



## Memorandum

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**To:** Kevin Briggs  
City of Hayward

**From:** Justin Semion  
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**Cc:**

**Date:** April 28, 2016

**Subject:** City of Hayward Former Highway 238 Bypass Due Diligence Review

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The purpose of this memorandum is to provide a due diligence analysis of potential biological resources constraints and opportunities with regard to a selection of land parcels associated with the former CalTrans Highway 238 Bypass Project. The bypass project was cancelled, and the City of Hayward is considering purchase of select properties that had previously been acquired for construction of the bypass. This due diligence assessment evaluates these properties for the potential presence of biological resources that represent potential constraints to construction feasibility, cost, and schedule, or offer opportunities for impact mitigation through restoration and/or conservation.

### Introduction

The land parcels that are the focus of this review (Study Area) are organized into nine separate Groups generally located east of Highway 238 (Mission Boulevard) and south of Highway 580 along an approximately 5-mile section of urban Hayward, Alameda County, California. The nine Groups are shown on Figure 1 and described individually in the following sections.

This due diligence review is organized under the following topics:

- Introduction, explanation of survey and assessment approach, and limitations
- A summary of potential biological constraints (or opportunities) associated with the Study Area:
  - Descriptions of habitats or vegetation communities observed during the field surveys that may represent biological constraints
  - Descriptions of special-status (protected) species of substantial concern within the Study Area
  - Specific evaluation of each of the nine Groups
    - Potential biological constraints
    - Potential restoration/conservation opportunities, with ecological value and cost rated as high, medium and low
  - The potential cost of mitigation for impacts to identified biological constraints is not included here because the cost will vary, sometimes substantially, based on project-specific design
- A general discussion of the regulatory review and permitting issues for biological resources that may be applicable to the Study Area
  - A description of regulatory agencies likely to have jurisdiction within each of the Groups
  - A general discussion of the regulatory review and permit process

WRA biologists conducted field assessments of the Study Area on April 11, 2016. Discussions included in this memorandum are based on the findings of these surveys, a review of existing online resources, and experience working with natural habitats and development projects in both Alameda County and the greater San Francisco Bay Area. The nine Groups were assessed in terms of potential development-related constraints and mitigation opportunities.

This analysis is not exhaustive, and was performed to a level of detail necessary to understand what types of major biological constraints and opportunities are likely to be associated with the Study Area. Further studies are likely to be necessary to confirm the nature and extent of the resources present, and to address and manage these resources with regard to planning of future projects. This assessment does not constitute a review of biological resources to the extent needed for permitting or environmental review under the California Environmental Quality act (CEQA). Instead, it is intended to identify resources that have a potentially material effect to future development or present opportunities for restoration and mitigation for impacts of other projects. The conclusions of this report are based on conditions observed at the time of the field assessments and regulatory policies and practices in place at the time the report was prepared; changes that may occur in the future with regard to conditions, policies, or practices could affect the conclusions presented in this study. Reliance on this study for detailed planning or project design is at the sole risk of the entity sponsoring a proposed project.

## Potential Biological Constraints and Opportunities

Potential biological constraints and opportunities that may be present in one or more of the nine Groups are reviewed in the following sections. As described above, the review performed for this study was not exhaustive, but was sufficient to identify reasonably foreseeable biological constraints and opportunities. Technical terms used for the evaluation of each Group are defined below.

### Sensitive Habitats and Vegetation Communities

Potential Wetlands. Areas mapped as potential wetlands displayed characteristics suggesting that they may be protected as Waters of the U.S. and/or Waters of the State. Any potential impacts to these areas may be subject to CEQA review.

Riparian Forest. Areas mapped as riparian forest generally include trees and other vegetation growing in close association with a nearby stream. These areas are protected under California Fish and Game code, and any potential impacts to these areas may be subject to CEQA review. Areas mapped as "Riparian Forest" within the Study Area may also contain streams or creeks, which would also be protected as wetlands/waters (above) and may represent habitat for protected species.

Oak Woodland. Areas with sufficient cover of native oak trees that are located outside of riparian forest were mapped as oak woodland, which is potentially sensitive under CEQA. The sensitivity of oak woodland varies throughout California, and the determination of sensitivity is up to the lead CEQA agency. Any potential impacts to oak woodland may be subject to CEQA review and potential mitigation requirements.

Special-Status Species Habitat. Areas that met characteristics to be considered habitat for special-status species of major concern were mapped in portions of the Study Area where this habitat was determined to represent a potential constraint. The only species discussed at length in this report are those known to be present in the vicinity which represent substantial potential issues for land use. Areas mapped as potential habitat for such species are those which showed characteristics suggesting a moderate or greater potential for use by such species. Within the Study Area, the only species determined to potentially require this level of consideration was Alameda whipsnake, described below. Occurrences of other special-status species that have been documented in the vicinity of the Study Area are shown in Figure 2 and Figure 3.

### Special-status Species

Alameda whipsnake (*Masticophis lateralis euryxanthus*). This species is listed as threatened under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). There is one documented occurrence of this species in the vicinity of Groups 3 and 4 within the Study Area. Areas containing chaparral, scrub, annual grassland, or oak woodlands in the vicinity of the occurrence may be considered potential habitat for this species. Any work within potential habitat could be seen as a potential impact to the species, and may require consultation with the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), with corresponding potential for mitigation requirements.

California red-legged frog (*Rana draytonii*; CRLF). This species is listed as threatened under the FESA and is a California Species of Special Concern. No breeding habitat is present within the Study Area; however, areas mapped as riparian forest with associated streams may be considered non-breeding aquatic habitat or a dispersal corridor for the species. Impacts to riparian forest with stream habitats may result in impacts to the species and may require consultation with the USFWS and may be subject to CEQA review.

### **Restoration/Mitigation Opportunities**

Each of the nine Groups was assessed for its habitat restoration and/or preservation potential, as this type of activity can provide valuable mitigation opportunities even when biological constraints present major obstacles for development. Table 1 outlines the ratings used to assess potential restoration and mitigation opportunities.

Table 1. Criteria Used in Rating for Potential Restoration and Mitigation Opportunities.		
<i>Rating</i>	<i>Ecological Value of Potential Restoration Areas</i>	<i>Cost of Restoration*</i>
N/A or Non-existent	Few or no areas with restoration potential within the survey Group	Restoration opportunities determined to be absent or infeasible
Low	Non-sensitive communities and low demand for mitigation	Less than \$100,000
Moderate	Sensitive communities with low or moderate demand for mitigation	\$100,000 - \$500,000
High	Sensitive communities with high demand for mitigation	More than \$500,000

\*The cost of restoration estimated in Table 1 refers to design and construction only, and does not include additional costs such as establishing a conservation easement or establishing an endowment for long-term management.

### **Focused Review of Land Groups within the Study Area**

Each of the nine Groups is reviewed individually in the sections below, with a focus on potential environmental constraints and opportunities.

## **Group 6**

### *Biological and Regulatory Constraints*

Group 6 (Figure 9) is approximately 29.6 acres in size, containing an abandoned mine with non-native woodland along the west and east sides along with disturbed/ruderal areas. A riparian forest area comprising 4.8 acres surrounds a creek that forms the northern/eastern boundary of Group 6.

Projects proposed for the Group 6 area involving any work in the vicinity of the riparian forest would likely require additional involvement from the Corps, the RWQCB, and/or the CDFW. Mitigation may be required by these agencies for impacts to biological resources within their jurisdiction.

<b>Table 7. Summary of Regulatory Agency Jurisdiction Limits for Group 6</b>		
<b>Regulatory Agency</b>	<b>Regulatory Authority/Permit</b>	<b>Jurisdictional Limit</b>
City of Hayward	California Environmental Quality Act	Projects requiring application to the City
U.S. Army Corps of Engineers (Corps)	Section 404 Clean Water Act	Extent of jurisdictional wetlands Extent of streams
San Francisco Bay Regional Water Quality Control Board (RWQCB)	Porter Cologne Act	Extent of jurisdictional wetlands Extent of streams
	Section 401 Clean Water Act	
California Department of Fish and Wildlife (CDFW)	California Fish and Game Code Section 1602	Stream top-of-bank or edge of riparian vegetation

### *Restoration/Mitigation Opportunities*

Ecological Value of Potential Restoration Areas: **Low**

Cost of Restoration: **High**

Group 6 has limited restoration/conservation potential. Since the area is surrounded by development and is highly disturbed in its existing condition, it would generally be considered an inappropriate location for habitat enhancements. Though the level of disturbance is extensive, oak woodland restoration or other native vegetative restoration may be possible but costly to establish and maintain. The riparian forest at the northern/eastern edge of Group 6 is situated on a steep slope which distinctly separates this area from the rest of Group 6, limiting possible opportunities to expand this area or perform stream/wetland enhancements. The stream within the riparian forest could potentially provide habitat for protected salmonid fish species in the future; however, these fish are not present and cannot access the site at the present time due to barriers located downstream and offsite, and for this reason there would currently be few or no opportunities to secure mitigation through projects to improve fish habitat. Based on these considerations, the ecological restoration/conservation potential for Group 6 is low, and the cost of restoration would likely be high.

## **Regulatory Permitting for Potential Impacts to Biological Resources**

Based on the potential biological constraints described above, the following regulatory agencies may have jurisdiction within the Study Area:

- City of Hayward
- County of Alameda
- U.S. Army Corps of Engineers
- San Francisco Bay Regional Water Quality Control Board
- U.S. Fish & Wildlife Service
- California Department of Fish & Wildlife

A general description of the regulatory permitting process with regard to these Agencies is outlined below.

### California Environmental Quality Act

CEQA requires assessment of the effects of a project on a number of biological resources issues. Such issues include potential impacts to sensitive habitats and species such as those discussed in this report; CEQA review may cover additional species or biological resources considerations which are not addressed by this report but are not likely to result in a substantial barrier to project feasibility, cost, or schedule.

### City of Hayward

The City of Hayward issues permits for construction, grading, and similar issues for projects within City limits, and would likely be the CEQA lead agency for these projects.

## County of Alameda

The County of Alameda issues permits for construction, grading, and similar issues for projects in unincorporated areas, and would likely be the CEQA lead agency for these projects.

## U.S. Army Corps of Engineers

The Corps issues aquatic resources regulatory permits under two authorities:

- Clean Water Act Section 404: generally, permits required for construction or other placement of earth or building materials in “waters of the U.S.”

“Waters of the U.S.” is defined specifically in 33 CFR Part 328, but generally include lakes, ponds, streams, rivers, wetlands, bays, tidal waters, and similar bodies of water. “Navigable waters of the U.S.” are defined less broadly in 33 CFR Part 329, and generally include bodies of water to the upper limit reached by watercraft.

Relative to the City of Hayward Project, all potential seasonal wetlands and all streams below the ordinary high water mark (OHWM) are potentially within Corps jurisdiction. Construction occurring within potential seasonal wetlands and below the OHWM would require a Corps Section 404 and/or Section 10 permit (depending on the activity and elevation).

The Corps issues permits through a variety of vehicles, but those potentially applicable to the project are a “Nationwide Permit” and an “Individual Permit”<sup>1</sup>. Nationwide Permits are programmatic level permits that can be processed under relatively short time frames and do not require independent public notice or project-specific National Environmental Protection Act (NEPA) review. To be authorized by a Nationwide Permit, a project must meet the General and Regional Conditions of the permit. Individual Permits are permits issued to an individual project by the local Corps District. Individual Permits require much more detailed analysis than Nationwide Permits, including an alternatives analysis based on guidelines established in Clean Water Act Section 404(b)(1) and 40 CFR Part 230, and project-specific NEPA review.

Table 11 summarizes the differences between Nationwide and Individual Permits.

Table 11. General Comparison of Nationwide Permits and Individual Permits				
	Typical Timeline for Processing	404(b)(1) Alternatives Analysis Required?	Project-Specific NEPA Required?	Compliance with Consultative Corps Procedures Required?
Nationwide Permit	6-9 months	N	N	Y
Individual Permit	18+ months	Y	Y	Y

Regardless of the type of permit issued, the Corps is required to ensure that their action in issuing a permit is consistent with requirements of other federal laws and regulations. These related laws and regulations include:

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<sup>1</sup> Both of these permit types are applicable to Section 404 of the Clean Water Act. For Section 10 of the Rivers and Harbors Act, a Letter of Permission is issued. Section 10 is not anticipated to be a significant factor for this project based on the elevations reached by project work (minimal, if any work below MHW).

- Section 7 consultation under the federal Endangered Species Act (see USFWS below)
- Essential Fish Habitat consultation (NMFS)
- Clean Water Act Section 401 Water Quality Certification (see RWQCB below)
- Coastal Zone Consistency Determination (responsible agency: BCDC)
- National Historic Preservation Act Section 106 consultation (State Historical Preservation Office)
- Compliance with Federal Emergency Management Agency (FEMA) requirements for fill occurring within the 100-year flood plain

The Corps typically does not issue permits until it can be demonstrated that these requirements are fulfilled. However, from time to time, compliance with some of these conditions may show up as a permit condition as opposed to required prior to issuance of the permit.

#### Regional Water Quality Control Board

The City of Hayward project is located within the regional boundary of the San Francisco Bay Regional Water Quality Control Board (RWQCB). The RWQCB is responsible for administering two laws related to placement of fill into jurisdictional waters: the state Porter-Cologne Act and the federal Clean Water Act. Compliance with both laws can be obtained in San Francisco Bay through issuance of a Water Quality Certification<sup>2</sup>.

Relative to the City of Hayward Project, all potential seasonal wetlands and all streams below top-of-bank (TOB) regulated by the RWQCB under Section 401 of the Clean Water Act and Porter-Cologne Act. Discharge of fill in seasonal wetlands or below the TOB would require a RWQCB permit. Items required for a complete application for a Water Quality Certification include:

- Reporting of the amount of fill placed in jurisdictional waters, and any mitigation proposed
- Information to document compliance with state stormwater regulations<sup>3</sup>
- Certified California Environmental Quality Act (CEQA) documentation

Additional information may also be requested/required by RWQCB staff, depending on the project:

- Requirements for an alternatives analysis based on Section 404(b)(1) of the Clean Water Act
- Additional mitigation for discharge of fill, even if none is required by the Corps
- Consistency with State sea level rise policy related to storm water outfalls
- Discussion of impacts in terms of effects to “beneficial uses” described in the Basin Plan

Not all of these items are required for every project, but larger scale projects tend to encounter these items more often than smaller projects.

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<sup>2</sup> If a proposed project does not require a federal permit but involves a discharge to “waters of the state”, the RWQCB may issue Waste Discharge Requirements under the Porter-Cologne Act. “Waters of the State” are defined more broadly than “waters of the U.S.” as “any surface water or groundwater, including saline waters, within the boundaries of the state”.

<sup>3</sup> The process for compliance with state stormwater regulations varies depending on the location of the project and specific design of the stormwater system.

### United States Fish and Wildlife Service

The USFWS is responsible for managing species listed under the FESA who spend no portion of their life cycles in the ocean. Consultation under the Endangered Species Act occurs via the Corps' permit process. Per federal regulations, the Corps is required to initiate consultations with the USFWS for activities that they determine have the potential to affect endangered species or their habitat. Take under the FESA is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Take extends to impacts to habitat which result in take of listed species indirectly.

Consultation with the USFWS may occur as either a formal consultation or informal consultation. A formal consultation typically entails preparation of a Biological Assessment and results in the issuance of a Biological Opinion. Informal consultation may entail preparation of a letter or a Biological Assessment, and results in the issuance of a Letter of Concurrence. Larger scale projects are more likely to require formal consultation.

### California Department of Fish and Wildlife

#### *Streams, Lakes, and Riparian Habitat*

Streams and lakes, as habitat for fish and wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the California Fish and Game Code. Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). "Riparian" is defined as "on, or pertaining to, the banks of a stream." Riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

#### *California Endangered Species Act*

The CDFW is responsible for administering California Endangered Species Act (CESA, California Fish and Game Code §§2050, et seq.) which prohibits take of species that have been listed, or are considered for listing (candidate species) as threatened or endangered species within the State of California. The CESA allows for incidental take of state listed species through issuance of an Incidental Take Permit, or through a Consistency Determination in coordination with a Biological Opinion issued by the USFWS (CDFW Code Section 2081). In contrast with federal law, the definition of "take" under CESA involves actual harm to one or more members of a listed species and does not extend to modification of habitat not involving direct take. Consultation is achieved either with an application for an Incidental Take Permit or a letter requesting a consistency determination with the USFWS Biological Opinion.

#### *Additional Wildlife with Rare Plant Protection*

California Fish & Game code and in some cases Federal law outline additional protections for wildlife and rare plant species not otherwise discussed in this report due to their lower level of sensitivity or the lack of indications that these issues pose significant biological resources constraints for the Study Area. These additional protections relate to species with special statuses such as "California Species of Special Concern", breeding birds, bat species, and rare plants. Such issues are typically dealt with through focused surveys at a later stage of a development project, with additional measures to address the issues (if necessary) built into the project plans. These protections have become standard practice for development projects in California and are not likely to present a substantial barrier to project feasibility, cost or schedule.

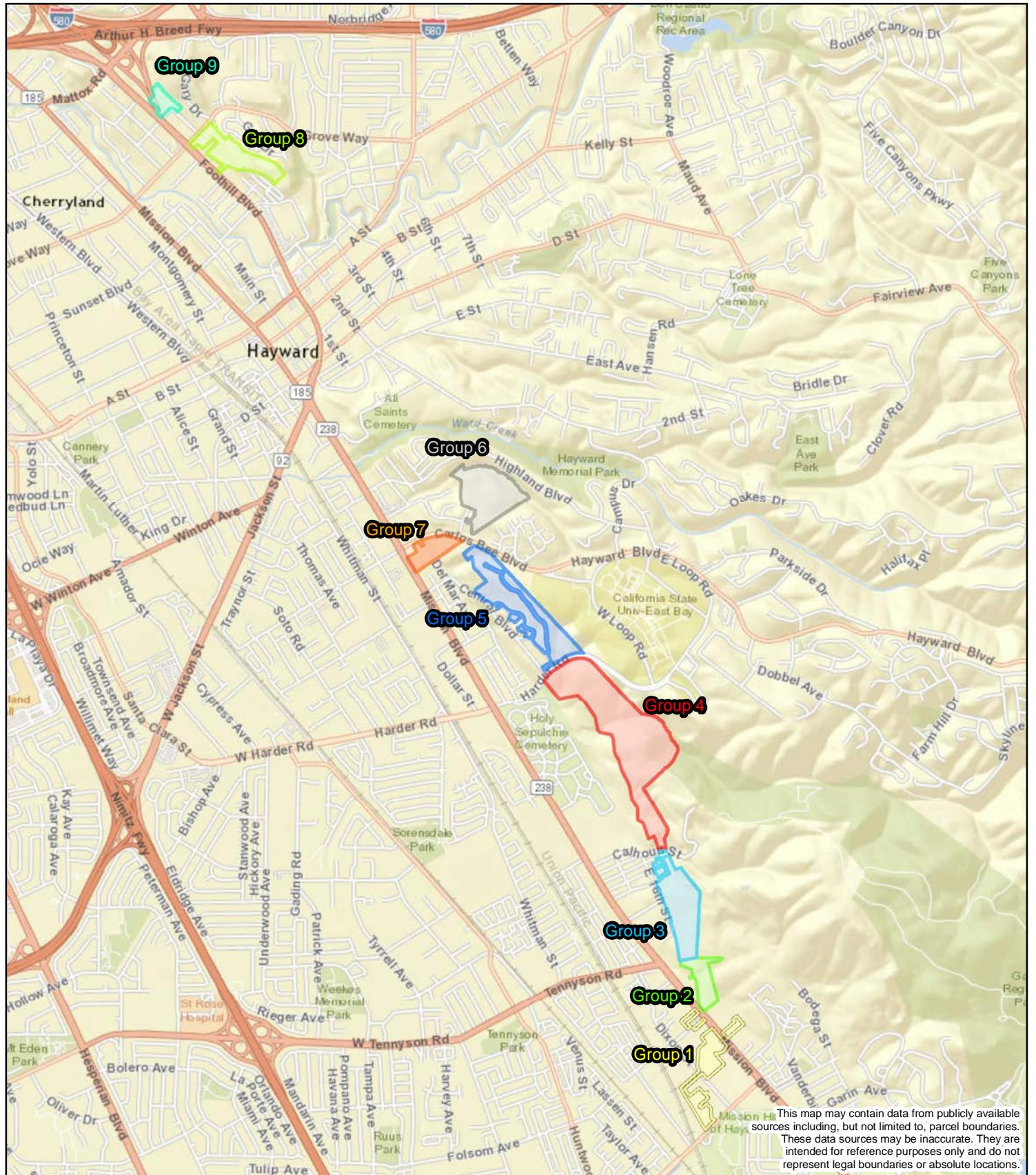


Figure 1. Study Area Overview Map



## City of Hayward Former Highway 238 Bypass Due Diligence Review Alameda County, California

0    0.25    0.5    1 Miles

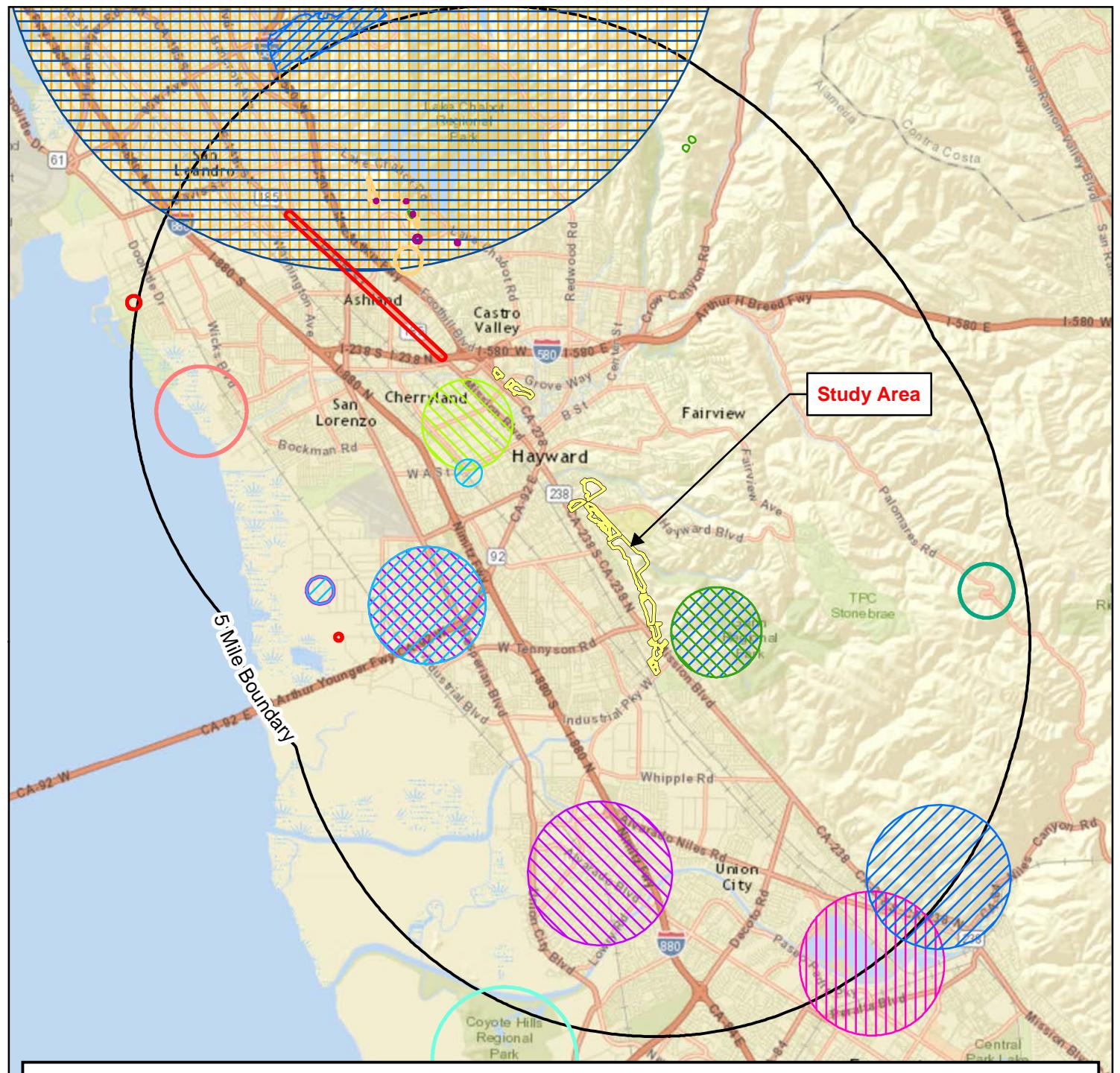


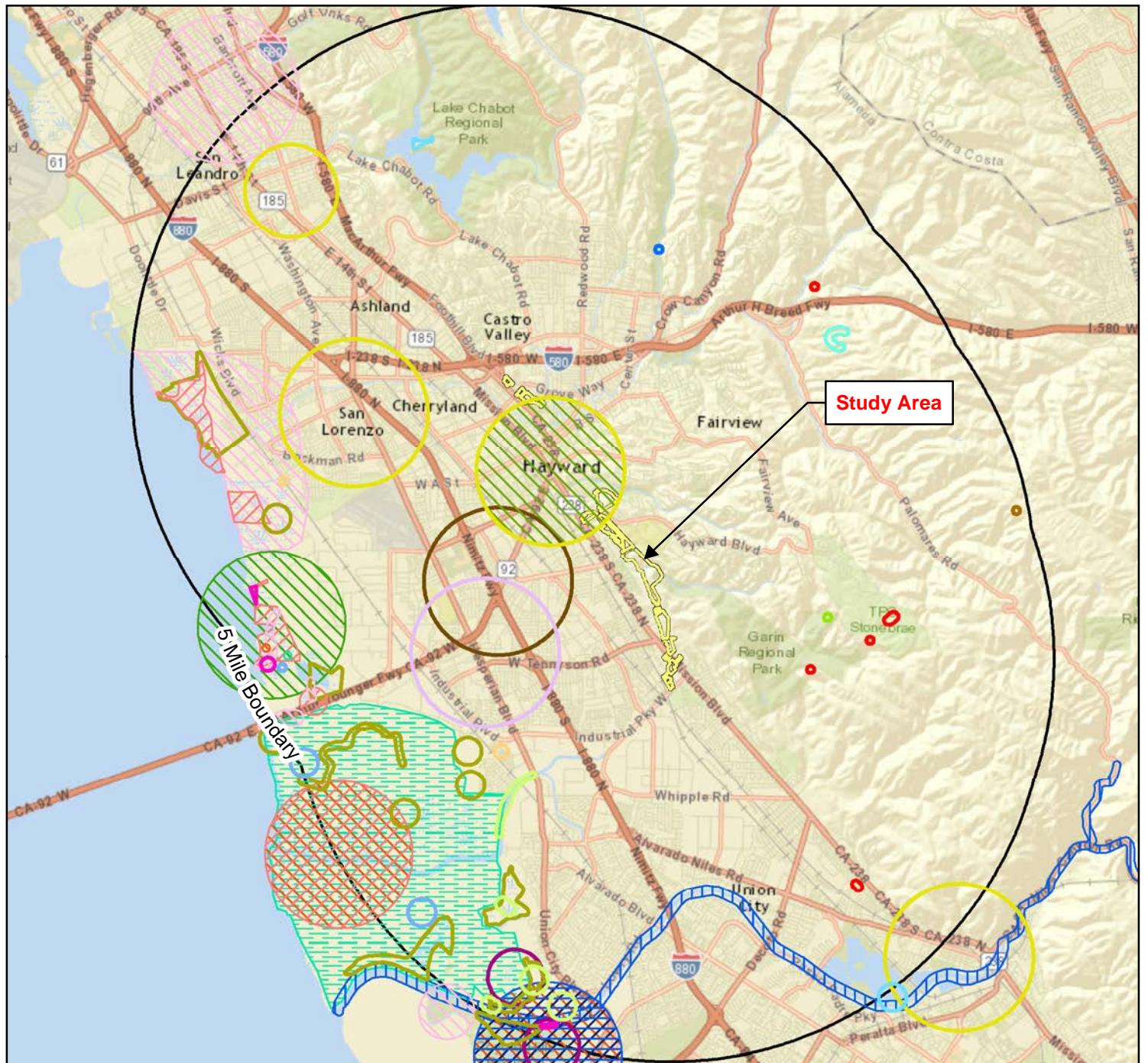
Figure 2. Special Status Plant Species  
within 5 Miles of the Study Area

City of Hayward Former Highway 238 Bypass  
Due Diligence Review  
Alameda County, California

0 0.5 1 2 Miles



Map Prepared Date: 4/28/2016  
Map Prepared By: flourigan  
Base Source: Esri Streaming - Nat Geo World Map  
Data Source(s): WRA



#### Wildlife Species

Alameda song sparrow	California red-legged frog	golden eagle	salt-marsh harvest mouse	western bumble bee
California black rail	California tiger salamander	great blue heron	salt-marsh wandering shrew	western mastiff bat
California clapper rail	San Francisco dusky-footed woodrat	hoary bat	saltmarsh common yellowthroat	western snowy plover
California least tern	bank swallow	northern harrier	steelhead - central California coast DPS	white-tailed kite
	burrowing owl	pallid bat	tricolored blackbird	yellow warbler

Alameda whipsnake has been documented in this area, although precise locations are confidential. Occurrence numbers include:  
1, 7, 14, 15, 17, 21-23, 31-35, 38, 39, 41-44, 46, 50, 60, 71, 73, 75, 76-81, 83-85, 91, 94, 95, 100, 135-146, 159

Figure 3. Special Status Wildlife Species  
within 5 Miles of the Study Area



City of Hayward Former Highway 238 Bypass  
Due Diligence Review  
Alameda County, California

0 0.5 1 2 Miles

Map Prepared Date: 4/28/2016  
Map Prepared By: flourigan  
Base Source: Esri Streaming - Nat Geo World Map  
Data Source(s): WRA, CNDB (April, 2016)



Figure 9. Potential Biological Constraints within the Group 6 Survey Area



City of Hayward Former Highway 238 Bypass  
Due Diligence Review  
Alameda County, California

0 80 160 320 Feet

Map Prepared Date: 4/28/2016  
Map Prepared By: fhourigan  
Base Source: Esri Streaming - NAIP 2014  
Data Source(s): WRA