentinite or gabbroic) between 420 and 1,920 feet.	No Habitat Present. Study area lacks gabbro and serpentine soils.
Bogg's Lake hedge-hyssop <i>Gratiola heterosepala</i>	-- / CE / 1B.2	Vernal pools and margins of lakes/ponds at elevations between 30 and 7,800 feet.	No Habitat Present. Study area lacks suitable vernal pool habitat.
Ahart's dwarf rush <i>Juncus leiospermus var. ahartii</i>	-- / -- / 1B.2	Valley and foothill grassland, restricted to the edges of vernal pools in grasslands between 100 and 330 feet.	No Habitat Present. Study area lacks suitable vernal pool habitat.
Red Bluff dwarf rush <i>Juncus leiospermus var. leiospermus</i>	-- / -- / 1B.1	Vernally mesic sites, valley and foothill grasslands, vernal pools, meadows, and seeps between 100 and 3,363 feet	No Habitat Present. Study area lacks suitable vernal pool or wetland habitat.
Legenere <i>Legenere limosa</i>	-- / -- / 1B.1	In beds of vernal pools and wetlands between 3 and 2,900 feet.	No Habitat Present. Study area lacks suitable vernal pool or wetland habitat.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT / CE / 1B.1	Vernal pools, often in gravelly substrates between 80 and 5,758 feet.	No Habitat Present. Study area lacks suitable vernal pool habitat.
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE / CE / 1B.1	Vernal pools and wetlands between 50 and 280 feet in the Central Valley.	No Habitat Present. Study area lacks suitable vernal pool or wetland habitat.
Layne's ragwort <i>Packera layneae</i>	FT / -- / 1B.2	Chaparral and cismontane woodlands (serpentinite or gabbroic) between 656 and 3,560 feet.	No Habitat Present. Study area lacks gabbro and/or serpentine soils.
Pincushion navarretia <i>Navarretia myersii ssp. Myersii</i>	-- / -- / 1B.1	Vernal pools and wetlands between 145 and 330 feet.	No Habitat Present. Study area lacks suitable vernal pool or wetland habitat.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	-- / -- / 1B.2	Marshes and swamps as well as assorted shallow freshwater habitats between 0 and 1,985 feet.	Low. Marginal habitat is located within the WHI and WHII project sites in areas associated with Strap Ravine and other areas that sustain shallow water well into the dry season.

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**Table 6-2
Special-Status Plants with Potential to Occur within Project Sites¹**

Common and Scientific Name	Fed / State / CNPS Status ²	Habitat Requirements	Potential for Occurrence
El Dorado County mules ears <i>Wyethia reticulata</i>	FE / -- / 1B.2	Chaparral, cismontane woodland (gabbroic or serpentinite) between 585 and 1,924 feet.	No Habitat Present. Study area lacks gabbro and/or serpentine soils.
<p>¹ The CNDDDB was queried for all plants and wildlife listed under the FESA and CESA, as well as CDFW species of special concern and fully protected species. A query area of five miles surrounding the project sites was used.</p> <p>² FT = Federally Threatened; FE = Federally Endangered; CE = California Endangered; CR = California Rare; CNPS = California Native Plant Society; Rank 1B = Rare, threatened, or endangered in California and elsewhere; Rank 2 = Rare, threatened, or endangered in California, but more common elsewhere; Rank 3 = Plants which more information is needed</p> <p>CNPS Threat Rank Extensions: .1 = Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat) .2 = Fairly endangered in California (20 to 80% of occurrences threatened) .3 = Not very endangered in California (less than 20% of occurrences threatened or no current threats known)</p> <p>Sources:</p> <ul style="list-style-type: none"> • <i>Salix Consulting, Inc., 2014, 2016.</i> • <i>California Natural Diversity Database. August 2018.</i> 			

Within the nine-quadrant region surrounding the study area, 16 special-status plants are known to occur; however, the study area only includes potential habitat for two of the 16 species, Sanford's arrowhead (*sagittaria sanfordii*) and Big-scale balsamroot (*Balsamorhiza macrolepis*). Considering that the study area does not include suitable habitat for the other 14 species, further consideration of such species is not provided in this EIR. The two identified species with the potential to occur within the study area are discussed in further detail below.

Big-scale Balsamroot

Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) is an herbaceous perennial member of the sunflower family (*Asteraceae*). The species does not have State or federal status, but has a California Rare Plant Rank of 1B.2. The species has large yellow flowering heads and leaves that arise from the ground. Big-scale balsamroot differs, in part, from other balsamroots by having coarsely serrate leaves. The species grows in open woodlands and grasslands at widely scattered locations in Northern California, and blooms from March to June.

The nearest recorded occurrence of big-scale balsamroot is approximately six miles northwest of the study area, just west of State Route (SR) 65, between Roseville and Lincoln. Big-scale balsamroot was not identified on either project site during field assessments conducted in 2014 or during subsequent field visits conducted in 2015, associated with rare plant surveys of both project sites independently. The 2015 field assessments were conducted by Salix Consulting during the blooming period for the species; however, the species was not identified on either project site during the field surveys. The unmined areas of foothill woodland within the WHI and WHII project

sites and the grassland habitat within the WHII project site represent marginal quality habitat for the species. Because only marginal quality habitat occurs within the project sites, the potential for occurrence of big-scale balsamroot is low.

Sanford's Arrowhead

Sanford's arrowhead (*Sagittaria sanfordii*) is an herbaceous perennial member of the water-plantain family (*Alismataceae*). The species does not have State or federal status, but has a CNPS Rare Plant Rank of 1B.2. Preferred habitat includes marshes associated with slow moving water in sloughs and ditches. Sanford's arrowhead is also known to occur in concrete-lined channels with only a few inches of soil. The species has a long blooming period, starting as early as May and occasionally lasting until October.

The nearest recorded occurrence of Sanford's arrowhead is approximately 3.7 miles to the south west of the study area. Sanford's arrowhead was not identified within either project site during field assessments in 2014 or during subsequent field assessments conducted in 2015 as part of the rare plant surveys for each project site. Field assessments associated with the rare plant surveys of each site were performed by Salix Consulting during the blooming period for the species. Although previous field assessments failed to identify the species within the project sites, Strap Ravine and other wetland areas within the project sites may provide marginal habitat for the species.

Listed and Special-Status Wildlife

The queries of the CNDDDB and USFWS species lists show that four invertebrates, three fish, four amphibians, one reptile, nine birds, and two mammals have the potential to occur in the vicinity of the project site. Information including common and scientific name, habitat requirements, and an assessment of potential for occurrence within the study area are detailed in Table 6-3. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability of the sites, and field observations.

Common and Scientific Name	Fed / State Status ²	Habitat Requirements	Potential for Occurrence
Invertebrates			
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT / --	Vernal pools or other seasonally ponded wetlands.	No Habitat Present. Study area lacks suitable vernal pool habitat.
Conservancy fairy shrimp <i>Brachinecta conservatio</i>	FE / --	Vernal pools.	No Habitat Present. Study area lacks suitable vernal pool habitat.
Vernal pool tadpole shrimp <i>Lepidurus packardi</i>	FE / --	Vernal pools.	No Habitat Present. Study area lacks suitable vernal pool habitat.

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Table 6-3			
Special-Status Wildlife with Potential to Occur within Five-Mile Vicinity of Project Area¹			
Common and Scientific Name	Fed / State Status²	Habitat Requirements	Potential for Occurrence
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT / --	Dependent upon blue elderberry plant (<i>Sambucus nigra</i> ssp. <i>caerulea</i>) as primary host species.	No Habitat Present. Elderberry shrubs have been observed to the northeast of the WHII project site, south of Douglas Boulevard. Off-site improvements associated with the WHII project (e.g., water line in Douglas) would not affect the existing shrubs, and shrubs do not exist within the project sites. Due to the lack of elderberry shrubs within the proposed disturbance areas, no adverse effects would result.
Fish			
Delta Smelt <i>Hypomesus transpacificus</i>	FT / CE	Adults are found in the brackish open surface waters of the Delta and Suisun Bay. Though spawning has never been observed, it is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	No Habitat Present. Study area is outside of the species' known range.
Steelhead – Central Valley ESU <i>Oncorhynchus mykiss irideus</i>	FE/--	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	Low. Strap Ravine provides marginal quality habitat for species. Known occurrences throughout Dry Creek system.
Central Valley spring-run Chinook salmon <i>Oncorhynchus tshawytscha</i>	FT / CT	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	No Habitat Present. Study area is outside of the species' known range.
Amphibians and Reptiles			
California tiger salamander <i>Ambystoma californiense</i>	FT / CT	Annual grassland habitat (<1500 feet) and occasionally in grassy understory of valley-foothill hardwood habitats where lowland aquatic sites are available for breeding. Breeds primarily in deeper vernal pools.	No Habitat Present. Suitable habitat does not occur within the study area or in surrounding areas. Species not known to occur in Placer County.
Western pond turtle <i>Emys marmorata</i>	-- / SSC	Ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	Low. Suitable aquatic habitat not present within the study area. Species may use portions

(Continued on next page)

Table 6-3			
Special-Status Wildlife with Potential to Occur within Five-Mile Vicinity of Project Area¹			
Common and Scientific Name	Fed / State Status²	Habitat Requirements	Potential for Occurrence
			of Strap Ravine as a movement corridor between suitable habitats located off-site.
Western spadefoot toad <i>Spea hammondi</i>	-- / SSC	Found in grasslands, scrub, chaparral, and oak woodlands within the central valley.	No Habitat Present. Suitable aquatic breeding habitat not observed within the study area. More frequently found in seasonal wetlands within Sacramento Valley to the west of the project site.
Foothill yellow-legged frog <i>Rana boylei</i>	-- / SSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes found in isolated pools vegetated backwaters, and deep, shaded, spring-fed pools.	No Habitat Present. Suitable permanent aquatic habitats not present within the study area.
California red-legged frog <i>Rana draytonii</i>	FT / SSC	Breeds in permanent to semi-permanent aquatic habitats including lakes, ponds, marshes, creeks, and other drainages.	No Habitat Present. Suitable permanent aquatic habitats not present within study area. Only one documented occurrence in Placer County.
Giant garter snake <i>Thamnophis gigas</i>	FT / CT	Prefers freshwater marsh, gradient streams, swamp, and riparian scrub. Has adapted to drainage canals and irrigation ditches.	No Habitat Present. Suitable habitat not located within the study area or in proximity to the study area. Occurrences have not been documented within region.
Birds			
Tricolored blackbird <i>Agelaius tricolor</i>	-- / CT	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	Low. Marginal quality nesting habitat available within study area. Limited amount of open foraging habitat available.
Grasshopper sparrow <i>Ammodramus savannarum</i>	-- / SSC	Breeds in grassland and savannahs in rolling hills and lower mountain hillsides up to 5,000 feet elevation. Native bunchgrasses are often an important component throughout portions of species range.	No Habitat Present. Suitable nesting habitat not present within study area. Species prefers expansive areas of grassland for nesting.
Burrowing owl <i>Athene cunicularia</i>	-- / SSC	Open, dry annual or perennial grasslands characterized by low-growing vegetation.	No Habitat Present. Study area does not contain areas of low-growing vegetation.
Golden Eagle <i>Aquila chrysaetos</i>	-- / FP	Found in rolling foothill grassland with scattered trees. Nests on cliffs and in large trees in open areas.	No Habitat Present. Suitable nesting and foraging habitat absent from study area.

(Continued on next page)

Table 6-3			
Special-Status Wildlife with Potential to Occur within Five-Mile Vicinity of Project Area¹			
Common and Scientific Name	Fed / State Status²	Habitat Requirements	Potential for Occurrence
Swainson's hawk <i>Buteo swainsoni</i>	-- / CT	Great Basin grassland, riparian forest and woodlands, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, savannahs, and agricultural or ranch lands with groves or lines of trees.	No Habitat Present. Suitable nesting and foraging habitat absent from study area. Study area located outside of typical species range.
White-tailed kite <i>Elanus leucurus</i>	-- / FP	Nests in riparian corridors along streams and rivers, and forages in nearby grasslands and fields.	Low. Species prefers nesting in closer proximity to large tracts of open foraging habitat.
Bald Eagle <i>Haliaeetus leucocephalus</i>	-- / CE, FP	Occurs along shorelines, lake margins, and rivers. Nests in large old-growth or dominant trees with open branch structures.	No Habitat Present. Suitable nesting and foraging habitat absent from study area.
California black rail <i>Laterallus jamaicensis coturniculus</i>	-- / CT, FP	Nests and forages in salt, brackish, and fresh marshes with abundant vegetative cover.	Low. Marginal quality habitat present on-site. Wetlands lack persistent shallow water preferred by species.
Purple martin <i>Progne subis</i>	-- / SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, & Monterey pine.	Low. Prefers large trees with cavities on hillsides and along ridgetops.
Bank swallow <i>Riparia riparia</i>	-- / CT	Colonial nester in vertical cliffs and banks associated with riparian zones along streams, rivers, and lakes.	No Habitat Present. Tall, vertical cliffs with sandy soils do not occur along Strap Ravine within the study area.
Mammals			
Pallid Bat <i>Antrozous pallidus</i>	-- / SSC	Occurs in a variety of habitats including woodlands and grasslands. Roosts in caves, rock crevices, tree hollows and buildings.	No Habitat Present. Suitable roosting habitat absent from the study area. Study area lacks structures or significant rock features that could support roosting species.
American badger <i>Taxidea taxus</i>	-- / SSC	Shrub, forest, and herbaceous habitats with dry, friable soils.	No Habitat Present. Evidence of species not observed during site visits, suitable habitat not present within study area.
<p>¹ The CNDDDB was queried for all plants and wildlife listed under the FESA and CESA, as well as CDFW species of special concern and fully protected species. A query area of five miles surrounding the project sites was used.</p> <p>² FT = Federally Threatened; FE = Federally Endangered; CE = California Endangered; CT = California Threatened; SSC = Species of Special Concern; FP = Fully Protected</p> <p>Sources:</p> <ul style="list-style-type: none"> • Salix Consulting, Inc., 2014, 2016. • California Natural Diversity Database. August 2018. 			

Of the 23 special-status animals identified through the database searches and other literature as occurring within the broader region surrounding the study area, 19 species were determined not to

have the potential for occurring within the study area due to the absence of suitable habitat. Special-status species with some potential to occur are discussed below.

Fish

The following section describes the special-status fish species with the potential to occur within the study area.

Central Valley Steelhead

Steelhead (*Oncorhynchus mykiss irideus*) populations in the Central Valley evolutionary significant unit (ESU) have been listed by the National Marine Fisheries Service (NMFS) under the FESA as Endangered. The Central Valley Steelhead is an anadromous form of rainbow trout that emigrates to the sea and later returns to freshwater to spawn. Steelhead spawn in winter or early spring after salmon have typically spawned. The species often require high water to provide access to upper watershed and spawning and rearing areas. Spawning occurs in clean, loose gravels and swift, shallow water. Steelhead generally prefer shallower stream depths and smaller gravel than salmon, but prefer similar water velocities. Juvenile steelhead often remain in freshwater for at least one year before out-migrating to the ocean. While in freshwater, young steelhead are typically found in cool, fast-flowing permanent streams and rivers where riffles predominate over pools and there is ample riparian and instream cover.

The CNDDDB documents steelhead occurring in the Dry Creek system, mainly in two tributaries to the north of the study area, including Secret Ravine and Miner's Ravine. Although steelhead occur within the Dry Creek system, in light of the historic disturbance of Strap Ravine due to previous mining activity, the GBCP concluded that Strap Ravine does not provide habitat for anadromous salmonids, including steelhead. Furthermore, Strap Ravine is not designated as critical habitat for the species. Nevertheless, according to Salix Consulting, Strap Ravine may act as a migration corridor if barriers to the movement of the species do not exist. The species was not observed during field assessments of the study area.

Reptiles

The following section describes the special-status reptile species with the potential to occur within the study area.

Western Pond Turtle

Western pond turtle (*Emys marmorata*), an SSC species, occurs in association with streams, rivers, and ponds containing suitable cover and basking sites. The species is normally associated with ponds, streams, lakes, marshes, and permanent pools along intermittent streams. Suitable basking sites along streams or ponds include partially submerged logs, rocks, mats of floating vegetation, or open streambanks. Suitable upland habitat, such as sandy banks or grassy fields, located adjacent to the aquatic habitat is

required for egg-laying. Nesting takes place in a variety of soil types from loose sandy soils to compact soils, and in a variety of habitat types.

Due to the shallow depth and lack of deep perennial pools within the study area, Strap Ravine does not provide suitable nesting, basking, or upland habitat for the species. However, Strap Ravine may act as a movement corridor for the species between habitat areas up and downstream from the study area. The species was not observed during field assessments of the study area.

Birds

The following section describes special-status bird species with the potential to occur within the study area.

Tricolored Blackbird

On April 19, 2018, the CDFW listed the tricolored blackbird (*Agelaius tricolor*) as threatened under CESA. The listing follows a 55 percent decline in the statewide population of the bird between the years 2008 and 2018.

The species generally requires open water with protected nesting habitat and suitable foraging areas close to the colony. The nearest CNDDDB documented nesting colony is approximately one mile southwest of the study area, south of Eureka Road. The blackberry thickets present within the study area, primarily along Strap Ravine, provide suitable nesting substrate for the species, but the amount of suitable foraging habitat available nearby is limited. The species was not observed during field assessments of the study area. Due to the low quality of habitat available for the species within the study area, the likelihood that tricolored blackbirds would nest within the study area is low.

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is a CDFW fully protected species. The non-migrating bird typically attains a wingspan of approximately 40 inches and feeds primarily on insects, small mammals, reptiles, and amphibians, which the species forages from open grasslands. White-tailed kite build a platform-like nest of sticks in trees or shrubs and lay three to five eggs, but may brood a second clutch if prey is abundant. The kite's distinct style of hunting includes hovering before diving onto the target.

The closest nesting occurrence of the species is approximately two miles southwest of the study area. Considering the limited amount of open foraging habitat, such as open woodland or annual grassland, within proximity to the study area, the study area provides only marginal quality nesting habitat for white-tailed kite. The species was not observed during field assessments of the study area.

California Black Rail

The California black rail (*Laterallus jamaicensis coturnculus*) is a scarce bird that occurs in saline, brackish, and freshwater wetlands. In the foothills region, the species is known to occur in wetlands with dense emergent vegetation, such as cattails and bulrush, where water levels are shallow and consistent, often from irrigation or leaky canals. According to the CNDDDB California black rails have not been documented within a five-mile radius of the study area. The closest documented occurrence is to the north of the study area in a large, cattail-dominated wetland associated with Clover Valley Creek. The seasonal wetlands, wetland swale, and riparian corridor of the study area do not provide habitat components considered suitable for the species. The species was not observed during field assessments of the study area.

Purple Martin

Purple martin (*Progne subis*) is uncommon in the Sierra Nevada and foothill region. Nesting usually takes place in tall, old trees or snags located near water. The CNDDDB documents one known occurrence of purple martin within the project region, which was recorded near the SR 65 overpass over Taylor Road. Snags and tree cavities located throughout the sites provide suitable nesting habitat for purple martin. Therefore, despite the rarity of this species within the region, nesting of purple martin within the project sites is considered possible. The species was not observed during field assessments of the study area.

Migratory Birds

The study area provides habitat for several migratory birds protected under the federal Migratory Bird Treaty Act (MBTA), including woodland hawks such as red-shouldered hawk and Cooper's hawk. A red-shouldered hawk nest was observed within the WHI project site in 2016, and Cooper's hawk nests were observed in both the WHI and WHII sites. During the 2016 bird surveys of the WHI and WHII sites performed by Salix Consulting, active nesting activity was occurring or had recently occurred on both sites. Furthermore, a red-tailed hawk nest was identified in the WHI site during the 2016 survey. Other common migratory birds observed within the study area include, but are not limited to: ash-throated Flycatcher (*Myiarchus cinerascens*), American crow (*Corvus brachyrhynchos*), brewer's blackbird (*Euphagus cyanocephalus*), bushtit (*Psaltriparus minimus*), house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), house wren (*Troglodytes aedon*), hutton's vireo (*Vireo huttoni*), black phoebe (*Sayornis nigricans*), mallard (*Anas platyrhynchos*), western scrub jay (*Aphelocoma caerulescens*), turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), white-crowned sparrow (*Zonotrichia leucophrys*), and wood duck (*Aix sponsa*).

In addition to the hawk nests previously discussed, the 2016 bird surveys of the project sites documented a house wren nest as well as a wood duck and ducklings within the WHII project site, and a mallard with ducklings as well as two turkey nests with poults. The foregoing listed birds, as well as other migratory species, have the potential to nest within the study area.

Trees

This section discusses individual trees within the project study area. For a discussion of general woodland habitats, please refer to the on-site vegetation communities/habitats section above. The Placer County Tree Preservation Ordinance (Article 12.16 of the Placer County Municipal Code) regulates the encroachment of construction activities into protected zones of protected trees and the removal of any protected trees. Protected trees are defined as any native tree species with a diameter at breast height (DBH) of six inches or greater (except gray pine trees, *Pinus sabiniana*) or multiple trunk trees with an aggregate diameter of 10 inches or greater. The Ordinance regulates both the removal of trees and the encroachment of construction activities into protected tree zones. Furthermore, the Ordinance prohibits the removal of landmark trees, trees located in designated Tree Preservation Zones, and trees within riparian areas. In addition to the foregoing restrictions for landmark trees, the County’s 2008 *Interim Guidelines for Evaluating Development Impacts on Oak Woodland* (Interim Guidelines) establishes specific mitigation requirements for any “Significant Trees” (generally trees greater than 24 inches DBH or clumps of trees greater than 72 inches in circumference measured at ground level). Mitigation for Significant Trees must be completed in addition to any mitigation required by the County’s Tree Preservation Ordinance.

Per the regulations within Article 12.16, of the Placer County Code, trees meeting the County’s standards for protection were tagged, identified and assessed within the WHI project site, the WHII project site, and the off-site EVA and construction access areas. Trees within the study area are discussed in further depth below.

WHI

Out of the 433 trees present within the WHI project site, 429 oak trees within the WHI site meet the Placer County Code tree preservation requirements. Two trees are protected species but are too small and do not meet the threshold for protection. Of the oak trees that meet the Placer County Code’s tree preservation requirements, 19 percent (80 trees) are blue oaks, 6 percent (25 trees) are Valley oak, and 76 percent (324 trees) are interior live oak. The WHI project site contains seven individual trees identified as Significant Trees under the County’s Interim Guidelines. A summary of the conditions of trees identified within the WHI project site is provided in Table 6-4. As discussed above, the disturbance history associated with mining appear to have contributed to the preponderance of relatively poor quality oaks.

Table 6-4 Tree Condition WHI and WHII			
Condition	WHI	WHII	EVA and Construction Access
Excellent	0	1	1
Fair or Good	107	567	40
Poor	192	341	20
Dangerous	130	132	2
Dead	3	3	0
<i>Source: Abacus Consulting Arborists, 2014 and 2018.</i>			

WHII

The WHII project site contains 1,053 total trees, with 1,044 of such trees being oak trees that meet the Placer County Code's tree preservation requirements. Nine trees are protected species but are too small and do not meet the threshold for protection. Of the 1,044 oak trees meeting Placer County Code's tree preservation requirements, 31 percent (323 trees) are blue oak, two percent (21 trees) are Valley oak, and 67 percent (700 trees) are interior live oak.

The off-site EVA and construction access areas contain 63 trees that qualify as protected trees per the Placer County Code Standards. Of the trees surveyed within the off-site EVA and construction access area, 67 percent (42 trees) are interior live oak, 22 percent (14 trees) are blue oak, 10 percent (six trees) are cottonwood, and two percent (one tree) are Valley oak. The condition of all trees within the WHII project site and the off-site EVA and construction access area are presented in Table 6-4. As discussed above, the disturbance history associated with mining appear to have contributed to the preponderance of relatively poor quality oaks.

The WHII project site contains 33 individual trees identified as Significant Trees under the County's Interim Guidelines. The EVA area and the construction access area do not contain any trees identified as significant.

6.3 REGULATORY CONTEXT

A number of Federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the study area.

Federal Regulations

The following are the Federal environmental laws and policies relevant to biological resources.

Federal Endangered Species Act

Under the FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC § 1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while NMFS has jurisdiction over anadromous fish and marine fish and mammals. Section 7 of the FESA mandates that federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. The FESA prohibits the 'take' of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery. Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan (HCP) that would offset the take of individuals

that may occur, incidental to implementation of a proposed project, by providing for the protection of the affected species.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within the jurisdiction of the agency must determine whether any federally listed threatened or endangered species may be present in the project area and whether the proposed project will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536(3), (4)).

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal MBTA prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Wildlife Code states, “It is unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

Clean Water Act (CWA)

The United States Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the United States under Section 404 of the CWA. “Discharge of fill material” is defined as the addition of fill material into Waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 C.F.R. §328.2[f]). In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 C.F.R. §328.3[b]).

Furthermore, Jurisdictional Waters of the United States can be defined by exhibiting a defined bed and bank and an ordinary high water mark (OHWM). The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of

the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 C.F.R. §328.3[e]).

State Regulations

The following are the State environmental laws and policies relevant to biological resources.

California Department of Fish and Wildlife

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the California Fish and Game Code (FGC), such as CESA (FGC Section 2050, et seq.), Fully Protected Species (FGC Section 3511) and the Lake or Streambed Alteration Agreement Program (FGC Sections 1600 to 1616). Such regulations are summarized in the following sections.

California Endangered Species Act

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that “overriding considerations” exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

CESA prohibits the taking of State-listed endangered or threatened plant and wildlife species. CDFW exercises authority over mitigation projects involving State-listed species, including those resulting from CEQA mitigation requirements. CDFW may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFW requires preparation of mitigation plans in accordance with published guidelines.

Fish and Game Code Section 3505

Birds of prey are protected in California under provisions of the California FGC, Section 3503.5, (1992), which states, “it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFW.

Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California’s fish, wildlife, and native plant resources. To meet this responsibility, the FGC, Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into a Lake or Streambed Alteration Agreement.

CDFW Species of Special Concern

In addition to formal listings under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of “Species of Special Concern” developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

Regional Water Quality Control Board (RWQCB)

Pursuant to Section 401 of the CWA and EPA 404(b)(1) guidelines, in order for a USACE federal permit applicant to conduct any activity which may result in discharge into navigable waters, they must provide a certification from the RWQCB that such discharge will comply with the State water quality standards. The RWQCB has a policy of no-net-loss of wetlands in effect and typically requires mitigation for all impacts to wetlands before the RWQCB will issue water quality certification.

Under the Porter-Cologne Water Quality Control Act (Cal. Water Code Section 13000-14920), the RWQCB is authorized to regulate the discharge of waste that could affect the quality of the State’s waters. Therefore, even if a project does not require a federal permit (i.e., a Nationwide Permit from the USACE), the project may still require review and approval by the RWQCB, in light of the approval of new NWP’s on March 9, 2000 and the Supreme Court’s decision in the case of the Solid Waste Agency of Northern Cook County (SWANCC) vs. USACE. The RWQCB in response to this, issued guidance for regulation of discharges to “isolated” water on June 25, 2004. The guidance states:

Discharges subject to Clean Water Act section 404 receive a level of regulatory review and protection by the USACE and are also subject to streambed alteration agreements issued by the CDFW; whereas discharges to waters of the State subject to SWANCC receive no federal oversight and usually fall out of CDFW jurisdiction. Absent of RWQCB attention, such discharges will generally go entirely unregulated. Therefore, to the extent that staffing constraints require the RWQCB to regulate some dredge and fill discharges of similar extent, severity, and permanence to federally-protected waters of similar value. Dredging, filling, or excavation of “isolated” waters constitutes a discharge of waste to waters of the State, and prospective dischargers are required to submit a report of waste discharge to the RWQCB and comply with other requirements of Porter-Cologne.

When reviewing applications, the RWQCB focuses on ensuring that projects do not adversely affect the “beneficial uses” associated with waters of the State. Generally, the RWQCB defines beneficial uses to include all of the resources, services and qualities of aquatic ecosystems and underground aquifers that benefit the State. In most cases, the RWQCB seeks to protect these beneficial uses by requiring the integration of water quality control measures into projects that will result in discharge into waters of the State. For most construction projects, RWQCB requires the use of construction and post-construction Best Management Practices (BMPs). In many cases, proper use of BMPs, including bioengineering detention ponds, grassy swales, sand filters, modified roof techniques, drains, and other features, will speed project approval from RWQCB. Development setbacks from creeks are also requested by RWQCB as they often lead to less creek-related impacts in the future.

California Native Plant Society

CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review. The following identifies the definitions of the CNPS listings:

- List 1A: Plants believed extinct.
- List 1B: Plants rare, threatened, or endangered in California and elsewhere.
- List 2: Plants rare, threatened, or endangered in California, but more numerous elsewhere.
- List 3: Plants about which we need more information - a review list.
- List 4: Plants of limited distribution - a watch list.

Senate Bill 1334

Effective January 1, 2005, Senate Bill 1334 established Public Resources Code Section 21083.4, the State’s first oak woodlands conservation standards under CEQA. This new law creates the following two requirements for counties: 1) Counties must determine whether or not a project that results in the conversion of oak woodlands will have a significant effect; and 2) If there may be a significant effect, counties must employ one or more of the following mitigation measures:

- Conserving oaks through the use of conservation easements;
- Planting and maintaining an appropriate number of trees either on-site or in restoration of former oak woodlands (tree planting is limited to half the mitigation requirement);
- Contributing funds to the Oak Woodlands Conservation Fund for the purpose of purchasing land or conservation easements; or
- Other mitigation measures developed by the County.

Local Regulations

The following are the local environmental laws and policies relevant to biological resources.

Placer County General Plan

The goals and policies from the Placer County General Plan that pertain to biological resources are presented below.

Water Resources

Policy 6.A.1 The County shall require the provision of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones, wetlands, old growth woodlands, and the habitat of special status, threatened or endangered species (see discussion of sensitive habitat buffers in Part I of this Policy Document). Based on more detailed information supplied as a part of the review for a specific project or input from state or federal regulatory agency, the County may determine that such setbacks are not applicable in a particular instance or should be modified based on the new information provided. The County may, however, allow exceptions, such as in the following cases:

1. Reasonable use of the property would otherwise be denied;
2. The location is necessary to avoid or mitigate hazards to the public;
3. The location is necessary for the repair of roads, bridges, trails, or similar infrastructure; or
4. The location is necessary for the construction of new roads, bridges, trails, or similar infrastructure where the County determines there is no feasible alternative and the project has minimized environmental impacts through project design and infrastructure placement.

Policy 6.A.3 The County shall require development projects proposing to encroach into a stream zone or stream setback to do one or more of the following, in descending order of desirability:

- a) Avoid the disturbance of riparian vegetation;
- b) Replace all functions of the existing riparian vegetation (on-site, in-kind);

- c) Restore another section of stream (in-kind); and/or
- d) Pay a mitigation fee for in-kind restoration elsewhere (e.g., mitigation banks).

Policy 6.A.4 Where stream protection is required or proposed, the County should require public and private development to:

- a) Preserve stream zones and stream setback areas through easements or dedications. Parcel lines (in the case of a subdivision) or easements (in the case of a subdivision or other development) shall be located to optimize resource protection. If a stream is proposed to be included within an open space parcel or easement, allowed uses and maintenance responsibilities within that parcel or easement should be clearly defined and conditioned prior to map or project approval;
- b) Designate such easement or dedication areas (as described in a. above) as open space;
- c) Protect stream zones and their habitat value by actions such as: 1) providing an adequate stream setback, 2) maintaining creek corridors in an essentially natural state, 3) employing stream restoration techniques where restoration is needed to achieve a natural stream zone, 4) utilizing riparian vegetation within stream zones, and where possible, within stream setback areas, 5) prohibiting the planting of invasive, non-native plants (such as *Vinca major* and eucalyptus) within stream zones or stream setbacks, and 6) avoiding tree removal within stream zones;
- d) Provide recreation and public access near streams consistent with other General Plan policies;
- e) Use design, construction, and maintenance techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas; and/or are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas;
- f) Provide for long-term stream zone maintenance by providing a guaranteed financial commitment to the County which accounts for all anticipated maintenance activities.

Policy 6.A.5 The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff and to encourage the use of BMPs for agricultural activities.

Wetland and Riparian Areas

- Policy 6.B.1 The County shall support the "no net loss" policy for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.
- Policy 6.B.2 The County shall require new development to mitigate wetland loss in both federal jurisdictional and non-jurisdictional wetlands to achieve "no net loss" through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation, including use of a mitigation and conservation banking program that provides the opportunity to mitigate impacts to special status, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas. Non-jurisdictional wetlands may include riparian areas that are not federal "waters of the United States" as defined by the Clean Water Act.
- Policy 6.B.3 The County shall discourage direct runoff of pollutants and siltation into wetland areas from outfalls serving nearby urban development. Development shall be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.
- Policy 6.B.4 The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the survival and nesting of wetland and riparian species.
- Policy 6.B.5 The County shall require development that may affect a wetland to employ avoidance, minimization, and/or compensatory mitigation techniques. In evaluating the level of compensation to be required with respect to any given project, (a) on-site mitigation shall be preferred to off-site, and in-kind mitigation shall be preferred to out-of-kind; (b) functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan; and (c) acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied, including compensation for temporal losses. The County shall continue to implement and refine criteria for determining when an alteration to a wetland is considered a less-than significant impact under CEQA.

Fish and Wildlife Habitat

- Policy 6.C.1 The County shall identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:
- a) Wetland areas including vernal pools.

- b) Stream zones.
- c) Any habitat for special status, threatened, or endangered animals or plants.
- d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
- e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, and vernal pool/grassland complexes.
- f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.
- g) Important spawning and rearing areas for anadromous fish.

Policy 6.C.2 The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.

Policy 6.C.3 The County shall encourage the control of residual pesticides to prevent potential damage to water quality, vegetation, fish, and wildlife.

Policy 6.C.4 The County shall encourage private landowners to adopt sound fish and wildlife habitat management practices, as recommended by California Department of Fish and Wildlife officials, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, and the Placer County Resource Conservation District.

Policy 6.C.6 The County shall support preservation of the habitats of threatened, endangered, and/or other special status species. Where County acquisition and maintenance is not practicable or feasible, federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.

Policy 6.C.7 The County shall support the maintenance of suitable habitats for all indigenous species of wildlife, without preference to game or non-game species, through maintenance of habitat diversity.

Policy 6.C.9 The County shall require new private or public developments to preserve and enhance existing riparian habitat unless public safety concerns require removal of habitat for flood control or other essential public purposes (See Policy 6.A.1.). In cases where new private or public development results in modification or destruction of riparian habitat the developers shall be responsible for acquiring, restoring, and enhancing at least an equivalent amount of like habitat within or near the project area.

Policy 6.C.11 Prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the County shall require, as part of the environmental review process, a biotic resources evaluation of the sites by a wildlife

biologist, the evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of special status, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the decision-making body shall determine the feasibility of the identified mitigation measures. Significant ecological resource areas shall, at a minimum, include the following:

- a) Wetland areas including vernal pools.
- b) Stream zones.
- c) Any habitat for special status, threatened or endangered animals or plants.
- d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
- e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, vernal pool/grassland complexes habitat.
- f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.
- g) Important spawning and rearing areas for anadromous fish.

Policy 6.C.13 The County shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered or threatened species and their habitats, wetland habitats, wildlife migration corridors, and locally important species/communities.

Vegetation

Policy 6.D.3 The County shall support the preservation of outstanding areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, and vernal pools.

Policy 6.D.4 The County shall ensure that landmark trees and major groves of native trees are preserved and protected. In order to maintain these areas in perpetuity, protected areas shall also include younger vegetation with suitable space for growth and reproduction.

Policy 6.D.5 The County shall require that new development preserve natural woodlands to the maximum extent possible.

Policy 6.D.14 The County shall require that new development avoid, as much as possible, ecologically-fragile areas (e.g., areas of rare or endangered species of plants, riparian

areas). Where feasible, these areas should be protected through public acquisition of fee title or conservation easements to ensure protection.

Granite Bay Community Plan

The following goals and policies from the GBCP related to biological resources are applicable to the proposed project.

Natural Resources

- Goal 5.2.1 Preserve and protect the natural features and resources of the community, which is essential to maintaining the quality of life within the community.
 - Goal 5.2.2 Protect the quality of air and water resources consistent with adopted federal, state and local standards.
 - Goal 5.2.3 Ensure that land use planning contributes to the protection, improvement, and restoration of water resources and that all new development has a minimum impact on the established natural environment.
 - Goal 5.2.6 Encourage public and private stewardship and partnerships directed to restoring, enhancing, and maintaining the natural environment.
- Policy 5.3.1 The natural resources and features of a site proposed for development shall be one of the planning factors determining the scope and magnitude of development.
 - Policy 5.3.2 Particular attention shall be given to protection of the natural regiment in the planning, environmental review, and completion of all subdivisions, land development or land alteration projects.
 - Policy 5.3.3 Removal of vegetation shall be minimized and where removal is necessary, replanting for erosion control, maximizing reoxygenation, and retaining the aesthetic qualities of the community.
 - Policy 5.3.4 Project landscaping shall emphasize the use of native rather than exotic plants. In areas of high fire risk, however, it may be preferable to introduce carefully chosen exotics with high fire resistance characteristics.
 - Policy 5.3.5 Continue to identify and preserve any rare, significant or endangered environmental features and conditions.
 - Policy 5.3.6 Encourage the use of ecologically innovative techniques in future development.

- Policy 5.3.8 All stream influence areas, including floodplains and riparian vegetation areas shall be retained in their natural condition, while allowing for limited stream crossings for public roads, trails, and utilities.
- Policy 5.3.9 Site-specific surveys shall be required prior to development to delineate wetlands and vernal pools in the Granite Bay Community Plan area. All development proposals involving wetlands shall be coordinated with the California Department of Fish and Game, Corps of Engineers, and U.S. Fish and Wildlife Service. A "no-net-loss" policy requiring preservation of all wetland sites or preservation of priority wetlands and compensation for wetland losses should continue to be implemented by these agencies.
- Policy 5.3.10 The standards of the Placer County Grading Ordinance and this Resources section of the Granite Bay Community Plan shall be implemented for all projects in the Granite Bay area.
- Policy 5.3.11 New construction shall not be permitted within 100 feet of the centerline of permanent streams and 50' of intermittent streams, or within the 100 year floodplain, whichever is greater.
- Policy 5.3.13 Protect sensitive habitats such as wetlands, riparian areas, and oak woodlands against any significant disruption or degradation of habitat values. Utilize the following design and use regulations on parcels containing or in close proximity to these resources, excluding existing agricultural operations:
- Structures shall be placed as far from the habitat as feasible;
 - Delineate development envelopes to specify location of development in minor land divisions and subdivisions;
 - Require easements, deed restrictions, or equivalent measures to protect that portion of a sensitive habitat on a project which is to be undisturbed by a proposed development activity or to protect sensitive habitats on adjacent parcels;
 - Limit removal of native vegetation to the minimum amount necessary for structures, landscaping/gardens, driveways, parking lots, and where applicable, septic systems; and,
 - Prohibit landscaping with invasive or exotic species and encourage the use of characteristic native species.
- Policy 5.3.14 Individual sites and properties can contribute to the health of the environment by incorporating measures such as:

- Using renewable energy sources such as solar or geothermal energy;
- Planting additional trees in appropriate locations;
- Managing storm water runoff using storm water best management practices;
- Naturalizing landscapes with native, non-invasive species; and,
- Installing ‘green roofs’ or light-colored roofs.

Policy 5.3.15 The County’s Tree Preservation Ordinance shall be implemented.

Open Space

- Goal 6.1.1 Preserve and enhance open space lands to maintain the natural resources and rural character of the Community Plan area.
- Goal 6.1.2 Protect and preserve those areas necessary to the integrity of the natural processes with special emphasis on, but not limited to, the water regimen.
- Goal 6.1.3 Protect and preserve open spaces vital for wildlife habitat and other areas of major or unique ecological significance.
- Goal 6.1.6 Provide open space for recreational needs and for the preservation of buildings and sites of archaeological, historical and cultural significance.
- Goal 6.1.7 Conserve the visual resources of the community including important vistas.
- Goal 6.1.8 Provide open space to shape and guide development and to enhance community identity.
- Policy 6.2.1 Encourage both private and public ownership and maintenance of open space.
- Policy 6.2.2 Protect natural areas along creeks and canals.
- Policy 6.2.3 Encourage scenic or greenbelt corridors along major transportation routes. Roads and other public works shall incorporate beauty as well as utility, safety, and economy.
- Policy 6.2.6 Open spaces should be linked visually and physically to form a system of open spaces. Where appropriate, trails shall connect open space areas. Dedication of easements shall be encouraged or required as lands are developed and built.

- Policy 6.2.7 Development on private lands should be planned and designed to provide for preservation of open space.
- Policy 6.2.9 In the design and development of new subdivisions, the following types of areas and features shall be preserved as open spaces to the maximum extent feasible: high hazard areas, scenic and trail corridors, streams, streamside vegetation, other significant stands of beneficial native vegetation, and any areas of special ecological significance.
- Policy 6.2.10 The County will use its implementing ordinances, such as subdivision and zoning, to assure that valuable open space resources on both public and private properties will be preserved.
- Policy 6.2.11 Native trees and woodlands shall be protected and enhanced by:
- Ensuring development and site alteration minimize impact to native trees;
 - Increasing tree canopy coverage and diversity by planting trees appropriate to the location;
 - Regulating the injury and destruction of trees on public and private property;
 - Providing public education and stewardship; and,
 - Enforcing the County's Tree Preservation Ordinance.

Placer County Conservation Plan

The draft Placer County Conservation Program (PCCP) was released in 2011, which proposes a streamlined strategy and permitting process for a range of covered activities in western Placer County for the next 50 years. The First Agency Review Draft PCCP establishes a conservation reserve area to protect and conserve special-status species and natural communities. The area covers approximately 269,502 acres, including important biological communities in western Placer County. The project site is located within the boundaries of the draft PCCP, in an area identified by the PCCP as a potential future growth area. The mitigation and conservation protocols that are applied through the PCCP are an equal to or greater functional equivalent mitigation standard for biological resources that are represented in this EIR. In the event the PCCP should be adopted prior to submittal of improvement plans for the project, then the protocols adopted with the PCCP would replace mitigation measures for the same effects as characterized within this EIR. The following statement follows all mitigation measures in this chapter of the EIR that are designed to address impacts to biological resources that could otherwise be mitigated through the PCCP:

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project, then Mitigation Measure XX may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation

document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

The statement identifies substitution mitigation, consistent with implementation of the PCCP, which addresses each specific biological resource area.

Placer County Tree Preservation Ordinance

The Placer County Tree Preservation Ordinance (Section 12.16) regulates the encroachment of construction activities into protected zones of protected trees and the removal of any protected trees. Protected trees are defined as any native tree species with a DBH of six inches or greater (except gray pines, *Pinus sabiniana*) or multiple trunk trees with an aggregate diameter of ten inches or greater. Each protected tree has a “Protected Zone,” which is a circle equal to the largest radius of a protected tree’s dripline plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the tree’s dripline. The Ordinance regulates both the removal of trees and the encroachment of construction activities into protected tree zones. In addition, the Ordinance prohibits the removal of landmark trees, trees located in designated Tree Preservation Zones, and trees within riparian areas.

Placer County Interim Oak Woodland Guidelines

The County enforces the above Tree Ordinance for cases of impacts to individual, isolated native trees; however, where tree crown canopy coverage is 10 percent/acre or greater, the woodland comprises an area greater than two acres, and the dominant tree species are native California oaks, the County regulates impacts to these areas as impacts to oak woodland under the 2008 Interim Guidelines. Under the Interim Guidelines, impacts to oak woodlands include all areas within 50 feet of the development footprint, and for every acre of oak woodland impacted, two acres of the same woodland type must be preserved off-site. In addition, any “significant trees” (generally trees greater than 24 inches in DBH or clumps of trees greater than 72 inches in circumference measured at ground level) impacted within the oak woodland must also be mitigated separately in accordance with the Tree Ordinance, above.

6.4 IMPACTS AND MITIGATION MEASURES

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

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines and the County’s Initial Study Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed projects would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish & Wildlife, U.S. Fish & Wildlife Service or National Oceanic and Atmospheric Administration Fisheries;
- Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species;
- Have a substantial adverse effect on the environment by converting oak woodlands;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community, including oak woodlands, identified in local or regional plans, policies or regulations, or by the California Department of Fish & Game, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers or National Oceanic and Atmospheric Administration Fisheries;
- Have a substantial adverse effect on federal or state protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nesting or breeding sites;
- Conflict with any local policies or ordinances that protect biological resources, including oak woodland resources; and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Method of Analysis

The information contained in this analysis is based on the various biological resources reports prepared for each project site, as well as the EVA area, by Salix Consulting, Inc., and discussed in the Introduction section of this Chapter.

Literature Review

A list of special-status species with potential to occur within the study area was developed by conducting a query of the following databases:

- CNDDDB query of the study area and all areas within five miles of the study area;
- USFWS Information for Planning and Conservation (IPaC) query for the study area;
- CNPS Rare and Endangered Plant Inventory query of the “Citrus Heights, California” USGS topo quadrangle, and the eight surrounding quadrangles; and
- BWBG Species Matrix.

In addition to the special-status species identified through the foregoing sources, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches, were also analyzed for their potential to occur within the study area.

During preparation of the biological resources assessments for each project site, Salix Consulting reviewed previous wetland delineations and biological resources assessments prepared by North Fork Associates.

Furthermore, Abacus Consulting Arborists prepared separate reports for the WHI,¹³ WHII,¹⁴ and EVA¹⁵ sites. The three arborist reports were reviewed and used to evaluate tree impacts associated with the proposed projects.

Field Surveys

Salix Consulting conducted multiple field surveys of each project site, as well as field surveys of the EVA area. Field surveys are summarized for each site below. It should be noted that protocol-level plant surveys are generally considered to be valid for three years.

WHI Site

During preparation of the Biological Resources Assessment¹⁶ for the WHI project site, Salix Consulting conducted a field survey on August 20, 2014. Further field surveys specifically intended to identify bird species present within the WHI site were conducted on May 9 and 13 of 2016.¹⁷ All of the site visits included pedestrian surveys of the project site, wherein biologists walked all habitats within the project site. The bird survey included observation through binoculars and identification of bird species through vocalizations. The bird surveys did not include any survey for special-status plant species, but the August 20, 2014 survey of the site included assessment of plant life within the WHI site. The August 20, 2014 field survey occurred during the blooming period for Sanford's arrowhead, but outside of the blooming period for big-scale balsamroot. Subsequent special-status plant surveys were performed on April 20, 2015 and May 20, 2015.¹⁸ The special-status plant surveys were timed to allow for the identification of special-status plants during the appropriate blooming period for such plants.

¹³ Abacus Consulting Arborists. *Preliminary Arborist Report & Oak Tree Inventory & Assessment For GB17*. October 15, 2014.

¹⁴ Abacus Consulting Arborists. *Preliminary Arborist Report & Oak Tree Inventory & Assessment For GB33*. October 15, 2014.

¹⁵ Abacus Consulting Arborists. *Preliminary Arborist Report & Oak Tree Inventory & Assessment For Whitehawk II, EVA Access Area*. March 9, 2018.

¹⁶ Salix Consulting, Inc. *Biological Resources Assessment for the 17-Acre Beaver Creek Study Area*. December 2014.

¹⁷ Salix Consulting, Inc. *Memorandum: Pre-Fuel Load Reduction bird survey – Whitehawk I property, Granite Bay*. May 26, 2016.

¹⁸ Salix Consulting, Inc. *Whitehawk I Project Rare Plant Survey*. January 14, 2016.

WHII Site

During preparation of the Biological Resources Assessment¹⁹ for the WHII project site, Salix Consulting conducted field surveys in May and August of 2014. Additional field studies intended to identify birds within the WHII project site were conducted on May 10, 11, and 12 of 2016,²⁰ while further studies intended to identify special-status plants within the site were conducted on April 20, May 1 and 20 of 2015.²¹ The special-status plant surveys were timed to allow for the identification of special-status plants during the appropriate blooming period for such plants.

EVA and Construction Access Areas

The proposed location of the EVA for the WHII project was surveyed on July 31, 2017 as well as February 7 and 14 of 2018. Field surveys of the EVA site included walking the easement area as well as the area anticipated to be used for construction access, adjacent to the EVA area and the WHII site.²² The July 31, 2017 survey occurred during the blooming period for big-scale balsamroot and Sanford's arrowhead.

Tree Evaluation

To document the existing on-site trees, Abacus Consulting Arborists prepared Arborist Reports for each project site as well as the EVA area. The Arborist Reports contain tree evaluations for all existing trees within each project site and the area to be used for the proposed EVA for WHII. Evaluation methods consisted of identifying, measuring, assessing, and tagging all accessible trees within the tree survey area that had a minimum stem DBH of four inches. Information collected included the species of the tree, DBH (measured at 4.5 feet from the base of the tree), radius of the tree canopy (measured at the largest radius), the general condition of the tree and the tree's components (root collar, trunk, limbs, and foliage), the general structural health of the tree, and overall condition. The condition of each tree was defined as either excellent, good, fair, poor, hazardous, or dead. The Arborist Reports, as well as the biological resources assessments, bird surveys, and rare plant survey, prepared for the project site are included within Appendix D.

Project-Specific Impacts and Mitigation Measures

As discussed in Chapter 3, Project Description, of this EIR, although the County has elected to evaluate both the WHI and WHII projects in a single EIR, it is reasonable to consider WHI and WHII as separate projects under the independent utility test, given that each proposal has independent utility and is not necessary for the other to proceed. As such, the following discussion analyzes the potential impacts of the WHI and WHII projects separately. In addition, each impact statement includes an analysis of the combined effects of the two projects. It should be noted that

¹⁹ Salix Consulting, Inc. *Biological Resources Assessment for the 33-Acre Creekside Oaks Study Area*. December 2014.

²⁰ Salix Consulting, Inc. *Memorandum: Pre-Fuel Load Reduction bird survey – Whitehawk II property, Granite Bay*. May 26, 2016.

²¹ Salix Consulting, Inc. *Whitehawk II Project Rare Plant Survey*. January 22, 2016.

²² Salix Consulting, Inc. *Memorandum: Biological Reconnaissance, Whitehawk II proposed EVA Easement and Construction Access Easement*. February 21, 2018.

only WHII would involve the establishment of an off-site EVA; therefore, biological resources and potential impacts related to development of the EVA are only discussed in relation to WHII alone or where potential impacts resulting from implementation of the combined projects is being discussed.

6-1 Have a substantial adverse effect, either directly or through habitat modifications, on a special-status plant species. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

WHI

The WHI project site contains marginal habitat for Sanford's arrowhead. Field assessments of the site conducted in 2014, and as part of the rare plant surveys in 2015, during the species' blooming period, did not identify any occurrences of the species. Nevertheless, areas of the project site that represent marginal habitat for Sanford's arrowhead are within the anticipated area of disturbance for the WHI project.

The unmined foothill woodland vegetation community within the WHI project site represents marginally suitable habitat for big-scale balsamroot. Individuals of the species were not identified during the 2014 or 2015 field assessments of the WHI project site. Although the 2014 field assessment was conducted outside of the blooming period for big-scale balsamroot, the rare plant surveys conducted during 2015 were within the blooming period for the species. The rare plant surveys did not identify any occurrences of the species within the WHI project site. Nevertheless, the potential exists that individuals of the species could occur within the project site.

Considering the existence of marginal habitat for Sanford's arrowhead and big-scale balsamroot within portions of the WHI project site that may be disturbed during implementation of the proposed project, the WHI project would have the potential to disturb or adversely affect special-status plant species, resulting in a significant impact.

WHII

The WHII project site contains limited areas of marginal habitat for big-scale balsamroot and suitable habitat for Sanford's arrowhead. Although the WHII site contains such habitat for the foregoing species, rare plant surveys of the site conducted by Salix Consulting during the blooming period for both big-scale balsamroot and Sanford's arrowhead in 2015 did not identify any individual of either species within the project site.²³ Nevertheless, areas of the project site that represent potentially suitable habitat for the foregoing species are within the anticipated area of disturbance for the WHII project. In addition, the USFWS considers protocol-level plant surveys to be valid for three years, and the potential exists that project implementation may begin after 2019.

²³ Salix Consulting, Inc. *Whitehawk II Project Rare Plant Survey*. January 22, 2016.

In addition to the 2015 field assessment of the WHII project site, Salix Consulting conducted a field assessment of the off-site EVA corridor and construction access easement for the WHII project. The proposed EVA corridor was determined not to contain habitat suitable for any special-status plants, particularly because there are no wetlands within the EVA corridor. In addition, no special-status plant habitat was identified within the construction access easement. Therefore, construction work within the EVA corridor and construction access easement would not have the potential to result in impacts related to special-status plant species.

Considering the existence of limited areas of marginal habitat for big-scale balsamroot and suitable habitat for Sanford's arrowhead within portions of the WHII project site that may be disturbed during implementation of the WHII project, as well as the potential for project implementation to occur outside of the three year window following the 2016 rare plant survey, the WHII project would have the potential to disturb or adversely affect special-status plant species, resulting in a significant impact.

WHI and WHII

As discussed for the individual project impacts above, the WHI and WHII sites contain marginally suitable habitat for Sanford's arrowhead and big-scale balsamroot, while the EVA corridor and construction access easement associated with the WHII site does not contain any suitable habitat areas for special-status plants. The aforementioned habitat areas are located within portions of the project sites that may be disturbed during implementation of both projects.

Considering that marginally suitable habitat for both species occur within areas that would be disturbed during implementation of both projects, the combined implementation of WHI and WHII would result in a greater disturbance area of marginally suitable habitat than what would occur with implementation of either WHI or WHII individually. Because a greater amount of potential habitat would be disturbed, implementation of both WHI and WHII would result in a greater potential to adversely affect special-status plant species.

Conclusion

Given the above, the proposed projects would have the potential to disturb or adversely affect on-site special-status plant species, resulting in a *significant* impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

WHI

6-1(a) *Special-status plant surveys were conducted within the WHI site in 2014 and in 2015. Although no special-status plant species were identified, the previous survey results are only valid for three years. Therefore, new*

focused plant surveys shall be performed according to CDFW and CNPS protocol, as generally described below.

Prior to Improvement Plan approval for the WHI project, focused surveys shall be performed by a qualified botanist in order to determine the presence or absence of Sanford's arrowhead and/or big-scale balsamroot. Furthermore, should additional plants having the potential to occur on-site be given special-status in the future, the qualified botanist shall also determine the presence/absence of such species. The survey(s) shall be conducted on-site during the identification periods (bloom periods) for Sanford's arrowhead and big-scale balsamroot. Survey results shall be submitted to the Placer County Community Development Resource Agency. If special-status plant species are not found to be present during the focused survey(s), then no further action is required.

If any special-status plant species are found, a mitigation plan shall be prepared in consultation with the Placer County Community Development Resource Agency. The plan shall detail the various mitigation approaches to ensure no net loss of the special-status plant(s). Mitigation could include, but would not be limited to, avoidance of the plant species, salvage of plant materials, such as transplant or propagation, where possible, acquisition of credits at an approved mitigation bank, or acquisition and preservation of property that supports the plant species.

WHII

6-1(b) *Protocol level special-status plant surveys were conducted within the WHII site in 2015, and the EVA area in 2018. Although no special-status plant species were identified, the previous survey results are only valid for three years. Therefore, new focused plant surveys shall be performed within the WHII site, and the EVA area should project initiation occur after 2021. New focused plant surveys shall be performed according to CDFW and CNPS protocol, as generally described below.*

Prior to Improvement Plan approval for WHII, focused surveys shall be performed by a qualified botanist in order to determine the presence or absence of Sanford's arrowhead and/or big-scale balsamroot. In addition, should additional plants having the potential to occur on-site be given special-status in the future, the qualified botanist shall also determine the presence/absence of such species. The survey(s) shall be conducted on-site as well as in any off-site improvement areas during the identification periods (bloom periods) for Sanford's arrowhead and big-scale balsamroot. Survey results shall be submitted to the Placer County Community Development Resource Agency. If special-status plant species are not found to be present during the focused survey(s), then no further action is required.

If any special-status plant species are found, a mitigation plan shall be prepared in consultation with the Placer County Community Development Resource Agency. The plan shall detail the various mitigation approaches to ensure no net loss of the special-status plant(s). Mitigation could include, but would not be limited to, avoidance of the plant species, salvage of plant materials where possible, acquisition of credits at an approved mitigation bank, or acquisition and preservation of property that supports the plant species.

6-2 Have a substantial adverse effect, either directly or through habitat modifications, on special-status fish species. Based on the analysis below and with implementation of mitigation, the impact is less than significant.

Central Valley steelhead have been documented within the Dry Creek system. However, historic disturbance of Strap Ravine during previous mining activity led the GBCP to conclude that Strap Ravine does not provide habitat for anadromous salmonids, including steelhead, and Strap Ravine is not designated as critical habitat for the species.²⁴ Although Strap Ravine is not considered to provide habitat for steelhead, according to Salix Consulting, Strap Ravine may act as a migration corridor for steelhead if barriers to the movement of the species do not exist downstream from the project site.

WHI

Due to the absence of perennial surface water and pools, the portion of Strap Ravine within the WHI project site does not represent suitable rearing habitat for steelhead. Nevertheless, the portion of Strap Ravine within the WHI project site could be used by individual steelhead as a movement corridor, and, thus, individuals of the species could be present within the WHI project site.

The WHI project does not include any site work within the channel of Strap Ravine that would have the potential to result in direct inadvertent injury or damage to steelhead moving through the project site. Although the WHI project includes a roadway crossing over Strap Ravine, the WHI project would include a CON/SPAN bridge that would clearly span Strap Ravine, without the need for any supports within the channel of Strap Ravine. Although placement of the bridge would not require work within the channel of Strap Ravine, placement of the bridge would result in ground disturbance in close proximity to Strap Ravine. As discussed in further depth in Impact 10-1, within the Hydrology and Water Quality Chapter of this EIR, disturbance of the project site during project construction would have the potential to result in erosion and sediment loss if the proper management practices are not implemented. Sedimentation of Strap Ravine could impact steelhead using Strap Ravine as a movement corridor. Therefore, implementation of WHI could result in adverse effects to special-status steelhead during project construction and a significant impact could occur.

²⁴ Placer County. *Granite Bay Community Plan* [pg. 74]. Adopted February 28, 2012.

WHII

Due to the absence of perennial surface water and pools, the portion of Strap Ravine within the WHII project site does not represent suitable rearing habitat for steelhead. Nevertheless, the portion of Strap Ravine within the WHII project site could be used by individual steelhead as a movement corridor, and, thus, individuals of the species could be present within the WHII project site. It should be noted that the EVA and off-site construction staging areas do not contain any portions of Strap Ravine, and work within the off-site areas related to implementation of WHII would not have the potential to result in adverse effects to steelhead.

The WHII project does not include any site work within the channel of Strap Ravine that would have the potential to result in direct inadvertent injury or damage to steelhead moving through the project site. Although the WHII project includes a roadway crossing over Strap Ravine, the WHII project would include two CON/SPAN bridges. One of the bridges within the WHII project would be used to span existing wetland areas in the southwestern corner of the site, while the other bridge would span Strap Ravine. Similar to the bridges discussed under WHI above, both bridges would be clear span bridges that would not require supports to be placed within either the wetland area being spanned or Strap Ravine. Nevertheless, work related to placement of the bridge over Strap Ravine would have the potential to result in erosion and sediment loss in proximity to Strap Ravine that could impact steelhead using Strap Ravine as a movement corridor. Therefore, implementation of WHII could result in adverse effects to special-status steelhead during project construction and a significant impact could occur.

WHI and WHII

Implementation of both projects would result in the construction of three total CON/SPAN bridges, with two located on the WHII site and one located on the WHI site. As discussed for implementation of the projects separately above, placement of the proposed bridges over Strap Ravine would result in ground disturbance in proximity to Strap Ravine. Such ground disturbance would have the potential to result in erosion and sediment loss in proximity to Strap Ravine that could impact steelhead using Strap Ravine as a movement corridor. Therefore, implementation of WHI and WHII together could result in combined adverse effects to special-status steelhead during project construction and a significant impact could occur.

Conclusion

Based on the above, implementation of WHI only, WHII only, or WHI and WHII combined could result in a *significant* impact related to special-status steelhead during project construction.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level. Mitigation Measures 6-2 below requires the implementation of

Mitigation Measures 8-2(a), 8-3(a), and 8-3(b) of this EIR. The foregoing mitigation measures require that construction Best Management Practices (BMPs) be implemented during construction of the projects to reduce the potential for erosion to occur during construction activities. Prevention of erosion would reduce the potential for construction activity related to implementation of the proposed projects to result in water quality degradation through sedimentation.

WHI and WHII

6-2 *Implement Mitigation Measures 8-2(a), 8-3(a), and 8-3(b).*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-2 may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-3 Have a substantial adverse effect, either directly or through habitat modifications, on special-status reptiles. Based on the analysis below the impact is *less than significant*.

The only special-status reptile considered to have the potential to be present within the project sites is the western pond turtle. A discussion of potential impacts related to western pond turtles is provided below.

WHI and WHII

Suitable habitat for western pond turtles consists of ponds or deeper pools along streams, where basking habitat is also available, and upland nesting habitat is in proximity. The project sites do not contain ponds or deeper pools required by the species. Therefore, the project sites do not contain suitable habitat for the species, and implementation of the proposed projects would not have the potential to result in loss or disturbance of nesting habitat for the species. Although the project sites do not include nesting habitat for the species, Strap Ravine within the project sites may be used for dispersal by the species. As discussed under Impact 6-2 above, the proposed projects would not include any direct disturbance activity within Strap Ravine. Therefore, the proposed projects would not include any activity that would have the potential to result in injury or other adverse effects to individual western pond turtles using Strap Ravine as a movement corridor.

Considering that implementation of either of the proposed projects separately or the combined projects would not include disturbance activity within Strap Ravine,

implementation of WHI and WHII would not have the potential to result in adverse effects to western pond turtles. As a result, a *less-than-significant* impact would occur. It is also noted that this EIR includes mitigation measures requiring that construction BMPs be implemented during construction of the projects to reduce the potential for erosion to occur during construction activities. This would ensure that construction activities would not lead to downstream sedimentation and water quality degradation of Strap Ravine.

Mitigation Measure(s)

None required.

- 6-4 Have a substantial adverse effect, either directly or through habitat modifications, on other special-status birds or birds protected under the MBTA. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

WHI and WHII

Special-status birds, migratory birds and other birds of prey, including tricolored blackbird, white-tailed kite, California black rail, and purple martins have the potential to nest within the proposed project sites, including in areas that would be impacted by construction of the proposed projects. Bird surveys of the project sites have identified various MBTA protected species present within the project sites, including red-shouldered hawks, Cooper's hawks, and red-tailed hawks nesting within the project sites. Implementation of the proposed projects would result in the disturbance of riparian woodland, cottonwood stands, foothill woodland, and grasslands, all of which could result in habitat loss for special-status birds or birds protected under the MBTA. Furthermore, should ground disturbance or tree removal occur during the nesting season, such activity could result in the loss of ground nesting or tree nesting species.

Considering the above, the proposed projects could have a substantial adverse effect, either directly or through habitat modifications, on raptors, nesting birds, or other birds protected under the MBTA, including tricolored blackbird, white-tailed kite, California black rail, and purple martins. Thus, a *significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

WHI and WHII

- 6-4 *If construction activities take place during the typical bird breeding/nesting season (typically February 15 through September 1), pre-construction nesting bird surveys shall be conducted by a qualified biologist on the project site and within a 500-foot radius of proposed construction areas, where access is available, no more than three (3) days prior to the initiation of construction. If the pre-construction survey does not show evidence of active nests, a letter report documenting the results of the survey shall be*

provided to the Placer County Community Development Resource Agency, and additional measures are not required. If construction does not commence within three days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey shall be required. The survey is valid for one construction season.

If any active nests are located within the study area, an appropriate buffer zone shall be established around the nests, as determined by the project biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or the young have successfully fledged. Buffer zones are typically between 100 feet and 250 feet for migratory bird nests and between 250 feet and 500 feet for a raptor nest. If active nests are found within the project footprint, a qualified biologist shall monitor nests daily for a minimum of five days during construction to evaluate potential nesting disturbance by construction activities. If construction activities cause the nesting bird(s) to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then an exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-4 may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

- 6-5 Have a substantial adverse effect on federal or state protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

WHI

As discussed previously, and presented in Table 6-1 above, the WHI project site includes wetland resources and Strap Ravine. Aquatic resources represent approximately 1.38 acres of the WHI project site. The WHI project would include grading and development activities

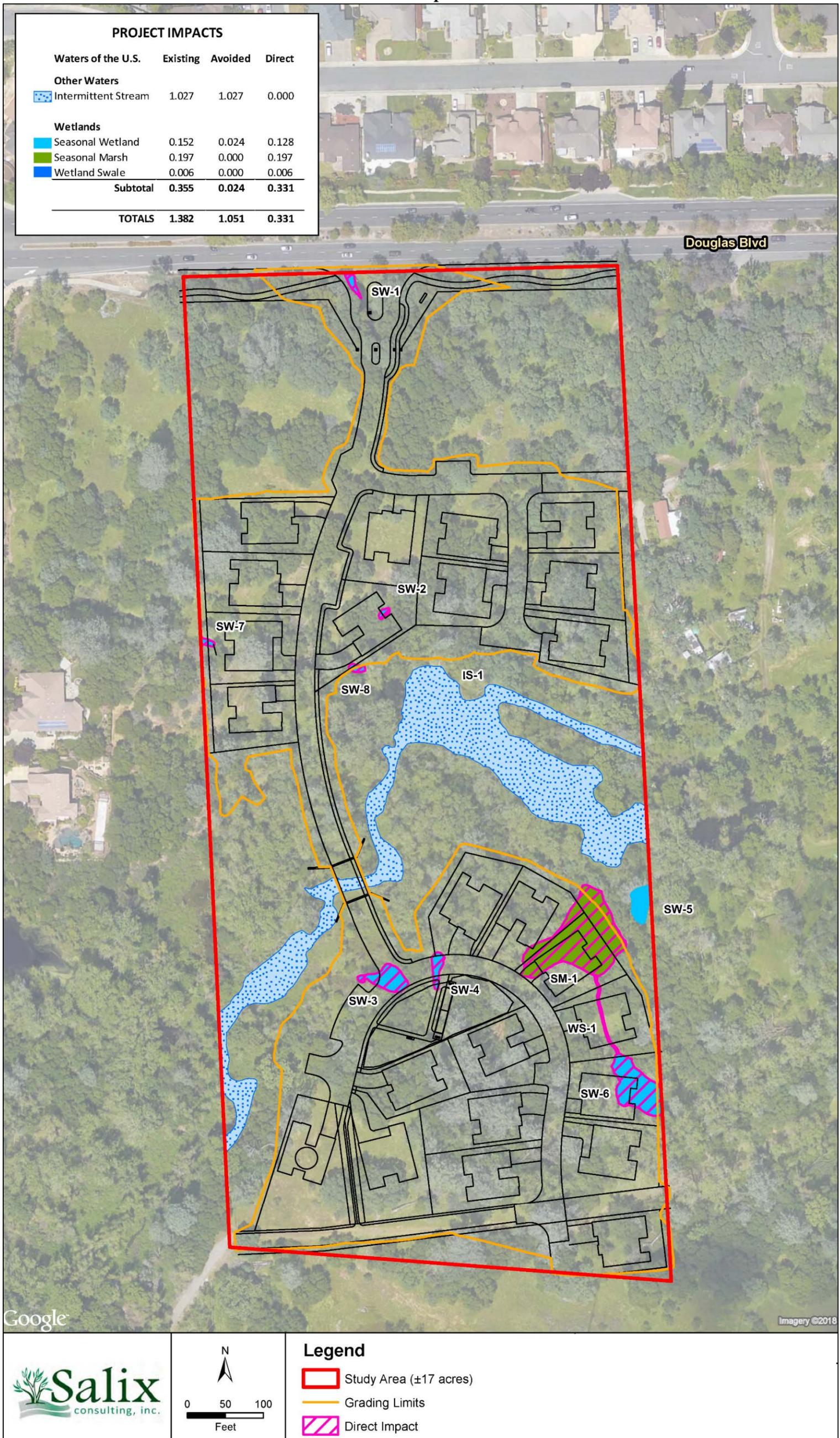
associated with the construction of the proposed residential units and associated infrastructure. Such development activities would have the potential to involve the disturbance, removal, fill or hydrologic interruption of wetlands or other waters of the U.S or State regulated by the USACE, RWQCB and/or the CDFW. To determine the potential impacts related to aquatic resources that could occur due to construction activity associated with the WHI project, Salix Consulting mapped these resources and quantified the areas that would be impacted by implementation of the WHI project. The area of Strap Ravine and wetlands that would be impacted or avoided during implementation of the WHI project are summarized below in Table 6-5 and presented in Figure 6-1.

Resource Type	Existing On-site	Avoided	Impacted
Strap Ravine	1.03	1.01	0.02 ¹
All Wetlands	0.355	0.024	0.331
<i>Seasonal Wetland</i>	<i>0.152</i>	<i>0.024</i>	<i>0.128</i>
<i>Seasonal Marsh</i>	<i>0.197</i>	<i>0.000</i>	<i>0.197</i>
<i>Wetland Swale</i>	<i>0.006</i>	<i>0.000</i>	<i>0.006</i>
Total	1.38	1.03	0.351
¹ This impact is assessed by CDFW for the shading effects of the proposed vehicular bridge; the proposed project does not include fill of Waters of the U.S. and Strap Ravine would remain with implementation of the proposed project. Because no direct effects would occur to Strap Ravine, the 0.02-acre is not reflected in Figure 6-1.			
<i>Source: Salix Consulting, Inc., 2018.</i>			

As shown in Table 6-5 implementation of the WHI project would have the potential to impact 0.331-acre of existing on-site wetland resources and 0.02-acre of Strap Ravine. The remaining 0.024-acre of wetland resources and 1.01-acre of Strap Ravine would be avoided. It should be noted that the WHI project would include the use of a CON/SPAN bridge that would clear Strap Ravine without the need for any construction work below the OHWM of Strap Ravine. Considering that placement of the CON/SPAN bridge would not result in any work below the OHWM, implementation of the WHI project would not result in impacts to the channel of Strap Ravine as defined by USACE. However, based upon coordination with CDFW to date, the agency considers the placement of the CON/SPAN bridge to result in impacts to 0.02-acre of Strap Ravine due to shading from the proposed vehicular bridge.

Based on the above, implementation of the WHI project could have an adverse effect on federal or State protected aquatic resources as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by State statute, through direct removal, filling, hydrological interruption, or other means. Thus, a significant impact could occur.

Figure 6-1
Waters of the U.S./State Impact Areas for WHI



WHII

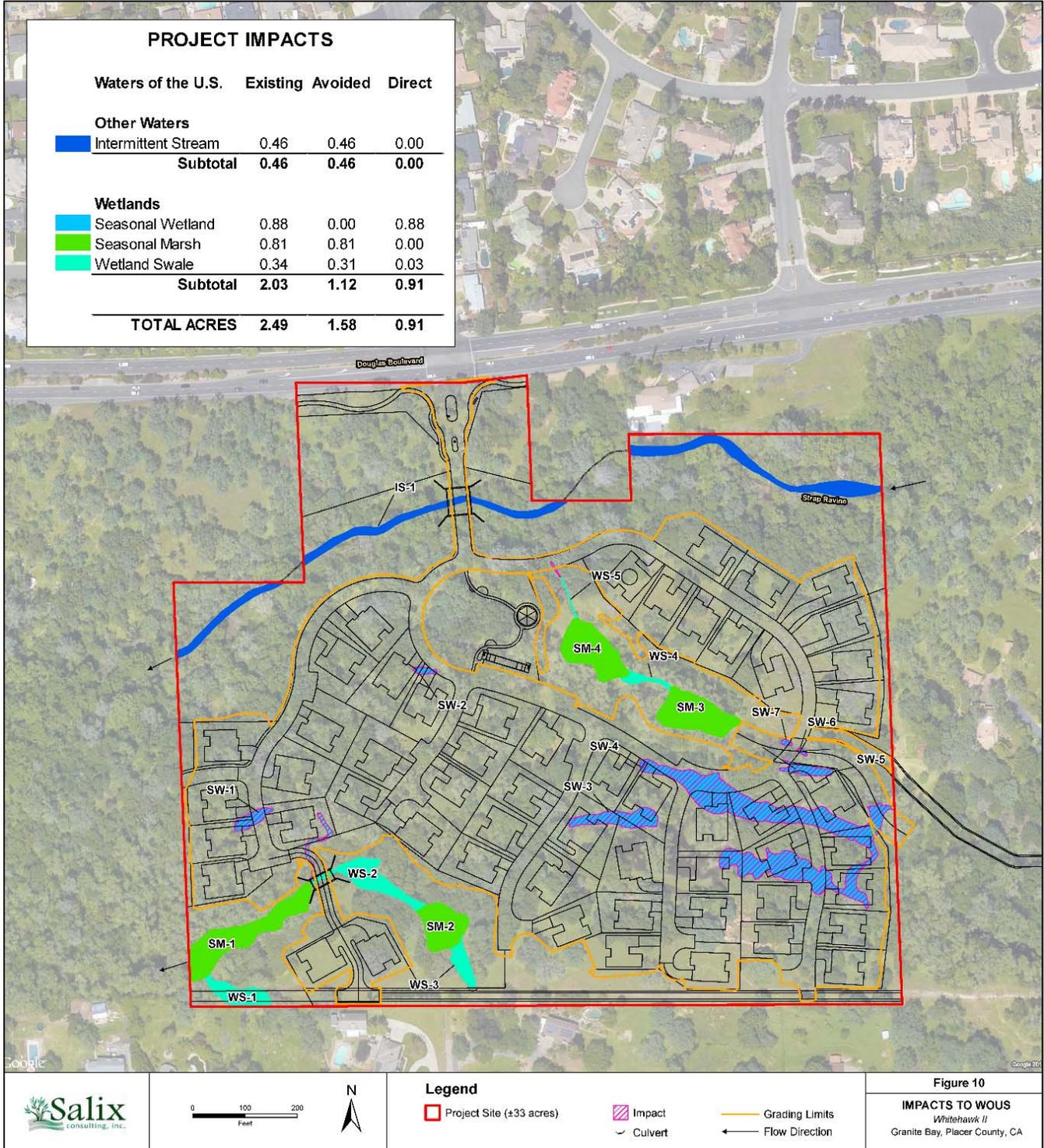
As discussed previously, and presented in Table 6-1 above, the WHII project site includes wetlands and Strap Ravine. Aquatic resources represent approximately 2.49 acres of the WHII project site.

The WHII project would include grading and development activities associated with the construction of the proposed residential units and associated infrastructure. Such development activities would have the potential to involve the disturbance, removal, fill or hydrologic interruption of wetlands or other waters of the U.S or State regulated by the USACE, RWQCB and/or the CDFW. To determine the potential impacts related to aquatic resources that could occur due to construction activity associated with the WHII project, Salix Consulting mapped these resources and quantified the areas that would be impacted by implementation of the WHII project. The area of Strap Ravine and wetlands that would be impacted and avoided during implementation of the WHII project are presented in Figure 6-2 below and summarized in Table 6-6.

As shown in Table 6-6 below, implementation of the WHII project would have the potential to impact 0.91-acre of existing on-site wetland resources and 0.02-acre of Strap Ravine. The remaining 1.12-acre of wetland resources and 0.46-acre of Strap Ravine would be avoided. It should be noted that the WHII project would include the use of a CON/SPAN bridge that would clear Strap Ravine without the need for any construction work below the OHWM of Strap Ravine. Considering that placement of the CON/SPAN bridge would not result in any work below the OHWM, implementation of the WHII project would not result in impacts to the channel of Strap Ravine as defined by USACE. However, based upon coordination with CDFW to date, the agency considers the placement of the CON/SPAN bridge to result in impacts to 0.02-acre of Strap Ravine due to shading from the proposed vehicular bridge.

Resource Type	Total	Avoided	Impacted
Strap Ravine	0.46	0.44	0.02 ¹
All Wetlands	2.03	1.12	0.91
<i>Seasonal Wetland</i>	<i>0.88</i>	<i>0.00</i>	<i>0.88</i>
<i>Seasonal Marsh</i>	<i>0.81</i>	<i>0.81</i>	<i>0.00</i>
<i>Wetland Swale</i>	<i>0.34</i>	<i>0.31</i>	<i>0.03</i>
Total	2.49	1.56	0.93
¹ This impact is assessed by CDFW for the shading effects of the proposed vehicular bridge; the proposed project does not include fill of Waters of the U.S. and Strap Ravine would remain with implementation of the proposed project. Because no direct effects would occur to Strap Ravine, the 0.02-acre is not reflected in Figure 6-2.			
<i>Source: Salix Consulting, Inc., 2018.</i>			

Figure 6-2
Waters of U.S./State Impact Areas for WHII



In addition to the on-site aquatic resources discussed above, the WHII project would involve construction of an off-site EVA and temporary disturbance of an off-site area for staging of construction equipment. The off-site EVA corridor does not contain aquatic resources. The temporary construction staging area includes a man-made ditch. Salix Consulting concluded that the man-made ditch does not typically carry water, but may carry water during flood flows. Furthermore, the ditch connects to an existing wetland within the WHII site, as shown in Figure 6-3 below. The ditch has not been formally delineated and submitted to the USACE for verification, but was mapped by Salix Consulting as encompassing 202 square feet of area. Because the ditch has not been delineated and verified by the USACE, the status of the ditch as a jurisdictional wetland is currently unknown. Should the ditch be determined jurisdictional, staging of construction equipment within the area shown in Figure 6-3 would have the potential to impact the ditch, which would be considered an additional impact to aquatic resources. However, should the USACE determine the ditch is not jurisdictional, staging of construction equipment would not have the potential to result in impacts to off-site aquatic resources.

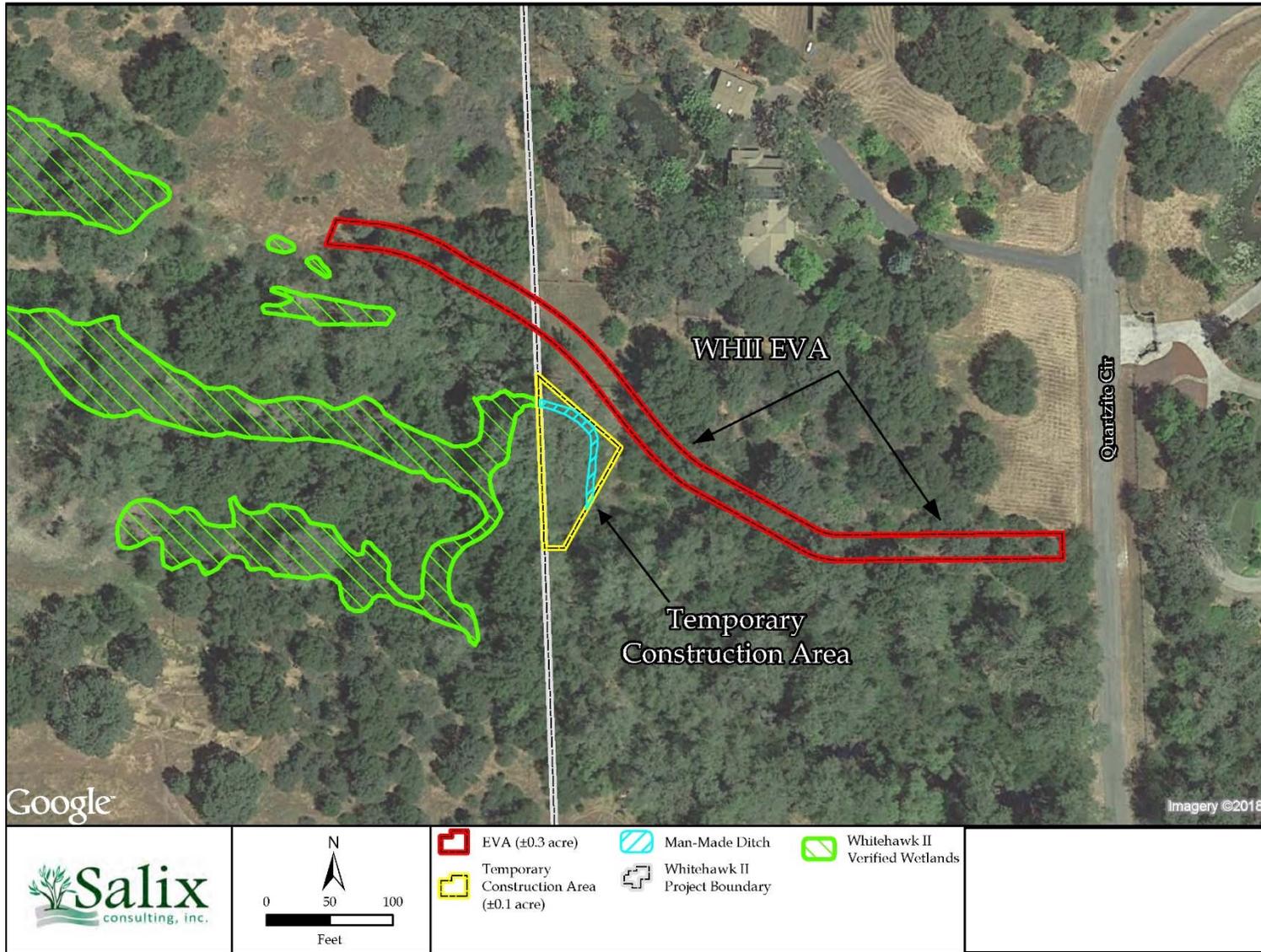
Based on the above, implementation of the WHII project could have a substantial adverse effect on federal or State protected aquatic resources as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by State statute, through direct removal, filling, hydrological interruption, or other means. Thus, a significant impact could occur.

WHI and WHII

Implementation of WHI and WHII would result in impacts to wetlands both on the WHI project site and the WHII project site. The combined area of impacted wetlands is presented in Table 6-7 below.

Table 6-7			
WHI and WHII Waters of the U.S./State Impacts (acres)			
Resource Type	Total	Avoided	Impacted
Strap Ravine	1.49	1.45	0.04 ¹
All Wetlands	2.385	1.144	1.241
<i>Seasonal Wetland</i>	<i>1.032</i>	<i>0.024</i>	<i>1.008</i>
<i>Seasonal Marsh</i>	<i>1.007</i>	<i>0.81</i>	<i>0.197</i>
<i>Wetland Swale</i>	<i>0.346</i>	<i>0.31</i>	<i>0.036</i>
Total	3.875	2.59	1.281
¹ This impact is assessed by CDFW for the shading effects of the proposed vehicular bridge; the proposed project does not include fill of Waters of the U.S. and Strap Ravine would remain with implementation of the proposed project.			
<i>Source: Salix Consulting, Inc., 2018.</i>			

Figure 6-3
Potential Off-site Waters of the U.S./State Associated with WHII EVA



As shown in Table 6-7 implementation of both WHI and WHII would have the potential to impact a total of approximately 1.24 acres of existing on-site wetland resources and 0.04-acre of Strap Ravine. The remaining approximately 1.14 acres of wetland resources and 1.45 acres of Strap Ravine would be avoided. As noted previously under the separate project impact discussions above, both projects would include placement of CON/SPAN bridges across Strap Ravine. The placement of such bridges would not result in disturbance of Strap Ravine below the OHWM, and, thus, the placement of the foregoing bridges would not result in impacts to Strap Ravine as defined by the USACE. Nevertheless, the CDFW considers the placement of the bridges within the WHI and WHII sites to result in a total of 0.04-acre of impacts to Strap Ravine.

In addition to the foregoing potential impacts, the WHII project would include construction of the off-site EVA and disturbance related to temporary staging of construction equipment. Consequently, implementation of WHII would have the potential to result in impacts to the potentially jurisdictional man-made ditch located off-site within the construction staging area.

Based on the above, implementation of the WHI and WHII projects could have a substantial adverse effect on federal or State protected aquatic resources as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by State statute, through direct removal, filling, hydrological interruption, or other means.

Conclusion

Based on the above, implementation of WHI only, WHII only, or WHI and WHII combined could result in a *significant* impact related to effects on federal or State protected aquatic resources as defined by Section 404 of the Clean Water Act or as defined by State statute, through direct removal, filling, hydrological interruption, or other means.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level. For impacts to Water of the U.S./State, the intent is to mitigate for CDFW-related impacts to Strap Ravine by preserving riparian habitat at the Sacramento River Ranch Wetlands Mitigation Bank (SRR). For impacts to wetlands, the intent is to purchase wetland credits from a USACE-approved mitigation bank. Given that the timing for the WHI project is not as certain as WHII, this specific approach to mitigation is not reflected in the WHI mitigation measure language, whereas it is reflected in the WHII language. The WHI language more generally requires the future WHI applicant to ensure all project impacts to Waters of the U.S./State are mitigated on a no-net-loss basis pursuant to the ratios set forth in Table 6-8.

WHI

6-5(a) *To the extent feasible, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. and jurisdictional waters of the State*

of California within the project site. Prior to Improvement Plan approval for the project, a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE “no-net-loss” policy and GBCP Policy 5.3.9. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines. Specifically, the applicant shall purchase wetland preservation and creation credits from an USACE-approved Conservation/Mitigation Bank at the following compensation ratios, as shown in Table 6-8:

Type of Aquatic Resource	Impact Area (Acres)	Mitigation	
		Ratio	Credits
Wetlands	0.33	1:1	0.33
Strap Ravine	0.02	2:1	0.04

If a Section 404 permit is obtained, the applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Placer County Community Development Resource Agency.

1600 LSAA. The applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW. The information provided shall include a description of all of the activities associated with the WHI project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this document. Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding project-specific drainage and hydrology changes resulting from project implementation shall be provided as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs.

In addition, during the five-year term of the Streambed Alteration Agreement, the project proposes to include invasive plant removal on the project sites. Although there are some extensive Himalayan blackberry thickets that have been identified within the project site, CDFW staff have not been in favor of removal. A qualified biologist will identify, flag and

oversee the removal of other invasive species that are located. There are no proposed success criteria for the removal.

PCCP. In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project’s own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-5(c) may be replaced with the PCCP’s mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

WHII

6-5(b)

To the extent feasible, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. and jurisdictional waters of the State of California within the project area. Prior to Improvement Plan approval for the project, a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE “no-net-loss” policy and GBCP Policy 5.3.9. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines. Specifically, the applicant proposes to purchase 0.04-acre of riparian habitat at the Sacramento River Ranch as mitigation for impacts to Strap Ravine, and 0.91-acre seasonal wetland credits from an USACE-approved Conservation/Mitigation Bank, as shown in Table 6-9:

Type of Aquatic Resource	Impact Area (Acres)	Mitigation	
		Ratio	Credits
Wetland	0.91	1:1	0.91
Strap Ravine	0.02	2:1	0.04

If a Section 404 permit is obtained, the applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Placer County Community Development Resource Agency.

1600 LSAA. The applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW. The information provided shall include a description of all of the activities associated with the WHII project, not

just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this document. Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding project-specific drainage and hydrology changes resulting from project implementation shall be provided as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs.

In addition, during the five-year term of the Streambed Alteration Agreement, the project proposes to include invasive plant removal on the project sites. Although there are some extensive Himalayan blackberry thickets that have been identified within the project site, CDFW staff have not been in favor of removal. A qualified biologist will identify, flag and oversee the removal of other invasive species that are located. There are no proposed success criteria for the removal.

PCCP. In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-5(d) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

- 6-5(c) *Prior to Improvement Plan approval, the project applicant shall submit a wetland delineation for the off-site man-made ditch within the temporary construction staging area for WHII that has been verified by the USACE. If USACE verifies that the ditch is jurisdictional, and the improvements would result in discharge of fill within the feature, then a Section 404 permit shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE "no-net-loss" policy. To the extent feasible, however, the construction staging area/staging of equipment shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area.*

If a Section 404 permit is obtained, the applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Placer County Community Development Resource Agency.

WHI and WHII

6-5(d) *Prior to approval of Improvement Plans, the following notes shall be provided on the plans for review and approval by the Placer County Community Development Resource Agency. High visibility and silt fencing shall be erected at the edge of construction/maintenance footprint if work is anticipated to occur within 50 feet of potentially jurisdictional features and riparian areas which are proposed for avoidance. A biological monitor shall be present during the fence installation and during any initial grading or vegetation clearing activities within 50 feet of potentially jurisdictional features and riparian areas which are proposed for avoidance.*

6-5(e) *On-site avoidance areas shall be protected with a declaration of covenants and development restrictions for each project site. Prior to approval of Improvement Plans, a long-term management plan shall be drafted requiring the future Homeowner's Association for the project site to continue management of the avoidance areas in perpetuity. Implementation of the management plans shall be funded by an assessment of the landowners within each project site, and shall include measures such as trash removal and general maintenance. The long-term management plans shall be submitted for review and approval to the Placer County Community Development Resource Agency.*

6-6 Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of or restrict the range of an endangered, rare, or threatened species. Based on the analysis below, the impact is less than significant.

WHI and WHII

Implementation of the proposed projects would result in a significant impact if the project would cause a discrete wildlife population to drop below self-sustaining levels or would wholly eliminate a discrete animal community. For officially listed endangered and threatened species, projects that substantially reduce the number or restrict the range of such species would have a significant impact. (See CEQA Guidelines, app. G, Mandatory Findings of Significance.) However, the courts have explicitly rejected the notion that a finding of significance is required simply because a proposed project would result in a net loss of habitat. “[M]itigation need not account for every square foot of impacted habitat to be adequate. What matters is that the unmitigated impact is no longer significant.” (*Save*

Panoche Valley v. San Benito County (2013) 217 Cal.App.4th 503, 528, quoting *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233.)

It should be noted that the County's draft PCCP, as currently proposed, is designed to ensure that lands within western Placer County, including the project sites and surrounding area, would be managed to continue to support the survival and well-being of the species covered by the PCCP, as well as the survival of hundreds of other species that are dependent on the same habitat.

As discussed above, this EIR provides a wide range of mitigation to minimize potential adverse effects to all special-status plant and wildlife species with the potential to occur within the project sites. Mitigation included in this EIR would require each project applicant to provide replacement aquatic habitat to off-set the loss of any such habitat due to implementation of either or both of the proposed projects.

Therefore, the proposed projects would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number of or restrict the range of an endangered, rare, or threatened species. Implementation of the mitigation measures required per this chapter would ensure that the impact would be *less than significant*.

Mitigation Measure(s)

None required.

- 6-7 Have a substantial adverse effect on the environment by converting oak woodlands, conflict with any local policies or ordinances that protect biological resources, including oak woodland resources, and/or have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by CDFW, the USFWS, the USACE, or the NMFS. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

Placer County provides specific oak woodland preservation guidelines for discretionary entitlements subject to CEQA review.²⁵ Under the County's Interim Oak Woodland Guidelines, impacts to individual native trees within any oak woodland areas that are less than two acres in total size are to be assessed and mitigated under the provisions of the County's Tree Ordinance. Similarly, oak trees within impact areas that are less than one acre in size are to be assessed and mitigated under the provisions of the Tree Ordinance. Impacts to more than one acre of oak woodlands within an oak woodland that is greater than two acres in total area may be assessed and mitigated in accordance with the Interim Guidelines or other approach deemed acceptable to the County. Potential impacts related to oak woodlands are discussed below.

²⁵ Placer County. *Oak Woodland Impact Guidelines*. 2008.

WHI

As shown in, the WHI project site contains both previously mined and unmined foothill woodlands as well as previously mined cottonwood and riparian woodland stands. Implementation of the WHI project would result in impacts to the foregoing woodland habitat types as presented in Table 6-10.

Table 6-10 WHI Woodland Impacts (Acres)		
Vegetation Community	Total Area	Impact Area
Cottonwood Stands (Mined)	1.00	1.00
Foothill Woodland	7.00	4.40
Foothill Woodland (Mined)	5.40	4.60
Riparian Woodland (Mined)	3.90	0.90
Total	17.30	10.90

Considering the anticipated impact areas presented in Table 6-10 and Figure 6-4, the WHI project would result in impacts to more than one acre of oak woodland within an oak woodland that exceeds two acres in total size. Furthermore, the WHI project would result in impacts to approximately 0.90-acre of riparian woodland and 1.00 acre of cottonwood stands. It should be noted that the County does not assess impacts specifically to cottonwood stands though the individual trees would be covered by the Tree Ordinance. However, based on consultation with CDFW, the agency has indicated that it considers removal of cottonwood stands as a significant impact requiring mitigation.

In addition to the consideration of potential impacts to oak woodlands, the County regulates the protection and removal of Significant Trees, requiring that any significant oak trees to be removed must be replaced at a 1:1 (inch for inch) basis. The WHI project site contains seven oak trees considered to be Significant Trees, totaling 252 inches of significant oak trunk diameter at breast height. Implementation of the WHI project would result in impacts to four of the existing significant oak trees (see Figure 6-5), leading to the loss of approximately 147 inches of oak trunk diameter. It should be noted that Figure 6-5 does not include tree number 3137, which would be preserved along the property line with implementation of the proposed project.

Due to the foregoing impacts to oak woodlands, cottonwood stands, and Significant Trees, the WHI project would be considered to result in a significant impact related to converting oak woodlands and conflicting with local policies related to oak woodland preservation or the protection of sensitive natural communities.

Figure 6-4
WHI Woodland Impact Areas

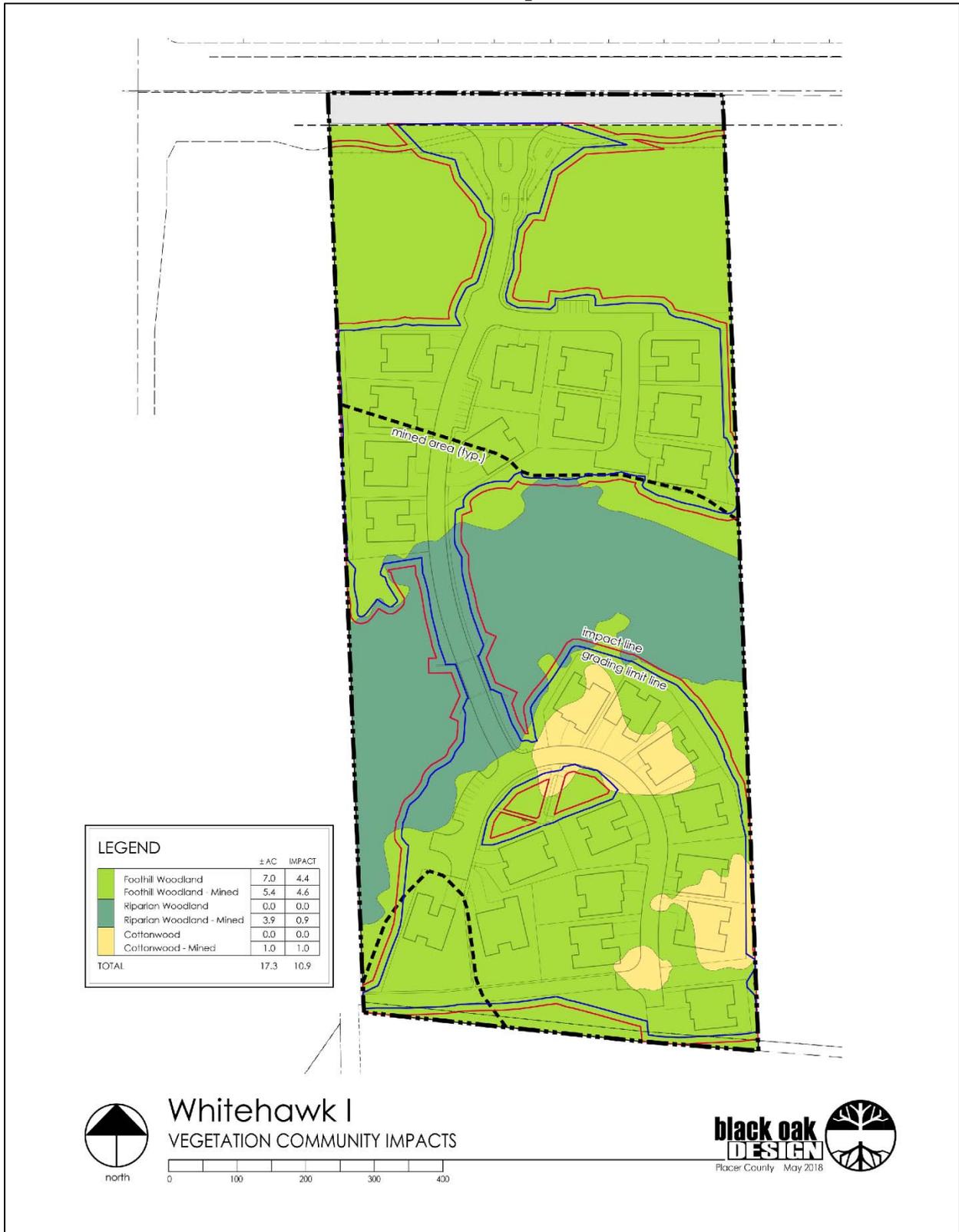
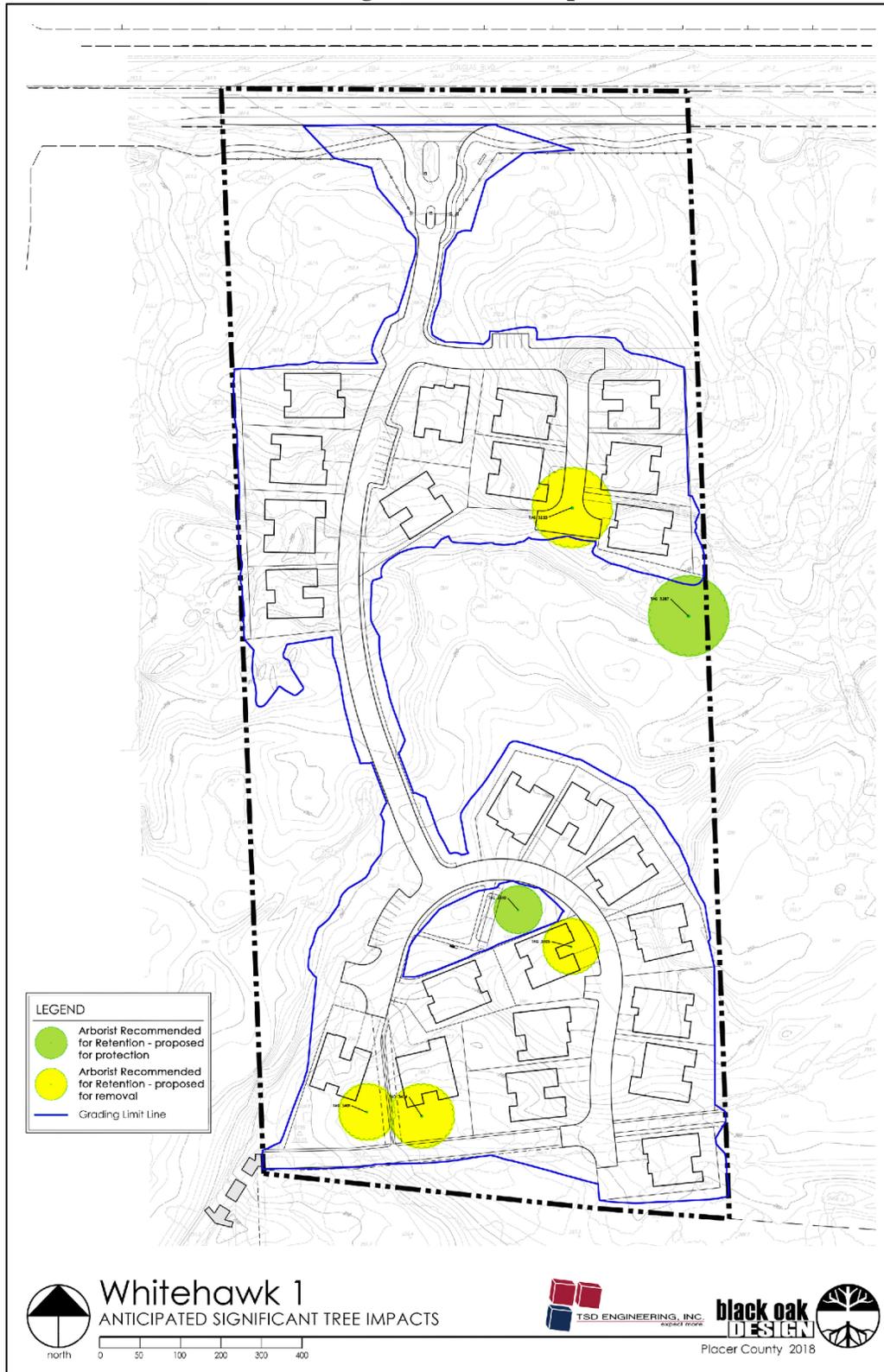


Figure 6-5
WHI Significant Tree Impacts



WHII

As shown in Table 6-11 and Figure 6-6, the WHII project site, adjacent EVA area, and construction staging area contain both previously mined and unmined foothill woodlands and cottonwood stands, as well as riparian woodlands. Implementation of the WHII project would result in impacts to the foregoing woodland habitat types as presented in Table 6-11. It should be noted that the area of woodland impacts presented in Table 6-11 includes 0.3-acre of woodland areas that would be impacted by construction of the EVA and due to work within off-site construction areas.

Table 6-11 WHII Woodland Impacts (Acres)		
Vegetation Community	Total Area	Impact Area
Cottonwood Stands	0.10	0.10
Cottonwood Stands (Mined)	5.30	4.10
Foothill Woodland	14.8*	8.40
Foothill Woodland (Mined)	9.2	8.20
Riparian Woodland	2.70	0.10
Total	32.1	20.9
Note: Includes approximately 0.4-acre of foothill woodland for the off-site EVA and construction staging area		

Considering the anticipated impact areas presented in Table 6-11 and Figure 6-6, the WHII project would result in impacts to more than one acre of oak woodland within an oak woodland that exceeds two acres in total size. Furthermore, the WHII project would result in impacts to approximately 0.10-acre of riparian woodland, 0.10-acre of unmined cottonwood stands and 4.10 acres of mined cottonwood stands.

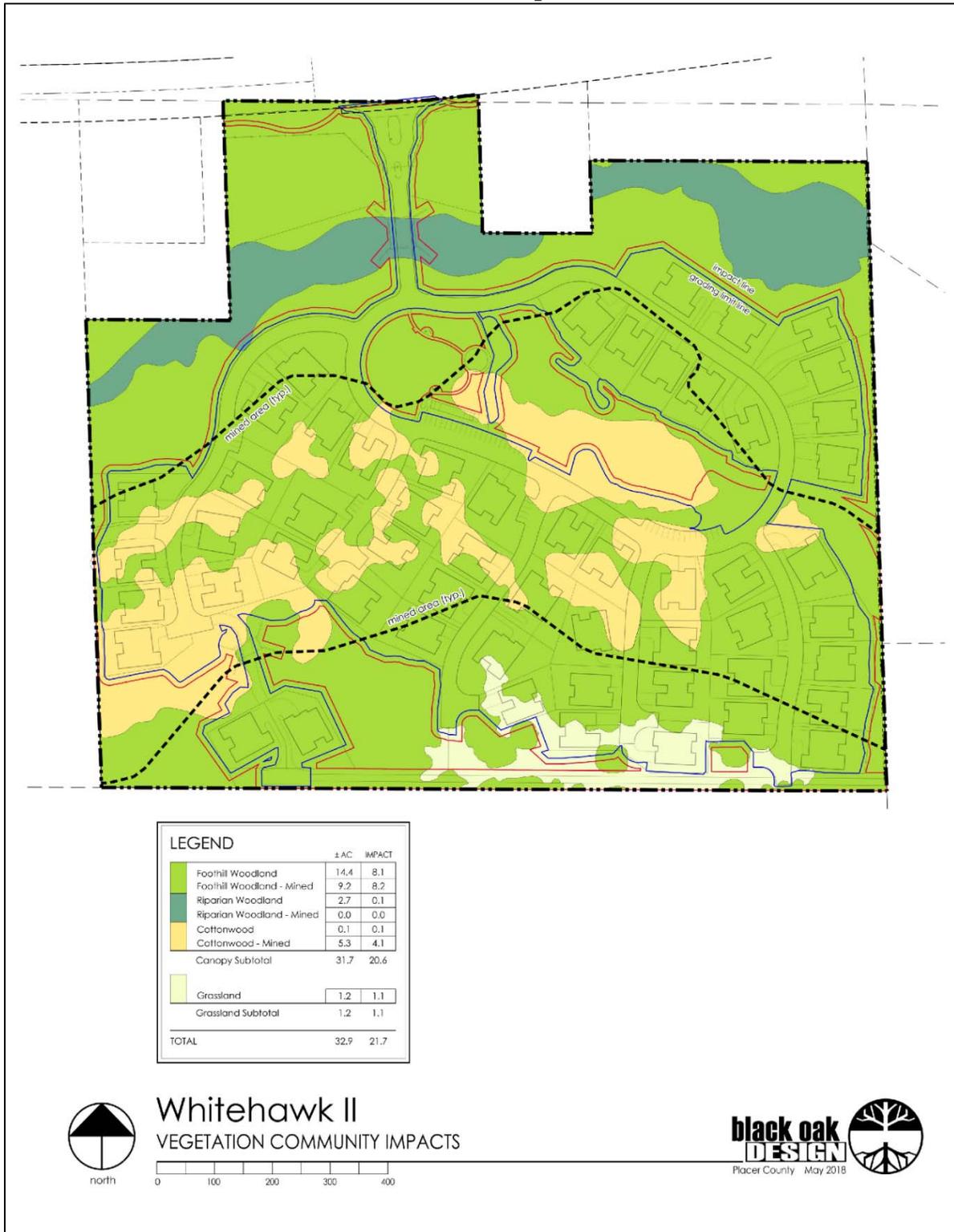
In addition, the WHII project site contains 33 oak trees considered to be Significant Trees, totaling 1,312 inches of significant oak trunk diameter at breast height. Implementation of the WHII project would result in impacts to 12 of the existing significant oak trees (see Figure 6-7), leading to the loss of approximately 777 inches of oak trunk diameter.

Due to the foregoing impacts to oak woodlands, cottonwood stands, and Significant Trees, the WHII project would be considered to result in a significant impact related to converting oak woodlands, conflicting with local policies related to oak woodland preservation, riparian habitat, or other sensitive natural communities.

WHI and WHII

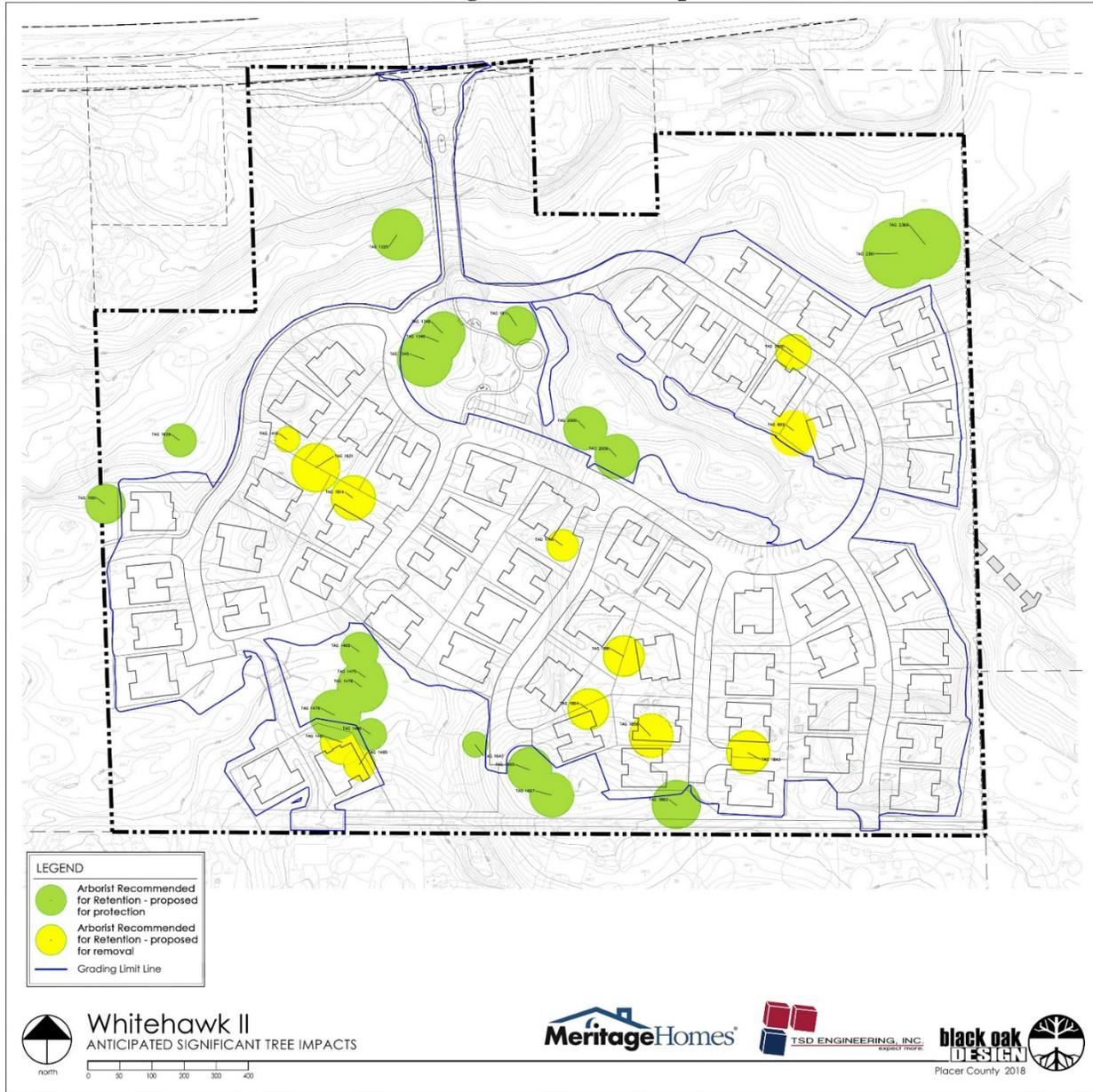
Implementation of both WHI and WHII would result in impacts to oak woodlands, significant oak trees, and cottonwood stands across both project sites. Table 6-12 presents potential impacts to woodlands within the project sites that would occur with implementation of the proposed projects. It should be noted that the impact areas presented in Table 6-12 include potential impacts resulting from construction of the EVA associated with the WHII project.

Figure 6-6
WHII Woodland Impact Areas



Note: In addition to the impact acreages presented in the Legend above, work within the EVA would result in additional impacts to 0.30-acre of foothill woodland.

Figure 6-7
WHII Significant Tree Impacts



Vegetation Community	Total Area (WHI and WHII)	Total Impact Area
Cottonwood Stands	0.10	0.10
Cottonwood Stands (Mined)	6.30	5.10
Foothill Woodland	21.8	12.8
Foothill Woodland (Mined)	14.6	12.8
Riparian Woodland	3.90	0.10
Riparian Woodland (Mined)	2.7	0.90
Total	49.4	31.8

Considering the anticipated impact areas presented in Table 6-12 as well as Figure 6-4 and Figure 6-6, the WHI and WHII projects would result in impacts to more than one acre of oak woodland within an oak woodland that exceeds two acres in total size. Furthermore, the WHI and WHII projects would result in impacts to approximately 0.10-acre of unmined riparian woodland, 0.90-acre of mined riparian woodlands, 0.10-acre of unmined cottonwood stands and 5.10 acres of mined cottonwood stands.

Impacts to woodland areas within WHI and WHII would result in impacts to significant oak trees within both project sites. In total, approximately 924 inches of significant oak trunk diameter would be impacted by implementation of the proposed projects.

Due to the foregoing impacts to oak woodlands, cottonwood stands, and Significant Trees, the WHI and WHII projects would be considered to result in a significant impact related to converting oak woodlands, conflicting with local policies related to oak woodland preservation, and effects on riparian habitat or other sensitive natural communities.

Conclusion

Based on the above, implementation of WHI only, WHII only, or WHI and WHII combined could result in a *significant* impact related to converting oak woodlands, conflicting with local policies related to oak woodland preservation, and effects on riparian habitat or other sensitive natural communities.

Mitigation Measure(s)

Placer County allows for the mitigation of impacts to oak woodlands and protected trees through the payment of fees for woodland conservation or direct purchase of off-site conservation easements by project applicants. The anticipated approach for mitigation of impacts related to implementation of the proposed projects is the purchase of riparian woodland mitigation credits at the Sacramento River Ranch, and for impacts to oak woodlands and cottonwood stands, fee contributions to the Placer Land Trust for the purchase of mitigation property. Specifically, the fee contribution to the Placer Land Trust is anticipated to assist with the purchase of the 331-acre Laursen Outback property within the Lower Bear River Focus Areas of the Spenceville Conceptual Area Protection Plan (CAPP). More specifically, the Mitigation Property is located along the southern bank of the Bear River, just west of Highway 49, north of Auburn, California. CAPPs are used by

the Wildlife Conservation Board to identify areas for land acquisition pursuant to CDFW guidance.

The Laursen Outback property (Mitigation Property) supports a variety of different foothill woodland communities. The majority of the site is comprised of blue oak savannah and blue oak woodland, while the drainages and the steep slopes dropping down to the Bear River support interior live oak woodland.

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

WHI and WHII

6-7(a) *To mitigate for the loss of oak woodlands and cottonwoods, the project applicant(s) shall obtain a Tree Permit from Placer County's Planning Services Division prior to construction activities that could impact protected trees and comply with all requirements of the Tree Permit. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. Compensatory mitigation shall occur off-site and shall consist of one of the following:*

- *Submit payment of fees for oak woodland conservation at a 2:1 ratio consistent with Chapter 12.16.080(C) Placer County Tree Preservation Ordinance - Replacement Programs and Penalties, and cottonwood canopy impacts at a 4:1 ratio, consistent with requests made by the California Department of Fish and Wildlife. These fees shall be calculated based upon the current market value of similar cottonwood and oak woodland acreage preservation and an endowment to maintain the land in perpetuity.*
- *Purchase off-site conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio and cottonwood canopy impacts at a 4:1 ratio.*
- *Provide for a combination of payment to the Tree Preservation Fund and creation of an off-site Oak Preservation Easement.*

In addition, the WHI applicant shall provide payment to the Tree Mitigation Fund for impacts to approximately 147 inches of significant oak trees, as determined prior to approval of Improvement Plans. The WHII applicant shall provide payment to the Tree Mitigation Fund for impacts to approximately 777 inches of significant oak trees.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project, then Mitigation Measure 6-7(a) may be replaced with the PCCP's mitigation fees and conditions on

covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-7(b)

Prior to Improvement Plan approval, the plans shall include a list of tree protection methods, for review and approval by the Planning Services Division. The list of tree protection methods shall be implemented during construction of the project. The list of tree protection methods shall include, but not limited to, the following:

- *The applicant shall install a four-foot tall, brightly colored (yellow or orange), synthetic mesh material fence around all oak trees to be preserved that are greater than six inches DBH (or 10 inches DBH aggregate for multi-trunked trees). The fencing shall delineate an area that is at least the radius of which is equal to the largest radius of the protected tree's drip line plus one foot. The fence shall be installed prior to any site preparation or construction equipment being moved onsite or any site preparation or construction activities taking place. Development of this site, including grading, shall not be allowed until this condition is satisfied. Any encroachment within the areas listed above, including within driplines of trees to be saved, must first be approved by a designated representative of the Development Review Committee (DRC). Grading, clearing, or storage of equipment or machinery may not occur until a representative of the DRC has inspected and approved all temporary construction fencing. Trees shall be preserved where feasible. This may include the use of retaining walls, planter islands, or other techniques commonly associated with tree preservation. The Improvement Plans shall indicate the location of the fencing and include a note describing the fencing requirements consistent with this mitigation measure.*
- *The project applicant shall implement the following guidelines before and during grading and construction for protection of all oak trees to be preserved:*
 - *Plans and specifications shall clearly state protection procedures for oak trees on the project site. The specifications shall also include a provision for remedies if oak trees are damaged;*
 - *Vehicles, construction equipment, mobile offices, or materials shall not be parked, stored, or operated within the driplines of oak trees to be preserved;*
 - *Cuts and fills around trees shall be avoided where feasible;*

- *Soil surface removal greater than one foot shall not occur within the driplines of oak trees to be preserved. Cuts shall not occur within five feet of their trunks;*
- *Earthen fill greater than one foot deep shall not be placed within the driplines of oak trees to be preserved, and fill shall not be placed within five feet of their trunks;*
- *Underground utility line trenching shall not be placed within the driplines of oak trees to be preserved where feasible without first obtaining approval from a designated representative of the DRC. If it is necessary to install underground utilities within the driplines of oak trees, boring or drilling rather than trenching shall be used;*
- *Paving shall not be placed in the vicinity of oak trees to be preserved (at a minimum, within the dripline of any oak tree) without first obtaining approval from a designated representative of the DRC; and*
- *Irrigation lines or sprinklers shall not be allowed within the dripline of native oak trees.*
- *If any of the on-site Significant Trees are heavily damaged during construction activities associated with the proposed project, the project applicant shall pay an in-lieu fee for the damaged tree(s) in accordance with Section 12.16.080 of the Placer County Code. Payment of such fees shall be ensured as a standard condition of approval by the Planning Services Division.*

6-8 Interfere Substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nesting or breeding sties. Based on the analysis below the impact is *less than significant*.

WHI and WHII

In both project sites, the existing stretches of Strap Ravine and the associated riparian vegetation provide movement corridors for wildlife species traveling up or downstream along Strap Ravine. Implementation of the proposed projects would result in development activity within the project sites; however, the reaches of Strap Ravine within each project site, and much of the riparian woodland areas adjacent to Strap Ravine, would be protected within areas of Open Space within each project site. As shown in Figure 3-8, of the Project Description Chapter of this EIR, as well as Figures 6-1, 6-2, 6-4, and 6-6 of this Chapter, construction activity within the portion of both project sites containing Strap Ravine would be limited to placement of the proposed CON/SPAN bridges. The CON/SPAN bridges would provide a clear span over Strap Ravine without the placement of supports or other structures within Strap Ravine that could result in impediments to the movement of species through the project sites. Considering the fact that both projects would not include the placement of structures within Strap Ravine, Strap Ravine would continue to act as a movement corridor for wildlife following implementation of the proposed projects.

In addition to protecting Strap Ravine, both projects would include protection of large amounts of riparian woodland areas adjacent to Strap Ravine as well as foothill woodlands adjacent to Douglas Boulevard. In total, approximately 17.6 acres of woodland/cottonwood habitat would remain on the project sites after development of the two projects. The protected areas of riparian woodland and foothill woodlands in each project site would allow for the continued movement of wildlife through each project site.

Considering the above, while the development of the proposed residential uses would reduce the on-site habitats, both projects have been designed to preserve substantial on-site habitats which would continue to facilitate movement of wildlife. Therefore, the proposed projects would not have the potential to substantially interfere with the movement of native wildlife species or inhibit the use of established breeding sites, resulting in a *less-than-significant* impact.

Mitigation Measure(s)

None required.

6-9 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Based on the analysis below there is *no impact*.

WHI and WHII

The project sites are located within the boundaries of the draft PCCP. However, at the time of preparation of the environmental analysis for the proposed projects, the PCCP had not yet been adopted. Nevertheless, as applicable throughout this chapter and as discussed in the Regulator Setting section above, each mitigation measure in this Chapter includes a statement that would allow for the substitution of mitigation fees or impact avoidance and minimization measures as set forth in the PCCP, should the PCCP be implemented prior to the implementation of the proposed projects. Given the inclusion of such statements in applicable mitigation measures throughout this document, while the PCCP has not yet been implemented, should the PCCP be implemented prior to implementation of the proposed projects, the projects would be required to be undertaken in compliance with the PCCP. Thus, the proposed projects would result in *no impact*.

Mitigation Measure(s)

None required.