4.2 BIOLOGICAL RESOURCES

INTRODUCTION

The Biological Resources chapter evaluates the biological resources known to occur or potentially occur within the Tuscany Meadows project site. This chapter describes potential impacts to those resources, and identifies measures to eliminate or substantially reduce those impacts to less-than-significant levels. Existing plant communities, wildlife habitats, and potential for special-status species and communities are discussed for the project site. The information contained in this analysis is primarily based on the *Planning Survey Report* prepared by Moore Biological Consultants (see Appendix F),[1] the *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan* (HCP/NCCP),[2] the *Pittsburg General Plan 2020,* and the associated EIR.[3]

EXISTING ENVIRONMENTAL SETTING

The following sections describe the regional setting of the site, as well as the existing biological resources occurring in the proposed project area.

Regional Setting

The City of Pittsburg is located in the northern portion of Contra Costa County on the southern border of Suisun Bay. The unincorporated community of Bay Point bounds Pittsburg to the west, the City of Antioch is located to the east, and the Black Diamond Mines Regional Preserve in unincorporated Contra Costa County is situated to the south. The City is made up of relatively flat land in its northern portion, with increasing elevations in the southern portion. The City's planning area includes 41.1 square miles of land, including the Sphere of Influence and City corporate limits. Geographic features in Pittsburg include the Sacramento River along the northern boundary, steep hills reaching almost 1,900 feet and the Black Diamond Mines Regional Preserve along the southern boundary, and Browns Island, located across New York Slough. Pittsburg is characterized by a Mediterranean climate, and supports a variety of grasslands, wetland communities, and scattered stands of trees. Historic vegetation in Pittsburg included native grassland, oak woodlands, riparian communities, and coastal salt and brackish marshes. The southern portion of the City is largely undeveloped open space with large areas of rolling grassy hills, while the northern portion of Pittsburg consists of salt and brackish marshlands at New York Slough. These natural areas provide potential habitat for several threatened and endangered plant and animal species.

Project Setting

The proposed project site occupies approximately 193 acres of land area in unincorporated Contra Costa County (see Figure 4.2-1, Aerial View of the Proposed Project Site). The Tuscany Meadows Tentative Map site encompasses approximately 170 acres of the overall project site and is comprised of ruderal grassland habitat. The remaining 23 acres of the site are occupied by an existing Chevron facility located in the northern portion of the site. The 23-acre Chevron parcel has been included in the total acreage of the site for annexation purposes only; the Chevron parcel would not be improved as part of the project.

The project site is bounded on the north by Buchanan Road, to the east by the Contra Costa Canal and Somersville Road, to the south by the Black Diamond Estates residential development, and to the west by the Highlands Ranch residential development. While surrounding land uses primarily include residential developments a closed landfill is situated to the southeast across Somersville Road. The topography of the site is relatively flat and generally sloped from south to north with elevations ranging between approximately 112 feet and 190 feet above mean seal level (msl).

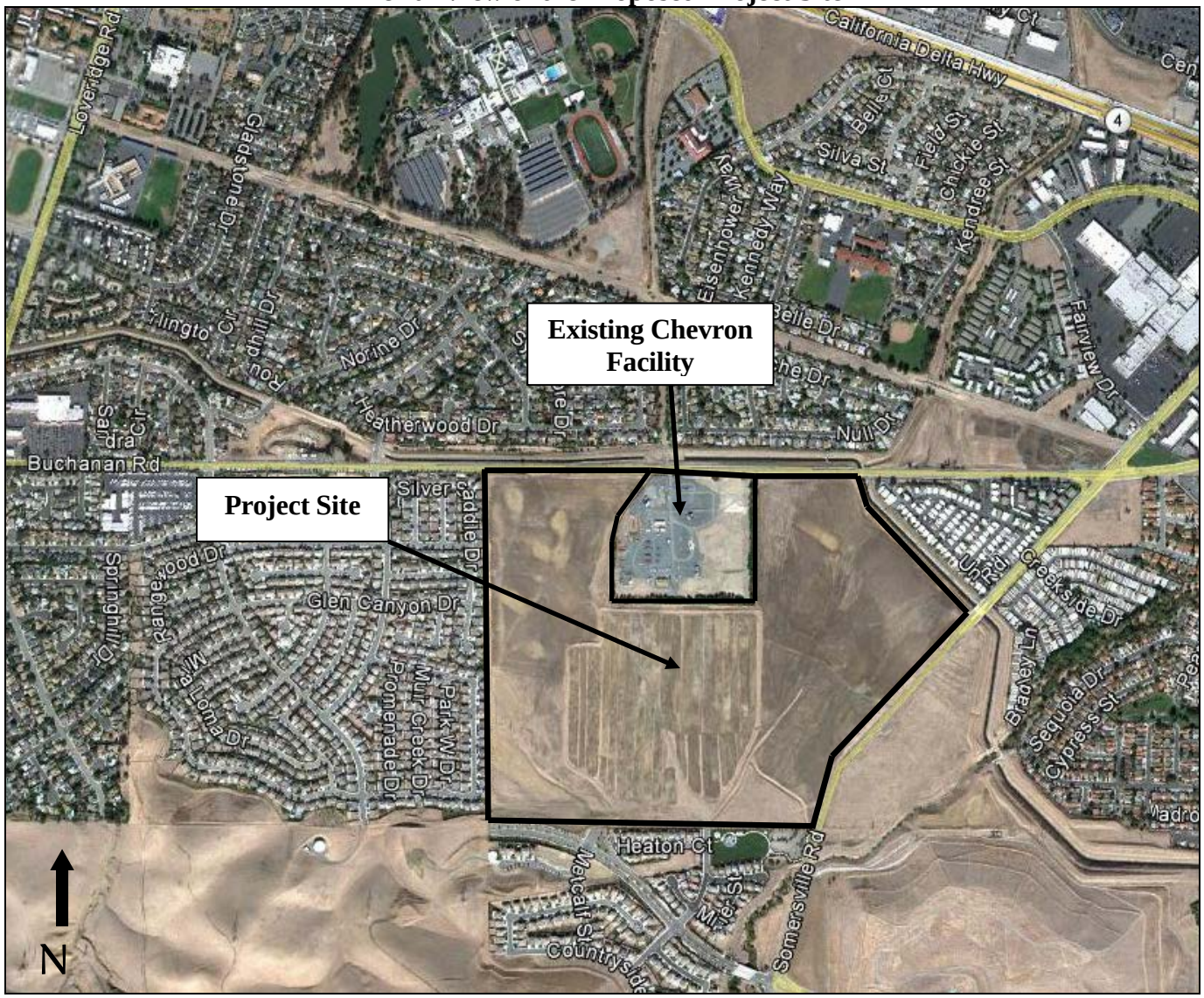
Although presently fallow, the project site was previously used as an above-ground crude oil tank farm owned by Chevron USA, Inc. However, all tanks and associated piping were removed from the site in 1981, and the site is currently undergoing soil remediation. Vegetation consists of ruderal grasses throughout the project site. The site was farmed in dryland hay crops (*Avena fatua*) and an oat crop at the time of the April 4, 2012 field visit conducted during preparation of the Planning Survey Report for the project site. Due to remediation activities, the project site is highly disturbed and contains very little vegetation. Structures do not exist on the Tentative Map site.

<u>On-Site Vegetation Communities</u>

Due to the past use of the site as an above-ground crude oil tank farm and ongoing remediation activities, the entire project site is highly disturbed, and as a result, is dominated by ruderal grassland vegetation. Ruderal habitat is habitat from which the native vegetation has been completely removed by grading, cultivation, or other surface disturbances. Once abandoned, such areas are typically recolonized by invasive exotic species. The native vegetation, if kept from further disturbance or left intact, may ultimately become at least partially restored.

As mentioned above, the project site has been farmed in dryland hay crops for the past several years. Most recently, the site supported an oat (*Avena fatua*) crop that was not yet harvested during the April 4, 2012 survey conducted by Moore Biological Consultants. The oats are intermixed with various native and non-native annual grass and weed species including perennial ryegrass (*Lolium perenne*), foxtail barley (*Hordeum murinum*), rancher's fireweed (*Amsinckia menziesii*), bull thistle (*Cirsium vulgare*), filaree (*Erodium botrys*), yellow star-thistle (*Centaurea solstitialis*), and rose clover (*Trifolium hirtum*).

Figure 4.2-1
Aerial View of the Proposed Project Site



Special-Status Species

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 that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (CEQA Guidelines, Section 15380);
- 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]);
- Locally important occurrences of plants listed by CNPS as plants for which more information is needed and plants of limited distribution (Lists 3 and 4, respectively, species in CNPS [2001]);
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 CCR 670.5);
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions; and/or
- Plants considered sensitive or unique by the scientific community or occurring at the limits of their natural range (*CEQA Guidelines*, Appendix G).

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 that are candidates for possible future listing as threatened or endangered under the FESA (54 CFR 554);
- Wildlife that meet the definitions of rare or endangered species under the CEQA (CEQA Guidelines, Section 15380);
- Wildlife listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5);
- Wildlife species of special concern to the California Department of Fish and Wildlife (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 California Department of Fish and Wildlife (CDFW) and the U.S. 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 California Native Plant Society (CNPS) has developed a set of lists of native plants considered rare, threatened, or endangered (CNPS 2001). Collectively, these plants and animals are referred to as "special-status species."

Sensitive plants are those that are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Sensitive plants also include species considered rare or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as those plant species identified on Lists 1A, 1B, and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the California Native Plant Society (CNPS, 2001). Finally, sensitive plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on List 3 in the CNPS Inventory.

Table 4.2-1 provides a summary of the listing status and habitat requirements of sensitive species that have been documented in the project vicinity or for which potentially suitable habitat exists in the area, as determined by the East Contra Costa County HCP. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability of the site, and field observations. Specifically, the table includes sensitive plant and wildlife species listed in the HCP/NCCP as having the potential to occur within the annual grassland land cover type which best characterizes the on-site habitat.[4]

Further analysis is included in this EIR only for species that are known to have at least a low potential for occurrence on the project site.

Special-Status Plant Species

The East Contra Costa County HCP identifies 10 special-status plant species as having the potential to occur in annual grassland habitat – the habitat type that best characterizes the on-site habitat.[5] These 10 plant species include Alkali milkvetch (*Astragalus tener ssp tener*), Big tarplant (*Blepharizonia plumosa*), Brewer's dwarf flax (*Hesperolinon breweri*), Contra Costa goldfields (*Lasthenia conjugens*), Diamond-petaled poppy (*Eschscholzia rhombipetala*), Large-flowered fiddleneck (*Amsinckia grandiflora*), Mount Diablo buckwheat (*Eriogonum truncatum*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), Round-leaved filaree (*California macrophylla*), and Showy madia (*Madia radiata*).

Table 4.2-1
Special-Status Species and Sensitive Natural Communities that Potentially Occur Within the Project Site

Common Name	Scientific Name	Habitat	Potential for Occurrence in the Study Area
PLANTS			
Large-flowered fiddleneck	*Amsinckia grandiflora*	Annual grasslands at elevations between 275 and 550 meters above sea level.	None. Site is far below elevation range of this species.
Alkali milkvetch	*Astragalus tener ssp. tener*	Annual grasslands in adobe clay soils, and alkaline vernal pools, at elevations between 0 and 60 meters above sea level.	None. No suitable habitat on site for this species. The CNPS inventory describes this species as extirpated in Contra Costa County
Big tarplant	*Blepharizonia plumosa*	Annual grasslands at elevations between 30 and 505 meters above sea level.	None. The highly disturbed ruderal grassland on the site does not provide suitable habitat for this species. No suitable habitat present. The site is not mapped in the East Contra Costa County HCP/NCCP as either "Suitable Low Potential Habitat" or "Suitable Habitat" for this species.
Round-leaved filaree	*California macrophylla*	Cismontane woodland habitats and annual grasslands with clay soils, at elevations between 15 and 1,200 meters above sea level.	None. Highly disturbed condition of ruderal grassland in the site greatly reduces the suitability of the site for this species. The site is at the low end or below elevation range of round-leaved filaree. The site is not mapped in the East Contra Costa County HCP/NCCP as either "Primary Habitat" or "Secondary Habitat" for this species.
Mount Diablo fairy-lantern	*Calochortus pulchellus*	Annual grasslands with sandy soils, at elevations between 30 and 840 meters above sea level. East Contra Costa County CHCP/NCCP describes the species occurring at elevations between 650 and 2,600 feet above sea level	None. Site is below the elevation range of the species. The site is not mapped in the East Contra Costa County HCP/NCCP as "Suitable Habitat" for this species.
Mount Diablo buckwheat	*Eriogonum truncatum*	Annual grasslands with sandy soils, at elevations between 3 and 350 meters above sea level.	None. Highly disturbed condition of the ruderal grassland in the site greatly reduces the suitability of the site for this species. The CNPS Inventory describes Mount Diablo buckwheat as now being known from only one population in Contra Costa County, within Mount Diablo State Park.
Diamond-petaled poppy	*Eschscholzia rhombipetala*	Annual grasslands with alkaline or clay soils, at	None. No areas of alkaline or clay soils were observed in the site. The CNPS

(Continued on next page)

Table 4.2-1
Special-Status Species and Sensitive Natural Communities that Potentially Occur Within the Project Site

Common Name	Scientific Name	Habitat	Potential for Occurrence in the Study Area
		elevations between 0 and 975 meters above sea level.	Inventory describes this species as extirpated in Contra Costa County
Brewer's dwarf flax	*Hesperolinon breweri*	Annual grasslands, usually in serpentine soils, at elevations between 90 and 900 meters above sea level.	None. The site is below the elevation range of Brewer's dwarf flax. The site is not mapped in the East Contra Costa County HCP/NCCP as either "Suitable Low Potential Habitat" or "Suitable Habitat" for this species.
Contra Costa goldfields	*Lasthenia conjugens*	Annual grasslands and vernal pools at elevations between 0 and 470 meters above sea level.	None. Vernal pools do not exist on site.
Showy madia	*Madia radiata*	Annual grassland habitats at elevations between 25 and 900 meters above sea level.	None. Highly disturbed condition of ruderal grassland in the site greatly reduces the suitability of the site for this species. The CNPS Inventory describes this species as extirpated in Contra Costa County.
WILDLIFE			
Mammals			
San Joaquin kit fox	*Vulpes macrotis mutica*	Annual grasslands, scrublands, vernal pool areas, alkali meadows and playas, and an agricultural matrix row of crops, irrigated pastures, orchards, vineyards, and grazed annual grasslands (ECCHCP/NCCP).	Low potential for species on-site. Site is ruderal annual grassland that is within the range of the San Joaquin kit fox, mapped as "Suitable Core Habitat" in the East Contra Costa County HCP/NCCP. The site was inspected for burrows or dens with evidence of kit fox occupancy or burrows or dens that meet the dimensional criteria for kit fox. Comprehensive inspection of potential den habitat was accomplished by driving and walking meandering transects throughout the property. Potential San Joaquin kit fox dens were not observed.
Birds			
Golden Eagle	*Aquila chrysaetos*	Rolling foothills, mountain areas, sage-juniper flats, desert. Cliff-walled canyons and large trees in open areas provide nesting habitat.	Low potential for species on-site. The site is within the range of the golden eagle. Potential nest trees are not located on the site, although some relatively large potential nest trees exist on the Chevron parcel. Nests were not observed in Chevron parcel trees, and no golden eagles were observed.

(Continued on next page)

Table 4.2-1
Special-Status Species and Sensitive Natural Communities that Potentially Occur Within the Project Site

Common Name	Scientific Name	Habitat	Potential for Occurrence in the Study Area
Western Burrowing Owl	*Athene cunicularia*	Open, dry, annual or perennial grasslands, deserts, and scrublands, characterized by low growing vegetation. Subterranean nester, dependent upon burrowing mammals.	Low potential for species on-site. The site is within the range of the burrowing owl. Comprehensive inspection of potential burrowing owl habitat was accomplished by driving and walking meandering transects throughout the property. Western burrowing owls or burrows with evidence of burrowing owl occupancy were not observed.
Swainson's hawk	*Buteo swainsoni*	Nests in isolated trees or in small groves surrounded by agricultural land or grasslands.	Low potential for species on-site. The site is within the extreme western edge of the range of Swainson's hawk habitat. Potential nest trees are not located on the site, although some relatively large potential nest trees occur on the Chevron parcel. Nests were not observed in Chevron parcel trees. Swainson's hawks were not observed and no active Swainson's hawks were located during the 2012 survey, which was conducted during the nesting season.
White-tailed kite	*Elanus caeruleus*	Grassland, marsh, or cultivated fields where dense-topped trees or shrubs are present for nesting and perching. Often reside near water sources, where prey is more abundant.	Low potential for species on-site. However, the species could potentially nest in the trees located on the Chevron parcel.
Peregrine falcon	*Falco peregrinus*	Nests on high cliffs near wetlands, lakes, rivers, or other water; also nests on human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	None. Suitable nesting habitat does not exist on or near project site.

Source: Moore Biological Consultants, Planning Survey Report, 2012.

The project site has been completely disturbed over many years of industrial and agricultural uses, and the site has been undergoing soil remediation for several years. As a result, the project site is largely occupied by ruderal annual grassland vegetation. The on-site survey did not detect any special-status plant species. Given the negative survey findings, and the lack of suitable habitats, as discussed in Table 4.2-1, the potential for special-status plant species to occur on-site is negligible, and further botanical surveys are not warranted.

Special-Status Wildlife Species

The *Planning Survey Report* prepared by Moore Biological Consultants provided the following information regarding the wildlife species that have a low potential to occur on-site.

San Joaquin kit fox

The San Joaquin kit fox (*Vulpes macrotis mutica*) occurs in a variety of habitats, including grasslands, scrublands, vernal pool areas, irrigated pastures, orchards, and vineyards, amongst others. The kit fox prefers habitats with soil that can be dug easily - mainly loose-textured soils. However, it is known that the kit fox may dig and occupy burrows within soils with high clay content dug by other animals, such as ground squirrels. Kit fox dens are normally located in open areas with grass, or grass and scattered brush, and within flat, well-drained terrain. The kit fox preys upon ground squirrels, cottontails, black-tail jackrabbits, pocket mice, kangaroo rats, ground-nesting birds, reptiles, and insects.

Despite the high level of disturbance on the project site, the ruderal annual grassland is a potential habitat for the San Joaquin kit fox. The project site was mapped as "Suitable Core Habitat" for San Joaquin kit fox under the East Contra Costa County HCP/NCCP. However, evidence of kit fox occupancy was not observed during site reconnaissance.

Golden Eagle

The golden eagle (*Aquila chrysaetos*) uses several species of oak, foothill pine, California bay laurel, eucalyptus, and western sycamore trees for nesting. Ideal territory sites for the golden eagle include those with a favorable nest site, dependable food supply, and large areas of open country land for foraging. Mountainous and undulating land is preferred to flat habitats. Golden eagles prey mostly on rodents, hares, and rabbits, but also take carrion from other mammals, birds, and reptiles.

The project site is ruderal annual grassland and is within the range of the golden eagle. While potential nest trees are not located on the Tuscany Meadows Tentative Map site, some relatively large potential nest trees are found within the landscaped perimeter of the Chevron facilities parcel. Site reconnaissance conducted by Moore Biological Consultants did not reveal evidence of golden eagle on the project site.

Western Burrowing Owl

The western burrowing owl (*Athene cunnicularia*) inhabits grasslands, deserts, sagebrush scrub, agricultural areas, earthen levees, and coastal uplands, amongst other places. Normally, burrowing owls can be found in sites that support short vegetation, although they can tolerate sparse vegetation. The most vital element for habitat consideration for the western burrowing owl is the presence of underground burrows. Western burrowing owls do not dig their own burrows; rather, they rely on other animals to dig their burrows. Burrowing owls often prey upon arthropods, small mammals, birds, amphibians, and reptiles.

The project site is ruderal annual grassland that is within the range of the western burrowing owl. The site and visible areas on adjacent lands were inspected for burrowing owls and ground squirrel burrows during site reconnaissance conducted by Moore Biological Consultants. Evidence of burrowing owl occupancy was not seen during site reconnaissance.

Swainson's Hawk

Swainson's hawks *(Buteo cunnicularia)* occupy a wide array of open habitats. Typically, the Swainson's hawk can be found within habitat that contains suitable nest trees, and close proximity to foraging habitat. The species also uses clumps of eucalyptus trees, and a variety of large trees near old farm houses for habitat. Foraging habitat for the Swainson's hawk includes ruderal fields, fallow fields, grain crops, and safflower fields.

The project site is ruderal annual grassland along the extreme western edge of the range of Swainson's hawks. While potential nest trees are not located on the Tuscany Meadows Tentative Map site, some relatively large potential nest trees are found within the landscaped perimeter of the Chevron facilities parcel. Site reconnaissance conducted by Moore Biological Consultants did not reveal evidence of Swainson's hawks on the project site.

White-tailed kite

The white-tailed kite is typically found foraging in grassland, marsh, or cultivated fields where dense-topped trees or shrubs are present for nesting and perching. They nest in a wide variety of trees of moderate height and sometimes in tall bushes, such as coyote bush (*Baccharis pilularis*). Although the surrounding terrain may be semiarid, kites often reside near water sources, where prey is more abundant. The particular characteristics of the nesting site do not appear to be as important as the proximity to a suitable food source. Kites primarily hunt small mammals, with California meadow voles (*Microtus californicus*) accounting for 50 to 100 percent of their diet.

While potential white-tailed kite nest trees are not located on the Tuscany Meadows Tentative Map site, some relatively large potential nest trees are found within the landscaped perimeter of the Chevron facilities parcel. Site reconnaissance conducted by Moore Biological Consultants did not reveal evidence of white-tailed kite on the project site.

Sensitive Natural Communities

Sensitive natural communities are those that are considered rare in the region, support special-status plant or wildlife species, or receive regulatory protection (i.e., wetlands and other waters under Sections 404 and 401 of the Clean Water Act, Section 1600 *et seq.* of the California Fish and Game Code, and/or the Porter-Cologne Act). In addition, the CNDDB has designated a number of communities as rare; these communities are given the highest inventory priority (Holland 1986, CDFW 2003e).

The *Planning Survey Report* prepared by Moore Biological Consultants indicates that special-status natural communities are not found within the proposed project site as a result of ongoing site disturbance activities.

REGULATORY CONTEXT

The following is a description of federal, State, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process.

Federal Regulations

Federal Endangered Species Act

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect endangered species or species that are threatened with extinction. The FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

The FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1532, 50 CFR 17.3). Taking can result in civil or criminal penalties.

The FESA and NEPA Section 404 guidelines prohibit the issuance of wetland permits for projects that would jeopardize the existence of threatened or endangered wildlife or plant species. The U.S. Army Corps of Engineers must consult with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic Atmospheric Administration (NOAA) when threatened or endangered species may be affected by a proposed project to determine whether issuance of a Section 404 permit would jeopardize the species.

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 Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Section 3503.5 of the California Fish and Game Code states, "it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes 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."

State Regulations

California Endangered Species Act

In 1984, the State of California enacted the California Endangered Species Act (CESA), which is similar to the FESA but pertains to State-listed endangered and threatened species. The California Endangered Species Act requires State agencies to consult with the CDFW when preparing California Environmental Quality Act (CEQA) documents to ensure that the actions of the lead agency do not jeopardize the existence of listed species. Lead agencies are directed by

CESA to consult with CDFW on projects or actions that could affect listed species. In addition, CESA 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.

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

California Department of Fish and Wildlife (CDFW)

The CDFW exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under CDFW Code Section 1600 to 1607. The CDFW has the authority to regulate work that will do any one or more of the following:

1) Divert, obstruct, or change the natural flow of a river, stream, or lake;
2) Change the bed, channel, or bank of a river, stream, or lake; or
3) Use material from a streambed.

The CDFW asserts that the jurisdictional area along a river, stream, or creek is usually bounded by the top-of-bank or the outermost edges of riparian vegetation. Typical activities regulated by CDFW under Section 1600-1607 authority include installing outfalls, stabilization of banks, creek restoration, implementing flood control projects, constructing river and stream crossings, diverting water, damming streams, gravel mining, logging operations, and jack-and-boring.

Careful project design, including the minimization of impacts and reduction of hard structure surface area (i.e., minimal amounts of cement or rip-rap), is critical for CDFW approval. The CDFW emphasizes the use of biotechnical or bioengineered creek-related components (emphasis on natural materials, sometimes in conjunction with hard materials) that minimize the need for hard structures in creeks.

CDFW Species of Special Concern

In addition to formal listing 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 the CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

CDFW Birds of Prey Protection

Birds of prey are also protected in California under provisions of the State Fish and Game Code, 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 the CDFW.

California Native Plant Society

The 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 more information is needed - a review list.
List 4:	Plants of limited distribution - a watch list.

Local Regulations

East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan

On January 25, 2000, the Contra Costa County Board of Supervisors made a declaration of intent to participate in the development of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP). On June 30, 2000, the East Contra Costa County Habitat Conservation Plan Association Agreement went into effect. This agreement established the East Contra Costa Habitat Conservation Plan Association (HCPA) as the lead agency in drafting the Habitat Conservation Plan for submittal to the governing boards and councils of member agencies, oversee compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), and would serve as the lead agency under CEQA for developing the HCP/NCCP. The City of Pittsburg elected to participate in the development of the HCP/NCCP and is a member of the HCPA.

The City of Pittsburg approved the HCP/NCCP on April 16, 2007 (Resolution 07-10745), and authorized execution of the Implementation Agreement on May 1, 2007. The Joint Exercise of Powers Agreement was executed on April 19, 2007 (Resolution No. 07-10898). The U.S. Fish and Wildlife Service signed the federal permit for the HCP/NCCP on July 25, 2007, and the CDFW signed the State permit for the HCP/NCCP on August 6, 2007. Therefore, East Contra

Costa County has an officially approved HCP/NCCP as of August 6, 2007. Currently, all participating jurisdictions have approved the HCP/NCCP and have adopted implementing ordinances and the fee structures set forth in the HCP/NCCP.

Based on the HCP/NCCP and the data and analyses referenced therein, there is a reasonable relationship between the use of the HCP/NCCP implementation fees authorized by the City of Pittsburg implementation ordinance and the type of development projects subject to the fees. All development is subject to the fees, except those exempted under Ordinance 15.108.030(A). Among the exemptions are development projects that would permanently disturb less than one acre, and development that is contained entirely within an area mapped as urban, turf, landfill and/or aqueduct land cover types in the HCP/NCCP. The Development Fee is used to implement the HCP/NCCP by funding the acquisition of land, the enhancement and management of habitat and the other activities to mitigate for impacts to open space, habitat and covered species caused by affected development projects. The Wetland Mitigation Fee is used to implement the HCP/NCCP by funding the restoration, creation and management of Jurisdictional Wetlands and Waters and riparian woodland/scrub and other actions in order to mitigate for impacts to Jurisdictional Wetlands and Waters and riparian areas caused by affected development projects. The HCP/NCCP implementation fees do not apply to all types of development projects, but only those that impact open space, habitat suitable for one or more covered species, Jurisdictional Wetlands and Waters, or riparian areas. In this way, the HCP/NCCP implementation fees are used only for purposes reasonably related to the types of development projects that will be subject to the fees.

The proposed project site is within the HCP/NCCP inventory area. The HCP/NCCP development fee is based on the project location. The HCP/NCCP includes three Fee Zones, defined by a map that determines the fee paid by development, regardless of the land cover type within the development. The Tuscany Meadows project is within the HCP/NCCP Development Fee Zone II: Natural Area Zone. Land within this zone is dominated by natural land cover types.

The proposed project's participation in the above-mentioned East Contra Costa County HCP/NCCP would provide a mechanism to adequately mitigate impacts to all potentially occurring sensitive species on the proposed project site.

City of Pittsburg General Plan

In addition to federal and State regulations, the City of Pittsburg General Plan Resource Conservation element identifies the following goals and policies to provide further protection to biological resources within the City's limits:

Goal 9-G-1 Protect conservation areas, particularly habitats that support special status species, including species that are State or Federally listed as endangered, threatened, or rare.

Goal 9-G-2 Guide development in such a way that preserves significant ecological resources.

Policy 9-P-1 Ensure that development does not substantially affect special status species, as required by State and federal agencies and listed in Table 9-1 of the Pittsburg General Plan. Conduct assessments of biological resources as required by CEQA prior to approval of development within habitat areas of identified special status species, as depicted in Figure 9-1 of the Pittsburg General Plan.

Development located in or adjacent to these ecologically sensitive areas must complete a site-specific assessment of biological resources as part of the development review process. The City's environmental review process would be used to impose appropriate mitigation measures as required by State and federal agencies to reduce impacts on sensitive habitat and special status species.

Policy 9-P-2 Establish an on-going program to remove and prevent the re-establishment of invasive species and restore native species as part of development approvals on sites that include ecologically sensitive habitat.

Non-native vegetation originally introduced as landscaping, such as giant reed, currently threaten habitat for threatened and endangered plant and animal species within the City. Guidelines should be developed that include a list of native species that may be planted as part of landscaping associated with future development. Drought tolerant and low maintenance species should be emphasized. Removal of invasive species may also be required if they are a notable fire hazard in parks or open space.

Policy 9-P-3 Participate in the development of a regional Habitat Conservation Plan (HCP) and consider its adoption for preservation of native species throughout eastern Contra Costa County.

Impacts and Mitigation Measures

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to biological resources. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

For the purposes of this EIR, the following standards of significance were adapted from Appendix G of the CEQA Guidelines. Impacts are considered significant if implementation of the proposed project would do any one or more of the following:

- Have a substantial adverse impact, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional

plans, policies, or regulations or by the CDFW or USFWS, including CNPS plants listed as 1B;

- Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites;

- Conflict with any local or regional policies or ordinances designed to protect or enhance biological resources, such as a tree preservation policy or ordinance;

- Conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, State, or federal resource conservation plans, goals, or regulations that would result in a physical impact on the environment.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important, but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, the impacts would not substantially diminish or result in the permanent loss of a defined important resource on a population-wide or region-wide basis.

Method of Analysis

The *Planning Survey Report* by Moore Biological Consultants is based on a review of biological resource databases, inventories, regional literature on both plants and animals, and a reconnaissance-level field survey that was conducted at the project site on April 4, 2012. The report was used in conjunction with other State and local sources of information, including the CNDDB, the California Native Plant Society Inventory of Rare and Endangered Vascular Plants (2010), manuals, the East Contra Costa County HCP/NCCP, and reports prepared for other projects in the region to assess the project's impacts on biological resources. Potential impacts to biological resources and proposed mitigation measures are based on the project description set forth in Chapter 3 of this EIR.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

4.2-1 Impacts to special-status plants. Based on the analysis below, the impact is *less than significant.*

The East Contra Costa County HCP/NCCP identifies 10 special-status plant species as having the potential to occur in annual grassland habitat – the habitat type that best characterizes the on-site habitat. These 10 plant species include Alkali milkvetch (*Astragalus tener ssp tener*), Big tarplant (*Blepharizonia plumosa*), Brewer's dwarf flax (*Hesperolinon breweri*), Contra Costa goldfields (*Lasthenia conjugens*), Diamond-petaled poppy (*Eschscholzia rhombipetala*), Large-flowered fiddleneck (*Amsinckia grandiflora*), Mount Diablo buckwheat (*Eriogonum truncatum*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), Round-leaved filaree (*California macrophylla*), and Showy madia (*Madia radiata*). The project site has been completely disturbed over many years of industrial and agricultural uses, and the site has been undergoing soil remediation for several years. As a result, the project site is largely occupied by ruderal annual grassland vegetation. The on-site survey performed by Moore Biological Consultants did not detect any special-status plant species. Given the negative survey findings, and the lack of suitable habitats for the above-listed 10 special-status plants, as discussed in Table 4.6-1, the potential for special-status plant species to occur on-site is negligible, and further botanical surveys are not warranted. Therefore, disturbance of the site during construction would have a ***less-than-significant*** impact on special-status plants.

Mitigation Measure(s)
None required.

4.2-2 Impacts to the San Joaquin kit fox. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

The San Joaquin kit fox is a covered species under the East Contra Costa County HCP/NCCP. The project site is ruderal annual grassland that is within the range of the San Joaquin kit fox, and is mapped as "Suitable Core Habitat" in Appendix D of the East Contra Costa County HCP/NCCP. However, site reconnaissance performed by Moore Biological Consultants determined that evidence of burrows or dens with kit fox occupancy does not exist on-site, nor were burrows or dens detected that meet the dimensional criteria for kit fox. Although on-site inspection did not reveal evidence of the San Joaquin kit fox, the project site is considered suitable habitat for the species. Therefore, impacts related to the San Joaquin kit fox as a result of the proposed project are deemed ***potentially significant***.

Mitigation Measure(s)
The proposed project's participation in the East Contra Costa County HCP/NCCP would provide a mechanism to adequately mitigate impacts to the San Joaquin kit fox. The following mitigation measures would reduce the above impact to a *less-than-significant* level.

4.2-2(a) *A USFWS/CDFW approved biologist shall conduct a pre-construction survey for San Joaquin kit fox within 30 days of on-site ground disturbance. The survey shall establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines. The biologist shall survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership will not be surveyed. Written results of pre-construction surveys shall be submitted to the Pittsburg Planning Department within five working days after survey completion and before the start of ground disturbance. Concurrence is not required prior to initiation of covered activities.*

If pre-construction surveys for the San Joaquin kit fox establish presence of the species and/or suitable dens within the survey area, the applicant shall implement Mitigation Measure 4.2-2(b) below.

4.2-2(b) *The following measures shall be implemented by a USFWS/CDFW approved biologist:*

- *If a San Joaquin kit fox den is discovered in the proposed development footprint, the den will be monitored for 3 days by a USFWS/CDFW approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.*
- *Unoccupied dens should be destroyed immediately to prevent subsequent use.*
- *If a natal or pupping den is found, USFWS and CDFW will be notified immediately. The den will not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFW.*
- *If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional 5 consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied it may be excavated under the direction of the biologist. Alternatively, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities)]*

If dens are identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of

entrances will be demarcated. The configuration of exclusion zones should be circular, with a radius measured outward from the den entrance(s). No covered activities will occur within the exclusion zones. Exclusion zone radii for potential dens will be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by kit fox.

4.2-2(c) *Prior to the issuance of grading or construction permits for each phase of development of the Tuscany Meadows subdivision, the applicant shall pay the applicable East Contra Costa County HCP/NCCP per-acre fee in effect for Zone II in compliance with Section 15.108.070[6] of the Pittsburg Municipal Code; or, per Section 15.108.080 of the Pittsburg Municipal Code, the applicant shall dedicate land in-lieu of some or all of the Development Fee that would otherwise be imposed upon the project. The Pittsburg Planning Department and the Contra Costa County Conservancy shall approve the final method of compliance with the East Contra Costa County HCP/NCCP provisions.*

4.2-3 Impacts to western burrowing owl. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

The project site is within the range of the western burrowing owl, a covered species under the East Contra Costa County HCP/NCCP. Moore Biological Consultants conducted a comprehensive inspection of potential on-site burrowing owl habitat by driving and walking meandering transects throughout the property. Western burrowing owls or burrows with evidence of burrowing owl occupancy were not observed on-site. However, because the project site provides suitable habitat for burrowing owl and is within the species' known range, the possibility exists that the project could have a ***potentially significant*** impact to western burrowing owl if they occupy the site prior to the onset of construction.

Mitigation Measure(s)
The proposed project's participation in the East Contra Costa County HCP/NCCP would provide a mechanism to adequately mitigate impacts to burrowing owl. The following mitigation measures would reduce the above impact to a *less-than-significant* level.

4.2-3(a) *A USFWS/CDFW approved biologist shall conduct a pre-construction survey for western burrowing owl no more than 30 days prior to construction. The survey shall establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines. The biologist shall survey the disturbance footprint on the project site and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. The survey*

shall take place near sunrise or sunset in accordance with CDFW guidelines, and all burrows or burrowing owls shall be indentified and mapped.

During the breeding season (February 1-August 31), the survey shall document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the non-breeding season (September 1-January 31), the survey shall document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or non-breeding) during which the survey is conducted. Written results of pre-construction surveys shall be submitted to the Pittsburg Planning Department within five working days after survey completion and before the start of ground disturbance.

If pre-construction surveys for the western burrowing owl establish presence of the species and/or burrows within the survey area, the applicant shall implement Mitigation Measure 4.2-3(b) below.

4.2-3(b) *Prior to the issuance of a grading permit for the Tuscany Meadows Subdivision, the following measures shall be implemented by the project proponent:*

- *If burrowing owls are found during the breeding season (February 1-August 31) the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a 160-foot non-disturbance buffer zone; owls shall be excluded from burrows in the immediate impact zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation; and*
- *The project area shall be monitored daily for one week to confirm that owls have abandoned the burrows.*
- *Wherever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.*

4.2-4 Impacts to other raptors covered under the East Contra Costa County HCP/NCCP, including Swainson's hawk and golden eagle. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

The project site is within the extreme western edge of the Swainson's hawk habitat range. The site is also within the range of the golden eagle. Both the Swainson's hawk and golden eagle are covered under the East Contra Costa County HCP/NCCP. Potential nest

trees are not located on the Tuscany Meadows Tentative map site, although some relatively large potential nest trees occur on the 23-acre Chevron parcel. These trees are landscape trees that are planted around the perimeter of the Chevron parcel, behind an existing concrete soundwall. Moore Biological Consultants did not observe any nests in the Chevron parcel trees visible from the Tentative Map portion of the project site. In addition, Swainson's hawks or golden eagles were not observed during the 2012 survey, which was conducted during the nesting season. It is important to note that improvements would not be made to the Chevron parcel as part of the proposed project. The 23-acre Chevron parcel is being included within the project boundaries for the sole purpose of annexing the parcel along with the Tuscany Meadows Tentative Map site, so as to avoid the creation of a County "island" property. Although the project improvements would not result in impacts to the relatively large landscape trees located around the perimeter of the Chevron parcel, the possibility exists that construction of the Tuscany Meadows project could disrupt nesting behavior if occupied nests are present within said trees during construction. This would be considered a ***potentially significant*** impact.

Mitigation Measure(s)

The proposed project's participation in the East Contra Costa County HCP/NCCP would provide a mechanism to adequately mitigate impacts to Swainson's hawk and golden eagle. The following mitigation measures would reduce the above impact to a *less-than-significant* level.

Swainson's hawk

4.2-4(a) *Prior to ground disturbance related activities that occur during the nesting season (March 15-September 15), a qualified biologist shall conduct a pre-construction survey no more than one month prior to construction to establish whether Swainson's hawk nests within 1,000 feet of the project site are occupied. If potentially occupied nests within 1,000 feet are off the project site, then their occupancy shall be determined by observation from public roads or by observations of Swainson's hawk activity (e.g., foraging) near the project site. If nests are occupied, minimization measures and construction monitoring are required in accordance with Mitigation Measure 4.2-4(b) below.*

4.2-4(b) *During the nesting season (March 15- September 15), ground disturbance related activities within 1,000 feet of occupied nests or nests under construction will be prohibited to prevent nest abandonment. The East Contra Costa County Habitat Conservancy and City of Pittsburg shall coordinate with the CDFW/USFWS to determine the appropriate buffer size, if applicable.*

If young fledge prior to September 15, construction activities can proceed normally. If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the East Contra Costa County Habitat

Conservancy and City of Pittsburg for a waiver of this mitigation measure. Any waiver must also be approved by USFWS and CDFW. While the nest is occupied, activities outside the buffer can take place.

Golden Eagle

4.2-4(c) *Prior to implementation of ground disturbance related activities, a qualified biologist shall conduct a pre-construction survey within 0.5 mile of the project site to establish whether nests of golden eagles are occupied. If potentially occupied nests within 0.5 mile are off the project site, then their occupancy shall be determined by observation from public roads or by observations of golden eagle activity (e.g., foraging) near the project site. If nests are occupied, minimization measures and construction monitoring are required in accordance with Mitigation Measure 4.2-4(d) below.*

4.2-4(d) *Ground disturbance related activities will be prohibited within 0.5 mile of active nests. If site-specific conditions or the nature of the construction related activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the East Contra Costa County Habitat Conservancy and City of Pittsburg will coordinate with the CDFW/USFWS to determine the appropriate buffer size.*

The project applicant shall also engage in construction monitoring. Construction monitoring will focus on ensuring that no ground disturbance related activities occur within the buffer zone established around an active nest. Construction monitoring will ensure that direct effects to golden eagles are minimized.

4.2-5 Impacts to other raptors and migratory birds not covered under the East Contra Costa County HCP/NCCP. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

White-tailed kite, though not covered under the East Contra Costa County HCP/NCCP, is a fully protected species per California Fish and Game Code Section 3511. White-tailed kite could potentially nest in the landscape trees located on the Chevron parcel. Although the project improvements would not result in impacts to the landscape trees located around the perimeter of the Chevron parcel, the possibility exists that construction of the Tuscany Meadows project could disrupt nesting behavior if occupied raptor nests are present within said trees. In addition, on-site grasslands could be used by other species of ground-nesting birds protected by the Migratory Bird Treaty Act. Removal of on-site grassland could therefore result in impacts to ground-nesting birds. As a result, the proposed project could result in ***potentially significant*** impacts to federally- or state-protected birds not covered under the East Contra Costa County HCP/NCCP.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above impacts to a *less-than-significant* level.

White-tailed kite

4.2-5(a) *Prior to any ground disturbance related activities that occur during the nesting season (March 15-August 31), a qualified biologist shall conduct a pre-construction survey no more than one month prior to construction to establish whether white-tailed kite is nesting in trees visible from the site. In the event active nests are found, the applicant shall develop and submit a construction monitoring plan to the East Contra Costa County Habitat Conservancy and the City of Pittsburg for review and approval prior to the commencement of construction activities.*

Migratory Birds

4.2-5(b) *If possible, vegetation removal shall occur outside of the general bird nesting season (February 1 through August 31). Alternatively, a qualified biologist shall conduct a pre-construction survey no more than two weeks prior to vegetation removal. If active nests are found, vegetation removal shall be delayed until the young have fledged, as determined by a qualified biologist.*

4.2-6 Impacts related to interference with the movement of native wildlife. Based on the analysis below, the impact is *less than significant.*

The proposed project site is regularly disced and graded and is surrounded by development on the north, south, west, and northeast; therefore, the project site does not offer any connectivity to other open spaces and represent a movement corridor or provide safe or secure long term habitat for native wildlife. In addition, the project site is in active remediation. Therefore, the project would not have a significant effect on home range and dispersal movements of native wildlife present in the site vicinity, resulting in a ***less-than-significant*** impact on the movement of native wildlife.

Mitigation Measure(s)
None required.

4.2-7 Impacts related to conflicts with local policies and ordinances. Based on the analysis below, the impact is *less than significant.*

The Pittsburg General Plan includes adopted goals and policies regarding the protection of natural resources in the Pittsburg Planning Area. In addition, the City of Pittsburg has approved the East Contra Costa County HCP/NCCP, which is intended to provide an effective framework to protect natural resources in eastern Contra Costa County, while

improving and streamlining the environmental permitting process for impacts on endangered species.

While limited vegetation exists on-site and the site provides potential habitat for a few special-status species, the project site would not conflict with the goals or policies in the Pittsburg Planning Area and does not serve as a prime example of habitat in that it was previously developed and is primarily surrounded by urban development. In addition, the applicant would be required to adhere to the goals and policies found in the regulatory context section in this chapter of this EIR. Furthermore, the proposed project will be required to adhere to the HCP/NCCP by paying development fees for the applicable Development Fee Zone, or dedicating land in lieu of fees (see Mitigation Measure 4.2-2(c)). Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region.

4.2-8 Cumulative loss of biological resources in the City of Pittsburg and the effects of ongoing urbanization in the region. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

As defined in Section 15355 of the State CEQA Guidelines, "cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects (CEQA Guidelines 15355).

An assessment of cumulative impacts should consider impacts identified as significant, as well as impacts identified as less-than-significant for individual projects that may become significant in a collective sense when considering the co-occurrence of multiple projects.

The Pittsburg area, like other communities in the Bay Area, has experienced urban growth over the last few years. Several housing developments are already approved or planned in the surrounding areas. Cumulatively, these projects would reduce common wildlife habitat and the numbers of special-status plant and animal species. The majority of the Tuscany Meadows project site is highly disturbed as a result of past industrial use, agricultural use, and other human activities. However, disturbed lands provide habitat for common species and may provide habitat for some special-status species.

The Pittsburg General Plan EIR concludes that development proposed under the General Plan has the potential to affect sensitive habitat areas and special status species within the Pittsburg Planning Area. The General Plan EIR also states that conservation efforts proposed by the General Plan would ensure that special-status species and their habitats are protected from destruction. However, loss of sensitive habitat in the Planning Area could still occur, and would be considered potentially significant pursuant to CEQA. The implementation of Policy 9-P-3 in the General Plan requiring cooperation in the development of an HCP with surrounding jurisdictions would reduce cumulative impacts to a less-than-significant level. As detailed above, the East Contra Costa County HCP/NCCP has been adopted by the City of Pittsburg.

The Pittsburg General Plan EIR notes that cumulative impacts associated with the buildout of the Pittsburg Planning Area could have a significant impact on special-status species and sensitive habitats. The proposed project is located south of Buchanan Road, and west of Somersville Road in the southeastern portion of the Pittsburg Urban Limit Line. According to the planning survey report prepared for the project, the site does not provide high quality habitat for any special-status species. However, implementation of the proposed project could result in a loss of habitat for burrowing owl, San Joaquin kit fox, and other special-status animal species as described in more detail above. Consistent with the conclusions of the General Plan EIR, cumulative development, including the proposed project, would have ***potentially significant*** cumulative impacts on biological resources.

Mitigation Measure(s)

The proposed project's participation in the East Contra Costa County HCP/NCCP would provide a mechanism to adequately mitigate impacts to potentially occurring sensitive species listed in the HCP/NCCP. Impacts to species not covered under the East Contra Costa County HCP/NCCP would be mitigated to a less-than-significant level with the mitigation measures required in this chapter. Therefore, the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.2-8 Implement Mitigation Measures 4.2-2 through 4.2-5.

Endnotes

[1] Moore Biological Consultants. *Planning Survey Report*. October 2012.
[2] East Contra Costa County Habitat Conservation Plan Association. *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan*. October 2006.
[3] City of Pittsburg. Pittsburg General Plan EIR. January 2001.
[4] See Table 2b, "Covered and No-Take Plant Species, Typical Habitat Conditions, and Typical Blooming Periods," in the *Planning Survey Report* for the project site, which is attached as Appendix G to the EIR.
[5] See Table 2b, "Covered and No-Take Plant Species, Typical Habitat Conditions, and Typical Blooming Periods," in the *Planning Survey Report* for the project site, which is attached as Appendix G to the EIR.
[6] City of Pittsburg, Habitat Conservation Plan/Natural Community Conservation Plan Implementation Ordinance.