

## 4.3 BIOLOGICAL RESOURCES

This section of the Environmental Impact Report (EIR) presents information on biological resources conditions in the project site. The current condition and quality of biological resources was used as the baseline against which to compare potential impacts of the proposed project. Where additional information has been used to evaluate the potential impacts, that information has been referenced. The following analysis of the potential impacts to biological resources is derived primarily from studies that include a biological assessment and delineation of waters on the project site. The reports were initially prepared by WRA Consultants (WRA) in September 2017 and updated January 2019. The reports are summarized in the following discussion, listed below, and included as Appendix D to this EIR.

- Biological Resources Assessment, WRA, September 2017 and January 2019.
- Delineation of Waters of the U.S. Report, WRA, September 2017 and January 2019.

### 4.3.1 ENVIRONMENTAL SETTING

#### REGIONAL SETTING

The City of Vallejo is located along the east margin of San Pablo Bay, a northeastern lobe of San Francisco Bay. The topography in Vallejo is varied, ranging from flat-lying areas such as marsh and estuarine. The environment along Mare Island and parts of the east margin of the Napa River includes gently sloping terrain in the central part of the City (especially the area flanking I-80 north of Curtola Parkway), hillier terrain that dominates the east-central and northeast parts of the City and include the East Bay Hills and Briones Hills to the southwest, the Vaca Mountains and Napa Valley to the north, and the Diablo Ranges to the southeast. Elevations range from near sea level on the shores of the Carquinez Strait to nearly 1,000 feet above mean sea level along the crest of Sulphur Springs Mountain in the northeast part of the City.

The 51.3-acre project site is currently undeveloped, vacant land. The proposed project site is located southeast of the intersection of Turner Parkway and Admiral Callaghan Lane. The project site is bordered by areas developed with predominantly commercial uses to the north and residential uses to the east and south. Although the site is now fenced along the northern edge on Turner Parkway, unauthorized access can still occur on the western edge of the property, and the site is illegally used by people for temporary campsites which have caused localized brush fires. In addition, ground disturbance, caused by excavation and other earth-moving activities occurred in the northern portion of the project site. As a result of this construction activity, several small depressions were created in the property.

The majority of the site (over 44 acres) is covered in non-native annual grassland with some elements of mixed woodland and coyote brush scrub intermixed. Plant species observed on the project site are predominantly non-native annual grasses and herbaceous species typical of disturbed sites. A seasonal wetland swale complex is present at the base of the small hills that are approximately 35 feet higher than

the majority of the project site. The project site also contains a small portion of Blue Rock Springs Creek, a perennial stream, which runs east to west in the southwestern corner of the site.

## **BASELINE DATA COLLECTION**

### **Literature Search and Review of Existing Data**

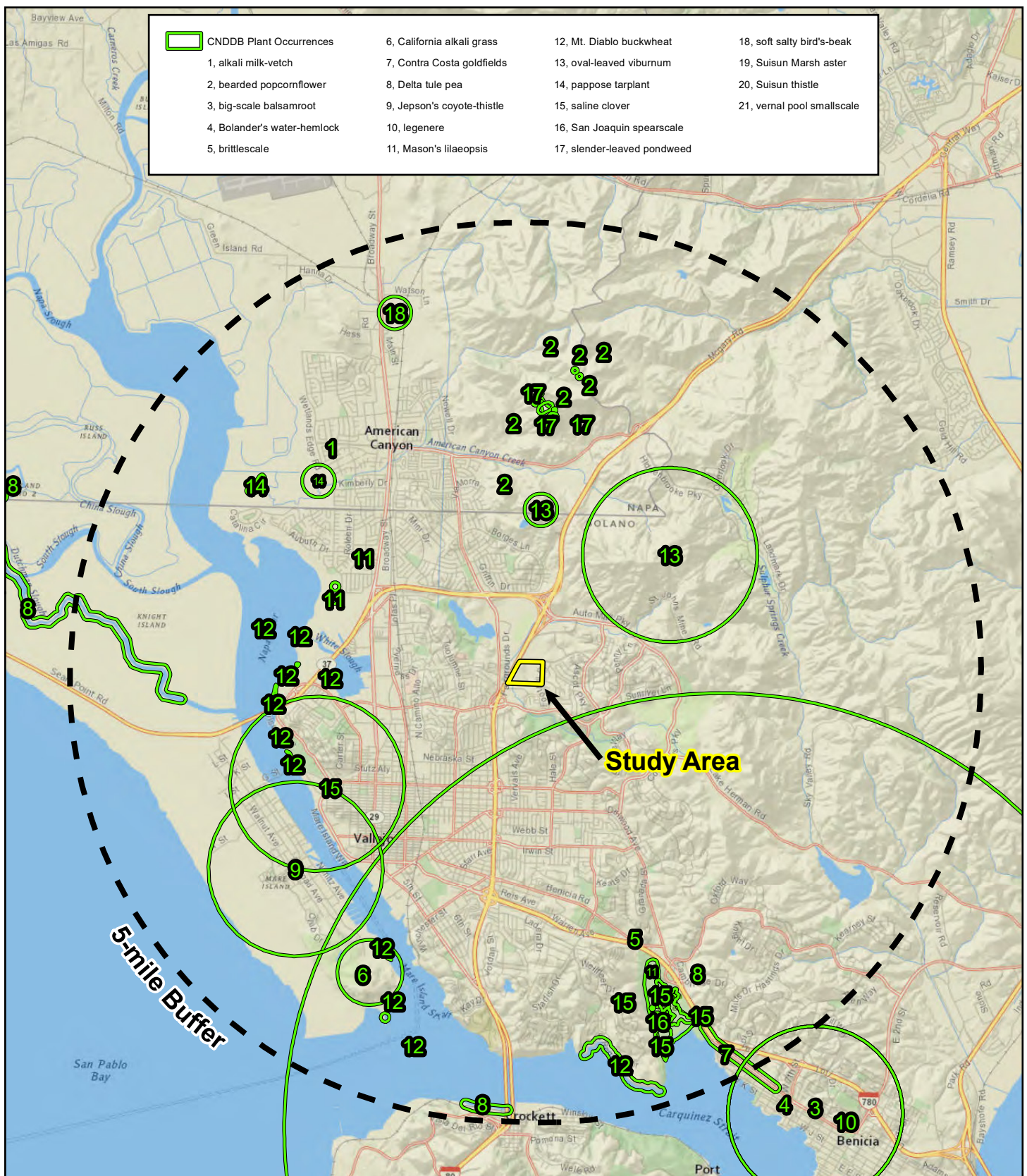
The assessment of biological resources for the proposed project began with a review of all available documents and species and habitat data provided by the Project Applicant, United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and other agencies. Biological resource data sources included, but were not limited to, the following:

- California Natural Diversity Database records
- USFWS Information for Planning and Conservation Species
- CDFW California Wildlife Habitat Relationships database species accounts and range maps
- California Amphibian and Reptile Species of Special Concern
- California Bird Species of Special Concern
- California Native Plant Society Inventory records
- Draft update of the Terrestrial Mammal Species of Special Concern in California
- eBird Online Bird Occurrence Database
- Western Bat Working Group species accounts
- Breeding Bird Atlas of Solano County
- Xerces Society for Invertebrate Conservation Species Accounts

## **Biological Communities**

### ***Literature Search***

Based on review of the California Natural Diversity Database (CNDDB), 67 special-status plant species have been documented within a 5-mile radius of the project site. These locations are shown in **Figure 4.3-1: Special Status Plant Species Within Five Miles**. Of those species, it was determined that 37 have no potential to occur at the project site; 29 species are unlikely to occur; and one species has moderate potential to occur. The 37 species that have no potential to occur require habitat elements that are absent from the site such as tidal marshes, chaparral, vernal pools, chenopod scrub, and serpentine substrate. For the 29 species determined to be unlikely to occur at the site, some elements of suitable habitat may be present (e.g., grassland, seasonal wetland, coastal scrub). However, because of the high disturbance levels surrounding the site and the generally degraded condition of habitat on the project site, these species are unlikely to occur on the site. A list of all species considered but rejected and the reasoning for their rejection is provided in Appendix D.



Source: WRA, 2019



**FIGURE 4.3-1:** Special Status Plant Species Within Five Miles  
Fairview at Northgate Project

Non-sensitive biological communities observed in the project site included non-native annual grassland and coyote brush scrub. Additionally, three sensitive biological communities were observed in the project site: perennial stream, seasonal wetland swale, and anthropogenic depressions.

### **Site Surveys**

Reconnaissance-level surveys of land cover, conducted on March 18 and May 3, 2017 by WRA identified five biological communities on the project site: non-native annual grassland, coyote brush scrub, perennial stream, seasonal wetland swale, and anthropogenic depression. This community is shown on **Figure 4.3-2: Biological Communities**. A special-status plant survey was also conducted simultaneously with the biological resources assessment and is discussed below.

## **Non-Sensitive Biological Communities**

### ***Non-Native Annual Grassland (45.67 acres)***

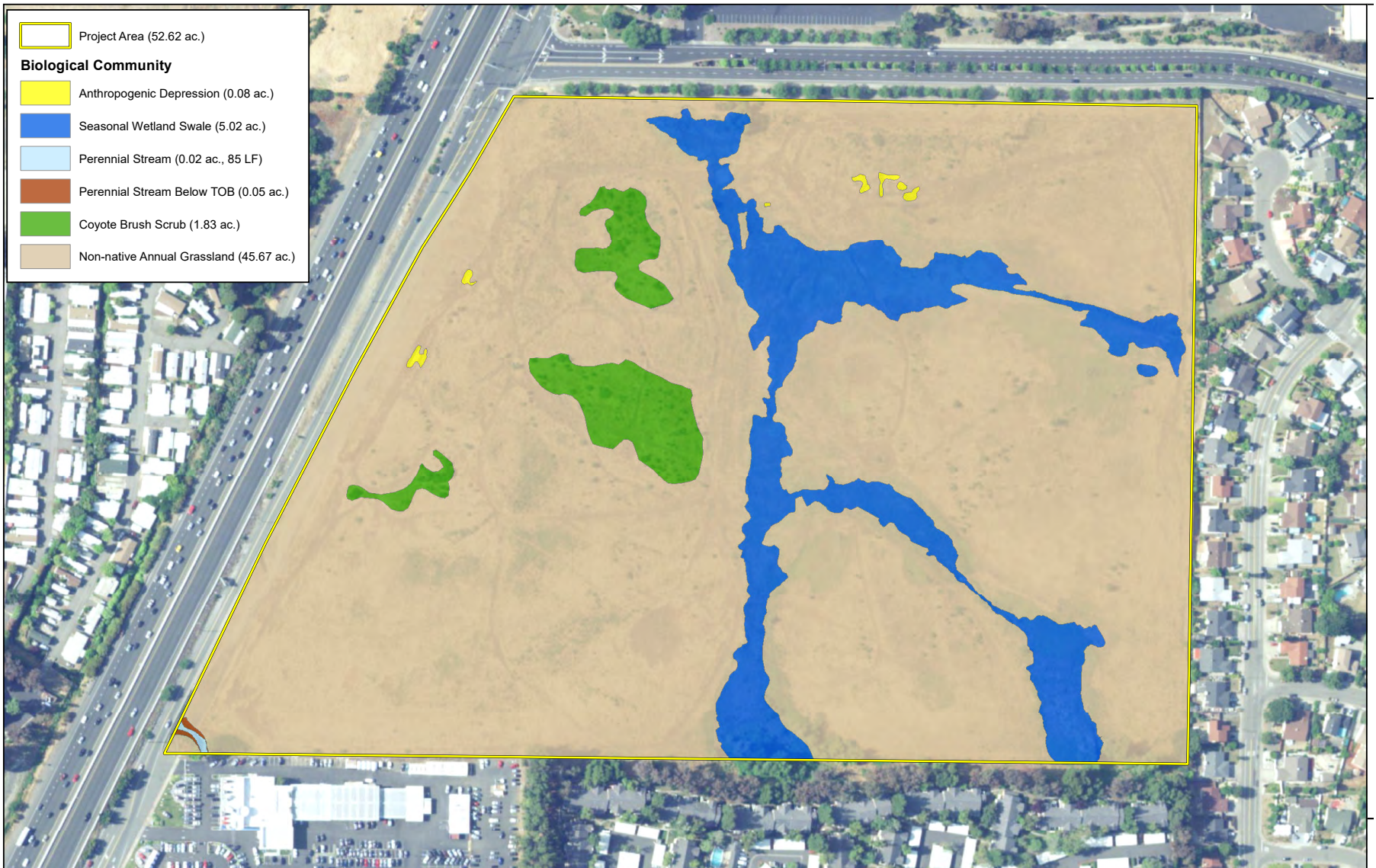
Non-native annual grassland occupies the majority of the project site in drier areas on all aspects and slopes. The dominant species observed on this community were Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), seaside barley (*Hordeum marinum*), foxtail barley (*Hordeum murinum*), and slender oat grass (*Avena barbata*). Indian teasel (*Dipsacus sativus*), sweet fennel (*Foeniculum vulgare*), curly dock (*Rumex crispus*), spring vetch (*Vicia sativa*), and bristly ox tongue (*Helminthotheca echinoides*) were observed mixed on the stands of annual grasses. Very few native species were observed on the non-native annual grasslands, and they occurred at extremely low cover. Native species observed included narrow leaf mule ears (*Wyethia angustifolia*) and white brodiaea (*Triteleia hyacinthina*).

### ***Coyote Brush Scrub (1.83 acres)***

Coyote brush scrub (*Baccharis pilularis*) is known from the outer Coast Ranges and Sierra Nevada Foothills from Del Norte County south to San Diego County. This vegetation alliance is typically located on river mouths, riparian areas, terraces, stabilized dunes, coastal bluffs, open hillsides, and ridgelines on all aspects underlain by variable substrate of sand to clay. These scrubs are located primarily on mid- to high-slopes on north-facing aspects, predominantly underlain by rocky loam substrate.

On the project site, the dominant species in the shrub layer is coyote brush with isolated individuals of toyon (*Heteromeles arbutifolia*) and cherry plum (*Prunus cerasifera*). Herbaceous cover is dominated by non-native herbs including soft chess, Italian rye grass, ripgut brome, foxtail barely, and slender oat grass. In lesser abundance, sweet fennel, purple vetch (*Vicia benghalensis*), short podded mustard (*Hirschfeldia incana*), Mediterranean linseed (*Bellardia trixago*), purple salsify (*Tragopogon porrifolius*) were present.





Source: WRA, 2019



**FIGURE 4.3-2:** Biological Communities  
Fairview at Northgate Project

## Sensitive Biological Communities

### ***Perennial Stream (0.02 acre [0.05-acre below top-of-bank])***

The perennial stream on the project site is comprised of a small (approximately 85 linear feet) portion of Blue Rock Springs Creek, which is located in the southwestern corner of the project site. Perennial streams are considered sensitive under the State CEQA Guidelines and are regulated by the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and CDFW. The primary source of water for the perennial stream is storm water and other runoff from the surrounding developed lands. The stream enters the project site from the south through a culvert that runs under the automobile dealership. It exits the project site to the west through a culvert under Admiral Callaghan Lane. Sparse vegetation is present along the fringes of Blue Rock Springs Creek below the Ordinary High-Water Mark (OHWM), but the feature is generally unvegetated. Indicators of OHWM are present, including a clear bed and bank. The perennial stream on the project site is assumed to drain into receiving waters that are Jurisdictional Waters of the U.S. and therefore, is expected to be considered jurisdictional under Section 404 of the Clean Water Act (CWA). Areas below the top of bank are expected to be considered jurisdictional by CDFW.

### ***Seasonal Wetland Swale (5.02 acres)***

A seasonal wetland swale is present in the low, flat areas at the base of the hills on the project site. The wetland consists of a number of connected swales that flow into the eastern portion of the site from the surrounding urbanized areas and then flow off the project site through a culvert to the north. The wetlands are characterized by hydrophytic vegetation<sup>1</sup> but they have been extensively disturbed by a still visible previously made network of off-road vehicle pathways and tire ruts resulting from unauthorized off-road vehicle activity. The wettest portions of the swales are generally at their upper ends, near the southern and eastern project site boundary, where they enter from the surrounding residential developments and are dominated by obligate<sup>2</sup> and facultative<sup>3</sup> perennial wetland species including cattails, bulrushes (*Bolboschoenus sp.*), and iris-leaved rush (*Juncus xiphioides*). Drier portions of the wetland swale are dominated by annual facultative and facultative wetland species including salt grass (*Distichlis spicata*), Italian ryegrass, curly dock, rabbit's foot grass, bristly ox-tongue, and creeping wildrye (*Elymus triticoides*). Occasional red willows (*Salix laevigata*) are present, particularly along the southern boundary of the project site; as well as oak trees including coast live oak (*Quercus agrifolia* var. *agrifolia*) and the non-native Holly Oak (*Quercus ilex*), but the wetlands are generally treeless.

Seasonal wetland swales on the project site were mapped primarily based on vegetation signatures observed on foot during the field visit in May 2017. On-site seasonal wetland swales met the three

<sup>1</sup> Hydrophytic Vegetation - Any macrophyte that grows in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content; plants typically found in wet habitats (USACE, 1987).

<sup>2</sup> Obligate - Plants that occur almost always (estimated probability >99 percent) in wetlands under natural conditions, but which may also occur rarely (estimated probability <1 percent) in non-wetlands.

<sup>3</sup> Facultative- Plants that occur usually (estimated probability >67 percent to 99 percent) in wetlands, but also occur (estimated probability 1 percent to 33 percent) in nonwetlands.

wetland criteria and are assumed to drain into receiving waters that are jurisdictional Waters of the U.S. and therefore, are expected to be considered jurisdictional under Section 404 of the CWA.

### ***Anthropogenic Depression (0.08 acre)***

Within the non-native annual grassland, several anthropogenic depressions and tire ruts caused by unauthorized off-road vehicle and excavation activity were observed in the north-central and west portions of the project site. The depressions are seasonally inundated and are typically characterized by annual species such as seaside barley, Italian ryegrass, rabbit's foot grass (*Polypogon monspeliensis*), and waxy mangrass (*Glyceria declinata*); some depressions support perennial species such as iris-leaved rush and cattails. Although the excavations and tire ruts are manmade in otherwise upland areas, anthropogenic depressions in the project site met the three wetland criteria and are assumed to drain into receiving waters that are jurisdictional Waters of the U.S. They are therefore expected to be considered jurisdictional under Section 404 of the CWA.

## **Special-Status Plant Species**

### ***Species with Potential to Occur on the Project Site***

One special-status species was determined to have a moderate potential to occur in the project site based on distribution and on-site habitat: coast iris (*Iris longipetala*). The potential for this species to occur in the project site and the results of the protocol-level plant survey for this species are discussed below.

#### ***Coast Iris***

Coast iris (*Iris longipetala*) has a moderate potential to occur on the project site but was not observed during site visits conducted by WRA. Coast iris is a perennial rhizomatous herb in the iris family (*Iridaceae*). It typically occurs in mesic coastal prairie, lower montane coniferous forest, and meadows and seeps habitats at elevations ranging from 0 to 1,970 feet. Typically observed associated species include coast redwood (*Sequoia sempervirens*), California bay (*Umbellularia californica*), rattlesnake grass (*Briza maxima*), slender wild oat, soft chess, and purple needlegrass (*Stipa pulchra*).

The nearest documented occurrence of this species is approximately 6.5 miles northeast of the project site on a grassy slope in a somewhat disturbed area. Coast iris has a moderate potential to occur in the non-native annual grassland and coyote brush scrub communities on the project site due to the relatively close proximity of the nearest occurrence and suitable grassland and open scrub habitats.

During the May 2017 site visit, meandering transects were walked throughout all grassland and coyote brush scrub habitat on the project site; coast iris was not observed. The only iris species observed on the project site was a non-native ornamental iris species located near the mixed woodland habitat. The site visit occurred during the published blooming period of coast iris and this species was observed at a reference site prior to the site visit. As such, coast iris is assumed to be absent from the project site.

## Special Status Wildlife Species

### Literature Search

Based upon a review of the resources and databases, it was determined that 64 special-status wildlife species have been documented in the vicinity of the project site. Eight special-status wildlife species were determined to have a moderate to high potential to occur at the project site, and one special-status wildlife species has been observed at the site during the WRA site visits. **Figure 4.3-3: Special Status Wildlife Species Within Five Miles**, shows these locations graphically.

Of the 64 special-status wildlife species, it was determined that 36 species have no potential to occur at the site, 19 species are unlikely to occur, and 8 species have moderate potential to occur. One special-status bird species, Allen's hummingbird (*Selasphorus sasin*), was observed at the project site during WRA site visits, and also may nest on the site. These species and their potential to occur in the project site are discussed in greater detail below. The 36 species that have no potential to occur require habitat elements that are absent from the site such as tidal marshes, chaparral, streams connected to Bay waters that would allow for fish passage, dense riparian vegetation, large expanses of open grasslands, woodlands, forests, sandy beaches, salt ponds, vernal pools, or alkali flats. For the 21 species determined to be unlikely to occur at the site, some elements of suitable habitat may be present (e.g., freshwater marsh). However, the high disturbance levels surrounding the site, the generally degraded condition of habitat, and lack of connectivity preclude their presence and/or inhabitation of the site. Eight special-status bird species were determined to have a moderate or high potential to occur and nest on or immediately adjacent to the project site:

- white-tailed kite (*Elanus leucurus*),
- northern harrier (*Circus cyaneus*),
- Nuttall's woodpecker (*Picoides nuttallii*),
- oak titmouse (*Baeolophus inornatus*),
- loggerhead shrike (*Lanius ludovicianus*),
- Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*),
- Samuel's song sparrow (*Melospiza melodia samuelis*), and
- San Francisco common yellowthroat (*Geothlypis trichas sinuosa*).

### Wildlife Surveys

Site visits conducted on March 18 and May 3, 2017 by WRA identified habitat conditions in order to evaluate the potential for special-status plant or wildlife species to occur there. Protocol-level surveys for the federal threatened California red-legged frog (CRLF; *Rana draytonii*) were completed as of July 12, 2017; no life-stage of CRLF or CRLF habitat was determined to be present.





Source: WRA, 2019



**FIGURE 4.3-3:** Special Status Wildlife Species Within Five Miles  
Fairview at Northgate Project

### ***Species with Potential to Occur in the Project Site or Documented as Present***

Eight special-status bird species were determined to have a moderate or high potential to occur and nest on or immediately adjacent to the project site: white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), loggerhead shrike (*Lanius ludovicianus*), Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), Samuel's song sparrow (*Melospiza melodia samuelis*), and San Francisco common yellowthroat (*Geothlypis trichas sinuosa*).

#### ***White-Tailed Kite***

White-tailed kite (*Elanus leucurus*) is a CDFW Fully Protected Species with a moderate potential to occur at the project site. The white-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas, and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities. Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall. This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates. The project site contains open grassland habitats suitable for foraging for this species. Large bushes and trees on the project site may also support nesting, although the project site is surrounded by development and thus the potential for nesting may be reduced. This species has not yet been observed at the site.

#### ***Northern Harrier***

Northern harrier (*Circus cyaneus*) is a CDFW Species of Special Concern with a moderate potential to occur on the project site. The northern harrier occurs as a resident and winter visitor in open habitats throughout most of California, including freshwater and brackish marshes, grasslands and fields, agricultural areas, and deserts. Harriers typically nest in treeless areas in patches of dense, relatively tall, vegetation, the composition of which is highly variable; nests are placed on the ground and often located near water or in wetlands. Harriers are birds of prey and subsist on a variety of small mammals and other vertebrates. The project site contains open grasslands mixed with seasonal wetlands, which provide foraging habitat for this species. Additionally, this species may nest in dense upland vegetation on the site, although regular mowing may reduce this potential. This species has not been observed at the project site.

#### ***Nuttall's Woodpecker***

Nuttall's woodpecker (*Picoides nuttallii*) is a USFWS Bird of Conservation Concern with a moderate potential to occur at the project site. Nuttall's Woodpecker, common in much of its range, is a year-round resident throughout most of California west of the Sierra Nevada. Typical habitat is oak or mixed woodland, and riparian areas. Nesting occurs in tree cavities, principally those of oaks and larger riparian trees. Nuttall's woodpecker also occurs in older residential settings and orchards where trees provide suitable foraging and nesting habitat. This species forages on a variety of arboreal invertebrates. This species is relatively common, even in developed areas, and the southern section of the project site contains

oaks and other trees that may contain cavities suitable for nesting. This species has not yet been observed at the site.

#### *Oak Titmouse*

Oak titmouse (*Baeolophus inornatus*) is a USFWS Bird of Conservation Concern with a moderate potential to occur. This relatively common species is year-round resident throughout much of California including most of the coastal slope, the Central Valley and the western Sierra Nevada foothills. In addition, the species may also occur in residential settings where landscaping provides foraging and nesting habitat. Its primary habitat is woodland dominated by oaks. Local populations have adapted to woodlands of pines and/or junipers in some areas. The oak titmouse nests in tree cavities, usually natural cavities or those excavated by woodpeckers, though they may partially excavate their own. Seeds and arboreal invertebrates make up the birds' diet. This species is relatively common, even at developed areas, and the southern section of the project site contains oaks and other trees that may contain cavities suitable for nesting. This species has not been observed at the project site.

#### *Loggerhead Shrike*

Loggerhead shrike (*Lanius ludovicianus*) is a CDFW Species of Special Concern and a USFWS Bird of Conservation Concern with a moderate potential to occur on the project site. The loggerhead shrike is a year-round resident and winter visitor in lowlands and foothills throughout California. This species is associated with open country with short vegetation and scattered trees, shrubs, fences, utility lines and/or other perches. Although they are songbirds, shrikes are predatory and forage on a variety of invertebrates and small vertebrates. Captured prey items are often impaled for storage purposes on suitable substrates, including thorns or spikes on vegetation, and barbed wire fences. Nests in trees and large shrubs; nests are usually placed three to ten feet off the ground. The project site contains suitable foraging habitat for the species, and patches of dense trees and shrubs may be suitable for nesting. This species has not been observed on the project site.

#### *Bryant's Savannah Sparrow*

Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*) is a CDFW Species of Special Concern with a moderate potential to occur on the project site. This subspecies of the common and widespread savannah sparrow is a year-round resident of the coastal California fog belt. It typically occupies upper tidally-influenced habitats, often found where wetland communities merge into grassland. Nesting occurs in vegetation on or near the ground, including along roads, levees, and canals. Like most sparrows, Bryant's consumes primarily invertebrates and vegetable matter (e.g., seeds). The project site is within this subspecies' range and contains grasslands near wetlands that may support foraging and nesting for this subspecies. This species has not been observed at the project site.

#### *Samuels Song Sparrow*

Samuels song sparrow (*Melospiza melodia samuelis*) is a CDFW Species of Special Concern and a USFWS Bird of Conservation Concern with a moderate potential to occur on the project site. Also known as the San Pablo song sparrow, this subspecies of the common and widespread song sparrow is endemic to tidal

and semi-tidal marshes of San Pablo Bay and northern San Francisco Bay. The essential habitat requirement is dense, taller emergent and herbaceous vegetation, particularly in the upper marsh plain; high-quality habitat tends to include woody shrubs in the upper marsh and adjacent transitional areas. Nests are placed in dense vegetative cover, and invertebrates compose most of the diet. The project site is within this subspecies' home range and contains wetland vegetation that may support foraging and nesting for this subspecies, although it is not the primary salt marsh habitat. This species has not been observed at the project site.

#### *San Francisco Common Yellowthroat*

San Francisco (saltmarsh) common yellowthroat (*Geothlypis trichas sinuosa*) is a USFWS Bird of Conservation Concern and a CDFW Species of Special Concern with a moderate potential to occur at the project site. This subspecies of the common yellowthroat is found in freshwater marshes, coastal swales, riparian thickets, brackish marshes, and saltwater marshes. Their breeding range extends from Tomales Bay in the north, Carquinez Strait to the east, and Santa Cruz County to the south. This species requires thick, continuous cover such as tall grasses, tule patches, or riparian vegetation down to the water surface for foraging and prefers willows for nesting. The project site is within this subspecies' range and contains emergent dense wetland vegetation suitable for foraging and nesting. This species has not been observed at the project site.

#### *Allen's Hummingbird*

Allen's hummingbird (*Selasphorus sasin*) is a USFWS Bird of Conservation Concern that is present in the vicinity of the project area and has been observed on the project site. Allen's hummingbird, common in many portions of its range, is a summer resident along the majority of California's coast and a year-round resident in portions of coastal southern California and the Channel Islands. Breeding occurs in association with the coastal fog belt, and typical habitats used include coastal scrub, riparian, woodland and forest edges, and eucalyptus and cypress groves. It feeds on nectar, as well as insects and spiders. One individual was observed in the project area during a WRA survey in March 2017. This species breeds in Solano County and the project site contains dense vegetation to support nesting along its southern perimeter.

#### *California Red-Legged Frog*

CRLF (*Rana draytonii*) is listed as threatened under the ESA and is a California Species of Special Concern. CRLF is dependent on suitable aquatic, elevation, estivation<sup>4</sup>, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, red-legged frogs disperse away from their estivation sites to seek suitable breeding habitat. Aquatic and breeding habitat is characterized by dense, shrubby, riparian vegetation and deep, still or slow-moving water. Breeding occurs between late November and late April. CRLF can be found during the dry months in small mammal burrows, moist leaf litter, incised stream channels, and large cracks in the bottom of dried ponds.

<sup>4</sup> Estivation is very similar to hibernation, when some mammals spend the winter moving very little and sleeping a lot, in order to save energy (vocabulary.com, 2019).



CRLF is known from the open ranchlands to the north and east of the project site. One occurrence of CRLF has been documented approximately 0.9-mile northeast of the project site, opposite a large commercial shopping center, residential development, and several major arterial roads. CRLF has not been detected nor is expected to occur on the project site. A CRLF survey conducted by Olberding Environmental in June 2016 did not detect any CRLF in the area; WRA completed protocol-level surveys per USFWS guidance and no life-stage of CRLF was detected.

In addition to these surveys, the project site does not contain any habitat capable of supporting CRLF, and the site is surrounded by complete barriers to dispersal, therefore CRLF is unlikely to occur. The site supports several acres of seasonal wetland swale that results from non-point source storm run-off from surrounding residential and commercial developments. The project site contains a small (85 feet) day-lighted section of Blue Rock Springs Creek in the far southwestern corner. CRLF are not known to occur in this creek and it is not hydrologically connected to any known CRLF aquatic habitats. Finally, this section of creek was sampled for CRLF environmental DNA on May 31, 2017. Based on the laboratory analysis of these samples, CRLF was determined to be absent upstream and downstream of the project site. The 2016 CRLF survey noted that site conditions were dry in June of that year. Furthermore, in 2017, a year where precipitation exceeded 150 percent of average, the wetlands features were observed to be completely dry in May, when CRLF young would still be dependent on water prior to metamorphosis. Therefore, there are no wetlands on the site that can support CRLF habitation.

No dispersal corridors are present that would allow CRLF to immigrate to, or emigrate from, the project site. The project site is bordered by roadways and residential and commercial development. All of these features represent complete barriers to dispersal and prevent ingress to or egress from the project site. Because the site lacks aquatic habitat, even in a very wet year, and there is no potential for overland dispersal, and the species appears to be absent from the site, CRLF are not expected to occur on the project site.

## **CRITICAL HABITAT AND ESSENTIAL FISH HABITAT**

The project site does not contain designated Critical Habitat for any listed species. The project site is also not connected to a natural watercourse and therefore has no potential to impact migratory fish or other special-status fish species; additionally, the site does not contain Essential Fish Habitat. Blue Rock Springs Creek crosses the southwest boundary of the project site, subsequently undergrounds downstream, and is thus not accessible by migrating special-status fish.

### **Jurisdictional Waters**

Field surveys were conducted by WRA on May 3 and 17, 2017 to determine jurisdictional delineation under Section 404 of the CWA. The project site was evaluated for the presence or absence of indicators of the three wetland parameters described in the U.S. Army Corps Wetlands Delineation Manual (Corps Manual) and the Arid West Supplement.

The three parameters used to delineate wetlands are the presence of: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. According to the Corps Manual, for areas not considered “problem areas” or “atypical situations”:

“...evidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination.”

The surveys also evaluated the presence of “Waters of the U.S.” other than wetlands potentially subject to Corps jurisdiction under Section 404 of the CWA. Other areas, besides wetlands, subject to Corps jurisdiction include lakes, rivers, and streams (including intermittent streams) in addition to all areas below the high tide line in areas subject to tidal influence. Jurisdiction in non-tidal areas extends to the OHWM defined as:

“...that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the characteristics of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

The Arid West Supplement includes recommended procedures for completing wetland delineations in areas of “difficult wetland situations.” The Corps Manual describes “problem areas,” defined as naturally occurring wetland types which periodically lack wetland indicators due to normal seasonal or annual variability.

The project site contains two wetland categories: seasonal wetland stream and anthropogenic depressions. All wetlands mapped on the project site are likely to be considered jurisdictional by the Corps as they all drain (or would potentially drain) to the San Francisco Bay, a navigable waterway. The jurisdictional wetlands are shown in **Figure 4.3-4: Jurisdictional Waters of the U.S.**

## Seasonal Wetlands

Seasonal wetland swales at the project site meet the three wetland criteria and are assumed to drain into receiving waters that are jurisdictional Waters of the U.S. and therefore, are expected to be considered jurisdictional under Section 404 of the CWA.

## Anthropogenic Depressions

Excavations and tire ruts exist on the project site that were formed by extensive and regular off-road vehicle use and other forms of ground disturbance. Although the excavations and tire ruts are manmade on otherwise upland areas, Corps personnel indicated during a site visit that the Corps would claim jurisdiction over these features as Waters of the U.S. Therefore, anthropogenic depressions mapped on the project site are considered to be jurisdictional under Section 404 of the CWA.



Source: WRA, 2019



**FIGURE 4.3-4:** Jurisdictional Waters of the U.S.  
Fairview at Northgate Project

## Potential Corps Jurisdiction

Based on the findings of the wetland delineation, the project site contains 5.10 acres of potentially jurisdictional wetlands and 0.02 acre (85 linear feet) of potentially jurisdictional non-wetland waters, as summarized in *Table 4.3-1: Summary of Potential CWA Section 404 Jurisdictional Areas*.

There are two wetland types delineated on the project site; seasonal wetland swale and anthropogenic depressions. Non-wetland waters were determined based on the presence of an OHWM; the one type of non-wetland waters delineated on the project site was a perennial stream.

**Table 4.3-1: Summary of Potential CWA Section 404 Jurisdictional Areas**

Feature Type (FGDC 2013)	Potential Jurisdictional Waters of the U.S. (acres/linear feet)
Potential Jurisdictional Section 404 Wetlands	
Seasonal Wetland Swale (PEM1)	5.02
Anthropogenic Depressions	0.08
Potential Jurisdictional Section 404 Non-wetland Waters	
Perennial Stream (R2UB)	0.02/85
Total Section 404 Jurisdictional Areas	5.12/85

Source: WRA, 2019.

### 4.3.2 REGULATORY SETTING

#### FEDERAL

#### Federal Endangered Species Act

The Federal Endangered Species Act (ESA) provisions protect federally listed threatened and endangered species and their habitats from unlawful take and ensure that federal actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Under the ESA, “take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” USFWS regulations define harm to mean “an act which actually kills or injures wildlife.” Such an act “may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR § 17.3).

Critical habitat is defined in Section 3(5)(A) of the ESA as “(i) the specific areas within the geographical area occupied by the species on which are found those physical or biological features (I) essential to the conservation of the species, and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species upon a determination by the Secretary of Commerce or the Secretary of the Interior that such areas are essential for the conservation of the species.” The effects analyses for designated critical habitat must consider the role of the critical habitat in both the continued survival and the eventual recovery (i.e., the conservation) of the species in



question, consistent with the recent Ninth Circuit judicial opinion, *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*. Activities that may result in “take” of individuals are regulated by the USFWS. The USFWS produced an updated list of candidate species on December 6, 2007. Candidate species are not afforded any legal protection under ESA; however, candidate species typically receive special attention from federal and State agencies during the environmental review process.

### **Migratory Bird Treaty Act**

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and State regulations. The Federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary. This act encompasses whole birds, parts of birds, and bird nests and eggs.

### **Regulated Habitats**

Areas meeting the regulatory definition of “Waters of the U.S.” (Jurisdictional Waters) are subject to the jurisdiction of the USACE under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, etc.), all impoundments of waters otherwise defined as “Waters of the U.S.,” tributaries of waters otherwise defined as “Waters of the U.S.,” the territorial seas, and wetlands (termed Special Aquatic Sites) adjacent to “Waters of the U.S.” (33 CFR, Part 328, Section 328.3).

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit would be effective in the absence of State water quality certification pursuant to Section 401 of the Clean Water Act. As a part of the permit process, the USACE works directly with the USFWS to assess project impacts on biological resources.

## **STATE**

### **California Endangered Species Act**

Provisions of the California Endangered Species Act (CESA) protect State-listed Threatened and Endangered species. CDFW regulates activities that may result in “take” of individuals (“take” means “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under CDFW Code. Additionally, the CDFW Code contains lists of vertebrate species designated as “fully protected” (§§ 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], 5515 [fish]). Such species may not be taken or possessed.

In addition to federal and State-listed species, CDFW also has produced a list of Species of Special Concern to serve as a “watch list.” Species on this list are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Species of Special

Concern may receive special attention during environmental review, but they do not have statutory protection.

Birds of prey are protected under the CDFG Code. Section 3503.5 states it is “unlawful to take, possess, or destroy any birds of prey (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.” Construction-related 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 “take” by CDFW. Under Sections 3503 and 3503.5 of the State Fish and Wildlife Code, activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory nongame bird as designated in the MBTA, or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant to CDFG Code Section 3800 are prohibited.

## **Regulated Habitats**

The State Water Resources Control Board is the State agency (together with the RWQCB) charged with implementing water quality certification in California. The proposed project falls under the jurisdiction of both the Central Valley and San Francisco Bay RWQCBs.

The CDFW potentially extends the definition of stream to include “intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (USGS), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife”. Such areas of the proposed project were determined using methodology described in A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607.

Activities that result in the diversion or obstruction of the natural flow of a stream; or which substantially change its bed, channel, or bank; or which utilize any materials (including vegetation) from the streambed, may require that the project applicant enter into a Streambed Alteration Agreement with the CDFW.

## **LOCAL**

### **Propel Vallejo General Plan 2040**

Project relevant General Plan policies for biological resources are addressed in this section. Where inconsistencies exist, if any, they are addressed in the respective impact analysis below.

Policy NBW-1.1	Natural Resources. Protect and enhance hillsides, waterways, wetlands, occurrences of special-status species and sensitive natural communities, and aquatic and important wildlife habitat through land use decisions that avoid and mitigate potential environmental impacts on these resources to the extent feasible.
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Action NBE-1.1A	Cooperate with federal, State, and local regulatory and stewardship agencies to promote the restoration and long-term sustainability of local natural resources, including wetlands and wildlife habitat at River Park.
Action NBE-1.1B	Continue to participate in the implementation of regional habitat conservation and restoration programs, including the Solano Multispecies Habitat Conservation Plan and Natural Community Conservation Plan, and wetland restoration occurring in the Napa/Sonoma Marshes.
Action NBE-1.1C	Pursue habitat enhancement at South White Slough and River Park through mitigation banking and/or similar mechanisms, whereby developers contribute to the preservation, enhancement, restoration, or creation of a wetland, stream, or habitat conservation areas, which could offset environmental impacts on other sites.
Action NBE-1.1E	Protect the remaining woodlands and native tree resources, and require replacement plantings where native trees must be removed.
Action NBE-1.1F	Require a biological assessment for new development proposed on sites that are determined to have some potential to contain sensitive biological and wetland resources. The assessment should be conducted by a qualified professional to determine the presence or absence of any sensitive resources, should evaluate potential adverse effects, and should define measures for protecting the resources in compliance with State and federal laws. Detailed surveys are not necessary in locations where past and existing development have eliminated natural habitat and the potential for presence of sensitive biological resources.
Action NBE-1.1G	Avoid potential impacts on jurisdictional wetlands and other waters as part of new development to the maximum extent feasible. This should include streams and associated riparian habitat and coastal salt marsh habitat along the Vallejo shoreline. Where complete avoidance is not possible, require that appropriate authorizations be secured from State and federal jurisdictional agencies and that adequate replacement mitigation be provided to ensure there is no net loss in habitat acreage or values.
Policy NBE-1.2	Sensitive Resources. Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, and wetlands are avoided and mitigated to the greatest extent feasible as development takes place.
Action NBE-1.2C	Protect the nests of raptors and other birds when in active use, as required by State and federal regulations. As part of new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season (September through February) or by conducting a preconstruction survey by a

	qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.
Action NBE-1.2D	Continue to require environmental review of development applications pursuant to CEQA to assess the potential impacts on native species and habitat diversity. Require adequate mitigation measures for ensuring the protection of sensitive resources and achieving “no net loss” of sensitive habitat acreage, values, and functions and encourage early consultation with all trustee agencies and agencies with review authority pursuant to CEQA for projects in areas supporting special-status species, sensitive natural communities, or wetland that may be adversely affected by new development.
Policy NBE-1.3	Interpretive Facilities. Encourage the development of facilities that provide education about local environmental resources and ecosystems.
Action NBE-1.3B	Work with landowners to facilitate assembly and retention of parcels of sufficient size to preserve valuable tidal marshes, seasonal marshes, managed wetlands and contiguous grassland areas for the protection of aquatic and wildlife habitat.
Action NBE-1.3C	Provide or encourage public access to natural resource areas where appropriate, to enhance environmental awareness as well as passive recreational opportunities.
Policy NBE-1.4	Waterway Restoration. Restore riparian corridors and waterways throughout the city.
Action NBE-1.4A	Collaborate with GVRD, Vallejo Sanitation & Flood Control District (VSFCD), and other partners to evaluate creek conditions and restoration opportunities, and to develop policies covering setbacks from creeks, damage prevention, stewardship, nuisance abatement, public access, and other community and environmental concerns.

## City of Vallejo Development Code

### ***Section 10.12, Trees***

Regulation of tree removal in the City is identified in Section 10.12 of the Development Code. The ordinance defines a “significant tree” as any tree or stand of trees on private property having either a height of twenty-five feet measured above ground level, or a diameter of ten inches. A “street tree” is defined as any tree of any species or size planted in parkways, sidewalk areas, easements, and rights-of-way granted to the City. Section 10.12 of the City’s Development Code requires a permit prior to removal of any street tree or significant tree.

## **The Solano Multi-Species Habitat Conservation Plan**

The City of Vallejo is a participant in preparation of the Solano Multi-Species Habitat Conservation Plan (HCP). The Solano HCP establishes a framework for complying with State and federal endangered species



regulations while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the plan participants in Solano County over the next 30 years. There is no timeframe for when the Solano HCP will be adopted.

### **Other Applicable Regulations, Plans, and Standards**

The mission of the California Native Plant Society (CNPS) Rare Plant Program is to develop current, accurate information on the distribution, ecology, and conservation status of California's rare and endangered plants, and to use this information to promote science-based plant conservation in California. Once a species has been identified as being of potential conservation concern, it is put through an extensive review process. Once a species has gone through the review process, information on all aspects of the species (listing status, habitat, distribution, threats, etc.) are entered into the online CNPS Inventory. The program currently recognizes more than 2,300 plant taxa (species, subspecies, and varieties) as rare or endangered in California.

Vascular plants listed as rare or endangered by the CNPS, but which might not have designated status under State endangered species legislation, are defined as follows:

- List 1A – Plants considered by the CNPS to be extinct in California
- List 1B – Plants rare, threatened, or endangered in California and elsewhere
- List 2 – Plants rare, threatened, or endangered in California, but more numerous elsewhere
- List 3 – Plants about which we need more information – a review list
- List 4 – Plants of limited distribution – a watch list

In addition to the list designations above, the CNPS adds a Threat Rank as an extension added onto the CNPS List and designates the level of endangerment by a 1 to 3 ranking, with 1 being the most endangered and 3 being the least endangered and are described as follows:

- 0.1 – Seriously threatened in California (high degree/immediacy of threat)
- 0.2 – Fairly threatened in California (moderate degree/immediacy of threat)
- 0.3 – Not very threatened in California (low degree/immediacy of threats or no current threats known)

The combined definition and Threat Rank (such as 1B.1) provide an overall classification of the species.

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### **4.3.3 STANDARDS OF SIGNIFICANCE**

Appendix G of the State CEQA Guidelines provides a checklist of potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

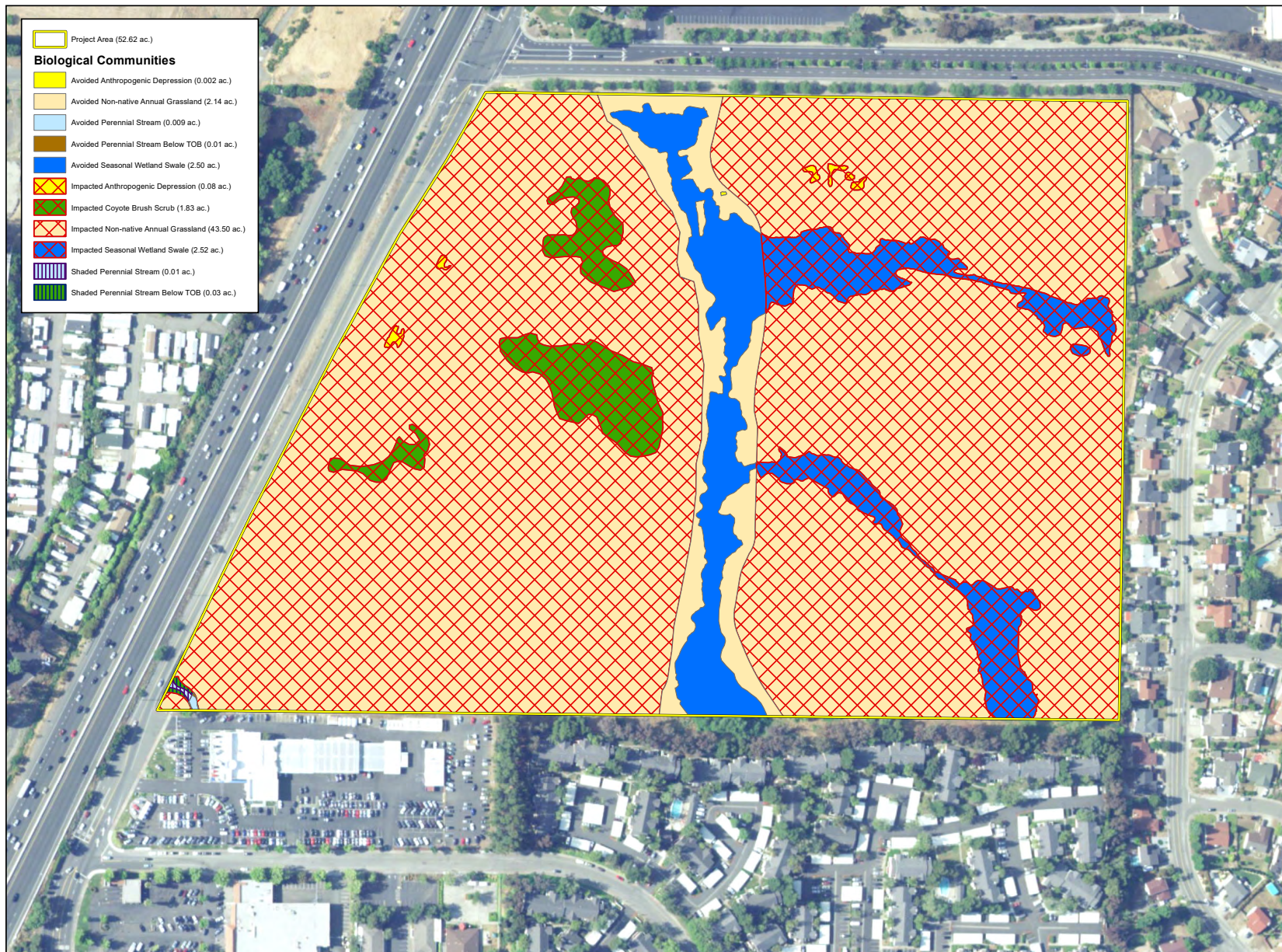
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.
- 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.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### 4.3.4 PROJECT IMPACTS AND MITIGATION

Potential impacts on existing biological resources were evaluated by comparing the quantity and quality of habitats present on the 51.3-acre project site under baseline conditions to the anticipated conditions after implementation of proposed project activities. Direct and indirect impacts on special-status species and sensitive natural communities were assessed based on the potential for the species, their habitat, or the natural community in question to be disturbed or enhanced by construction or operation of the proposed project. Project impacts on the biological communities onsite are shown in **Figure 4.3-5: Impacts on Biological Communities**.

<b>IMPACT BIO-1</b>	<p><b>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></p> <p><b>(LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED)</b></p>
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The project site has a moderate potential to support one special-status plant species, the coast iris. Following observation of this species blooming at a nearby reference site, a protocol-level plant survey was conducted on the project site; however, no coast iris individuals were documented. As such, coast iris was found to be absent from the project site, and no avoidance and minimization measures are recommended for this species.



Source: WRA, 2019



**FIGURE 4.3-5:** Impacts on Biological Communities  
Fairview at Northgate Project

The project site has a moderate to high potential to support nesting habitat for eight special-status bird species: white-tailed kite, northern harrier, Nuttall's woodpecker, oak titmouse, loggerhead shrike, Bryant's savannah sparrow, Samuel's song sparrow, and San Francisco common yellowthroat. In addition, a special-status bird was observed during the May visit: Allen's hummingbird. The project site has potential to support common bird species protected by the Migratory Bird Treaty Act and California Fish and Game Code. Activities that result in the removal of active nests (nests containing eggs and/or young) or disturbance to nesting birds sufficient to result in the abandonment of active nests may be considered a significant impact under the State CEQA Guidelines and a violation of the Migratory Bird Treaty Act and the California Fish and Game Code. Based on these conditions, proposed project activities should be in accordance with Mitigation Measure BIO-1 to ensure impacts on special-status bird species are reduced to a less than significant level. Implementation of Mitigation Measure AES-1 would also reduce potential impacts on special status bird species by avoiding light spillover in the open space area.

### **Mitigation Measure:**

**MM BIO-1: Nesting Birds.** Project activities should be initiated outside of the nesting season to the extent feasible (September 1 - January 31). However, if vegetation removal, grading, or initial ground-disturbing activities must be conducted during the nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist prior to vegetation removal or initial ground disturbance. Nesting habitat may include grasslands, shrubs, trees, snags and open ground. The survey should be conducted in a sufficient area around the work site to identify the location and status of any nests that could potentially be affected by Project activities.

If active nests are found within the project limits of impact or close enough to these areas to affect breeding success, a work exclusion zone shall be established around each nest by a qualified biologist and confirmed by the City. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers and ambient sound levels, and other factors; an exclusion zone radius shall be a minimum of 25 feet (for common, disturbance-adapted species) or as large as 250 feet or more for raptors. Exclusion zone size may also be reduced from established levels if supported with nest monitoring by a qualified biologist indicating that work activities outside the reduced radius are not adversely impacting the nest.

**IMPACT  
BIO-2**

**HAVE A SUBSTANTIAL ADVERSE EFFECT ON ANY RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL PLANS, POLICIES, REGULATIONS OR BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME OR US FISH AND WILDLIFE SERVICE?**  
  
**(LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED)**

The project site contains three sensitive biological communities: perennial stream, anthropogenic depressions, and seasonal wetland swales. The project has been designed to avoid approximately 2.50 acres of seasonal wetlands in the central region of the project site; however, project activities would impact 2.52 acres of seasonal wetland swale and 0.08 acre of anthropogenic depression. Construction activities within the seasonal wetlands in the central part of the project site, the proposed open space area, would consist of a single span (temporary bridge) over the seasonal wetland. This span would allow graded soil to be transferred from the western portion of the project site to the eastern portion of the project site without trucks having to use local roadways. Additionally, this process would minimize dust pollutants and greenhouse gas emissions because trucks would be traveling the shortest possible distance. With the construction of a temporary span, grading activities would avoid any physical impacts to the wetlands in this area, but the coverage from the temporary span over the wetland would result in temporary impacts from shading. Construction of the Admiral Callaghan Lane roadway improvements would result in shading to 0.01-acre of perennial stream, in the southwestern corner of the project site, below the OHWM (0.03 acre below the top of bank).

Wetland swales and anthropogenic depressions are within the jurisdiction of the Corps under Section 404 of the CWA and the RWQCB under the Porter Cologne Act and Section 401 of the CWA. The perennial stream is jurisdictional by those agencies as well as the CDFW under Section 1602 of the California Fish and Game Code. Permits from these agencies will be required for work on or affecting wetlands and open water habitats. In addition, the existing PG&E gas line and portion of the existing sewer line that underlie the project site and would no longer be used would be abandoned in place. These lines would remain underground and no additional disturbance would occur. The applicant shall demonstrate compliance with these regulations through the implementation of Mitigation Measure BIO-2. In order to compensate for impacts to Waters of the U.S. and State, the applicant shall provide compensation in accordance with Mitigation Measure BIO-3. Implementation of Mitigation Measures BIO-4 and BIO-5 ensure that the wetland areas preserved onsite are not adversely impacted during project construction. Thus, with the implementation of Mitigation Measures BIO-2 through BIO-5, impacts on wetland habitats would be reduced to a less than significant level.

### Mitigation Measures:

**MM BIO-2: Wetland Permits.** Prior to the approval of grading permits or improvement plans, the applicant shall provide, to the satisfaction of the Planning & Development Services Director, evidence that the U. S. Army Corps of Engineers (USACE) California Department of Fish and Wildlife (CDFW), and the San Francisco Regional Water Quality Control Board (RWQCB) have been notified in writing regarding the existence of wetlands on the property. Any permits required shall be obtained and copies submitted to the Director prior to any equipment staging, clearing, grading, or excavation work. The permit shall include authorization for temporary construction work within the wetland area.

**MM BIO-3: Wetland Compensation.** Prior to the approval of grading permits or improvement plans, the applicant shall submit to the satisfaction of the Planning & Development Services Director evidence that the following measures have been completed:

Provide written evidence that compensatory mitigation has been established through the purchase of mitigation credits at a qualified wetland mitigation bank established by and in agreement with the U. S. Army Corps of Engineers (USACE) and the San Francisco Regional Water Quality Control Board (RWQCB). The purchase of credits shall be a minimum of 1:1 or equal to the amount necessary as determined and by USACE and RWQCB to replace impacted jurisdictional wetlands including compensation for temporal loss in accordance with approved regulatory permits (e.g., Regional Water Quality Control Board Section 401 Water Quality Certification, US Army Corps of Engineers 404 Permit, and California Department of Fish and Game Section 1602 Lake and Streambed Alteration Agreement). The total amount of impacted jurisdictional wetlands, as determined by the regulatory agencies, shall be replaced in accordance with the total amount of impacted acreage.

**MM BIO-4: Construction Fencing.** Prior to approval of grading or improvement plans, the applicant shall submit to the satisfaction of the Planning & Development Services Director evidence that the following measures have been completed:

The grading or improvement plans shall identify the location of protective construction fencing. High visibility and silt fencing shall be erected at the edge of the construction/maintenance footprint if work is anticipated to occur within 50 feet of the preserved jurisdictional features and riparian areas. A qualified biologist shall be present during the fence installation and during any initial grading or vegetation clearing activities within 50 feet of jurisdictional features and riparian areas which are proposed for avoidance.

Temporary construction activities related to the transfer of graded soil material and equipment to and from the commercial and residential areas shall be described and included in the permit issued for grading and encroachment in the wetland area. The crossing shall be limited to a single span in a single location and shall not be moved during any grading activities. The span shall be fenced and marked and shall be removed at the earliest feasible time upon the completion of grading. The span shall be installed, operated, and removed to minimize disturbance to the wetland area to the maximum extent feasible.

**MM BIO-5: Construction Staging.** Prior to the approval of grading or improvement plans, the applicant shall submit to the satisfaction of the Planning & Development Services Director evidence that the following measures have been completed:

All equipment shall be stored, fueled and maintained in a vehicle staging area 300 feet (or the maximum distance possible) from any wetland feature. The staging area shall be no closer than 200 feet unless a bermed area is constructed between it and the wetland. Within the staging area the refueling areas shall be lined to prevent fuel contamination and hazardous-material absorbent pads shall be available in the event of a spill. The grading or improvement plans shall include a note clearly stating the requirements for the staging area distances, berming requirements, and use of liners in the refueling areas.



**IMPACT  
BIO-3**

**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?**

**(LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED)**

The project site contains two wetland categories, seasonal wetland stream and anthropogenic depressions. All wetlands mapped on the project site are likely to be considered jurisdictional by the Corps as they all drain (or would potentially drain) to the San Francisco Bay, a navigable waterway. Anthropogenic Depressions on the project site were formed by extensive and regular off-road vehicle use and other forms of ground disturbance. Although the excavations and tire ruts are manmade on otherwise upland sites, Corps personnel indicated during a site visit that the Corps would claim jurisdiction over these features as Waters of the U.S. Therefore, anthropogenic depressions mapped on the project site are considered to be jurisdictional under Section 404 of the CWA. Permits from the Corps under Section 404 of the CWA, the RWQCB under the Porter-Cologne Act and Section 401 of the CWA, and the CDFW under Section 1602 of the California Fish and Game Code would be required for work on or affecting wetlands and open water habitats. Compliance with Mitigation Measures BIO-2 through BIO-5 are required to mitigate impacts to protected wetlands. Thus, impacts would be reduced to a less than significant level with mitigation incorporated.

**IMPACT  
BIO-4**

**INTERFERE SUBSTANTIALLY WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS, OR IMPEDE THE USE OF NATIVE WILDLIFE NURSERY SITES?**

**(LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED)**

Environmental corridors are segments of suitable habitat that provide connectivity between larger areas of suitable habitat, allowing species to disperse through otherwise unsuitable areas. On a broader level, corridors may also function as avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters and threatened species can be replenished from other areas. In the project region, environmental corridors often consist of riparian areas along streams, rivers, or other natural features. In addition, the rivers and streams themselves may serve as migration corridors for fish and other aquatic species.

The project site is surrounded by existing single-family homes and other types of urban development. Therefore, activities associated with the proposed project would not result in fragmentation of natural habitats. The project site is also not connected to a natural watercourse and thus, has no potential to impact migratory fish or other special-status fish species, nor does the project site contain Essential Fish Habitat. Blue Rock Springs Creek crosses the southwest boundary of the project site, subsequently

undergrounds downstream, and is thus not accessible by in migrating special-status fish. Therefore, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or nursery sites. As a result, impacts would be less than significant.

Migratory birds are protected under the MBTA and Sections 3500 and 4511 of the California Fish and Game Code which prohibit the “take” of migratory birds and their eggs, nests, or young. As previously discussed, the project site has the potential to support nesting for eight special-status bird species which are also protected under the MBTA. Adherence to Mitigation Measure BIO-1 would minimize the potential impacts of project activities to all birds covered under the MBTA as it would require a pre-construction nesting bird survey prior to vegetation removal or initial ground disturbance during the nesting season. Thus, compliance with Mitigation Measure BIO-1 would reduce impacts on nesting birds to a less than significant level with mitigation incorporated.

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<b>IMPACT BIO-5</b>	<b>CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES, SUCH AS A TREE PRESERVATION POLICY OR ORDINANCE?</b>  <b>(LESS THAN SIGNIFICANT IMPACT)</b>
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Section 16.70. of the City’s zoning code regulates screening and landscaping, including tree planting and tree removal for new development within the City. Trees identified as significant trees or street trees within the City are required to be replaced when removed. Section 16.04.475 of the zoning code defines a “significant tree” as any tree or stand of trees on private property having either a height of twenty-five feet measured above ground level, or a diameter of ten inches. A “street tree” is defined as any tree of any species or size planted in parkways, sidewalk areas, easements, and rights-of-way granted to the City. Section 16.70.070 of the zoning code states that for every significant tree removed, it shall be replaced on a one-for-one basis with large box-sized trees. According to the project plans, the project would remove 8 of the 15 existing trees on the project site including some of the street trees along Turner Parkway. Conformance with the listed zoning code and incorporation of the requirements as a condition of approval (COA) would ensure that all of the trees that are removed are replaced with large box sized trees as required by the zoning code. Thus, compliance with the City’s zoning code required as part of project approval would reduce impacts to a less than significant and no additional mitigation is required.

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<b>IMPACT BIO-6</b>	<b>CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN?</b>  <b>(NO IMPACT)</b>
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Although the Solano HCP has not been adopted, the City is a participating member agency in the preparation and approval process for the Solano HCP. The proposed project would comply with Mitigation Measure BIO-1 through BIO-5, which would provide avoidance and mitigation measures related to special-status plant and animal species. Thus, although the proposed project would comply

with mitigation related to special-status plant and animal species, there would be no impact to an adopted habitat conservation plan or natural community conservation plan as the Solano HCP has not been adopted. Thus, no impact would occur, and mitigation is not required.

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### 4.3.5 CONCLUSION

Based on a review of relevant resources and the types and condition of biological communities observed at the site, it was determined that one special-status plant species had a moderate potential to occur on the project site, the coast iris; however, this species was not observed during surveys and is assumed to be absent. Protocol-level surveys for the federal threatened CRLF were completed on July 12, 2017, and no life-stage of CRLF or CRLF habitat was determined to be present. Eight special-status wildlife species were determined to have a moderate to high potential to occur on the project site; they are bird species that may nest on the site. Further, one special status bird, Allen's hummingbird was observed on the site and may nest on the site. Mitigation Measure BIO-1 requires pre-construction nesting bird survey prior to vegetation removal or initial ground disturbance during the nesting season, and Mitigation Measures BIO-3 and would reduce impacts to a less than significant level.

Project activities associated with the proposed project would not result in fragmentation of natural habitats and adherence to Mitigation Measure BIO-1 would minimize the potential impacts of project activities to all birds covered under the MBTA. The City is a participating member agency in the preparation and approval process for the Solano HCP; there would be no impact to an adopted habitat conservation plan or natural community conservation plan because the Solano HCP has not been adopted. The project site contains three sensitive biological communities: perennial stream, anthropogenic depressions, and seasonal wetland swales. The project has been designed to avoid 2.50 acres of seasonal wetlands in the central region of the project site. However, project activity would impact 2.52 acres of seasonal wetland swale and 0.08 acre of anthropogenic depression. Per Mitigation Measures BIO-2 through BIO-5, the applicant shall obtain the necessary jurisdiction wetland permits, provide compensatory at a minimum 1:1 ratio through the purchase of mitigation credits from an approved mitigation bank with a service site that includes the project site, and provide protections for the wetland areas during construction activities.

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### 4.3.6 CUMULATIVE IMPACTS

The project would result in potential impacts to jurisdictional features and special-status wildlife species including migratory birds. Impacts would be fully mitigated in accordance with previous larger planning efforts and in consultation with State and federal wildlife agencies. Although the Solano HCP has not been adopted, project impacts were considered in connection with the Solano HCP, which is a regional effort to offset significant cumulative biological impacts, and development in the County. Therefore, the proposed project would not affect the implementation of an existing HCP, nor would the proposed project affect the potential adoption of the proposed HCP. Other cumulative projects within the cumulative impact area for biological resources have been identified to have a less than significant impact because they are located within an urban area and there is no native habitat on or adjacent to the cumulative project sites. The Solano360 Specific Plan covers an area of 149.11 acres currently containing the Solano

County Fairgrounds. The Solano360 project site has a relatively low biotic resource value mainly because of its long-term commercial use and the built-up condition of the surrounding area.<sup>5</sup> Similar to the proposed project, mitigation measures requiring pre-construction surveys, wetland preservation and avoidance, and wetland mitigation. The Solano360 EIR concluded that implementation of the mitigation measures would reduce potential impacts on biological resources to less than significant. Because of the disturbed nature of both the Fairgrounds site and the proposed project site, potential impacts on biological resources are considered less than cumulative considerable. As such, cumulative impacts are considered less than significant. As such, cumulative impacts are considered less than significant.

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<sup>5</sup> Solano360 Specific Plan Draft EIR, prepared by Michael Brandman and Associates, November 2012, page 3.3-1

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