3.3 - Biological Resources

3.3.1 - Introduction

This section describes the existing biological resources conditions in the project area, as well as the relevant regulatory framework. This section also evaluates the possible impacts related to biological resources that could result from implementation of the project. Information in this section is based on a project site biological reconnaissance survey performed on January 7, 2019, a subsequent project-specific Biological Resources Assessment (BRA), and a project-specific Tree Inventory Report included in Appendix C. No public comments were received during the Environmental Impact Report (EIR) scoping period related to biological resources.

3.3.2 - Environmental Setting

Records Searches and Pedestrian Survey to Identify Existing Biological Resources

A BRA prepared by FirstCarbon Solutions (FCS) on February 12, 2019, and revised August 5, 2019, included a thorough review of relevant literature followed by a reconnaissance-level field survey both included in Appendix C.

Literature Review

FCS Biologists examined existing environmental documentation for the project site and immediate vicinity. This documentation included the Tree Inventory Report noted above, relevant biological studies for the area, literature pertaining to habitat requirements of special-status species potentially occurring near the site, and federal and State register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW).

Elevation and Drainage

An FCS Biologist reviewed current United States Geological Survey (USGS) 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity. Information obtained from the review of the topographic maps included elevation range, general watershed information, and potential drainage feature locations.¹ Aerial photographs provide a perspective of the most current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

Soil

FCS Biologists also reviewed United States Department of Agriculture (USDA) soil surveys to establish if soil conditions on the project site are suitable for any special-status plant species. These soil profiles include major soil series with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were

reviewed to determine existing soil mapping units within the project site and to establish if soil conditions on-site are suitable for any special-status plant species.\(^2\)

**Special-Status Wildlife and Plant Species**

FCS Biologists compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the general project vicinity. The list was based on a search of the CDFW California Natural Diversity Database (CNDDB),\(^3\) a special-status species and plant community account database, and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California database\(^4\) for the Walnut Creek, California USGS 7.5-minute topographic quadrangle map. The database search results can be found in Appendix C. The CNDDB Biogeographic Information and Observation System database was used to determine the distance between known recorded occurrences of special-status species and the project site.

**Trees**

FCS Biologists reviewed applicable County ordinances pertaining to tree preservation and protective measures and their tree replacement conditions or permits required, such as Chapter 816-6 of the Contra Costa County Code. FirstCarbon Solutions (FCS) also performed a technical review of the previously completed Tree Inventory Report (Appendix C).\(^5\) The report recorded 189 individual trees, representing 27 species present on site.

**Jurisdictional Waters and Wetlands**

FCS Biologists reviewed USGS topographic maps and aerial photography to identify potential natural drainage features and water bodies. In general, surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to State and federal regulatory authority as “waters of the United States and/or State.”

**Field Survey**

On January 7, 2019, an FCS Biologist conducted a reconnaissance-level field survey of the project site and surrounding area up to 100 feet where possible. The reconnaissance-level survey was conducted on foot during daylight hours. The purpose of the survey was not to extensively search for every species occurring within the project site, but to ascertain general site conditions and identify potentially suitable habitat areas for various special-status plant and wildlife species. Special-status or unusual biological resources identified during the literature review were ground-truthed during the reconnaissance-level survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

Common plant species observed during the reconnaissance-level survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Wildlife species

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detected during the reconnaissance-level survey by sight, calls, tracks, scat, or other signs were recorded in a field notebook. Notations were made regarding suitable habitat for those special-status species determined to potentially occur within the project site.\(^6\),\(^7\)

**Physical Habitat/Vegetation**

Habitat is an area consisting of a combination of resources (e.g., food, cover, water) and environmental conditions (e.g., temperature, precipitation, presence, or absence of predators and competitors) that promotes occupancy by individuals of a species and enables those individuals to survive and reproduce. Thus, habitat arises from interaction among soils, hydrology, climate, and vegetation. Soils, hydrology, and climate are addressed in other sections of this EIR; this habitat discussion includes information regarding vegetation.

**Contra Costa County Area**

Habitat communities in the Contra Costa area consist primarily of Mediterranean plant associations, but vary depending on microclimate. Due to the large size of Contra Costa County, there are a variety of microclimates found within County boundaries, including but not limited to riparian woodlands, estuaries, native grasslands, and coniferous forests.

**Project Site**

The project site is a heavily wooded area with two residential buildings located within the project boundaries. There are several areas of uneven terrain with slight incline and decline, but the vast majority of the project site is relatively flat. The project site is largely devoid of shrubs and low-growing vegetation and is primarily comprised of invasive grass species. There are several human-made barriers throughout the project site and along most of the project site boundaries. The project site consists of non-native grassland, mixed oak woodland, and urban/developed land (Exhibit 3.3-1).

**Wildlife**

Wildlife species observed in this community included California ground squirrel (*Otospermophilus beecheyi*), California towhee (*Melozone crissalis*), black-capped chickadee (*Poecile atricapillus*), black phoebe (*Sayornis nigricans*), and American crow (*Corvus brachyrhynchos*). Given the high level of disturbance surrounding the project site, there is only low-value habitat available for special-status plants within the project site boundaries; however, the valley oak woodland area may provide suitable nesting habitat for special-status and non-special-status raptor and bat species.

**Vegetation Communities**

**Non-Native Grassland**

Non-native annual grassland typically occurs in the open areas of valleys and foothills throughout California. Species observed during the field survey include non-native species such as Irish ivy (*Hedera hibernica*), lily of the Nile (*Agapanthus* spp.), oleander (*Nerium oleander*), and bristly oxtongue (*Helminthotheca echioides*). Additionally, there is a large ornamental blue aloe plant (*Aloe vera* spp.) on the project site.

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Mixed Oak Woodland
The foliage present on the project site can be characterized as a mixed oak woodland, dominated by valley oak (*Quercus lobata*) and coast live oak (*Quercus agrifolia*), in conjunction with a variety of other mature, adult tree species. This community has a relatively dense tree canopy, open sub-canopy, and grassy understory. The tree canopy consists primarily of valley oak, representing nearly 48 percent of all trees counted in field surveys. Other common species found on the project site include coast redwood (*Sequoia sempervirens*), blue gum (*Eucalyptus globulus*), and glossy privet (*Ligustrum lucidum*) in order of abundance.

The understory supports several non-native annual grass species. Large trees or snags (greater than 18 inches in diameter) within or adjacent to the project site may provide suitable nesting or roosting habitat for wildlife. The project site is largely devoid of shrubs and low-canopy growth with scattered shrubs occurring mainly along project boundaries and the manmade fences within the project boundaries. The relatively dense clusters of trees in conjunction with the limited amount of understory vegetation provide limited foraging habitat for wildlife.

Urban/Developed Land
Urban/Developed land is classified as areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported and retains no soil substrate. Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident because a large amount of debris or other materials have been placed upon it may also be considered urban/developed (e.g., car recycling plant, quarry). Characteristic vegetation includes un-vegetated or landscaped with a variety of ornamental (usually non-native) plants. There are two residential structures present on the project site as well as a gravel road. The project site is bound by apartment complexes, a highly trafficked road, Iron Horse Regional Trail, and the Pleasant Hill Bay Area Rapid Transit (BART) station.

Sensitive Biological Communities
Biological communities are assemblages of organisms that live within or use a variety of habitats for their range-of-life functions. Of the habitat communities discussed above, some are further identified as sensitive biological communities. Sensitive biological communities include habitats that fulfill special functions or have special values (e.g., greater biological diversity), such as wetlands, streams, and riparian habitat. Because wildlife is a major aspect of a biological community, this discussion of sensitive biological communities describes wildlife present in such communities.

Contra Costa County Area
The sensitive biological communities present within Contra Costa County are mainly areas associated with tidal marshes and wetland habitat. Due to the large size of the county, there are a variety of areas that may be considered sensitive biological communities, depending on the aggregations of plant and wildlife species that occur in these areas. They include, but are not limited to, mixed oak woodland, riparian woodland, evergreen forests, chaparral forests, redwood forests, and native grasslands.
Exhibit 3.3-1
Existing Habitat

Source: ESRI Aerial Imagery.
Project Site
There are no sensitive biological communities present on the project site. The mixed oak woodland present within the project site boundaries offers habitat to a variety of nesting birds but are not in large enough abundance to be considered a sensitive biological community. Additionally, the project site and surrounding areas display high levels of disturbance, further precluding the presence of special-status species that may occur in mixed oak woodland habitat.

Wetlands and Waters of the United States and the State
Wetlands and waters of the United States and waters of the State are protected as hydrological resources, but also often provide habitat for common and special-status species. Types of water features include open water, developed open water, tidal marsh, seasonal wetland, wetlands swale, and waters.

Contra Costa County Area
Wetlands, waters of the United States, and waters of the State in the Contra Costa County area occur primarily near the coast in the San Pablo Bay, Suisun Bay, and their associated features. Additionally, there are several reservoirs, such as the San Pablo reservoir, Briones reservoir, and Los Vaqueros reservoir.

Project Site
The project site does not contain any wetlands or other areas designated as waters of the United States or State, and no further studies or regulatory permitting are required. There are several areas with concave topography, but due to the lack of hydrophilic soils, riparian and wetland vegetation, and elevation differentiation, these areas are not indicative of federal or State jurisdictional wetlands or waters.

Common Species
The vegetation community and land cover types discussed above provide habitat for a limited number of local wildlife species. The small number of wildlife species observed on or near the project site primarily consisted of avian species identified by song or sight. The numerous trees within the project boundaries offer suitable habitat for a variety of nesting birds. Common avian species observed in urban and developed areas include American crow, California scrub jay (Aphelocoma californica), spotted towhee (Pipilo maculatus), lesser goldfinch (Spinus psaltria), and yellow-rumped warbler (Setophaga coronata).

Special-Status Species
Habitat, whether aquatic or terrestrial, supports ecological functions and processes to preserve biological communities (i.e., wildlife) that live within it for all or a portion of their life cycle. Special-status species, whether plants, wildlife, or fish, are considered sufficiently rare that they require special consideration and/or protection and have been or should be listed as rare, threatened, or endangered by the federal and/or state governments. The following discussion focuses on the occurrence or potential for occurrence of special-status species at the project site.
**Special-Status Plants on the Project Site**

Special-status plant communities are considered sensitive biological resources when federal, state, or local laws regulate their development, limited distributions, and habitat requirements of special-status plant or wildlife species that occur within them. The Special-Status Plant Species Table (Appendix C) identifies 18 special-status plant species and CNPS sensitive species that have been recorded to occur within the Walnut Creek California topographic quadrangles, as recorded by the CNDDDB and California Native Plant Society Electronic Inventory. The table also includes each species’ status, required habitat, and potential to occur within the project site.

All special-status plant species have been determined unlikely to occur on-site based upon the results of the species review and the reconnaissance-level field assessment. The project site lacks suitable habitat conditions, most notably aquatic features or suitable soil conditions, to support any special-status plant species; further, no special-status plant species were found on the project site.

**Special-Status Wildlife at the Project Site**

The Special-Status Wildlife Species Table (Appendix C) identifies nine federal and State listed threatened and/or endangered wildlife species, and State Species of Special Concern that have been recorded in the CNDDDB as occurring within the Walnut Creek, California topographic quadrangle. Of these, two special-status wildlife species have the potential to occur at the project site: the pallid bat (*Antrozous pallidus*) and Townsend’s big-eared bat (*Corynorhinus townsendii*). The table also includes each species’ status, required habitat, and potential to occur within the project site. The remaining seven species have also been included in the table to justify their exclusion from further discussion. No special-status amphibian or reptile species have the potential to occur within the project site. The following special-status mammal and bird species have the potential to occur within the project site.

**Mammals**

**Pallid bat**

The pallid bat is a California Species of Special Concern. This species roosts in rock crevices, mature trees, and buildings and forages in habitats with open vegetation. The project site provides potential for this species to occur on-site, due to the presence of marginal roosting habitat in the form of trees and buildings. No focused surveys were conducted for this species, and it was not found during field surveys. No recorded occurrences of this species within 5 miles of the project site have been noted in the last year. Due to the high level of disturbance surrounding the project site, including auditory disturbances from the nearby construction and high level of activity at the Pleasant Hill BART station, there is a low potential for this species to occur on the project site.

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Townsend’s big-eared bat

Townsend’s big-eared bat is a California Species of Special Concern. This species roosts in a variety of habitats, including hanging from walls or ceilings in undisturbed or abandoned buildings. The buildings and trees on-site offer marginal roosting habitat for this species. No focused surveys were conducted for this species, and it was not found during field surveys. Due to the high level of disturbance surrounding the project site, there is low potential for this species to occur on the project site.

Birds

Migratory and Nesting Birds

The high number of trees within the project site provide suitable nesting habitat for various avian species, including those protected under the Migratory Bird Treaty Act (MBTA). Some species protected under the MBTA that could occur on the project site include acorn woodpecker (*Melanerpes formicivorus*), oak titmouse (*Baeolophus inornatus*), and American goldfinch (*Spinus tristis*). There is a variety of large, mature trees on site that are proposed for removal that provide potential nesting habitat for migratory species.

Wildlife Movement Corridors

Contra Costa County Area

Terrestrial habitat throughout Contra Costa County ranges from high to low quality and varies in accessibility and continuity for wildlife movement. Wetland and riparian habitats along coastal areas and inland reservoirs provides wildlife movement corridors for numerous fish and bird species. In addition, the Pacific Flyway (a major north-south flyway for migratory birds in America) encompasses the entire West Coast, and migrating bird species utilize the wetland and riparian habitats, especially the Suisun marshes and estuaries in San Pablo Bay, for foraging and resting.

Project Site

Due to the lack of aquatic features on or in the project vicinity, there are no corridors for fish or other aquatic species. Additionally, the high level of development surrounding the project site and the various barriers and fences present throughout the project site further impede the movement of terrestrial species through the area. Avian species are similarly impeded by the high level of development surrounding the site, though to a lesser extent. Due to the fragmented pockets of heavily wooded areas and lack of a connected habitat that occurs within the area, it is unlikely the area would serve as a corridor for avian species.

Regulated Trees

Project Site

Trees are protected under Chapter 816-6 of the Contra Costa County Code. Trees having a diameter of 6.5 inches or greater as measured 4.5 feet from ground level is considered a protected tree under the County’s Code Section 816-6.6004. According to the Tree Inventory Report completed for the project site May 9, 2019, all trees 6 inches or greater in diameter within and adjacent to the project site were surveyed (Appendix C). The Tree Inventory Report assessed 189 total trees across 27 species within the project site, including 18 off-site and 9 trees on the border of the project site.

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total of approximately 161 trees would be removed within the boundaries of the project site. Of the total trees proposed for removal, approximately 145 trees are considered code-protected due to their size, while the remaining approximately 16 trees are not code-protected based on the Tree Protection and Preservation Ordinance (Exhibit 3.3-2).

3.3.3 - Regulatory Framework

Federal

Federal Endangered Species Act

The USFWS administers the Federal Endangered Species Act (FESA). The United States Congress passed FESA in 1973 to protect those species that are endangered or threatened with extinction. 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. FESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. FESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A “threatened” species is a species that is likely to become endangered. A “proposed” species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

According to FESA Section 9, “take” of threatened or endangered species is prohibited. FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA § 3(3)(19)). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] § 17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR § 17.3). Actions that result in take can result in civil or criminal penalties.

FESA and Clean Water Act (CWA) Section 404 Guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The United States Army Corps of Engineers (USACE) must consult with the USFWS and/or the National Marine Fisheries Service (NOAA) when threatened or endangered species under their jurisdiction may be affected by a project. In the context of the project, FESA would be implicated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

Federal 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.
Exhibit 3.3-2
Tree Removal Plan

Code of Federal Regulations (Wetlands and Waters Definition)

As defined in the Code of Federal Regulations (33 CFR 328.3(a) and 40 CFR 230.3(s)), the term “waters of the United States” includes the following:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. All interstate waters including interstate wetlands. (Wetlands are defined by the federal government [33 CFR 328.3(b)] as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.)

2. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters which are or could be used by interstate or foreign travelers for recreational or other purposes; or from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or which are used or could be used for industrial purposes by industries in interstate commerce.

3. All impoundments of waters otherwise defined as waters of the United States under the definition.

4. Tributaries of waters identified in paragraphs (1) through (4).

5. Territorial seas.

6. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).

Wetlands are a subset of waters of the United States and receive protection under Section 404 of the CWA. The federal definition of wetlands is the following:

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

The regulations and policies of various federal agencies—such as USACE, the United States Environmental Protection Agency (EPA), USFWS, and NOAA—mandate that filling wetlands be avoided unless it can be demonstrated that no practicable alternatives exist. The USACE has primary federal responsibility for administering regulations that concern waters and wetlands. In this respect, the USACE acts under two statutory authorities: Sections 9 and 10 of the Rivers and Harbors Act, and CWA Section 404.
Clean Water Act
The USACE regulates discharge of dredge or fill material into waters of the United States under Section 404 of the CWA. “Discharges of fill material” is defined as the addition of fill material into waters of the United States, 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; fill for intake and outfall pipes and subaqueous utility lines (33 CFR § 328.2(f)). In addition, Section 401 of the CWA (33 United States Code [USC] 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.

Executive Order 11990: Protection of Wetlands
The federal government also supports a policy of minimizing the destruction, loss, or degradation of wetlands. Executive Order 11990 (May 24, 1977) requires that each federal agency take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. As primary screening, the United States Department of Housing and Urban Development (HUD) or grantees must verify whether the project is located within wetlands identified on the National Wetlands Inventory or else consult directly with USFWS staff. The USACE regulates the discharge of dredged or fill material, including but not limited to grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge, if performed specifically in a manner to avoid discharges, include driving pilings, drainage channel maintenance, temporary mining and farm/forest roads, and excavating without stockpiling.

State
California Endangered Species Act
The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW, formally California Department of Fish and Game, when preparing California Environmental Quality Act (CEQA) documents. The purpose is to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). 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. CESA allows the CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

Special-Status Natural Communities
Special-status natural communities, as identified by CDFW’s Natural Heritage Division, are those that are naturally rare and those whose extent has been greatly diminished through land use changes.
The CNDDB tracks 135 such natural communities in the same way that it tracks occurrences of special-status species: by maintaining information about each site’s location, extent, habitat quality, level of disturbance, and current protection measures. The CDFW is mandated to seek the long-term perpetuation of the areas in which these communities occur. Although no Statewide laws require protection of all special-status natural communities, CEQA requires consideration of the potential impacts of a project on biological resources of Statewide or regional significance.

**California Department of Fish and Game Code**

Fully protected fish species are protected under Section 5515; fully protected amphibian and reptile species are protected under Section 5050; fully protected bird species are protected under Section 3511; and fully protected mammal species are protected under Section 4700. The California Fish and Game Code defines take as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Except for take related to scientific research, all take of fully protected species is prohibited. Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and the destruction of raptor nests. Sections 2062 and 2067 define endangered and threatened species.

**California Department of Fish and Wildlife Species of Concern**

In addition to formal listing under FESA and CESA, species receive additional consideration by CDFW and local lead agencies 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 that tracks species in California whose numbers, reproductive success, or habitat may be threatened. In addition to Species of Special Concern, the CDFW identifies animals that are tracked by the CNDDB, but warrant no federal interest and no legal protection. These species are identified as California Special Animals.

**California Code of Regulations (Wetlands and Waters Definition)**

The California State Water Resources Control Board (State Water Board) indicates that no single accepted definition of wetlands exists at the State level, and that Regional Water Quality Control Boards (RWQCBs) may have different requirements and levels of analysis with regard to the issuance of water quality certifications. Generally, an area is a wetland if, under normal circumstances:

1. The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
2. The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
3. The area’s vegetation is dominated by hydrophytes or the area lacks vegetation.

Under California law, waters of the State means “any surface water or groundwater, including saline waters, within the boundaries of the state.” As such, water quality laws apply to both surface water and groundwater. After the U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (53 USC 159), the Office of Chief Counsel of the State Water Board released a legal memorandum confirming the State’s jurisdiction over isolated wetlands. The memorandum stated that under the California Porter-Cologne Water Quality Control Act (Porter-
Cologne), discharges to wetlands and other waters of the State are subject to State regulation, and this includes isolated wetlands. In general, the State Water Board regulates discharges to isolated waters in much the same way as it does for waters of the United States, using Porter-Cologne rather than CWA authority.

**Porter-Cologne Water Quality Control Act**

The CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify the CDFW if a project will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds . . . except when the department has been notified pursuant to Section 1601.” Additionally, the CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State. All of the wetlands and waterways in the project site are waters of the State, which are protected under this Act.

Historically, California relied on its authority under Section 401 of the CWA to regulate discharges of dredged or fill material to California waters. That section requires an applicant to obtain “water quality certification” from the State Water Board through its RWQCBs to ensure compliance with State water quality standards before certain federal licenses or permits may be issued. The permits subject to Section 401 include permits for the discharge of dredged or fill materials (CWA § 404 permits) issued by the USACE. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. With the recent changes that limited the jurisdiction of wetlands under the CWA, the State Water Board has needed to rely on the report of waste discharge process.

**California Native Plant Protection Act**

State listing of plant species began in 1977 with the passage of the Native Plant Protection Act (NPPA), which directed CDFW to carry out the Legislature’s intent to “preserve, protect, and enhance endangered plants in this state.” The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to require permits for collecting, transporting, or selling such plants. The CESA expanded on the original NPPA and enhanced legal protection for plants. The CESA established categories for threatened and endangered species, and
grandfathered all rare animals—but not rare plants—into the act as threatened species. Thus, the State of California employs three listing categories for plants: rare, threatened, and endangered.

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

- **Rank 1A:** Plants presumed Extinct in California
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2:** Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- **Rank 3:** Plants about which we need more information—A Review List
- **Rank 4:** Plants of limited distribution—A Watch List

All plants appearing on the CNPS List ranked 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

**Local**

**Contra Costa County General Plan**

The purpose of the Contra Costa County General Plan is to express the broad goals and policies, and specific implementation measures, which will guide decisions on future growth, development, and the conservation of resources through the year 2020. The following are the applicable Contra Costa County General Plan goals and policies most pertinent to the project with regard to protection and preservation of the natural resources in the area.

- **Goal 8-A:** To preserve and protect the ecological resources of the County.
- **Goal 8-B:** To conserve the natural resources of the County through control of the direction, extent and timing of urban growth.
- **Goal 8-D:** To protect ecologically significant lands, wetlands, plant, and wildlife habitats.
- **Goal 8-E:** To protect rare, threatened and endangered species of fish, wildlife, and plants, significant plant communities, and other resources which stand out as unique because of their scarcity, scientific value, aesthetic quality or cultural significance. Attempt to achieve a significant net increase in wetland values and functions within the County over the life of the General Plan. The definition of rare, threatened, and endangered includes those definitions provided by the Federal Endangered Species Act, the California Endangered Species Act, the California Native Plant Protection Act, and the California Environmental Quality Act.
- **Policy 8-1:** Resource utilization and development shall be planned within a framework of maintaining a healthy and attractive environment.
- **Policy 8-3:** Watersheds, natural waterways, and areas important for the maintenance of natural vegetation and wildlife populations shall be preserved and enhanced.
• **Policy 8-6**: Significant trees, natural vegetation, and wildlife populations generally shall be preserved.
• **Policy 8-7**: Important wildlife habitats which would be disturbed by major development shall be preserved, and corridors for wildlife migration between undeveloped lands shall be retained.
• **Policy 8-9**: Areas determined to contain significant ecological resources, particularly those containing endangered species, shall be maintained in their natural state and carefully regulated to the maximum legal extent. Acquisition of the most ecologically sensitive properties within the County by appropriate public agencies shall be encouraged.
• **Policy 8-10**: Any development located or proposed within significant ecological resource areas shall ensure that the resource is protected.
• **Policy 8-12**: Natural woodlands shall be preserved to the maximum extent possible in the course of land development.
• **Policy 8-13**: The critical ecological and scenic characteristics of rangelands, woodlands, and wildlands shall be recognized and protected.
• **Policy 8-15**: Existing vegetation, both native and non-native, and wildlife habitat areas shall be retained in the major open space areas sufficient for the maintenance of a healthy balance of wildlife populations.
• **Policy 8-21**: The planting of native trees and shrubs shall be encouraged in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are sustained in urban areas.
• **Policy 8-22**: Applications of toxic pesticides and herbicides shall be kept at a minimum and applied in accordance with the strictest standards designed to conserve all the living resources of the County. The use of biological and other non-toxic controls shall be encouraged.
• **Policy 8-28**: Efforts shall be made to identify and protect the County’s mature native oak, bay, and buckeye trees.
• **Policy 9-A**: To preserve and protect the ecological, scenic, cultural/historic, and recreational resource lands of the county.
• **Policy 9-C**: To achieve a balance of open space and urban areas to meet the social, environmental, and economic needs of the county now and for the future.

**Contra Costa County Ordinance Code**

- **Chapter 82-1—65/35 Land Preservation Plan**
  - Chapter 82-1 covers the implementation of the general plan and the various regulations regarding development in urban and undeveloped areas.
- **Section 816-6.** Lists the protected trees, permit requirements, and the application process for tree removal.
- A protected tree is any one of the following:
  1. (A) Where the tree to be cut down, destroyed or trimmed by topping is adjacent to or part of a riparian, foothill woodland or oak savanna area, or part of a stand of four or more trees, measures twenty inches or larger in circumference (approximately 6.5 inches in diameter) as measured four and one-half feet from ground level, and is included in the following list of indigenous trees: *Acer macrophyllum* (Bigleaf Maple), *Acer negundo* (Box Elder), *Aesculus califonica* (California Buckeye), *Alnus Rhombifolia* (White Alder), *Acer negundo* (Box Elder), *Aesculus califonica* (California Buckeye), *Alnus Rhombifolia* (White Alder),
Arbutus menziesii (Madrone), Heteromeles arbutifolia (Toyon), Juglans Hindsii (California Black Walnut), Juniperus californica (California Juniper), Lithocarpus densiflora (Tanoak or Tanbark Oak), Pinus attenuata (Knobcone Pine), Pinus sabiniana (Digger Pine), Platanus Racemosa (California Sycamore), Populus fremontii (Fremont Cottonwood), Populus trichocarpa (Black Cottonwood), Quercus agrifolia (California or Coast Live Oak), Quercus chrysolepis (Canyon Live Oak), Quercus douglasi (Blue Oak), Quercus kelloggii (California Black Oak), Quercus lobata (Valley Oak), Quercus wislizenii (Interior Live Oak), Salix lasiandra (Yellow Willow), Salix laevigata (Red Willow), Salix lasiolepis (Arroyo Willow), Sambucus callicarpa (Coast Red Elderberry), Sequoia sempervirens (Coast Redwood), Umbellularia californica (California Bay or Laurel);

(B) Any tree shown to be preserved on an approved tentative map, development or site plan or required to be retained as a condition of approval;

(C) Any tree required to be planted as a replacement for an unlawfully removed tree.

(2) On any of the properties specified in subsection (3) of this section:

(A) Any tree measuring twenty inches or larger in circumference (approximately six and one-half inches diameter), measured four and one-half feet from ground level including the oak trees listed above;

(B) Any multistemmed tree with the sum of the circumferences measuring forty inches or larger, measured four and one-half feet from ground level;

(C) And any significant grouping of trees, including groves of four or more trees.

(3) Specified properties referred to in subsection (2) of this section includes:

(A) Any developed property within any commercial, professional office or industrial district;

(B) Any undeveloped property within any district;

(C) Any area designated on the general plan for recreational purposes or open space;

(D) Any area designated in the county general plan open space element as visually significant riparian or ridge line vegetation and where the tree is adjacent to or part of a riparian, foothill woodland or oak savanna area

• Any person proposing to trench, grade or fill within the dripline of any protected tree or cut down, destroy, trim by topping or remove any protected tree shall apply to the department for a tree permit, not less than ten days prior to the proposed tree removal or tree alterations.

• “Tree removal” means the destruction of any protected tree by cutting, regrading, girdling, interfering with water supply, applying chemicals or by other means.

• A heritage tree is defined as a tree that is 72 inches or more in circumference measured four and one-half feet above the natural grade; or any tree or a group of trees particularly worthy of protection, and specifically designated as a heritage tree by the board of supervisors pursuant to the provisions of this chapter, because of:
  a) Having historical or ecological interest or significance, or
  b) Being dependent upon each other for health or survival, or
  c) Being considered an outstanding specimen of its species as to such factors as location, size, age, rarity, shape, or health.

• The Contra Costa County Heritage Tree Ordinance (Chapter 816-4, Ordinance 88-83, Contra Costa County Code) protects trees that have been designated as a heritage tree by the planning commission or board. A tree permit must be filed to remove a heritage tree, including application for a building, grading, or demolition permit.
3.3.4 - Impacts and Mitigation Measures

Significance Criteria

According to 2019 CEQA Guidelines Appendix G, to determine whether impacts related to biological resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

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

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

c) Have a substantial adverse effect on State of federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Approach to Analysis

Impacts on biological resources were evaluated based on the likelihood that special-status species, sensitive habitats, wildlife corridors, and protected trees are present on the project site, and the likely effects of project construction or operation on these resources. For the purposes of this EIR, the word “substantial” as used in the significance thresholds above is defined by the following three principal components:

- Magnitude and duration of the impact (e.g., substantial/not substantial),
- Uniqueness of the affected resource (rarity), and
- Susceptibility of the affected resource to disturbance.

In this Biological Resources Analysis, the project site is defined as all areas directly affected by project development.
Specific Thresholds of Significance

For purposes of this Analysis, the following thresholds are used to evaluate the significance of biological resources impacts resulting from implementation of the project.

- Result in direct take or habitat removal or alteration for candidate, sensitive, or special-status species
- Remove vegetation or damage water quality related to riparian habitat or other sensitive natural community
- Remove, fill, or damage a federally protected wetland
- Interrupt fish movement in an aquatic channel or impede terrestrial movement via a land corridor
- Remove, damage, or replace trees designated by the Contra Costa County Tree Ordinance
- Conflict with the provisions of an applicable habitat conservation plan

Impact Evaluation

Special-Status Species

Impact BIO-1: The project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Construction

An impact to special-status plant and wildlife species would be considered significant if project operations resulted in a substantial, adverse change in any of the physical conditions (such as habitat) within the area affected by the project. Each potential special-status species that has the potential to be impacted is discussed in detail below.

Special-Status Plant Species

Special-status plant species or communities are unlikely to occur within the project site, based on multiple database searches, literature review, and on-site field survey observations. The Special-Status Species Table (Appendix C) provides both the habitat description and the rationale of the potential of special-status plant species to occur on the project site. Suitable habitats requirements for special-status plant species include vernal pools, chaparral, serpentine soils, and coastal scrub, and these features are absent from the project site. Therefore, no impacts to special-status plants or plant communities are expected to result from project construction.

Special-Status Wildlife Species

Two special-status wildlife species (pallid bat and Townsend’s big-eared bat) as well as birds protected under the MBTA have potential to occur on the project site and, thus, have the potential to be impacted by project construction. The Special-Status Species Table (Appendix C) provides both the habitat description and the rationale of the potential of special-status wildlife species to occur on the project site.
Suitable habitat requirements for other special-status wildlife species include permanent or temporary aquatic features, dry open grassland, or sand and loamy soils with sparse vegetation, and these features are absent from the project site. Potential impacts to the aforementioned special-status wildlife species and migratory birds are discussed below.

**Pallid bat**
The pallid bat is a California Species of Special Concern. The two residential buildings and large amount of mature trees on the project site provide marginal roosting habitat for this species. The project involves the demolition of the residential buildings, removal of trees, and impacts to additional trees. However, there is a low potential for this special-status species to occur on-site and, thus, to be disturbed during project construction. This represents a potentially significant impact.

Implementation of Mitigation Measure (MM) BIO-1a would reduce potential impacts to the pallid or Townsend’s big-eared bats by requiring surveys prior to removal of trees, commencement of demolition or construction activities and, if bats are present, requiring any necessary buffer zones to be established by a qualified Biologist. Moreover, the project would not contribute to the permanent loss of roosting habitat, habitat fragmentation, or a loss of suitable foraging habitat. Therefore, impacts to bats would be less than significant with mitigation.

**Townsend’s big-eared bat**
Townsend’s big-eared bat is a California Species of Special Concern. It has no special federal status or listing. There is a low potential for this species to occur on the project site, as the immediate surrounding area is highly trafficked with vehicles and persons. However, the species is very sensitive to disturbances and, thus, potentially could be disturbed during project construction. This represents a potentially significant impact.

Migratory and Nesting Birds
The variety of trees on and surrounding the project site have the potential to serve as suitable nesting habitat of various species of birds and raptors protected under the MBTA. The removal of trees by the project could result in a reduction of potential nesting habitat. This represents a potentially significant impact.

Implementation of MM BIO-1b would reduce potential impacts to migratory and nesting birds by requiring pre-construction surveys prior to removal of trees, demolitions or construction activities taking place during the nesting season, and if necessary, buffer zones established by a qualified Biologist. Moreover, the project would not contribute to the permanent loss of roosting habitat or a loss of suitable foraging habitat. Therefore, impacts to migratory birds would be less than significant with mitigation.

**Operation**
Impacts related to a project’s potential effect on special-status species are limited to construction impacts. No respective operational impacts would occur.

**Level of Significance Before Mitigation**
Potentially Significant
Mitigation Measures

MM BIO-1a  Conduct Pre-construction Special-status Bat Surveys

The following measures shall be implemented prior to demolition, construction activities, or tree removal:

- A qualified wildlife Biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area no less than 7 days and no more than 14 days prior to tree removal, beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.). Visual surveys shall include trees within 0.25 mile of project construction activities. The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required.

- If evidence of bat use is observed, the number and species of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts.

- If roosts are determined to be present and must be removed, the bats shall be excluded from the roosting site before the facility is removed. A mitigation program addressing compensation, exclusion methods, and roost removal procedures shall be developed prior to implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but cannot reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

- If roosts cannot be avoided or it is determined that construction activities may cause roost abandonment, such activities shall not commence until permanent, elevated bat houses have been installed outside of, but near the construction area. Placement and height shall be determined by a qualified wildlife Biologist, but the height of the bat house will be at least 15 feet. Bat houses will be multi-chambered and will be purchased or constructed in accordance with CDFW standards. The number of bat houses required will be dependent upon the size and number of colonies found, but at least one bat house will be installed for each pair of bats (if occurring individually), or of sufficient number to accommodate each colony of bats to be relocated.

MM BIO-1b  Avoid Active Migratory Bird Nests and Bat Roosts During Construction

The following measures shall be implemented for construction work during the nesting season (February 15 through August 31):

- If construction or tree removal is proposed during the breeding/nesting season for migratory birds (typically February 15 through August 31), a qualified Biologist shall conduct pre-construction surveys for northern harrier, pallid bat, Townsend's...
big-ear bat, and other migratory birds within the construction area, including a survey buffer determined by a qualified Biologist based on professional experience, no more than 14 days prior to the start of ground disturbing activities in the construction area.

- If an active nest is located during pre-construction surveys, USFWS and/or CDFW (as appropriate) shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a qualified Biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 50-foot radius around an active migratory bird nest) or alteration of the construction schedule.

- A qualified Biologist shall delineate the buffer using nest buffer signs, ESA fencing, pin flags, and or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

Level of Significance After Mitigation

Less Than Significant with Mitigation

Sensitive Natural Communities

Impact BIO-2: The project would not have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Construction

An impact to sensitive natural communities or riparian habitat would be considered significant if the project construction or operation resulted in a substantial, adverse change in any of the physical conditions (such as removal of vegetation) within the area affected by the project. Potential impacts to sensitive natural communities or riparian habitat that have the potential to be impacted are discussed in detail below.

There are no rivers, streams, or associated riparian vegetation on or adjacent to the project site. Walnut Creek, a concrete lined urbanized channel, is located approximately 0.5 mile away from the project site. Due to the lack of preserved and undisturbed natural habitat within or surrounding the project site, there is also no other sensitive natural community on the project site that could be impacted by project construction. There are several areas on the project site that contain multiple adult, mature oaks, but due to the small size of the project site and high level of disturbance and development that has occurred with the immediate vicinity, these areas are not considered a sensitive natural community under CEQA. Therefore, there would be no construction impact related to effects on riparian habitat or other sensitive natural communities.
**Operation**
Impacts related to a project’s potential effect on sensitive natural communities are limited to construction impacts. No respective operational impacts would occur.

**Level of Significance**
No Impact

**Wetlands**

| Impact BIO-3: | The project would not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. |

**Construction**
Impacts to State or federally protected wetlands would be considered significant if the project operations resulted in a substantial, adverse change in any of the physical conditions (i.e. fill) of wetlands.

There are no State or federally protected wetlands or other jurisdictional features on, or adjacent to, the project site. The project site is located in an urban area and surrounded by development. As a whole, the project site is devoid of aquatic features. As such, there are no wetlands that would require filling or removal or could experience degradation due to project construction. Therefore, no impact related to effect on State or federal wetlands would occur due to project construction.

**Operation**
Impacts related to a project’s potential effect on wetlands are limited to construction impacts. No respective operational impacts would occur.

**Level of Significance**
No Impact

**Fish and Wildlife Movement Corridors**

| Impact BIO-4: | The project would not substantially interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. |

**Construction**
An impact to fish or wildlife movement would be considered significant if the project construction or operation resulted in a substantial, adverse change in any of the physical conditions (such as the interruption of a channel or terrestrial movement corridor) within the area affected by the project. Fish or wildlife movement that have the potential to be impacted are discussed in detail below.

The project site is surrounded by residential buildings, actively used roads and walking paths. There are barriers around the majority of the project site boundaries. Several fences partially surround the two residential buildings on-site, consisting, of both chicken wire and wooden fencing. These barriers, in conjunction with the urban context of the project site and lack of surface waters, further
impede wildlife and fish species movement through and within the project site. As such, there is little potential for a wildlife corridor to occur or be hindered due to the project construction and disturbance of the project site. Additionally, it is highly unlikely that any wildlife corridors present in the East Contra Costa County Habitat Conservation Plan area, which is roughly 5.5 miles away, would be affected by project construction. Therefore, impacts to wildlife movement and corridors would be less than significant.

**Operation**

Impacts related to a project’s potential interference with a fish or wildlife movement corridor are limited to construction impacts. No respective operational impacts would occur.

**Level of Significance**

Less Than Significant

**Local Biological Resources Policies/Ordinances Consistency**

Impact BIO-5: The project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

**Construction**

The Contra Costa County Code Chapter 816-6 lists the protected trees, permit requirements, and the applications process for tree removal. A significant impact would result if construction or operation of the project would conflict with these policies and provisions. Conflicts with this ordinance protecting biological resources are discussed below.

The Tree Inventory Report\(^{14}\) conducted for the project site on May 9, 2019, provides an inventory and preliminary evaluation of all trees over 6 inches in diameter within the project site. Trees that were surveyed were numbered, tagged, identified, measured, and evaluated. A total of approximately 161 trees would be removed within the boundaries of the project site. Of the trees proposed for removal, approximately 145 trees are considered code-protected due to their size, while the remaining approximately 16 trees are not code-protected based on the Tree Protection and Preservation Ordinance. If not properly protected, the trees proposed for preservation within the site boundaries and directly adjacent to the project site could also be subject to injury or inadequate maintenance during construction, which represents a potentially significant impact.

The response of individual trees would depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods.

As the construction of the project requires the removal of trees subject to the Contra Costa County Tree Protection and Preservation Ordinance, the applicant would be required to prepare and implement a tree replacement plan (per MM BIO-5a). In addition, remaining trees that are proposed for preservation on the project site would be preserved through the implementation of the tree protection guidelines identified and outlined in the project-site-specific Tree Inventory Report (per MM BIO-5b).

As a part of approval for on-site development, the applicant would be required to demonstrate and implement consistency with the County’s tree ordinance, including tree removal permits and protection of preserved trees. Therefore, with implementation of MM BIO-5a and MM Bio-5b, impacts related to consistency with local policies or ordinances that protect biological resources would be less than significant.

**Level of Significance Before Mitigation**
Potentially Significant

**Mitigation Measures**

**MM BIO-5a** Prepare and Implement a Tree Replacement Plan

A Tree Replacement Plan shall be submitted to and approved by Contra Costa County Department of Conservation and Development prior to the removal of trees, and/or prior to issuance of a demolition or grading permit. The Tree Replacement Plan shall designate the approximate location, number, and sizes of trees to be planted. Trees shall be planted prior to requesting a final inspection of the building permit.

**MM BIO-5b** Implement Tree Protection Guidelines During Construction

Tree protection guidelines shall be implemented during construction through the clearing, grading, and construction phases as outlined in the arborist report prepared by HortScience dated May 9, 2019.

**Level of Significance After Mitigation**
Less Than Significant with Mitigation

**Habitat/Natural Community Conservation Plan Consistency**

| Impact BIO-6: | The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. |

**Construction**
The project site does not fall within the coverage area of a habitat conservation plan or natural community conservation plan. The project site is roughly 5.5 miles west of the East Contra Costa County Habitat Conservation Plan (ECCCHCP) area, the nearest habitat conservation plan area. Therefore, there would be no construction impact related to consistency with a conservation plan.

**Operation**
Impacts related to a project’s consistency with habitat or natural community conservation plans are limited to construction impacts. No respective operational impacts would occur.

**Level of Significance**
No Impact
3.3.5 - Cumulative Impacts

Special-status Species

The geographical scope of the cumulative Biological Resources Analysis is the boundaries of Contra Costa County, the City of Pleasant Hill, and the City of Walnut Creek with a focus on the areas of Contra Costa County near where the project site is located. Development listed in Table 3-1 (Refer to Chapter 3.0, Environmental Impact Analysis) consists predominantly of commercial development and some include residential components. The majority of this area is highly developed and contains a mix of residential, commercial, and industrial buildings. There are several jurisdictional waterways in the proximity of the project site, such as the Contra Costa Canal and Ygnacio Canal. Additionally, the Walnut Creek Waterway is to the east of the project site and provides habitat for a variety of wetland and riparian species of flora and fauna. The majority of projects are occurring in close vicinity of the project site and, subsequently, occurring in previously developed or highly disturbed areas. The developed urban characteristics of the previously mentioned areas will preclude the presence of many special-status species. However, the varying degree of trees present in and around the urban areas may provide suitable nesting habitat for birds protected by the MBTA. Standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact nesting birds and protected bat species. While there are a limited number of isolated pockets of natural habitat that can support special-status wildlife and plant species, the built-up nature of the previously listed areas precludes the possible cumulative impacts to biological resources related to special-status wildlife and plant species.

Sensitive Natural Communities or Riparian Habitat

Within Contra Costa County, the City of Pleasant Hill, and the City of Walnut Creek, there are several small waterbodies, the Walnut Creek waterway, and associated riparian habitats. These areas may be considered sensitive natural communities dependent on the habitat conditions and species present. The majority of current developments are designed to address future growth problems, prevent urban sprawl, and minimize developmental impacts to sensitive natural communities. This is accomplished by designing projects to occur in previously developed or highly disturbed areas that the characteristics of lack sensitive natural communities or riparian habitat. As such, the project, in conjunction with other cumulative projects, would result in a less than significant cumulative impact related to sensitive natural communities and associated riparian habitat.

Waters of the United States

The areas of Contra Costa County, the City of Pleasant Hill, and the City of Walnut Creek contain several areas that would be considered jurisdictional features. As such, current projects are occurring in a highly developed and disturbed area with low potential for jurisdictional features to be impacted by project development. If any issues were to arise due to current development, the applicant would be required to obtain appropriate permits from the USACE and CDFW, compensate for loss of waters of the United States through re-creation or payment of mitigation credits, and re-creation of lost riparian habitat. Due to the limited scope of current projects, which are occurring in highly developed and disturbed areas, it is expected there will be a less than significant cumulative impact related to waters of the United States.
Local Policies or Ordinances

The project would remove approximately 161 trees (approximately 145 code-protected trees and approximately 16 not code-protected trees). Other projects listed in Table 3-1 may require the removal or encroachment on certain protected trees as listed by the Contra Costa County Zoning Ordinance, the Walnut Creek Municipal Code, or the Pleasant Hill Municipal Code. As previously mentioned, many of the current development projects are occurring in previously developed or disturbed areas. As such, a limited number of trees within the geographical scope are likely to occur. Current project developments may require an Arborist report to determine the identity of trees planned for removal or encroachment. Therefore, the project, in conjunction with other future development projects, would be required to adhere to applicable tree ordinances and regulations set by the County of Contra Costa and the City of Walnut Creek and City of Pleasant Hill resulting in a less than significant cumulative impact to biological resources related to local policies and ordinances.

Fish and Wildlife Movement Corridors

The main wildlife corridor in the vicinity of the project site is the Walnut Creek Waterway, which is roughly contiguous with the Interstate 680 (I-680) corridor, stretching from northern San Ramon to Suisun Bay. There are several small water channels and tributaries that are located within the geographical scope of this project. The project site is located to the west of Walnut Creek and due to the small size, will not have to account for any potential impacts to wildlife corridors. Any current development that occurs within the geographic scope of Contra Costa County, the City of Walnut Creek and the City of Pleasant Hill will have to take into account the potential impact to these corridors. The areas surrounding the potential corridors within the previously mentioned geographical scope are highly developed, further impeding the movement of species out from these areas. As such, there will be a less then significant cumulative impact to biological resources related to movement corridors for fish and wildlife.

Habitat and Natural Community Conservation Plan Consistency

The project site is not located within the ECCCHCP. The ECCHCP provides for comprehensive species, wetlands, and ecosystem conservation, and contributes to the recovery of endangered species in Northern California. Any current project sites within the boundaries of the ECCCHCP will have to adhere by the additional regulations and guidelines set forth. This may include additional surveys for listed species, developments fees, and various other directions. As such, there will be a less then significant cumulative impact to biological resources relating to developments occurring in Habitat Community Conservation Plans.

Level of Cumulative Significance

Less Than Significant
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