

**BIOLOGICAL CONSTRAINTS ANALYSIS
LOT 3 UNIT 4 (APN 057-250-024)
NAPA VALLEY GATEWAY
NAPA, CALIFORNIA**

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1.0 INTRODUCTION

This report presents the results of a biological constraints analysis conducted on approximately 2.4 acres located north of the intersection of Technology Way and Gateway Road West in Napa, Napa County, California. The project site, located approximately one-half mile west of Highway 29, occurs on the Cuttings Wharf 7.5' USGS topographic quadrangle Township 5N, Range 4W Section 2 (Figure 1). Lands to the east are developed, Gateway Road West borders the site to the south, Sheehy Creek borders the property to the north, and undeveloped lands occur to the west. The property occurs within the Napa Valley Gateway Business Park, most of which has been developed or is currently being developed.

The purpose of the biological constraints analysis is to identify special-status plant and animal species and sensitive habitats that have the potential to occur on or in the vicinity of the project area and to determine if proposed development of the site would affect these resources. In addition, a jurisdictional wetlands assessment was also conducted on the site. The purpose of the wetland assessment is to characterize the nature and extent of areas on the project site that are potentially subject to U.S. Army Corps of Engineers' (Corps) jurisdiction pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and Regional Water Quality Control Board (RWQCB) regulation pursuant to Section 401 of the Clean Water Act and the Porter Cologne Act. Based on information and data collected for the analysis, appropriate mitigation measures designed to minimize and/or avoid potential biological resource impacts resulting from the project are also provided. Please note this report does not include any results of species-specific surveys (plant or animal), however, a determination as to what surveys may need to be conducted prior to construction are provided.

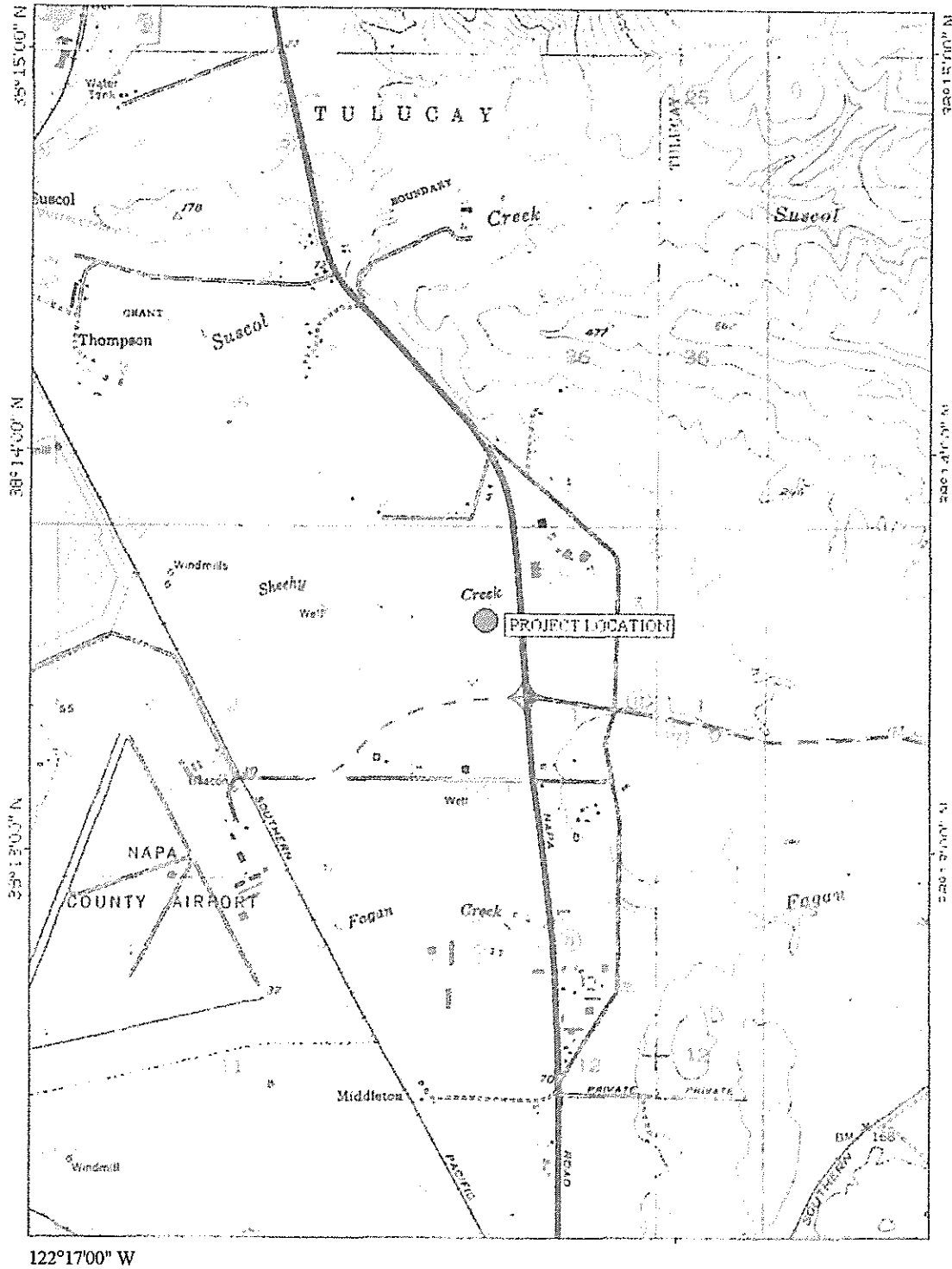
2.0 SITE DESCRIPTION

The project site covers 2.4 acres north of the intersection of Technology Way and Gateway Road West at the Napa Valley Gateway Business Park west of Devlin Road. The site is relatively flat and is bound by office development to the east, Sheehy Creek to the north, Gateway Road West to the south, and undeveloped grasslands to the west. The site gradually slopes towards Sheehy Creek to the north and has a base elevation of about 38 feet mean sea level. While Sheehy Creek occurs north of the property it is not included within the property boundaries. The project site is primarily vegetated with non-native ruderal grasses and herbs and has a history of being grazed.

3.0 SPECIAL-STATUS SPECIES ASSESSMENT

The California Department of Fish and Game's Natural Diversity Database (CNDDB, 2008) was reviewed (Cuttings Wharf and eight surrounding quadrangles) to identify special-status species potentially occurring on or in the vicinity of the project site. In addition, the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (www.cnps.org) was also reviewed. Discussion of the

Figure 1 - Site Location
 122°16'00"W WGSB4 122°15'00" W



Map created with TOPO!® ©2002 National GeoBOMe (v1TjTy.nationakecsranhic.coKito3o)

regulatory definition of special-status species and results of the CNDDDB review are provided below and presented in Tables 1 and 2.

Special-status plants and animals are legally protected under the State and Federal Endangered Species Acts or other regulations, and species that are considered rare by the scientific community. They are defined as:

- Plants and animals that are listed or proposed for listing as threatened or endangered under the California Endangered Species Act (Fish and Game Code 1995 §2050 et seq.; 14 CCR §670.1 et seq.) and/or the Federal Endangered Species Act (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; and various notices in the Federal Register [FR] for proposed species).
- Plants and animals that are Candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for plants; 59 FR 58982 November 15, 1994 for animals).
- Plants and animals that are considered Federal Species of Concern (formerly C2 candidate species).
- Plants and animals that meet the definition of rare or endangered under CEQA (14 CCR §15380), which includes species not found on State or Federal Endangered Species lists.
- Plants occurring on Lists 1A, 1B, 2, 3, and 4 of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994). California Department of Fish and Game (CDFG) recognizes that Lists 1A, 1B, and 2 of the CNPS inventory contain plants that, in the majority of cases, would qualify for state listing, and CDFG requests their inclusion in EIRs as necessary. Plants occurring on CNPS Lists 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (Skinner and Pavlik 1994), and may be included as special-status species on the basis of local significance and/or recent biological information.
- Animals that are designated as "Species of Special Concern" by CDFG (1999).
- Animal species that are "fully protected" in California (Fish and Game Code, §3511, §4700, §5050 and §5515).
- Animal species that are considered sensitive by California Department of Forestry (14 CCR §895.1 pursuant to 14 CCR §898.2[d]) and plants and animals that are considered as sensitive by the U. S. Forest Service (Forest Service Manual §2670) and the U. S. Bureau of Land Management (BLM 6840 Manual).

3.2 Background Review and Field Assessment

Following the review of the CNDDDB and CNPS data bases, a target list of special-status species with potential to occur on or in the vicinity of the project site was developed (see Tables 1 and 2). On September 22, 2008, a reconnaissance-level habitat assessment was conducted on the project site. The purpose of the assessment was to characterize the nature and extent of habitat types and to determine if these habitats have the potential to

support special-status species identified in the background review. The project site was walked and field observations noted on an aerial photograph.

3.2.1 Special-status Plants

The project site is primarily vegetated with non-native grasses and herbs including Italian rye grass (*Lolium* sp.), bristly ox tongue (*Picris echinodes*), bird's foot trefoil (*Lotus corniculatus*), yellow star thistle (*Centaurea solstitialis*), fennel (*Foeniculum vulgare*), and Bermuda grass (*Cynodon dactylon*). Shrubs and trees associated with the Sheehy Creek corridor located approximately 30 feet north of the project boundary include coyote bush (*Baccharis pilularis*), toyon (*Heteromoles arbutifolia*), cottonwood (*Populus fremontii*), and willow (*Salix* spp.). Because the site has been grazed and is primarily dominated by ruderal, weedy species, it is unlikely that any special-status plant species occur on the site due to the general lack of suitable habitats. However, seasonally-timed surveys for rare plants known to occur in grassland habitats in the project vicinity should be conducted at the appropriate time of year (see Table 1). These surveys would be conducted in the spring months, most likely between March and July. If special-status plants were identified during these surveys, mitigation measures to minimize and/or avoid impacts to the species would be developed in coordination with the USFWS and/or California Department of Fish and Game.

3.2.2 Special-status Animals

Because the project site occurs as open grassland adjacent to Sheehy Creek¹, it provides foraging habitat for a variety of raptors and other birds. Birds and raptors are protected under the federal Migratory Bird Treaty Act (50 CFR 10.13). Their nest, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, and §3800). In addition, raptors such as the white-tailed kite (*Elanus leucurus*) are "fully protected" under Fish and Game Code (§3511). Fully protected raptors cannot be taken or possessed (that is, kept in captivity) at any time.

If project construction is to occur between February 1 through August 31 a qualified biologist should conduct pre-construction surveys of all potential nesting habitats (primarily vegetation associated with the Sheehy Creek riparian corridor) within 500 feet of project activities. If nesting birds are identified, a non-disturbance buffer determined in coordination with the CDFG should be established around the nest area during the breeding season or until the young have fledged. If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied, no further mitigation measures are required. Raptor or other bird nests initiated during construction are presumed to be

¹ Currently project plans do not call for impacting Sheehy Creek or the established conservation easement zone that borders the creek. If plans were to change resulting in direct impacts to Sheehy Creek, evaluation of potential impacts to northwestern pond turtle and California red-legged frog may be required. Furthermore, permits from the California Department of Fish and Game, the U.S. Army Corps of Engineers, and the San Francisco Bay Regional Water Quality Control Board may also be required.

unaffected and no buffer is necessary. However, the "take" of any individuals is prohibited.

4.0 WETLANDS ASSESSMENT

The purpose of the wetland assessment is to characterize the nature and extent of areas on the project site that are potentially subject to Corps of Engineers pursuant to Section 404 of the Clean Water Act and Regional Water Quality Control Board (RWQCB) regulation pursuant to Section 401 of the Clean Water Act and the Porter Cologne Act.

4.1 Potential Jurisdictional Waters

4.1.1 Corps of Engineers

Unless exempt from regulation, all proposed discharges of dredged or fill material into waters of the United States require U.S. Army Corps of Engineers (Corps) authorization under Section 404 of the Clean Water Act (33 U.S.C. 1344) and Clean Water Act Section 401 authorization from the Regional Water Quality Control Board (RWQCB). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), wetlands (excluding isolated wetlands for the Corps), and farmed wetlands.

In streams, the extent of waters of the United States is determined by the "ordinary high water mark" - a point on the stream above which high water normally does not rise. Such points may be determined in the field through observation of scour marks, drift lines, stream deposition patterns, or it may be established through historical records, photographic interpretation, hydrological calculations, or other means. The lateral limits of jurisdiction for a tidal water are measured at the maximum high tide line or the limit of adjacent wetlands, whichever is wider.

The Corps identifies wetlands using a "multi-parameter approach" which requires positive wetland indicators in three distinct environmental categories: hydrology, soils, and vegetation. According to the Corps of Engineers Federal Wetlands Delineation Manual (Environmental Laboratory, 1987), except in certain situations, all three parameters must be satisfied for an area to be considered a jurisdictional wetland. In general, the RWQCB employs similar wetland delineation techniques for identifying wetland areas potentially subject to its regulation.

The *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* which was released in early 2007 is utilized when conducting jurisdictional wetland determinations in areas identified within the boundaries of the arid west (U.S. Army Corps of Engineers, 2006). The project site falls within the arid west

region (which includes most of the Central California Coast and inland) and so wetlands identified on the site were delineated using the arid west guidance².

4.1.2 San Francisco Bay Regional Water Quality Control Board

The Regional Water Quality Control Board regulates waters of the State pursuant to Sections 13260(a)(1) and 13050(e) of the State Water Code, and the Porter Cologne Act. In addition, anyone proposing to conduct a project that requires a federal permit or involves dredge or fill activities that may result in a discharge to U.S. surface waters and/or "Waters of the State" are required to obtain a Clean Water Act (CWA) Section 401 Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects) from the Regional Water Quality Control Board, verifying that the project activities will comply with state water quality standards. The most common federal permit for dredge and fill activities is a CWA Section 404 permit issued by the Corps of Engineers (North Coast Regional Water Quality Control Board, 2007). In general, the RWQCB employs similar wetland delineation techniques for identifying wetland areas potentially subject to its regulation.

Section 401 of the CWA grants each state the right to ensure that the State's interests are protected on any federally permitted activity occurring in or adjacent to Waters of the State. In California, the Regional Water Quality Control Boards (Regional Board) are the agency mandated to ensure protection of the State's waters. So if a proposed project requires a U.S. Army Corps of Engineers CWA Section 404 permit, falls under other federal jurisdiction, and has the potential to impact Waters of the State, the Regional Water Quality Control Board will regulate the project and associated activities through a Water Quality Certification determination (Section 401) (North Coast Regional Water Quality Control Board, 2007).

However, if a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a fill discharge to "Waters of the State", the Regional Board has the option to regulate the project under it's state authority (Porter-Cologne) in the form of Waste Discharge Requirements or Waiver of Waste Discharge Requirements (North Coast Regional Water Quality Control Board, 2007). Waters of the State include isolated wetlands which are not regulated by the Corps.

² This interim manual applies to wetland areas only; the methods for delineating waters as specified in the federal manual remain in effect and are not superseded by the interim manual.

4.2 Results of Assessment

4.2.1 Background review

Prior to conducting the on-site wetlands assessment, various background materials relating to the site were reviewed. These include a colored aerial photograph and the Cuttings Wharf USGS 7.5 minute quadrangle to preliminarily identify potential wetland features on the project site. With the exception of Sheehy Creek to the north, there were no obvious wetland signatures visible in the materials reviewed. A darker green area on the northeast corner of the site was observed; this could suggest wetter conditions and/or a different type of vegetation from the surrounding areas and therefore further investigation of this area would be made during the field assessment.

Additionally, the Soil Survey of Napa County (www.ca.nrcs.usda.gov/mlra02/napa/) was reviewed on-line to determine if any of the soils on the project site are mapped as hydric soils. The presence of a hydric soil mapping unit on a project site suggests the presence of potential wetland habitats and therefore is another tool used in wetland identification.

The soil unit mapped on the project site is listed as the Haire loam, 2 to 9 percent slopes. This soil consists of the Haire component which is not listed as a hydric soil on the National or County hydric soil list. However, this unit has inclusions of Clear Lake Clay which is listed as a hydric soil on both the County and National hydric soil lists.

4.2.2 Field Assessment

On September 22, 2008 a wetlands delineation was conducted on the project site using a base aerial and tentative map as the base map. The project site was walked and observations of vegetative characteristics noted. Species observed include Italian rye grass (*Lolium* sp.), bristly ox tongue (*Picris echioides*), bird's foot trefoil (*Lotus corniculatus*), yellow star thistle (*Centaurea solstitialis*), fennel (*Foeniculum vulgare*), and Bermuda grass (*Cynodon dactylon*).

On field examination, the darker green area located on the northeast corner of the site that was visible on the aerial photograph is slightly lower than the surrounding grasslands and gradually slopes in a northeasterly direction towards Sheehy Creek. At the time of survey, this area supported bristly ox tongue, Italian rye grass, and unidentifiable grasses (*Hordeum* sp.). Most of the identifiable plant species in this area are classified as facultative species which means they are equally likely to occur in wetlands or non-wetlands. Upon examination of soils in this area, soils consisted of a silty clay loam and were faintly mottled which suggests marginal saturation during the growing season. Based on this observation and the predominance of facultative species and because there was no definitive evidence of wetland hydrology (such as biotic crust, oxidized

rhizospheres, or a high water table) this area was not classified as a wetland potentially subject to Corps or RWQCB jurisdiction. However, only the Corps can determine whether or not an area is subject to its regulation therefore this assessment would be subject to their verification.

5.0 SUMMARY OF CONCLUSIONS

Provided below is a summary of conclusions for this report.

5.1 Special-status plants

Based on habitat conditions, it was determined that the site is unlikely to provide habitat for special-status plants. However, seasonally-timed surveys for rare plants known to occur in grassland habitats in the project vicinity should be conducted at the appropriate time of year as described in the previous section. If special-status plants are identified during these surveys, mitigation measures should be developed in coordination with the USFWS and/or the Department of Fish and Game.

5.2 Special-status animals

Based on habitat conditions, it was determined the site provides potential foraging habitat for a variety of birds and raptors. In addition, due to the site's proximity to Sheehy Creek, if construction is to occur between February 1 and August 31, pre-construction nesting surveys should be conducted within 500 feet of all potential nesting habitats and mitigation measures implemented as necessary as described in the previous section.

5.3 Potential Wetlands

No potential jurisdictional wetlands were identified on the project site. However, only the Corps can make a determination regarding wetland areas subject to their jurisdiction therefore this assessment would be subject to their verification.

Animal	Status	Habitat	Potential for Occurrence on Project Site
Birds**			
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	FT, CSC	(Nesting) Federal listing only applies to the Pacific coastal population. Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	No suitable habitat exists on project site.
White-tailed kite (<i>Elanus leucurus</i>)	SFP	Forages in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands. Uses trees with dense canopies for cover and nesting.	Grasslands provide foraging habitat.
Red-tailed hawk (<i>Buteo jamaicensis</i>)	SFP	Feeds in grasslands and grass/shrub stages of most habitats. Roosts in trees.	Grasslands provide foraging habitat.
San Pablo Song Sparrow (<i>Melospiza melodia samuelis</i>)	FSC, SC	Resident of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in Salicornia marshes; nests in Grindelia bordering slough channels.	No suitable habitat exists on project site.
Tricolored blackbird (<i>Agelaius tricolor</i>)	FSC, CSC	(Nesting) Highly colonial, most numerous in Central Valley and vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	No suitable habitat exists on project site.
Saltmarsh common yellowthroat (<i>Geothlypis trichas sinuosa</i>)	FSC, CSC	Mostly breeds and winters in wet meadows, fresh emergent wetland, and saline emergent wetland habitats in the San Francisco Bay region. Microhabitat includes thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	No suitable habitat exists on project site.

Animal	Status	Habitat	Potential for Occurrence on Project Site
Birds**			
Red-shouldered hawk (<i>Buteo lineatus</i>)	SFP	Forages mostly along edges of wet meadows, swamps, and emergent wetlands.	Grasses provide potential foraging habitat.
Mammals			
Pallid bat (<i>Antrozous pallidus</i>)	CSC	Rocky outcrops, cliffs and crevices for roosting; access to open habitats required for foraging.	Grasslands provide potential foraging habitat. No roosting habitat on site.
Salt-marsh Harvest Mouse (<i>Reithrodontomys raviventris</i>)	FE, SE	Only in the saline emergent wetlands of San Francisco bay and its tributaries. Pickleweed is primary habitat.	No suitable habitat occurs on project site.
Suisun shrew (<i>Sorex ornatus sinuosus</i>)	FSC, CSC	Tidal marshes of the northern slopes of San Pablo and Suisun Bays.	No suitable habitat exists on project site.
American badger (<i>Taxidea taxus</i>)	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Potential for occurrence on site though no burrows observed during spring 2007 reconnaissance.

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