

**EAST CONTRA COSTA COUNTY
HABITAT CONSERVANCY**

DATE: May 10, 2012
TO: Governing Board
FROM: Conservancy Staff
SUBJECT: Consider actions related to Park and Recreation Facilities under the HCP/NCCP

RECOMMENDATION

Consider the following actions related to Park and Recreation Facilities under the HCP/NCCP:

- a) **DETERMINE** that the East Bay Regional Park District may use take coverage authorized to it through the HCP/NCCP and the associated state and federal permits to cover the Round Valley Pedestrian Bridge Project. **AUTHORIZE** staff to file a Notice of Determination for this Board action with the County Clerk.

- b) **DIRECT** staff to examine needs and opportunities for simplifying and expediting the process for Conservancy review of small projects and making various determinations required of the HCP/NCCP Implementing Entity, **REFER** this matter to the Public Advisory Committee (PAC) for additional review and recommendation; and **DIRECT** staff to report back to the Governing Board.

DISCUSSION

Item (a). The East Bay Regional Park District (“EBRPD”) is proposing to construct a new pedestrian bridge at the Round Valley Regional Preserve, known as the Round Valley Pedestrian Bridge Project (“Project”), located approximately six miles west of Brentwood in Contra Costa County. The Project includes installation of abutments and a 60-foot clear span, prefabricated steel bridge over Round Valley Creek and a minor realignment of the existing permeable natural surface trails to conform to the bridge approaches. The project will eliminate the need for persons and vehicles to pass through the creek channel by providing a clear span bridge. EBRPD intends to award a construction contract in May and construct the project this summer. The Project will result in 0.15 acres of permanent impact for the installation of the new trail alignment and 0.83 acres of temporary impact related to all other construction and staging activities.

CONTINUED ON ATTACHMENT: Yes ACTION OF BOARD ON: <u>May 10, 2012</u> OTHER: _____	APPROVED AS RECOMMENDED: _____
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VOTE OF BOARD MEMBERS

UNANIMOUS
 AYES: _____
 NOES: _____
 ABSENT: _____
 ABSTAIN: _____

I HEARBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED _____
*CATHERINE KUTSURI, SECRETARY OF THE EAST CONTRA COSTA COUNTY
 HABITAT CONSERVANCY*

BY: _____, DEPUTY

The Project is an eligible covered activity under Section 2.3.2 of the HCP/NCCP for “Park or Recreation Facilities” located outside of the Urban Development Area (UDA) and the HCP/NCCP Preserve System. Section 2.3.2 states the following:

“Park and recreation facilities may be covered activities outside the UDA and outside the HCP/NCCP preserves. Because of the uncertainty in their location and project footprint, coverage for these projects will be decided on a case-by-case basis by the Implementing Entity, USFWS, and CDFG. This will allow alternative siting or redesign, if possible, to avoid or minimize impacts on covered species and natural communities.”

As outlined in Section 2.3.2, the Project is an eligible covered activity with the approval of the Conservancy (which is the Implementing Entity), U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). Conservancy staff have reviewed the project and the Planning Survey Report (“PSR”) submitted by EBRPD and find that the project will have mostly beneficial impacts on covered species and that the project is appropriate for coverage pursuant to Section 2.3.2. USFWS and CDFG have already provided their written determination that the Project may be covered under Section 2.3.2.

For the Project, EBRPD is the CEQA lead agency. EBRPD prepared an Initial Study/Mitigated Negative Declaration (“IS/MND”) for the Project in conformance with CEQA. The IS/MND evaluated and addressed potential impacts as a result of the Project and determined that no significant environmental impacts are anticipated to be associated with the Project. The Conservancy has considered the IS/MND and finds that anticipated impacts were fully disclosed and analyzed and no significant environmental impacts are anticipated.

Item (b). The Round Valley Pedestrian Bridge Project (“Project”) is the first example of a project proposed for coverage under the HCP/NCCP that requires a determination by the Conservancy for an action by a named Permittee under the HCP/NCCP (in this case, EBRPD). The HCP/NCCP contains various other provisions that require a Conservancy determination on an action that would be carried out or approved by another Permittee (e.g. the participating cities, the County, Flood Control and EBRPD). For example, the HCP/NCCP requires Conservancy determination or approvals on proposals to reduce temporary impact fees associated with wetlands in a flood control detention basin when wetlands will be restored following the project, on requests to fill more than 3 acres of wetlands and in a variety of other circumstances. The Conservancy also has substantial experience with issuing take coverage to Participating Special Entities (PSEs). A process has been developed for PSEs that has been working but can be challenging for the smaller projects with tight timelines (e.g. urgent pipeline repair projects). Conservancy staff recommends further analysis and discussion of such circumstances and identification of opportunities to make Conservancy action as effective and efficient as possible.

Subject to Board approval, staff would propose to identify and analyze HCP/NCCP requirements, consider opportunities for a streamlined Conservancy process (including some potential delegated authority or other techniques for reducing delay), discuss and receive recommendations from the Public Advisory Committee, and report back to the Board.

Attachments:

- Planning Survey Report for Round Valley Pedestrian Bridge Project:
 - Main body of planning survey report
 - Project Vicinity Maps, Impact and Land Cover Maps, Species Habitat Maps
 - Fee Calculator (Exhibit 1 and Exhibit 2)
- The Initial Study/Mitigation Negative Declaration prepared by the East Bay Regional Park District



East Contra Costa County
Habitat Conservation Plan
Natural Community
Conservation Plan

City of Brentwood
City of Clayton
City of Oakley
City of Pittsburg
Contra Costa County
ECCC Habitat Conservancy

Template prepared by the
ECCC Habitat Conservancy

651 Pine Street, North Wing, 4th Floor
Martinez, CA 94533-0095
Phone: 925/335-1290
Fax: 925/335-1299
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City/County of Alameda Application Form and Planning Survey Report to Comply with and Receive Permit Coverage under the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan

Project Applicant Information:

Project Name: Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County

Project Applicant's Company/Organization: East Bay Regional Park District, 2950 Peralta Oaks Ct., P.O. Box 5381, Oakland CA 94605-0381

Contact's Name: East Bay Regional Park District, 2950 Peralta Oaks Ct., P.O. Box 5381, Oakland CA 94605-0381

Contact's Phone: 510-544-2323 Fax: 510-635-3478

Contact's Email: jbondurant@ebparks.org

Mailing Address: Julie Bondurant
2950 Peralta Oaks Ct., P.O. Box 5381
Oakland CA 94605-0381

Project Description:

Lead Planner: Julie Bondurant

Project Location: The project is located within Round Valley Preserve which is located approximately six miles west of Brentwood in Contra Costa County along Marsh Creek Road.

Project APN(s) #: 007-050-002-0

Number of Parcels/Units: One

Size of Parcel(s): 270.49 acres

Project Description/Purpose (Brief): Project will involve: installation of abutments and a 60-foot clear span prefabricated steel bridge over Round Valley Creek, and minor realignment of the existing permeable, natural surface trails to conform to the bridge approaches.

Biologist Information:

Biological/Environmental Firm: East Bay Regional Park District

Lead Contact: Steve Bobzien

Contact's Phone: 510-544-2347 Fax: 510-635-3478

Contact's Email: sbobzien@ebparks.org

Mailing Address: Steve Bobzien
East Bay Regional Park District,
2950 Peralta Oaks Ct., P.O. Box 5381
Oakland CA 94605-0381

East Contra Costa County HCP/NCCP Planning Survey Report for Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County East Bay Regional Park District

I. Project Overview

Project proponent: East Bay Regional Park District

Project Name: Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County

Application Submittal Date: March 28, 2012

Jurisdiction: Contra Costa County Participating Special Entity¹
 City of Oakley Covered through EBRPD
 City of Pittsburg
 City of Clayton
 City of Brentwood

Check appropriate Development Fee Zone(s): Zone I Zone IV
 Zone II
 Zone III

See Figure 9-1 of the Final HCP/NCCP for a generalized development fee zone map. Detailed development fee zone maps by jurisdiction are available from the jurisdiction or at www.cocohcp.org.

Total Parcel Acreage: Construction activities and construction staging will take place within a 40,550 SF [0.93 acre] area

Acreage of land to be permanently disturbed²: Permanently Disturbed area = 6,560 SF [0.15 acre] - new trail alignment

¹ *Participating Special Entities* are organizations not subject to the authority of a local jurisdiction. Such organizations may include school districts, water districts, irrigation districts, transportation agencies, local park districts, geologic hazard abatement districts, or other utilities or special districts that own land or provide public services.

² *Acreage of land permanently disturbed* is broadly defined in the HCP/NCCP to include all areas removed from an undeveloped or habitat-providing state and includes land in the same parcel or project that is not developed, graded, physically altered, or directly affected in any way but is isolated from natural areas by the covered activity. Unless such undeveloped land is dedicated to the Preserve System or is a deed-restricted creek setback, the development fee will apply. The development fees were calculated with the assumption that all undeveloped areas within a parcel (e.g., fragments of undisturbed open space within a residential development) would be charged a fee; the fee per acre would have been higher had this assumption not been made. See Chapter 9 of the HCP/NCCP for details.

Acreage of land to be temporarily disturbed³:

Total temporary disturbed area =36,015 [0.83] acres
– This includes the disturbed area associated with new trail construction and construction staging activities = 30,925 SF [0.71 acre] and the existing disturbed land to be restored by the project = 5,090 SF [0.12 acre]

Project Description

Concisely and completely describe the project and location. Reference and attach a project vicinity map (Figure 1) and the project site plans (Figure 2) for the proposed project. Include all activities proposed for site, including those disturbing ground (roads, bridges, outfalls, runoff treatment facilities, parks, trails, etc.) to ensure the entire project is covered by the HCP/NCCP permit. Also include proposed construction dates. Reference a City/County application number for the project where additional project details can be found.

City/County Application Number:

NA

Anticipated Construction Date: August 1, 2012 – October 31, 2012

Project Description

Project Site and Function. The project is in Round Valley Regional Preserve. The Preserve entrance is located along Marsh Creek Road, an east-west connector road. This staging area is located approximately six miles south of Brentwood and six miles west of Byron in Contra Costa County (Refer to *Figures 1a, 1b, 1c*). The project site is located at Round Valley Creek approximately one and one-half miles from the Marsh Creek Staging Area via a dirt road. The elevation at the top of bank is 384.5. The elevation at the toe of the bank is 373.5. Grassland habitat comprises 0.83 acre of the project area with a 0.09-acre area of intermittent stream habitat bisecting the site (Refer to *Figure 3A –Land Cover Map*).

The project consists of the installation a 60-foot clear span pedestrian bridge and minor realignment of the existing, permeable, natural surface trails to connect to the bridge, which ties into existing recreation trails on either side of Round Valley Creek. These trail and creek crossing improvements will improve public access through the Preserve.

Coverage under the HCP/NCCP. Park and recreation facilities may be covered activities outside the UDA and outside the HCP/NCCP preserves. Because of the uncertainty in their location and project footprint, coverage for these projects will be decided on a case-by-case basis. In this case, Take Coverage will be issued through the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan with concurrence from USFWS and CDFG that incidental take coverage may be issued for the Project.

³ *Acreage of land temporarily disturbed* is broadly defined in the HCP/NCCP as any impact on vegetation or habitat that does not result in permanent habitat removal (i.e. vegetation can eventually recover).

Site Access. Access to the construction site will be through either the Marsh Creek Staging Area located along Marsh Creek Road or via Los Vaqueros Road which traverses Contra Costa Water District Los Vaqueros Reservoir property. Construction vehicles utilizing the Marsh Creek Staging Area will travel on an existing dirt road crossing over two existing 12-foot wide 20-ton limit bridges and three concrete fords to reach the construction staging area which will be situated on the northeast side of Round Valley Creek. Access via Los Vaqueros Road will be along an existing dirt road and will not require any bridge or ford crossings. This access route has been approved by the Contra Costa Water District.

Temporary Construction Staging Area. The construction staging area will be created in an open area composed of non-native annual grasslands. Development of the temporary construction staging area will consist of clearing and grubbing these grasslands. This construction staging area will be used to store equipment, supplies and stockpiled materials. At the conclusion of the bridge and trail construction work strippings accumulated from grading activities will be distributed over the temporary construction area to encourage recovery of annual grasslands. These actions will result in 0.71 acres (30,925 SF) of temporary impacts to grassland habitat at the project site (Refer to *Figure 2 - Site Map*).

Bridge Work. The project proposes the installation a 60-foot clear span pedestrian/bike bridge to connect to existing trails on either side of the creek. Bridge work will consist of design, fabrication, delivery and installation of the prefabricated steel bridge and construction of the abutments. The steel bridge framework will be manufactured in a shop off site and delivered to the site for assembly. The bridge will be supported by two abutments approximately 3-foot wide by 12-foot long with the piers extending a minimum of 5 feet into the bedrock. The piers will be located outside of the creek bed between 10 and 15 feet from the top of bank of Round Valley Creek at elevation 384.5. A crane will be used to place the bridge onto the abutments.

Materials included in the construction of the proposed project will include: concrete and steel reinforcement for the piers and abutments and a prefabricated pedestrian/bike bridge with a 5-ton (10,000 pounds) vehicle weight limit that will be constructed of weathering steel.

Once installed, the resulting shaded area of bridge will be approximately 540 square feet. Neither the bridge structure nor the installation activity would impact, or be impacted by, changes to the creek flow line as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel. As the bridge will be a clear span installation, this action will result in 0 acres of temporary or permanent impacts (Refer to *Figure 2a - Bridge Cross Section*).

New Trail Construction. New trail construction will consist of the minor realignment of the existing, permeable, natural surface trail to conform to the bridge approaches. The area of impact will be in non-native, annual grasslands. Earthwork will involve grading for the abutments and approximately 550 linear feet of trail to align the trail to the bridge. Changes in elevations as a result of these activities will be negligible. The total anticipated grading volume will be 50 cubic yards of soil that will be excavated over a 3,600 square foot area. This action will result in 0.15 acres (6,560 SF) of permanent impacts resulting from the realignment of the existing, permeable, natural surface trail to conform to the bridge approaches.

Construction Best Management Practices/Erosion Control Measures. The Contractor shall be required to prepare, submit and implement a Storm Water Pollution Plan (SWPPP) to minimize potential impacts from sediments entering the creek. The SWPPP shall be prepared by a Qualified SWPPP Developer (QSD) and managed on-site by a Qualified SWPPP Practitioner

(QSP) to ensure implementation of appropriate Best Management Practices for minimizing potential erosion and sedimentation within the project area during construction. These measures include, as appropriate to the site conditions: conducting construction activities during the dry season (August 1–October 31); using dikes, basins, ditches, straw, erosion control fabric and other temporary measures (e.g., water bars, fiber rolls) as catchments for source pollutants, but will not employ any plastic netting materials that could result in entanglement and death of reptiles and amphibians. Use of vegetative materials (e.g., hay bales, fiber rolls) will be certified as free of noxious weeds. Seed mixtures applied for erosion control will not contain invasive nonnative species, and will be composed of native species or sterile nonnative species. All trash items will be removed from the construction/staging areas to reduce the potential for attracting predators.

Existing Disturbed Land to be Restored by Project. At the conclusion of the construction trail and bridge construction work strippings accumulated from grading activities will be distributed over the abandoned trail segments to encourage recovery of annual grasslands. The project will not involve hauling any soil off the District Preserve lands. This work will involve 0.12 acres (5,090 SF) of temporary impacts of grassland habitat at the project site.

II. Existing Conditions and Impacts

Land Cover Types

In completing the checklist in Table 1, click in the appropriate fields and type the relevant information. Please calculate acres of terrestrial land cover types to nearest tenth of an acre. Calculate the areas of all jurisdictional wetlands and waters land cover types to the nearest hundredth of an acre. If the field is not applicable, please enter N/A. The sum of the acreages in the *Acreage of land to be “permanently disturbed”* and *“temporarily disturbed”* by project column should equal the total impact acreage listed above.

Land cover types and habitat elements identified with an ^(a) in Table 1 require identification and mapping of habitat elements for selected covered wildlife species. In Table 2a and 2b below, check the land cover types and habitat elements found in the project area and describe the results. Insert a map of all land cover types present on-site and other relevant features overlaid on an aerial photo below as Figure 3.

Table 1. Land Cover Types on the Project Site as Determined in the Field and Shown in Figure 3.

Land Cover Type (acres, except where noted)	Acreage of Land to be “Permanently Disturbed” by Project ^b	Acreage of Land to be “Temporarily Disturbed” by Project ^b	Acreage of Land Proposed for HCP/NCCP Dedication on the Parcel ^c	
			Stream Setback	Preserve System Dedication
Grassland^a				
<input checked="" type="checkbox"/> Annual grassland	0.15	0.83		
<input type="checkbox"/> Alkali grassland				
<input type="checkbox"/> Ruderal				
<input type="checkbox"/> Chaparral and scrub				
<input type="checkbox"/> Oak savanna ^a				

Land Cover Type (acres, except where noted)	Acreage of Land to be "Permanently Disturbed" by Project ^b	Acreage of Land to be "Temporarily Disturbed" by Project ^b	Acreage of Land Proposed for HCP/NCCP Dedication on the Parcel ^c	
			Stream Setback	Preserve System Dedication
Oak woodland				
Jurisdictional wetlands and waters				
<input type="checkbox"/> Riparian woodland/scrub				
Permanent wetland ^a				
<input type="checkbox"/> Seasonal wetland ^a				
<input type="checkbox"/> Alkali wetland ^a				
<input type="checkbox"/> Aquatic (Reservoir/Open Water) ^a				
<input type="checkbox"/> Slough/Channel ^a				
<input type="checkbox"/> Pond ^a				
<input type="checkbox"/> Stream (acres) ^{a, d}				
Total stream length (feet) ^{a, d}				
Stream length by width category				
<input type="checkbox"/> ≤ 25 feet wide				
<input type="checkbox"/> > 25 feet wide				
Stream length by type and order ^e				
<input type="checkbox"/> Perennial				
<input type="checkbox"/> Intermittent				
<input type="checkbox"/> Ephemeral, 3 rd or higher order				
<input type="checkbox"/> Ephemeral, 1 st or 2 nd order				
Irrigated agriculture^a				
<input type="checkbox"/> Cropland				
<input type="checkbox"/> Pasture				
<input type="checkbox"/> Orchard				
<input type="checkbox"/> Vineyard				

Land Cover Type (acres, except where noted)	Acreage of Land to be "Permanently Disturbed" by Project ^b	Acreage of Land to be "Temporarily Disturbed" by Project ^b	Acreage of Land Proposed for HCP/NCCP Dedication on the Parcel ^c	
			Stream Setback	Preserve System Dedication
Other				
<input type="checkbox"/> Nonnative woodland				
<input type="checkbox"/> Wind turbines				
Developed				
<input type="checkbox"/> Urban				
<input type="checkbox"/> Aqueduct				
<input type="checkbox"/> Turf				
<input type="checkbox"/> Landfill				
Uncommon Vegetation Types (subtypes of above land cover types)				
<input type="checkbox"/> Purple needlegrass grassland				
<input type="checkbox"/> Wildrye grassland				
<input type="checkbox"/> Wildflower fields				
<input type="checkbox"/> Squirreltail grassland				
<input type="checkbox"/> One-sided bluegrass grassland				
<input type="checkbox"/> Serpentine grassland				
<input type="checkbox"/> Saltgrass grassland (= alkali grassland)				
<input type="checkbox"/> Alkali sacaton bunchgrass grassland				
<input type="checkbox"/> Other uncommon vegetation types (please describe)				
Uncommon Landscape Features or Habitat Elements				
<input type="checkbox"/> Rock outcrop				
<input type="checkbox"/> Cave ^a				
<input type="checkbox"/> Springs/seeps				
<input type="checkbox"/> Scalds				
<input type="checkbox"/> Sand deposits				
<input type="checkbox"/> Mines ^a	—	—		—
<input type="checkbox"/> Buildings (bat roosts) ^a	—	—		—
<input type="checkbox"/> Potential nest sites (trees or cliffs) ^a	—	—		—
Total (Developed Acres)	0.15	0.83	N/A	N/A

Land Cover Type (acres, except where noted)	Acreage of Land to be "Permanently Disturbed" by Project ^b	Acreage of Land to be "Temporarily Disturbed" by Project ^b	Acreage of Land Proposed for HCP/NCCP Dedication on the Parcel ^c	
			Stream Setback	Preserve System Dedication

^a Designates habitat elements that may trigger specific survey requirements and/or best management practices for key covered wildlife species. See Chapter 6 in the HCP/NCCP for details.

^b See Section 9.3.1 of the HCP/NCCP for a definition of "permanently disturbed" and "temporarily disturbed." In nearly all cases, all land in the subject parcel is considered permanently disturbed.

^c Dedication of land in lieu of fees must be approved by the local agency and the Implementing Entity before they can be credited toward HCP/NCCP fees. See Section 8.6.7 on page 8-32 of the Plan for details on this provision. Stream setback requirements are described in Conservation Measure 1.7 in Section 6.4.1 and in Table 6-2.

^d Specific requirements on streams are discussed in detail in the HCP/NCCP. Stream setback requirements pertaining to stream type and order can be found in Table 6-2. Impact fees and boundary determination methods pertaining to stream width can be found in Table 9-5. Restoration/creation requirements in lieu of fees depend on stream type and can be found in Tables 5-16 and 5-17.

^e See glossary (Appendix A) for definition of stream type and order.

Field-Verified Land Cover Map

Insert field-verified land cover map. The map should contain all land cover types present on-site. The map should be representative of an aerial photo. Identify all pages of the field-verified land cover map as **(Figure 3a)**. **Please attach representative photos of the project site (Figure 3b).**

Refer to Figure 3a – Land Cover Map, attached.

Refer to Figure 3b – Representative photos of the project site, attached.

Jurisdictional Wetlands and Waters

Jurisdictional wetlands and waters are defined on pages 1-18 and 1-19 of the Final HCP/NCCP as the following land cover types: permanent wetland, seasonal wetland, alkali wetland, aquatic, pond, slough/channel, and stream. (It should be noted that definitions of these features differ for state and federal jurisdictions.) If you have identified any of these land cover types to be present on the project site in Table 1, complete the section below.

The project site is located at Round Valley Creek within a 0.09-acre area of intermittent stream habitat. The creek at this location has incised a channel that runs through an alluvial plain. The area is generally level with minor elevation changes in the vicinity of the creek banks. The channel is approximately 30 feet wide and 11 feet deep at the proposed bridge site. The creek banks are marked by erosion and shallow landsliding upstream and downstream of the proposed bridge alignment. The elevation at the top of bank is 384.5. The elevation at the toe of the bank is 373.5 (Refer to *Figure 3A – Land Cover Map – Proposed Pedestrian Bridge, Round Valley Regional Preserve*).

Indicate agency that certified the wetland delineation:

USACE, RWQCB, or the ECCC Habitat Conservancy.

Wetland delineation is attached (Jurisdictional Determination)

Provide any additional information on Impacts to Jurisdictional Wetland and Waters below.

Neither the bridge structure nor the installation activity would impact, or be impacted by, changes to the creek flow line as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel. As the bridge will be a clear span installation, this action will result in 0 acres of temporary or permanent impacts (Refer to *Figure 2a - Bridge Cross Section*) to jurisdictional wetlands or waters.

Species-Specific Planning Survey Requirements

Based on the land cover types found on-site and identified in Table 1, check the applicable boxes in Table 2a then provide the results of the planning surveys below. In Table 3 check corresponding preconstruction survey or notification requirements that are triggered by the presence of particular landcover types or species habitat elements as identified in Table 2a. The species-specific planning survey requirements are described in more detail in Section 6.4.3 of the HCP/NCCP.

Table 2a. Species-Specific Planning Survey Requirements Triggered by Land Cover Types and Habitat Elements in the project area based on Chapter 6 of the Final HCP/NCCP.

Land Cover Type in the project area?	Species	Habitat Element in the project area?	Planning Survey Requirement
<input checked="" type="checkbox"/> Grasslands, oak savanna, agriculture, ruderal	San Joaquin kit fox	Assumed if within modeled range of species	Identify and map potential breeding and denning habitat and potential dens if within modeled range of species (see Appendix D of HCP/NCCP).
	Western burrowing owl	Assumed	Identify and map potential breeding habitat.
<input checked="" type="checkbox"/> Aquatic (ponds, wetlands, streams, slough, channels, & marshes)	Giant garter snake	<input type="checkbox"/> Aquatic habitat accessible from San Joaquin River	Identify and map potential habitat.
	California tiger salamander	<input checked="" type="checkbox"/> Ponds and wetlands in grassland, oak savanna, oak woodland <input type="checkbox"/> Vernal pools <input type="checkbox"/> Reservoirs <input type="checkbox"/> Small lakes	Identify and map potential breeding habitat. Document habitat quality and features. Provide Implementing Entity with photo-documentation and report.

Land Cover Type in the project area?	Species	Habitat Element in the project area?	Planning Survey Requirement
	California red-legged frog	<input checked="" type="checkbox"/> Slow-moving streams, ponds, and wetlands	Identify and map potential breeding habitat. Document habitat quality and features. Provide Implementing Entity with photo-documentation and report.
<input type="checkbox"/> Seasonal wetlands	Covered shrimp	<input type="checkbox"/> Vernal pools <input type="checkbox"/> Sandstone rock outcrops <input type="checkbox"/> Sandstone depressions	Identify and map potential breeding habitat.
Any	Townsend's big-eared bat	<input type="checkbox"/> Rock formations with caves <input type="checkbox"/> Mines <input type="checkbox"/> Abandoned buildings outside urban areas	Map and document potential breeding or roosting habitat.
	Swainson's hawk	<input type="checkbox"/> Potential nest sites (trees within species' range usually below 200')	Inspect large trees for presence of nest sites.
	Golden eagle	<input checked="" type="checkbox"/> Potential nest sites (secluded cliffs with overhanging ledges; large trees)	Document and map potential nests.

^a Vernal pool fairy shrimp, vernal pool tadpole shrimp, longhorn fairy shrimp, and midvalley fairy shrimp.

Results of Species-Specific Planning Surveys Required in Table 2a

- Describe the results of the planning survey conducted as required in Table 2a.**
Planning surveys will assess the location, quantity, and quality of suitable habitat for specified covered wildlife species on the project site. Covered species are assumed to occupy suitable habitat in impact areas and mitigation is based on assumption of take.

The project site is located at Round Valley Creek approximately one and one-half miles from the Marsh Creek Staging Area via a dirt road. The elevation at the top of bank is 384.5. The elevation at the toe of the bank is 373.5. Grassland habitat comprises 0.83 acre of the project area with a 0.09-acre area of intermittent stream habitat bisecting the site (Refer to *Figure 3A – Land Cover Map – Proposed Pedestrian Bridge, Round Valley Regional Preserve*).

At the project site, the creek has incised a channel that runs through an alluvial plain. The area is generally level with minor elevation changes in the vicinity of the creek banks. The channel is approximately 30 feet wide and 11 feet deep at the proposed bridge site. The creek

banks are marked by erosion and shallow landsliding upstream and downstream of the proposed bridge alignment.

The trail approaches will be routed through open non-native annual grasslands. Grassland plants in this area include annual rabbitfoot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and golden monkey flower (*Mimulus guttatus*). Tree cover, predominately valley oak (*Quercus lobata*), is confined to a narrow band along the banks of the creek (Refer to Table A – Round Valley Bridge - Plant Survey 11-01-2011). A spring survey is planned to confirm the absence/presence of other species that may occur within the project area.

The trail bridge will cross Round Valley Creek, a tributary of Marsh Creek originating in the uplands surrounding Round Valley. The creek flows until late spring or early summer, after which the water pools at intervals along the stream course.

Round Valley Creek supports the federally threatened California red-legged frog (*Rana draytonii*) and Western pond turtle (*Actinemys marmorata*) formally (*Clemmys marmorata marmorata*). Trees lining the creek corridor and the adjacent grasslands support golden eagles (*Aquila chrysaetos*) and white tailed kite (*Elanus leucurus*), which are protected by State and Federal law. The project site constitutes suitable habitat for California tiger salamander (*Ambystoma californiense*), Alameda whipsnake (*Masticophis lateralis euryxanthus*) and Western burrowing owl (*Athene cunicularia*). The Preserve is within the extreme north western range of San Joaquin kit fox (*Vulpes macrotis mutica*), a Federal Endangered species and State threatened species. Following are descriptions of methodology and results of surveys conducted at the site for each of these species.

San Joaquin Kit Fox (*Vulpes Macrotis Mutica*) Surveying Methodology & Results

Methodology. During 1997 and 1998 live trapping for San Joaquin Kit Fox (*Vulpes macrotis mutica*) was conducted in September and October at Round Valley Preserve using double-door tomahawk traps measuring 106.6cm (42inches) x 39.4cm (15.5inches) x 39.6cm (15.6inches) with 2.5cm (1inch) x 2.5cm (1inch) or 5.1cm (2inches) x 2.5cm (1inch) mesh. Traps were covered with canvas traps and grass lined to minimize the effects of exposure on captured animals. Bait used during trapping primarily consisted of canned mackerel. Canned tuna fish, canned cat food and fresh grapes were also used as bait to a limited extent. All traps were previously checked <2hours after sunrise at both locations. A 1:10 chlorine-water solution was used to disinfect traps after captured animals were released and prior to being reset. The trapline at Round Valley consisted of 6 traps set along a 1.9km (1.2 mile) transect. The configuration of the trap line at Round Valley did not change throughout the trapping effort.

During 1999 no trapping was conducted. Alternatively the District conducted diurnal helicopter surveys on August 2nd and September 7th, and inspected burrows for San Joaquin kit fox sign.

Subsequently, from 1999 to present the USFWS/CDFG–approved biologists District biologists have annually conducted surveys for a variety of species throughout the Preserve with the most recent surveys specifically for San Joaquin kit fox occurring in February and March 2012. On February 24, 2012 and March 9, 2012 habitat suitability surveys for San Joaquin kit fox were conducted to assess existing conditions and determine potential fox activity at the project site and vicinity (project area). California ground squirrel

(*Spermophilus beecheyi*) is considered a “keystone species” of open grassland and oak savanna, and squirrel burrows are an important habitat component for San Joaquin kit fox in the xeric regions of Eastern Contra Costa County. Consequently, all ground squirrel burrows within a radial area of 250 meters were investigated and examined to determine density, activity, and potential use by San Joaquin kit fox. Within this project area, ground squirrel densities varied from high burrow density within Round Valley Creek streambank and along top-of-bank, to relatively low densities along the proposed trail alignment. Evidence suggested that many of the burrows were abandoned including two burrows that appeared to be previously occupied by American badgers (*Taxidea taxus*).

Survey and fieldwork conducted between 1997 and 1999 were performed by Steven Bobzien (East Bay Regional Park District), David Casady (California Department of Fish and Game), and Laurie Briden (California Department of Fish and Game). In addition, under direct supervision, some onsite fieldwork was performed by Gina Vanklombenburg (California Department of Fish and Game) and Dina Gizatallin and Dan Modrell (East Bay Regional Park District). 2012 surveys for San Joaquin kit fox were conducted by Steven Bobzien (East Bay Regional Park District)

Results. On July 15, 1992 Heather Bell documented six San Joaquin kit fox consisting of 2 adults and 4 juveniles. Subsequently, District biologists have not observed or collected any physical evidence of San Joaquin kit fox within the Preserve, including the field investigations conducted in 2012. Although ground squirrel activity was prevalent, no evidence (i.e. excavation, tracks, or scat) of San Joaquin kit fox were found in the project area.

Sources: San Joaquin Kit Fox Survey and Management Options for East Bay Regional Park’s Black Diamond Regional Preserve and Round Valley Regional Park, Heather Bell, Consulting Biologists, October 28, 1992.

Status of the San Joaquin Kit Fox (*Vulpes macrotis mutica*) in the Northern San Joaquin Valley, California, 1997 Annual Report of Activities Conducted under Subpermit FWSSFO-5 for the Take of San Joaquin Kit Fox. Heather Bell, US Fish & Wildlife Service, Steve Bobzien, East Bay Regional Park District, David Casady, California Department of Fish and Game. 1997

Status of the San Joaquin Kit Fox (*Vulpes macrotis mutica*) in the Northern San Joaquin Valley, California, 1998 Annual Report of Activities Conducted under Subpermit FWSSFO-5 for the Take of San Joaquin Kit Fox. Heather Bell, US Fish & Wildlife Service, Steve Bobzien, East Bay Regional Park District, David Casady, California Department of Fish and Game. 1998

Status of the San Joaquin Kit Fox (*Vulpes macrotis mutica*) in the Northern San Joaquin Valley, California, 1999 Annual report of Activities Conducted under Subpermit FWSSFO-5 for the Take of San Joaquin Kit Fox. Heather Bell, US Fish & Wildlife Service, Steve Bobzien, East Bay Regional Park District, Laurie Briden, California Department of Fish and Game. 1999

Steven Bobzien, Ecological Services Coordinator, East Bay Regional Park District (personnel communication 3/20/2012)]

California Red-Legged Frog (*Rana Draytonii*) Surveying Methodology & Results

Methodology. California red-legged frogs occur in a variety of habitats including lentic and lotic waterbodies, spring boxes, and upland areas with cover. Specific sites were selected and visited at the beginning of the breeding season (to evaluate initial reproductive effort) and re-visited when larvae began to metamorphose (to evaluate reproductive success). Efforts were focused during the peak of the breeding season so a maximum number of egg masses, larvae, metamorphs and/or adults would be documented. Over the survey period, active and passive visual encounter surveys were conducted. Passive methods included night bankside observation with binoculars and flashlights and walks along ponds and streambanks to observe and detect frogs. Active surveys for all taxa included capture by hand (wet hands), dip-netting, seining, and scooping up by container.

To document the presence of California red-legged frogs in Round Valley movements and dispersal of frogs were tracked using a combination of radio-telemetry and pit-tags. Using dip-nets, seines, and wet-hands, California red-legged frogs were captured and placed in damp cloth bags for processing. Radio transmitters (150 MHZ) were placed on subadult or adult frogs. Pit-tags were inserted into seven other individual subadult or adults frogs. In addition, 17 frogs were previously pit-tagged and 10 adults received transmitters (by Trish Tatarian, 1999, Sonoma State University). Collectively, 18 California red-legged frogs received transmitters and inserted pit-tags in 25 individuals. After processing, captured frogs were released at their capture locations. Then their movements were monitored from November 1999-January 2001 and from May 2001-November 2001. During this period the majority of their movements were restricted to Round Valley Creek, and most individuals remained very close to their capture sites. However, Tatarian documented an adult frog moving 60 meters into a blue oak savanna woodland during an October rain event. In addition, District staff observed and documented daily (diurnal and nocturnal) movements of California red-legged frog including small metamorphs and/or juveniles utilizing areas above top-of-bank and in adjacent uplands where several were observed at the entrances of ground squirrel burrows. During a 1998 spring survey two juvenile frogs (with snout vent lengths of 79cm and 82cm, respectively, were observed in an upland vernal pool 110 meters from Round Valley Creek. Locations were entered into a GPS unit. Radio transmitters were replaced or removed from individual frogs at eighteen weeks to account for the average twenty week life of the transmitters.

Subsequently, from 1999 to present the District biologists have annually conducted surveys for a variety of species throughout the Preserve. Each year between three and sixteen biological surveys, focusing on listed and special status species, are conducted within the Preserve. These include performing biological and habitat suitability assessments for a variety of listed and non-listed species, including California red-legged frog. Survey results are recorded in the biologists' field logs and notable species, specifically listed species are entered into the District database.

Results. Round Valley Creek, a low gradient stream (<2%), has a sizeable breeding population of California red-legged frogs consistently supporting greater than 60 sub-adult and adult frogs. Their population seems to have increased between 1995 and 1997, stabilized during 1998-2001 and experienced some variation between 2003 and 2005. Some California red-legged frog tadpoles may remain in the larval stage beyond the normal seasonal period associated with these species; a phenomenon referred to as "overwintering". The majority of these individuals measured between 60-68mm, had rudimentary or developed hind legs and appeared to overwinter at this stage.

Based on District surveys, stream breeding California red-legged frogs appear to be very selective and consistently deposit eggs at or near the surface on vegetation in deep water pools, plunge pools, back water pools, and eddies. Successful breeding occurs in stable stream environments and at sites capable of supporting egg hatching and developing tadpoles. As stream scouring increases with gradient, fine sediments are transported downstream to settle in still water areas, which creates highly suitable tadpole habitat. California red-legged frog tadpoles are negatively buoyant and escape by rapidly descending and burying themselves in fine silt, clay or sandy substrate.

Various life stages including larvae, metamorphs, subadult, and adult California red-legged frogs have been documented within the bridge site stream reach. In addition, as previously described during a 1998 spring survey, two juvenile frogs were observed in an upland vernal pool 110 meters from Round Valley Creek and southwest of the bridge site.

While California red-legged frogs have been documented in the stream reach of the proposed bridge crossing, there will be no fill or disturbance of aquatic or streambank habitat within the riparian corridor, and work will proceed outside of the breeding season. Additionally, even though the impact will be confined to upland terrestrial habitat (e.g., California red-legged habitat) avoidance and minimization measures will be implemented [Personal communication East Bay Regional Park wildlife biologists January 5, 2012].

Sources: Status of the California red-legged frog (*Rana aurora draytonii*) in the East Bay Regional Park District, California. Annual Report of Activities Conducted under USFWS Permit PRT-817400 for the take of California red-legged frog. Steven Bobzien, Joseph E. DiDonato, and Peter J. Alexander, East Bay Regional Park District. 2000]

Overwintering Tadpoles in the California Red-Legged Frog (*Rana aurora draytonii*). Herpetological Review (Fellers *et al.* 2001)

The Status of California Tiger Salamanders (*Ambystoma californiense*), California Red-Legged Frog (*Rana draytonii*), California Yellow-Legged Frog (*Rana boylei*) and Other Aquatic Herpetofauna in the East Bay Regional Park District, California. Steven Bobzien and Joseph E. DiDonato, East Bay Regional Park District. 2007]

California Tiger Salamander (*Ambystoma Californiense*) Surveying Methodology & Results

Methodology. California Tiger Salamanders (CTS) spend the majority of the year in the uplands of grazed grasslands and oak savannas from near sea level to above 3,600 feet and are widely distributed in 13 District parkland units of eastern Alameda and Contra Costa Counties. Most of these areas have abundant California ground squirrel (*Spermophilus beecheyi*) populations and other burrowing rodents including California vole (*Microtus californicus*) and Botta's pocket gopher (*Thomomys bottae*) that create burrows which can be utilized by California tiger salamanders and other amphibians. The winter months are spent in both seasonal and perennial water bodies, the former of which tend to be free of predacious aquatic hexapods. Efforts were focused during the peak of the breeding season so a maximum number of egg masses, larvae, metamorphs and/or adults would be documented. Pond environments may or may not contain aquatic vegetation with ponds having less than 5 percent emergent or submerged vegetation having the highest presence of California tiger salamander. CTS movements were monitored from November 1999-January 2001 and from May 2001-November 2001. During this period the majority of their movements were restricted to Round Valley Creek, and most individuals

remained very close to their capture sites. Over the survey period, active and passive visual encounter surveys were conducted. Active surveys for all taxa included capture by hand (wet hands), dip-netting, seining, scooping up by container, and incidentally using minnow traps while conducting California tiger salamander larval surveys.

Subsequently, from 1999 to present the District biologists have annually conducted surveys for a variety of species throughout the Preserve. Each year between three and sixteen biological surveys, focusing on listed and special status species, are conducted within the Preserve. These include performing biological and habitat suitability assessments for a variety of listed and non-listed species, including California tiger salamanders. Survey results are recorded in the biologists' field logs and notable species, specifically listed species are entered into the District database.

Results. Although California tiger salamanders (*Ambystoma californiense*) are reproductively successful at two pond sites (rvpnd001 and rvpnd003) within the Preserve, no California tiger salamanders have been observed or documented (e.g. District, CNDDDB, or other records) in Round Valley Creek or at the proposed bridge project site. The two documented breeding sites are located at ponds 1.15 miles and 1.20 miles from the proposed bridge project site. Moreover, based on East Bay Regional Park District and other research, California tiger salamanders are predominately a lentic species and Round Creek is unlikely to support breeding salamanders. Regardless, there will be no fill or disturbance of aquatic or streambank habitat within the riparian corridor, and work will proceed outside of the breeding season. Additionally, even though the impact will be confined to upland terrestrial habitat (e.g., California tiger salamander habitat) avoidance and minimization measures will be implemented [Personal communication East Bay Regional Park wildlife biologists January 5, 2012].

Sources: The Status of California Tiger Salamanders (*Ambystoma californiense*), California Red-Legged Frog (*Rana draytonii*), California Yellow-Legged Frog (*Rana boylei*) and Other Aquatic Herpetofauna in the East Bay Regional Park District, California. Steven Bobzien and Joseph E. DiDonato, East Bay Regional Park District. 2007]

Golden Eagle – Surveying Methodology & Results

Methodology. The District averages two to six visits to an eagle territory per year, and performs area searches looking for new nests if the old nest is unoccupied. Area searches can last from less than an hour to an entire day (12 or more hours). The District also searches for other raptor nests at the same time. None of these field surveys have resulted in the identification of any raptor nests within the area of the proposed bridge construction site.

Results. The project site lies within a golden eagle territory known as the Round Valley golden eagle territory. The one known nest site (N 37° 51' 15.9" W 121° 45' 59.0") of this pair is located approximately 0.57 mi from the project site. There is no line-of-site view from the nest to the project site, as the nest is in a steep ravine in the southeast corner of Round Valley behind an intervening ridgeline. Thus, construction activity is not likely to adversely affect the behavior of this pair. Nevertheless, if construction occurs outside of the eagle nesting period (January 1 to August 31) any risk to nesting behavior will be absolutely minimized. The Round Valley nest was active in 2010, inactive in 2011. The second closest golden eagle territory to the project site is known as the Lydia Lane territory. The closest nest of this territory (N 37° 51' 38.2" W 121° 45' 20.4") is approximately 0.95 mi from the project site. There is no line-of-site view from the nest

to the project site, as the nest is located well to the east of Round Valley on a north-facing ridge. Thus, construction activity is not likely to adversely affect the behavior of this pair. The Lydia Lane nest was active in both 2010 and 2011. Both golden eagle nests have been surveyed each year since 2005. Area searches of three to eight hours duration for territorial golden eagle (and other raptors such as white-tailed kite and burrowing owl) were performed in 2010 on April 16th, April 19th, May 4th and August 13th and in 2011 on February 2nd, February 4th, February 7th, May 13th and July 25th. The proposed bridge construction project will be located a minimum of one half mile from any of the nest sites. Moreover, construction is scheduled for fall (September – October) when risk to nesting behavior will be absolutely minimized (Refer to *Table B – Raptor Nests* listing findings from field surveys that have taken place between 2005 and 2011).

Territory Name	Nest ID #	Species	Territory Status	Nest Status	No. Chicks	No. Fledged	Lat	Long	Lat-Long Location
Round Valley	GOEA_2011.31	GOEA	Unknown	Unknown			37° 51' 15.9"	121° 45' 59.0"	09 Nest
Round Valley	GOEA_2010.31	GOEA	Occupied	Active		1	37° 51' 15.9"	121° 45' 59.0"	09 Nest
Round Valley	GOEA_2009.31	GOEA	Occupied	Active	1		37° 51' 15.9"	121° 45' 59.0"	09 Nest
Round Valley	GOEA_2008.31	GOEA	Unknown	Unknown			37° 51' 15.9"	121° 45' 59.0"	07 Nest
Round Valley	GOEA_2007.31	GOEA	Occupied	Active	2		37° 51' 15.9"	121° 45' 59.0"	07 Nest
Round Valley	GOEA_2006.31	GOEA	Not Surveyed	Unknown			37 51.26'	121 45.98	05 Nest
Round Valley	GOEA_2005.31	GOEA	Occupied	Active	1		37°0.85367'	121°0.77017'	05 Nest

[Source: Eagle Territory Status. Douglas A. Bell, East Bay Regional Parks District. November 03, 2011]

Burrowing Owl – Surveying Methodology & Results

Methodology. Each year District biologists conduct between three and sixteen biological surveys within the Preserve focusing on listed and special status species. These include performing biological and habitat suitability assessments and area searches looking for Western burrowing owl (*Athene cunicularia*) activity and their nest sites. Area searches can last from less than an hour to an entire day (12 or more hours). Survey results are recorded in the biologists’ field logs and notable species, specifically listed species are entered into the District database.

Results. None of these field surveys have resulted in the identification of any Western burrowing owls within the Preserve since surveys were initiated in 1995 [Personal communication East Bay Regional Park wildlife biologists January 5, 2012].

2. Reference and attach the Planning Survey Species Habitat Maps as required in Table 2a.

Refer to Figure 4, attached.

Covered and No-Take Plants

On suitable land cover types, surveys for covered and no-take plants must be conducted using approved CDFG/USFWS methods during the appropriate season to identify any covered or no-take plant species that may occur on the site (see page 6-9 of the Final HCP/NCCP). Based on the land cover types found in the project area and identified in Table 1, check the applicable boxes in Table 2b and provide a summary of survey results as required below. If any no-take plants are found in the project area, the provisions of Conservation Measure 1.11 must be followed (see *Avoidance and Minimization Measures* below).

Table 2b. Covered and No-Take Plant Species, Typical Habitat Conditions, and Typical Blooming Periods

Land Cover Type in the project area?	Plant Species	Covered (C) or No-Take (N)?	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period ^a
<input type="checkbox"/> Oak savanna	Diablo Helianthella (<i>Helianthella castanea</i>)	C	Elevation above 650 feet ^b	Mar–Jun
	Mount Diablo fairy-lantern (<i>Calochortus pulchellus</i>)	C	Elevation between 650 and 2,600 feet ^b	Apr–Jun
<input checked="" type="checkbox"/> Oak woodland	Brewer's dwarf flax (<i>Hesperolinon breweri</i>)	C		May–Jul
	Diablo Helianthella (<i>Helianthella castanea</i>)	C	Elevation above 650 feet ^b	Mar–Jun
	Mount Diablo fairy-lantern (<i>Calochortus pulchellus</i>)	C	Elevation between 650 and 2,600 feet ^b	Apr–Jun
	Showy madia (<i>Madia radiata</i>)	C		Mar–May
<input type="checkbox"/> Chaparral and scrub	Brewer's dwarf flax (<i>Hesperolinon breweri</i>)	C		May–Jul
	Diablo Helianthella (<i>Helianthella castanea</i>)	C	Elevation above 650 feet ^b	Mar–Jun
	Mount Diablo buckwheat (<i>Eriogonum truncatum</i>)	N		Apr–Sep; uncommonly Nov–Dec.
	Mount Diablo fairy-lantern (<i>Calochortus pulchellus</i>)	C	Elevation between 650 and 2,600 feet ^b	Apr–Jun
	Mount Diablo Manzanita (<i>Arctostaphylos auriculata</i>)	C	Elevation between 700 and 1,860 feet; restricted to the eastern and northern flanks of Mt. Diablo ^b	Jan–Mar
<input type="checkbox"/> Alkali grassland	Brittlescale (<i>Atriplex depressa</i>)	C	Restricted to soils of the Pescadero or Solano soil series; generally found in southeastern region of plan area ^b	May–Oct
	Caper-fruited tropidocarpum (<i>Tropidocarpum capparideum</i>)	N		Mar–Apr
	Contra Costa goldfields (<i>Lasthenia conjugens</i>)	N	Generally found in vernal pools	Mar–Jun

Land Cover Type in the project area?	Plant Species	Covered (C) or No-Take (N)?	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period ^a
	Recurved larkspur (<i>Delphinium recurvatum</i>)	C		Mar–Jun
	San Joaquin spearscale (<i>Atriplex joaquiniana</i>)	C		Apr–Oct
<input type="checkbox"/> Alkali wetland	Alkali milkvetch (<i>Astragalus tener</i> ssp. <i>tener</i>)	N		Mar–Jun
	Brittlescale (<i>Atriplex depressa</i>)	C	Restricted to soils of the Pescadero or Solano soil series; generally found in southeastern region of plan area ^b	May–Oct
	San Joaquin spearscale (<i>Atriplex joaquiniana</i>)	C		Apr–Oct
<input checked="" type="checkbox"/> Annual grassland	Alkali milkvetch (<i>Astragalus tener</i> ssp. <i>tener</i>)	N		Mar–Jun
	Big tarplant (<i>Blepharizonia plumosa</i>)	C	Elevation below 1500 feet ^b	Jul–Oct
	Brewer's dwarf flax (<i>Hesperolinon breweri</i>)	C	Restricted to grassland areas within a 500+ buffer from oak woodland and chaparral/scrub ^b	May–Jul
	Contra Costa goldfields (<i>Lasthenia conjugens</i>)	N	Generally found in vernal pools	Mar–Jun
	Diamond-petaled poppy (<i>Eschscholzia rhombipetala</i>)	N		Mar–Apr
	Large-flowered fiddleneck (<i>Amsinckia grandiflora</i>)	N		Apr–May
	Mount Diablo buckwheat (<i>Eriogonum truncatum</i>)	N		Apr–Sep; uncommonly Nov–Dec
	Mount Diablo fairy-lantern (<i>Calochortus pulchellus</i>)	C	Elevation between 650 and 2,600 ^b	Apr–Jun

Land Cover Type in the project area?	Plant Species	Covered (C) or No-Take (N)?	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period ^a
	Round-leaved filaree (<i>California macrophylla</i>) ¹	C		Mar–May
	Showy madia (<i>Madia radiata</i>)	C		Mar–May
<input type="checkbox"/> Seasonal wetland	Adobe navarretia (<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>)	C	Generally found in vernal pools ^b	Apr–Jun
	Alkali milkvetch (<i>Astragalus tener</i> sp. <i>tener</i>)	N		Mar–Jun
	Contra Costa goldfields (<i>Lasthenia conjugens</i>)	N	Generally found in vernal pools	Mar–Jun

^a From California Native Plant Society. 2007. *Inventory of Rare and Endangered Plants* (online edition, v7-07d). Sacramento, CA. Species may be identifiable outside of the typical blooming period; a professional botanist shall determine if a covered or no take plant occurs on the project site.

^b See Species Profiles in Appendix D of the Final HCP/NCCP.

Results of Covered and No-Take Plant Species Planning Surveys Required in Table 2b

Describe the results of the planning survey conducted as required in Table 2b. Describe the methods used to survey the site for all covered and no-take plants including the dates and times of all surveys conducted (see Tables 3-8 and 6-5 of the HCP/NCCP for covered and no-take plants). In order to complete all the necessary covered and no-take plant surveys, both spring and fall surveys are required, check species survey requirements below.

If any covered or no-take plants were found, include the following information in the results summary:

- Description and number of occurrences and their rough population size.
- Description of the “health” of each occurrence, as defined on pages 5-49 and 5-50 of the HCP/NCCP.
- A map of all the occurrences.
- Justification of surveying time window, if outside of the plant’s blooming period.
- The CNDDDB form(s) submitted to CDFG (if this is a new occurrence).
- A description of the anticipated impacts that the covered activity will have on the occurrence and/or how the project will avoid impacts to all covered and no-take plant species. All projects must demonstrate avoidance of all six no-take plants (see table 6-5 of the HCP/NCCP).

Plant communities within the project area have been mapped and identified on aerial photographs. Inventories of specific plant species have been conducted on foot on with a checklist of plant list of species previously seen in the same park or area with the latest survey occurring on November 18, 2011. Where a positive identification is obvious, the plant is checked off on (or added to) the District database list. Where an in-field identification is not possible, plant samples with characteristics necessary for positive identification are collected, along with any necessary photographs, and the samples are keyed out later indoors using a binocular dissecting scope, and printed and on-line references. When the correct species cannot be determined, the plant is identified generally to genus. The final species list is entered into the District Wild Plant database and an appropriate query and report are generated.

The habitat areas for the project site resulting from this survey are illustrated on *Figure 3A – Land Cover Map*. A list of plants identified during this survey is provided in *Table A - Round Valley Bridge - Plant Survey 11-01-2011*.

Prior plant surveys conducted in Round Valley Preserve are listed below:

- 4-22-1996: EBRPD (ASWAD SW Corner)
- 5-10-1992: CNPS (Round Valley)
- 5-21-1996: EBRPD (Hardy Canyon Trail)
- 5-22-1996: EBRPD (Hardy Canyon Trail)
- 3-31-1997: EBRPD (Aswad Group Camp)
- 4-14-1997: EBRPD (Aswad Group Camp)
- 4-29-1996: EBRPD (Staging Area)
- 11-01-2011: EBRPD (Proposed bridge location)

No “Covered” or “No-take Plant” species were identified within the project area during any of the field surveys listed above. Refer to “*Results of Species – Specific Planning Surveys Required in Table 2*” above for a description of the habitat within the project area.

III. Species-Specific Monitoring and Avoidance Requirements

This section discusses subsequent actions that are necessary to ensure project compliance with Plan requirements. Survey requirements and Best Management Practices pertaining to selected covered wildlife species are detailed in Section 6.4.3, *Species-Level Measures*, beginning on page 6-36 of the Final HCP/NCCP.

Preconstruction Surveys for Selected Covered Wildlife

If habitat for selected covered wildlife species identified in Table 2a was found to be present in the project area. In Table 3, identify the species for which preconstruction surveys or notifications are required based on the results of the planning surveys. Identify whether a condition of approval has been inserted into the development contract to address this requirement.

Table 3. Applicable Preconstruction Survey and Notification Requirements based on Land Cover Types and Habitat Elements Identified in Table 2a.

Species	Preconstruction Survey and Notification Requirements
<input type="checkbox"/> None	
<input checked="" type="checkbox"/> San Joaquin kit fox (p. 6-38)	Map all dens (>5 in. diameter) and determine status. Determine if breeding or denning foxes are in the project area. Provide written preconstruction survey results to FWS within 5 working days after surveying.
<input checked="" type="checkbox"/> Western burrowing owl (p. 6-40)	Map all burrows and determine status. Document use of habitat (e.g. breeding, foraging) in/near disturbance area (within 500 ft.)
<input type="checkbox"/> Giant garter snake (p. 6-44)	Delineate aquatic habitat up to 200 ft. from water's edge. Document any sightings of garter snake.
<input checked="" type="checkbox"/> California tiger salamander (p. 6-46) (notification only)	Provide written notification to USFWS and CDFG regarding timing of construction and likelihood of occurrence in the project area.
X California red-legged frog (p. 6-47) (notification only)	Provide written notification to USFWS and CDFG regarding timing of construction and likelihood of occurrence in the project area.
<input type="checkbox"/> Covered shrimp species (p. 6-47)	Document and evaluate use of all habitat features (e.g., vernal pools, rock outcrops). Document occurrences of covered shrimp.
<input type="checkbox"/> Townsend's big-eared bat (p. 6-37)	Determine if site is occupied or shows signs of recent occupation (guano).
<input type="checkbox"/> Swainson's hawk (p. 6-42)	Determine whether nests are occupied.
<input checked="" type="checkbox"/> Golden eagle (p. 6-39)	Determine whether nests are occupied.
Note: Page numbers refer to the HCP/NCCP.	

Preconstruction Surveys as Required for Selected Covered Wildlife in Table 3

Describe the preconstruction survey's or notification conditions applicable to any species checked in Table 3. All preconstruction surveys shall be conducted in accordance with the requirements set forth in Section 6.4.3, *Species-Level Measures*, and Table 6-1 of the HCP/NCCP.

San Joaquin Kit Fox (*Vulpes macrotis mutica*)

Recognizing that several existing burrows within the Preserve are suitable size and could provide cover for San Joaquin kit (Refer to discussion on page 12), a qualified District biologist will conduct San Joaquin kit fox surveys.

Prior to any ground disturbance related to covered activities, a USFWS/CDFG approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as supporting suitable breeding or denning habitat for San Joaquin kit fox. The surveys will establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines (U.S. Fish and Wildlife Service 1999).

Preconstruction surveys will be conducted within 30 days of ground disturbance. On the parcel

where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 250 foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens.

Adjacent parcels under different land ownership will not be surveyed. The status of all dens will be determined and mapped. Written results of preconstruction surveys will be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance. Concurrence is not required before initiation of covered activities.

Western Burrowing Owl (*Athene cunicularia*)

Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFG survey guidelines (California Department of Fish and Game 1993).

On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFG guidelines. All burrows or burrowing owls will be identified and mapped.

Surveys will take place no more than 30 days before construction. During the breeding season (February 1– August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted.

California Tiger Salamander (*Ambystoma californiense*)

Note: The Project will not impact California Tiger Salamander (CTS) breeding habitat, but rather only potential estivation habitat. The HCP/NCCP minimization measure for CTS only requires notification if breeding habitat will be impacted.

Minimization. Written notification to USFWS, CDFG, and the ECCHC, including photos and breeding habitat assessment, is required prior to disturbance of any suitable breeding habitat. The project proponent will also notify these parties of the approximate date of removal of the breeding habitat at least 30 days prior to this removal to allow USFWS or CDFG staff to translocate individuals, if requested. USFWS or CDFG must notify the project proponent of their intent to translocate California tiger salamanders within 14 days of receiving notice from the project proponent. The applicant must allow USFWS or CDFG access to the site prior to construction if they request it. There are no restrictions under this Plan on the nature of the disturbance or the date of the disturbance unless CDFG or USFWS notify the project proponent of their intent to translocate individuals within the required time period. In this case, the project proponent must coordinate the timing of disturbance of the breeding habitat to allow USFWS or CDFG to translocate the individuals. USFWS and CDFG shall be allowed 45 days to translocate

individuals from the date the first written notification was submitted by the project proponent (or a longer period agreed to by the project proponent, USFWS, and CDFG).

California red-legged frog (*Rana draytonii*)

Note: The Project will not impact California red-legged frog (CRLF) breeding habitat, but rather only potential estivation habitat. The HCP/NCCP minimization measure for CTS only requires notification if breeding habitat will be impacted.

Minimization. Written notification to USFWS, CDFG, and the ECCHC, including photos and habitat assessment, is required prior to disturbance of any suitable breeding habitat. The project proponent will also notify these parties of the approximate date of removal of the breeding habitat at least 30 days prior to this removal to allow USFW or CDFG staff to translocate individuals, if requested. USFWS or CDFG must notify the project proponent of their intent to translocate California red-legged frog within 14 days of receiving notice from the project proponent. The applicant must allow USFWS or CDFG access to the site prior to construction if they request it.

There are no restrictions under this Plan on the nature of the disturbance or the date of the disturbance unless CDFG or USFWS notify the project proponent of their intent to translocate individuals within the required time period. In this case, the project proponent must coordinate the timing of disturbance of the breeding habitat to allow USFWS or CDFG to translocate individuals. USFWS and CDFG shall be allowed 45 days to translocate individuals from the date the first written notification was submitted by the project proponent (or a longer period agreed to by the project proponent, USFWS, and CDFG).

Golden eagles (*Aquila chrysaetos*)

A USFWS/CDFG approved biologist will conduct a preconstruction survey to establish whether nests of golden eagles are occupied. If nests are identified, the project proponent will avoid and minimize impacts to the maximum extent practicable.

Construction Monitoring & Avoidance and Minimization Measures for Selected Covered Species

If preconstruction surveys for key covered wildlife species establish the presence of any such species, construction monitoring will be necessary. In Table 4, check the boxes for the species that will be assessed during the preconstruction surveys (see Table 3). A summary of the construction monitoring requirements for each species is provided in Table 4 and these measures must be implemented in the event that preconstruction surveys described in Table 3 detect the covered species. A summary of avoidance measures is also provided in Table 4 and these measures must be implemented if construction monitoring detects the species or its sign. These construction monitoring and avoidance requirements are described in detail in Section 6.4.3, Species-Level Measures, of the Final HCP/NCCP.

Construction Monitoring Plan Requirements in Section 6.3.3, Construction Monitoring, of the Final HCP/NCCP:

Before implementing a covered activity, the applicant will develop and submit a construction-monitoring plan to the Implementing Entity⁴ for approval.

Table 4. Applicable Construction Monitoring Requirements

Species Assessed by Preconstruction Surveys	Monitoring Action Required if Species Detected
<input type="checkbox"/> None	N/A
<input checked="" type="checkbox"/> San Joaquin kit fox (p. 6-38)	Establish exclusion zones (>50 ft) for potential dens. Establish exclusion zones (>100 ft) for known dens. Notify USFWS of occupied natal dens.
<input checked="" type="checkbox"/> Western burrowing owl (p. 6-40)	Establish buffer zones (250 ft) around nests. Establish buffer zones (160 ft) around burrows.
<input type="checkbox"/> Giant garter snake (p. 6-44)	Delineate 200-ft buffer around potential habitat. Provide field report on monitoring efforts. Stop construction activities if snake is encountered; allow snake to passively relocate. Remove temporary fill or debris from construction site. Mandatory training for construction personnel.
<input type="checkbox"/> Covered shrimp species (p. 6-47)	Establish buffer around outer edge of all hydric vegetation associated with habitat (50 feet of limit of immediate watershed supporting the wetland, whichever is larger). Mandatory training for construction personnel.
<input type="checkbox"/> Swainson's hawk (p. 6-42)	Establish 1,000-ft buffer around active nest and monitor compliance.
<input checked="" type="checkbox"/> Golden eagle (p. 6-39)	Establish 0.5-mile buffer around active nest and monitor compliance.

Construction Monitoring & Avoidance and Minimization Measures as Required for Selected Covered Wildlife in Table 4

Describe the construction monitoring and avoidance and minimization measures applicable to any species checked in Table 4. A summary of avoidance measures is provided in Table 4, these measures must be implemented if construction monitoring detects the presence of the species. The construction monitoring and avoidance and minimization measures requirements are described in detail in Section 6.4.3, Species-Level Measures, of the HCP/NCCP.

⁴ The East Contra Costa County Habitat Conservancy and the local land use Jurisdiction must review and approve the plan **prior** to the commencement of all covered activities (i.e. construction).

San Joaquin Kit Fox (*Vulpes macrotis mutica*)

Avoidance and Minimization Measures. If a San Joaquin kit fox den is discovered in the proposed development footprint, the den will be monitored for 3 days by a USFWS/CDFG–approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.

- Unoccupied dens should be destroyed immediately to prevent subsequent use.
- If a natal or pupping den is found, USFWS and CDFG will be notified immediately.
- The den will not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFG.
- If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional 5 consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied it may be excavated under the direction of the biologist. Alternatively, if the animal is still present after 5 or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal’s normal foraging activities).

Western Burrowing Owl (*Athene cunicularia hypugaea*)

Avoidance and Minimization and Construction Monitoring. If burrowing owls are located during the breeding season (February 1–August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include the establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg laying and incubation or that the juveniles from the occupied burrows have fledged.

During the nonbreeding season (September 1–January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone (described below).

Mitigations for unavoidable impacts include:

- If occupied burrows for burrowing owls are not avoided, passive relocation will be implemented. Owls should be excluded from burrows in the immediate impact zone and should be in place for 48 hours before excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow.
- Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

Golden eagles (*Aquila chrysaetos*)

Avoidance and Minimization and Construction Monitoring.

Covered activities will be prohibited with 0.5 mile of active nests. Nests can be built and active at almost any time of the year, although mating and egg incubation occurs in late January through

August, with peak activity in March through July. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the EBRPD will coordinate with ECCHC and DFG/USFWS to determine the appropriate buffer size.

Construction monitoring will focus on ensuring that no covered activities occur within the buffer zone established around an active nest. Construction monitoring will ensure that direct effects to golden eagle are minimized.

IV. Landscape and Natural Community-Level Avoidance and Minimization Measures

Describe relevant avoidance and minimization measures required to address the conservation measures listed below. If a conservation measure is not relevant to the project, explain why.

For All Projects

HCP/NCCP Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion

Briefly describe how the project complies with this measure. See page 6-21 of the Final HCP/NCCP for details.

The project activities would be confined to the dry season when storm events are unlikely. Additionally, there will be no in-water construction work so there will be no effect on peak runoff flows and volumes in the short term.

Over the long term through the siting of the bridge and employment of the construction techniques described below will maintain existing hydrologic conditions and minimize erosion.

The bridge piers will be located outside of the creek bed between 10 and 15 feet from the top of the bank at elevation 384.5. The foundations will extend a minimum of 5 feet into bedrock. At a length of 60 feet, the single span bridge will have abutments set back far enough from the top of bank so as not to affect or be affected by seasonal peak stream flows. The proposed use of piers and reinforced concrete walls/grade beams to resist forces directed towards the creek channel installed in these soils will meet the criteria for the site established by the geotechnical engineer [Source: *Geotechnical Engineering Study, Round Valley Pedestrian Bridge, Round Valley Regional Preserve*, Jensen-Van Lienden Associates, Inc. May 2011]. As the bridge span is significantly longer than the 30-foot creek width, hard armor will not be required to protect the abutments.

To reduce the potential for erosion and sedimentation associated with the construction activities the contractor will be required to comply with the protective measures of the State Water Resources Control Board (SWRCP) Construction General Permit, 2009-0009-DWQ (CGP) as set forth in the construction specifications including management of the site by a Qualified SWPPP Practitioner (QSP).

Additional soil stabilization and sedimentation control provisions contained in the project construction specifications follow.

- No site work will begin until the EBRPD approves a Storm Water Pollution Prevention Plan (SWPPP) for the project, which is being required by EBRPD, even though the total disturbed area will be less than one acre and filing is not required by the State Regional Water Quality Control Board.
- Work on site may only take place during the dry season, specifically between August 1 and October 31, 2012.
- The contractor will be required to design, construct, maintain and remove storm water pollution measures set forth in the SWPPP.
- The bridge approaches will be stabilized using compacted aggregate to minimize the potential for sediment to enter the creek.
- Soil disturbed around the abutments, former trail alignment and construction staging areas will be covered with the strippings to encourage reestablishment of the annual grasslands.
- Construction equipment and tools will be maintained and stored within the construction staging area which will be located a minimum of 100 feet from the banks of Round Valley Creek.
- The strippings resulting from clearing and grubbing the construction staging area will be stockpiled at the start of construction and covered or surrounded by erosion control BMPs (e.g., silt fence, wattles, fiber rolls - certified as free of noxious weeds) for replacement at the end of construction to facilitate revegetation of disturbed areas.

HCP/NCCP Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Covered Migratory Birds

Briefly describe how the project complies with this measure. See page 6-23 of the Final HCP/NCCP for details.

Plant communities within the project area have been mapped and identified on aerial photographs. Inventories of specific plant species have been conducted on foot on with a checklist of plant list species previously seen in the same park or area with the latest survey occurring on November 18, 2011. Where a positive identification is obvious, the plant is checked off on (or added to) the District database list. Where an in-field identification is not possible, plant samples with characteristics necessary for positive identification are collected, along with any necessary photographs, and the samples are keyed out later indoors using a binocular dissecting scope, plus printed and on-line references. When the correct species cannot be determined, the plant is identified generally to genus. The final species list is entered into the District Wild Plant database and an appropriate query and report are generated.

Using this methodology “No Covered” or “No-take” plant species have been identified within the project area and it has been determined that no-take plants are absent from the project site, and the project will not result in indirect impacts if such plants are found adjacent to the project site.

Since 1995, District biologists have annually conducted between three and sixteen biological surveys within the Preserve focusing on listed and special status species. During this period, six Alameda whipsnakes (*Masticophis lateralis euryxanthus*) were observed within the riparian

corridor of Round Valley Creek. This includes the August 19, 1998 observation of adult Alameda whipsnake foraging along the streambank of Round Valley Creek within 0.5 miles of the proposed bridge project site (CNDDDB and District records).

There are no known breeding locations documented for white-tailed kite at the project site. Refer to *Table B – Raptor Nests* for recent raptor area search surveys listed under golden eagle for dates of most recent raptor surveys.

Refer to “*Construction Monitoring & Avoidance & Minimization Measures as Required for Selected Wildlife in Table 4*” for a description of mitigations measures that will be taken to ensure no take of covered wildlife species.

For Projects on or adjacent to Streams or Wetlands

HCP/NCCP Conservation Measure 1.7. Establish Stream Setbacks

Briefly describe how the project complies with this measure. See page 6-15 and Table 6-2 of the Final HCP/NCCP for details. For questions on the stream setback requirements, please contact the Conservancy.

Neither the bridge structure nor the installation activity would impact, or be impacted by, changes to the creek flow line as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel. As the bridge will be a clear span installation, this action will result in 0 acres of temporary or permanent impacts (Refer to *Figure 2a - Bridge Cross Section*). Also refer to “*HCP/NCCP Conservation Measure 2.12 Wetland, Pond & Stream Avoidance & Minimization*” below.

HCP/NCCP Conservation Measure 2.12. Wetland, Pond, and Stream Avoidance and Minimization

Briefly describe how the project complies with this measure. See page 6-33 of the Final HCP/NCCP for details.

The project will consist of installation of piers and abutments and a clear span prefabricated bridge structure and minor realignment of existing permeable, natural surface trails to align with the bridge; this use is consistent with the uses established for this preserve. The project will not discharge into or fill waters of the United States, nor will it involve alteration of the streambed as the 60-foot long bridge has been designed to span the 30-foot wide Round Valley Creek channel.

Additionally, the project will apply the following measures to avoid and minimize impacts of covered activities on Round Valley Creek and the associated oak woodland habitat.

- Riparian woodland trees will be temporarily staked/fenced in the field by a qualified biologist; these protective measures will be removed once the construction activities have been completed.
- Construction staging and storage will be located a minimum of 100 feet from the banks of the creek to minimize potential damage to the riparian woodland habitat.

- Personnel conducting ground disturbing activities within or adjacent to the riparian habitat zone will be trained by a qualified biologist in avoidance and minimization measures and the permit obligations of project proponents working under this HCP/NCCP.
- Vehicles and equipment will be parked on existing roads and/or within the designated construction staging area.
- Trash generated by covered activities will be promptly removed from the site.
- No construction or maintenance vehicles will be refueled within 200 feet of Round Valley Creek.
- To reduce the potential for erosion and sedimentation associated with the construction activities, the contractor will be required to comply with the protective measures of the State Water Resources Control Board (SWRCP) Construction General Permit, 2009-0009-DWQ (CGP) as set forth in the construction specifications including management of the site by a Qualified SWPPP Practitioner (QSP).

For Projects adjacent to Protected Natural Lands (existing and projected)

Covered activities adjacent to permanently protected natural lands will require a variety of special considerations to address issues associated with characteristics of the urban-wildland interface. These considerations are intended to minimize the impacts of development on the integrity of habitat preserved and protected under the terms of the Plan. Permanently protected natural lands are defined as any of the following (see the latest Preserve System map on the Conservancy web site, www.cocohcp.org).

- Publicly owned open space with substantial natural land cover types including but not limited to state and regional parks and preserves and public watershed lands (local and urban neighborhood parks are excluded).
- Deed-restricted private conservation easements.
- HCP/NCCP Preserve System lands.
- Potential HCP/NCCP Preserve System lands (see Figure 5-3 in the HCP/NCCP).

HCP/NCCP Conservation Measure 1.6. Minimize Development Footprint Adjacent to Open Space

Briefly describe how the project complies with this measure. See page 6-14 of the Final HCP/NCCP for details.

The project is located in Round Valley Regional Preserve, a publicly owned, permanently protected natural open space with substantial natural land cover. Installation of the bridge will improve public recreation access within the Preserve in keeping with designated uses. The project will not alter the existing habitat characteristics of these open space lands as the 60-foot long bridge has been designed to span the 30-foot wide Round Valley Creek channel without removing any of the mature oak trees that line the creek or impeding the movement of wildlife within the riparian corridor. To ensure no loss of mature trees occurs, existing trees in the project vicinity will be protected in place during construction. The strippings from this site will be stockpiled and

covered for redistribution at the close of construction. At the end of construction strippings accumulated from grading activities will be distributed over the temporary construction area and abandoned trail segments to encourage recovery of annual grasslands, thereby minimizing the development imprint on adjacent open space.

HCP/NCCP Conservation Measure 1.8. Establish Fuel Management Buffer to Protect Preserves and Property

Briefly describe how the project complies with this measure. See page 6-18 of the Final HCP/NCCP for details.

The project is located wholly within Round Valley Regional Preserve, a publicly owned, permanently protected natural open space with substantial natural land cover. This regional preserve is designated as a Moderate Fire Hazard Severity Zone in an area of State responsibility in the vicinity of the Marsh Creek Staging Area and High Fire Hazard Severity Zone in the area of the proposed construction site (Source: Internet www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.php, accessed April 21, 2011). However, the proposed project will not add any new uses that would create additional long term fire risks.

Installation of the bridge will improve public recreation access within the Preserve in keeping with designated uses and will facilitate egress in the event of an emergency. The project will not alter the existing characteristics of these open space lands.

Over the short term, the proposed project will involve the use of heavy equipment that could magnify fire risk, particularly during warmer days. To minimize this risk, the contractor will be required to comply with the fire safety requirements set forth in the project specifications for the project. Measures contained in the project specifications include, but may not limited to, the following measures to reduce fire hazards:

- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment.
- Work crews will be required to clear and grub an area of dry grass and brush at a location agreed upon by the Contractor and District Representative prior to project commencement. This area is to be used as a construction staging area for parking construction vehicles and supplies.
- Park staff will be required to have a District radio on-site, which will allow for direct contact to Calfire and the centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire. Fire suppression equipment (i.e., fire extinguishers) will also be available at the project site.

HCP/NCCP Conservation Measure 1.9. Incorporate Urban-Wildland Interface Design Elements

Briefly describe how the project complies with this measure. See page 6-20 of the Final HCP/NCCP for details.

Installation of the Round Valley Creek Bridge will improve public recreation access within the Preserve in keeping with designated uses. The project will not alter the existing characteristics of these open space lands nor impact views at an urban-wildland interface.

For Rural Infrastructure Projects

Rural infrastructure projects provide infrastructure that supports urban development within the urban development area. Such projects are divided into three categories: transportation projects, flood protection projects, and utility projects. Most rural road projects covered by the Plan will be led by Contra Costa County. All flood protection projects covered by the Plan will be led by the County Flood Control District. Utility projects will likely be led by the private companies that own the utility lines. A complete discussion of rural infrastructure projects is presented in Section 2.3.2 of the Final HCP/NCCP beginning on page 2-18.

HCP/NCCP Conservation Measure 1.12. Implement Best Management Practices for Rural Road Maintenance

Briefly describe how the project complies with this measure. See page 6-25 of the Final HCP/NCCP for details.

This bridge and trail project will include the following BMPs consistent with HCP/NCCP Conservation Measure 1.12 for Rural Road Maintenance:

- There will be no in-water construction work.
- Active construction areas will be watered regularly to minimize the impact of dust on adjacent vegetation and wildlife habitats, as warranted.
- Construction equipment and tools will be maintained and stored within the construction staging area, which will be located a minimum of 100 feet from the banks of Round Valley Creek.
- The strippings resulting from clearing and grubbing will be stockpiled at the start of construction and covered or surrounded by erosion control BMPs (e.g., silt fence, wattles fiber rolls). At the end of construction the strippings will be redistributed over the area to encourage reestablishment of the annual grasslands.
- No erodible materials will be deposited into watercourses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
- Work will be seasonally timed to avoid or minimize adverse effects on active nests of resident and migratory birds, including the covered birds (e.g., golden eagle, western burrowing owl).
- No herbicides or pesticides will be employed as part of the project.
- The bridge has been designed and will be installed as a clear span structure that will not impede wildlife to movement along or across the creek.

HCP/NCCP Conservation Measure 1.13. Implement Best Management Practices for Flood Control Facility Maintenance

Briefly describe how the project complies with this measure. See page 6-26 of the Final HCP/NCCP for details.

N/A; this is not a flood control facility maintenance project. Refer to Section 2.12 and Measure 1.14 of this document for applicable best management practices that will be implemented.

HCP/NCCP Conservation Measure 1.14. Design Requirements for Covered Roads outside the Urban Development Area

Briefly describe how the project complies with this measure. See page 6-27 of the Final HCP/NCCP for details.

Conservation Measure 1.14 is not applicable to this project.

V. Mitigation Measures

Complete and Attach Exhibit 1 (Permanent Impact Fees) and/or Exhibit 2 (Temporary Impact Fees) Fee Calculator(s) for Permanent and Temporary Impacts.

- Briefly describe the amount of fees to be paid and when.
- See Section 9.3.1 of the HCP/NCCP for details. If land is to be dedicated in lieu of fees or if restoration or creation of jurisdictional wetlands or waters is to be performed in lieu of fees, summarize these actions here and attach written evidence that the Conservancy has approved these actions in lieu of fees.

The HCP/NCCP fee for permanent impacts [0.15 acres, 6,560 SF] covers the area that will be disturbed to create the abutments and new trail approaches required to conform to the bridge crossing. See Exhibit 1 for the permanent impact fees.

The HCP/NCCP fee for temporary impacts [0.83 acres, 36,015 SF] includes the areas that will be temporarily disturbed by the project including the construction staging areas. See Exhibit 2 for the temporary impact fees.

Mitigation Fees will be paid before or at the time the construction permit is issued.

Figures & Tables

Figure 1a - Vicinity Map

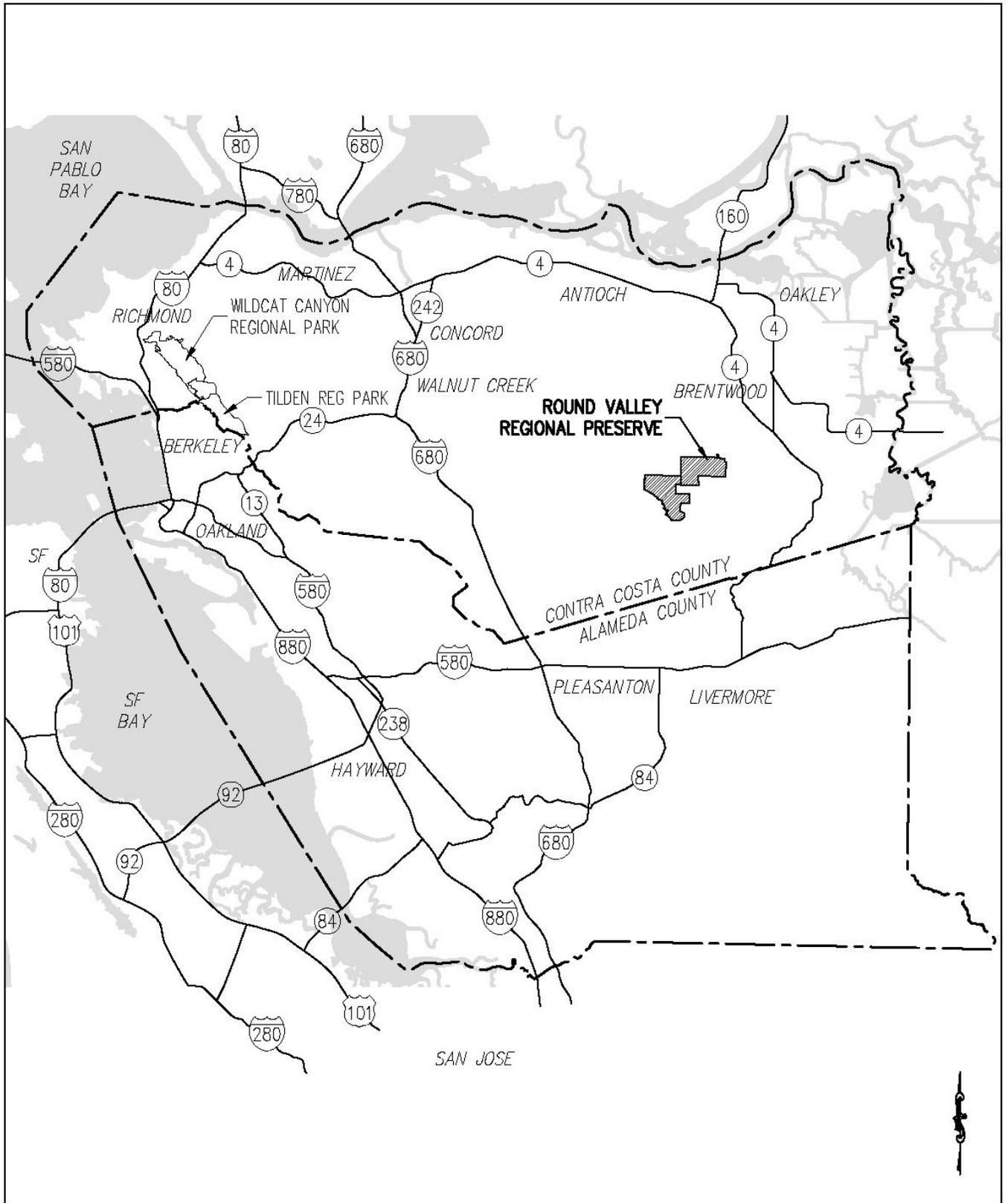


Figure 1b – Park Location Map

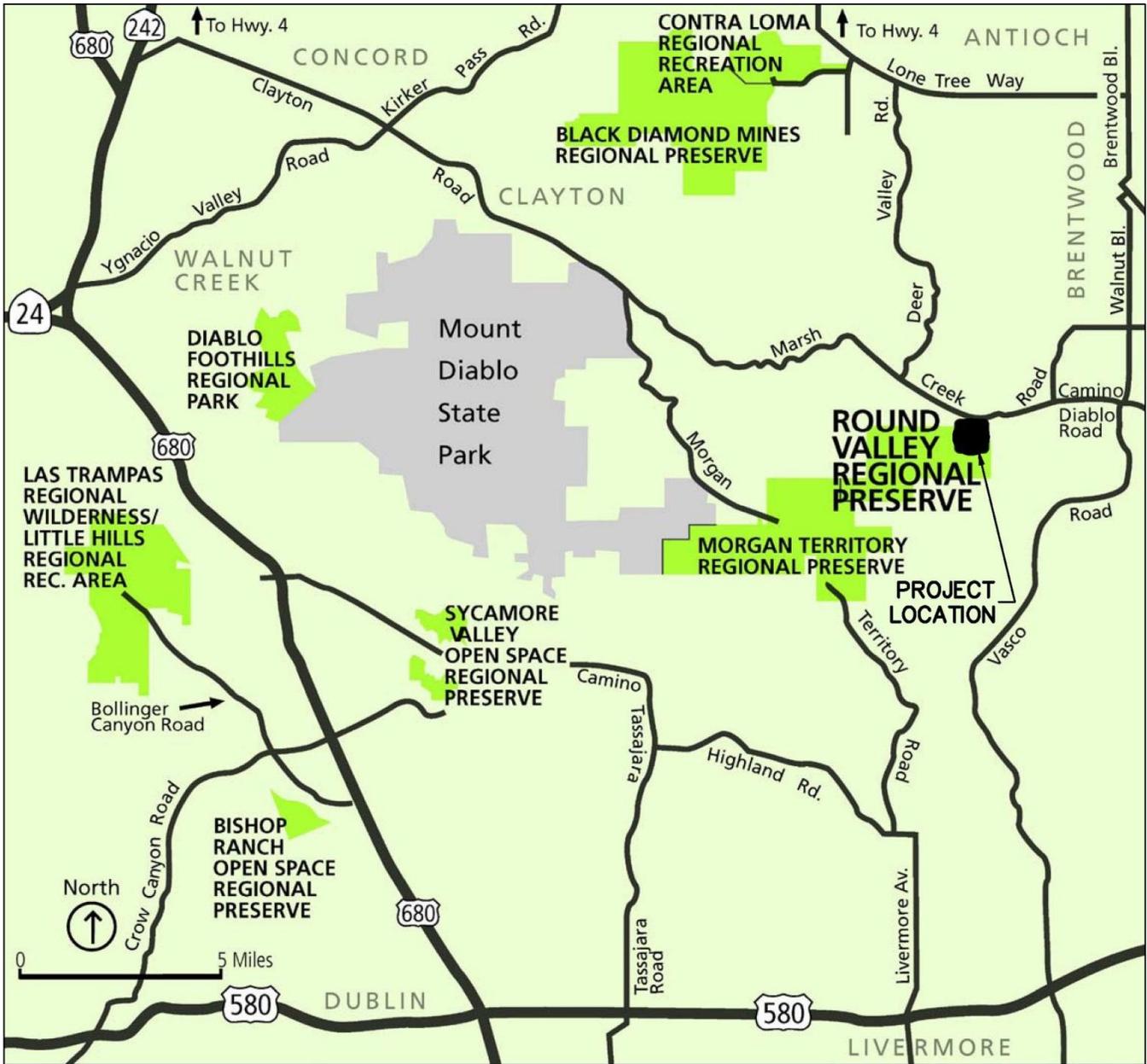
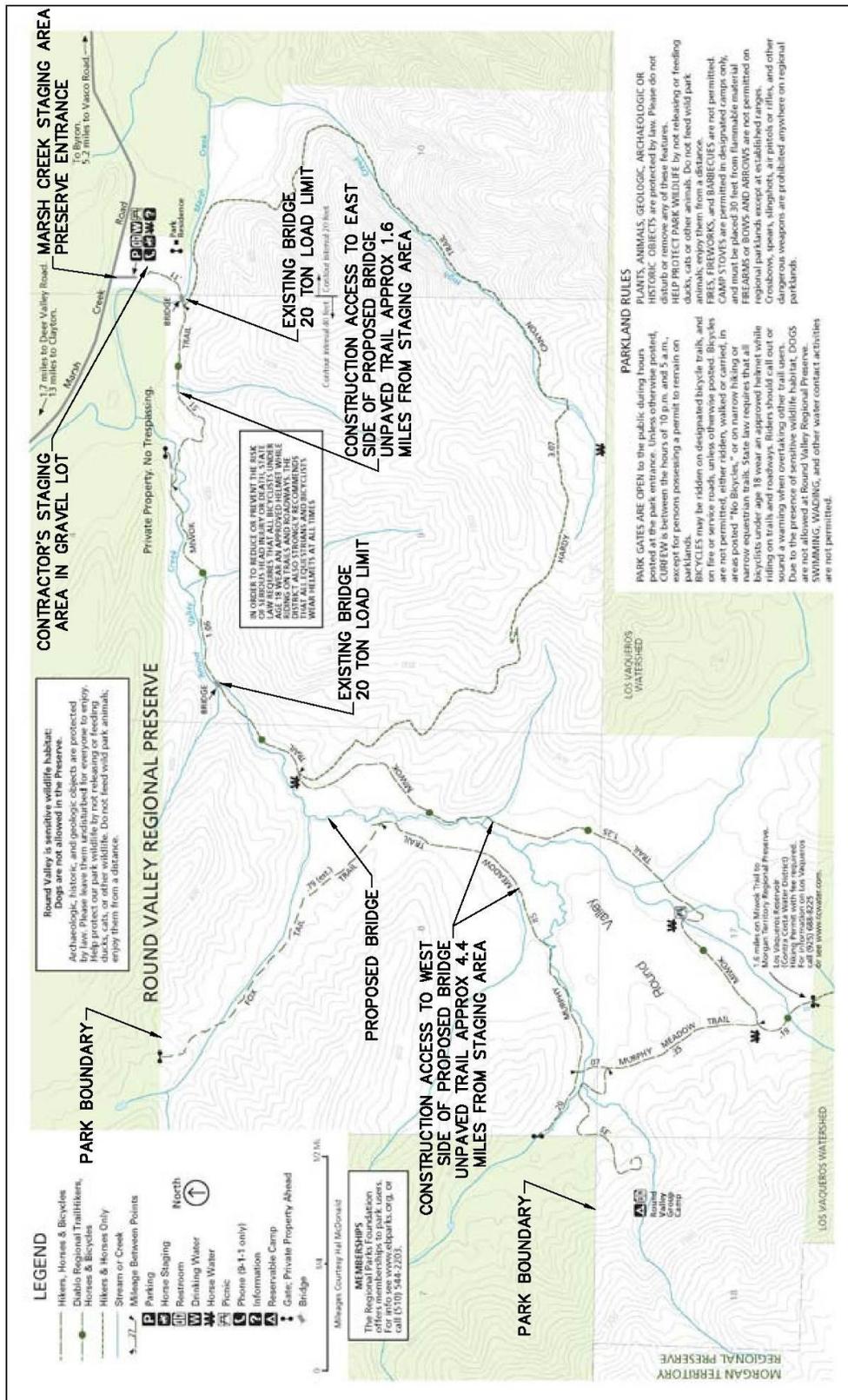


Figure 1c – Project Site Location within the Preserve



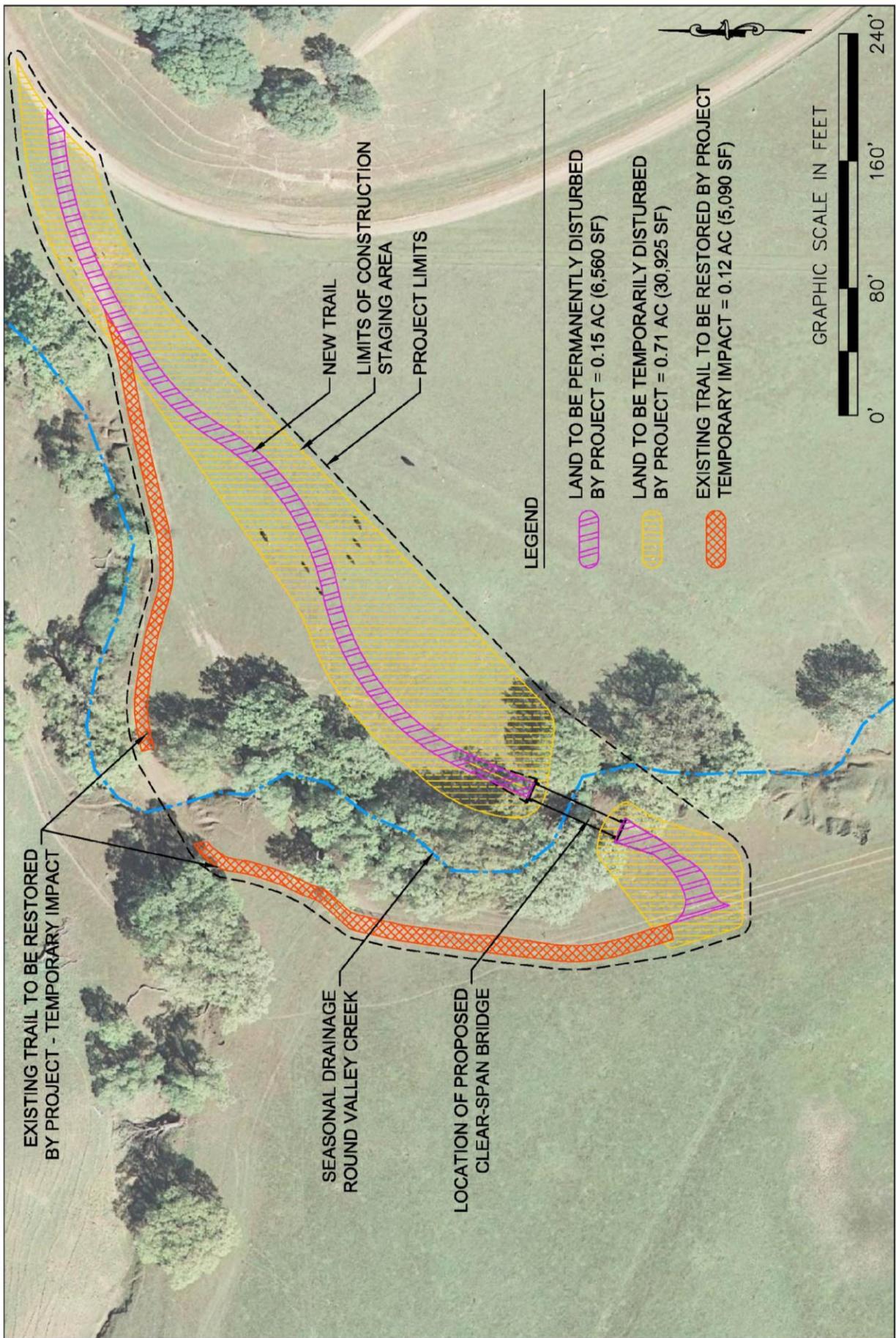


Figure 2 - Project Site Plans

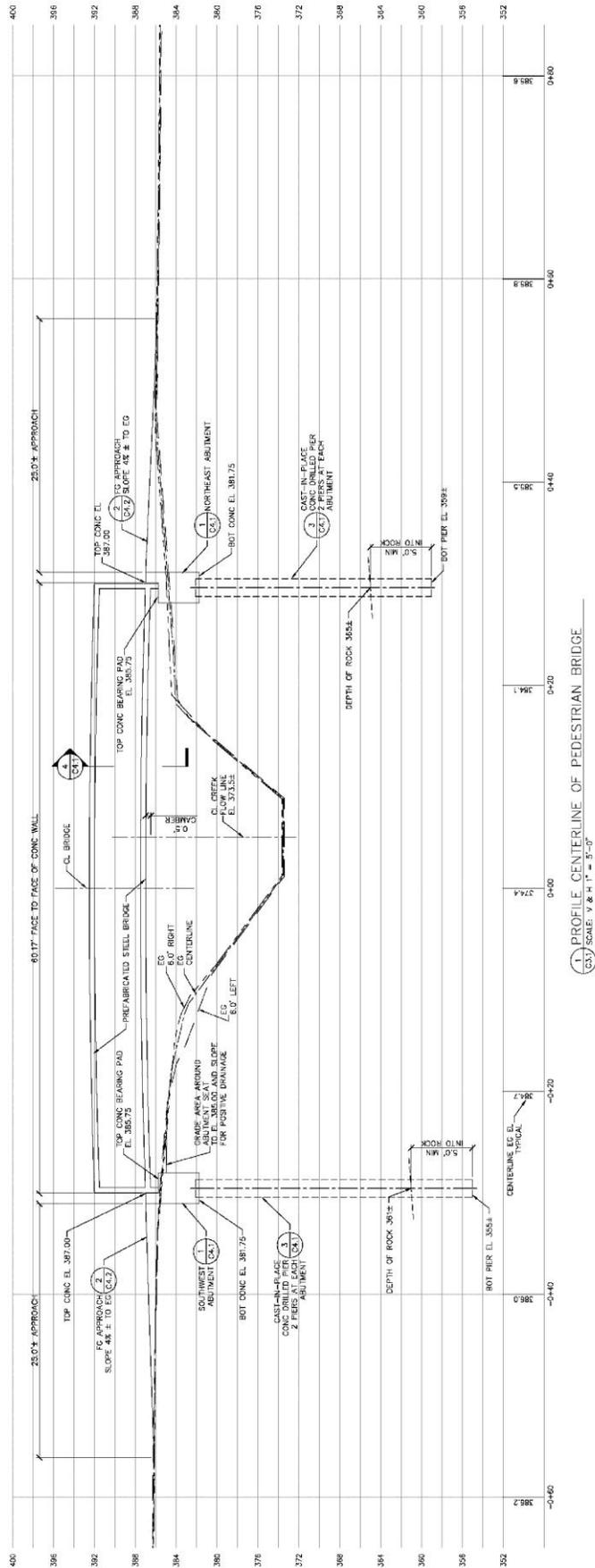


Figure 2a - Project Site – Bridge Profile

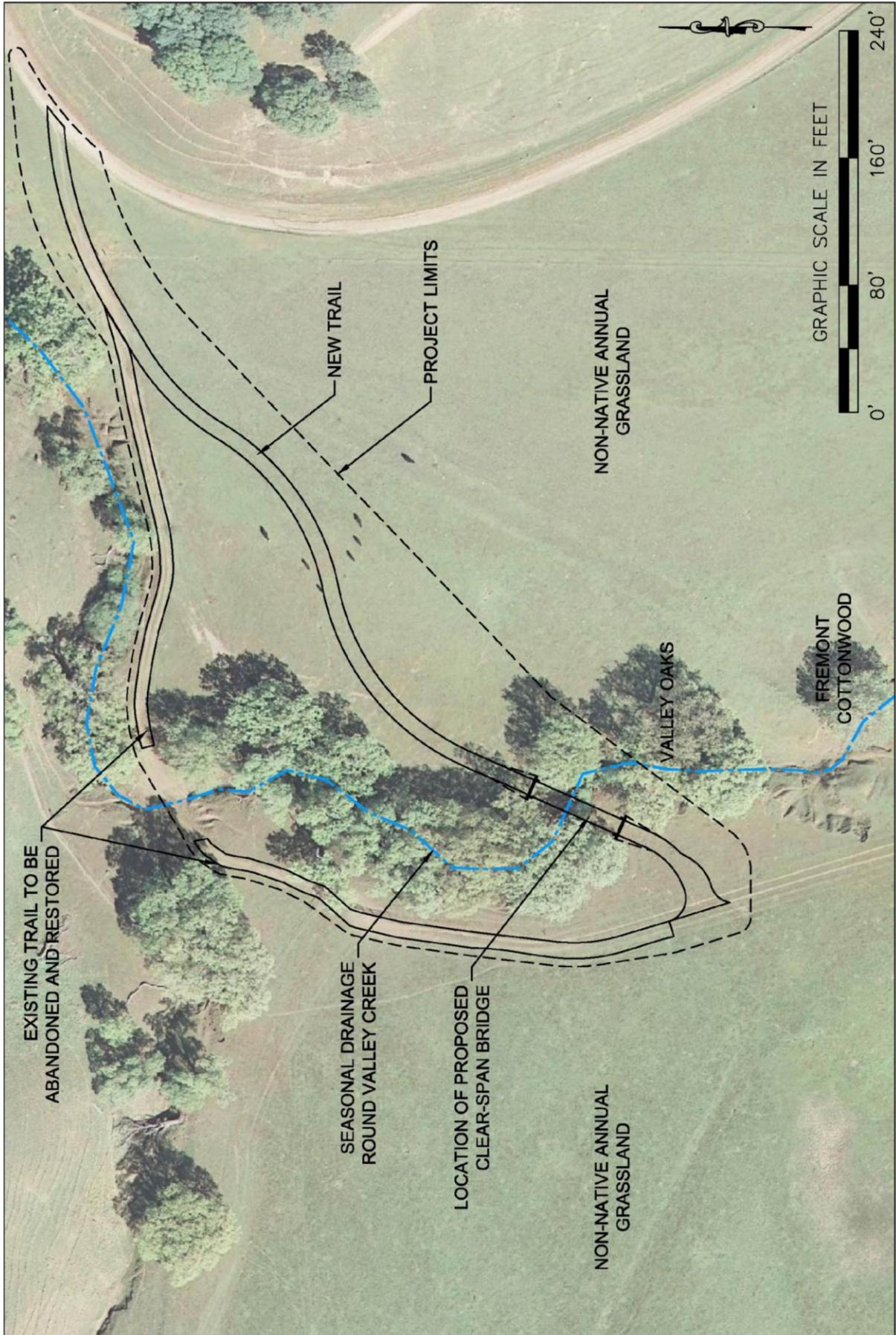


Figure 3a – Land Cover Map

Figure 3b – Representative Photos of the Project Site



View Round Valley looking north toward Round Valley Creek Bridge Site



View of Round Valley Creek Bridge Site from top of the east bank looking west



View of Round Valley Creek Bridge Site from top of the east bank looking south



View of Round Valley Creek Bridge Site looking south from bottom of creek channel

Figure 4 - Planning Survey Species Habitat Map

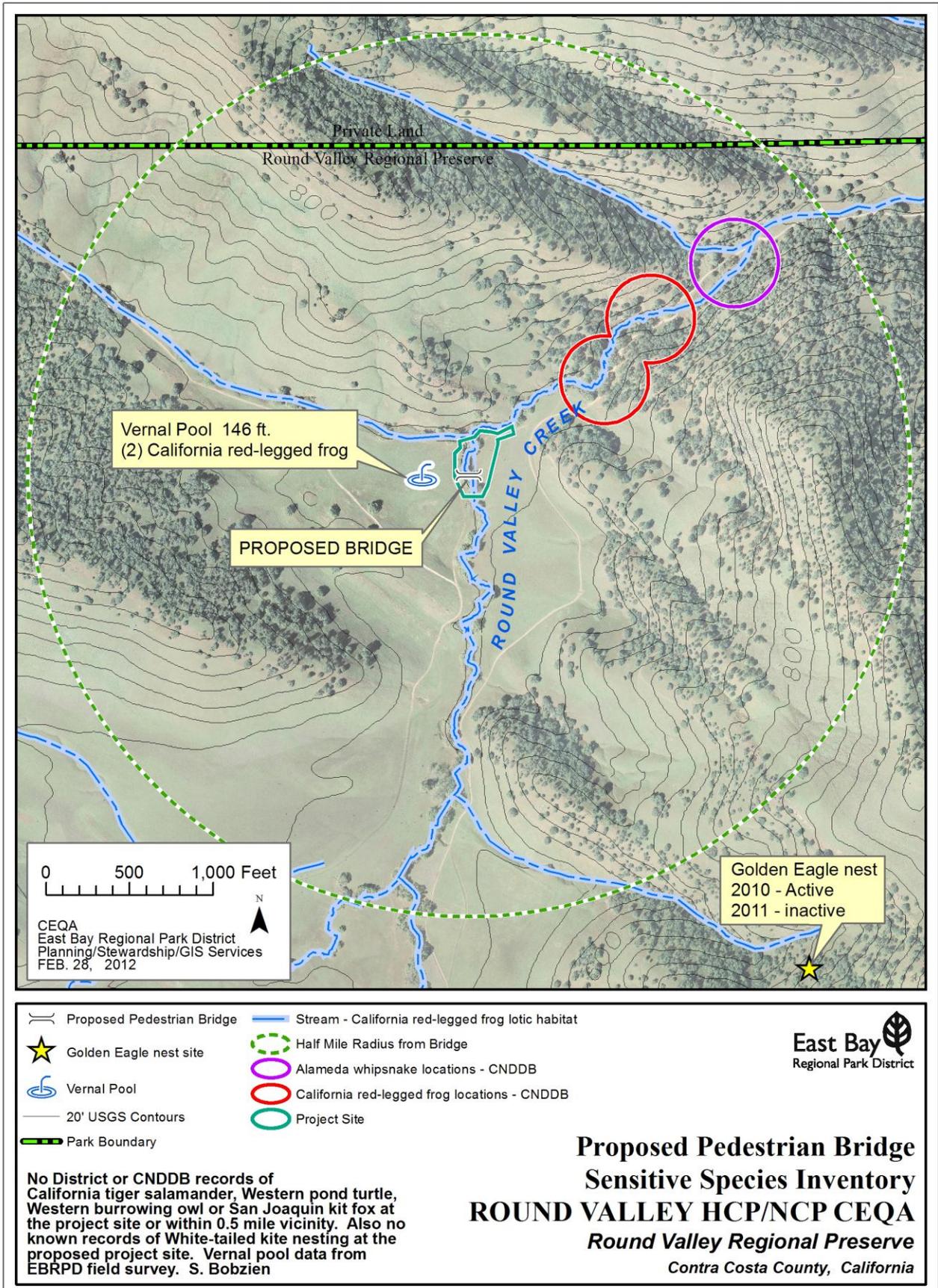


Table A- Round Valley Proposed Bridge - Plant Survey 11-01-2011

Survey conducted on November 1, 2011 by Wilde Legard - EBRPD Botanist

Scientific Name (Jepson eFlora - November 2011)	Common Name	Family
<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish Clover	Fabaceae
<i>Artemisia douglasiana</i>	California Mugwort	Asteraceae
<i>Asclepias fascicularis</i>	Whorled/Narrow-leaf Milkweed	Apocynaceae
<i>Brassica nigra</i>	Black Mustard	Brassicaceae
<i>Bromus diandrus</i>	Ripgut Brome	Poaceae
<i>Bromus hordeaceus</i>	Soft Brome	Poaceae
<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i>	Italian Thistle	Asteraceae
<i>Centaurea solstitialis</i>	Yellow Star Thistle	Asteraceae
<i>Croton setigerus</i>	Turkey Mullein	Euphorbiaceae
<i>Elymus caput-medusae</i>	Medusahead	Poaceae
<i>Elymus glaucus</i> subsp. <i>glaucus</i>	Blue Wild Rye	Poaceae
<i>Festuca bromoides</i>	Six-weeks Fescue	Poaceae
<i>Holocarpha obconica</i>	San Joaquin Tarplant	Asteraceae
<i>Juncus</i> sp.	Rush	Juncaceae
<i>Malvella leprosa</i>	Alkali Mallow	Malvaceae
<i>Mimulus guttatus</i>	Golden Monkey Flower	Phrymaceae
<i>Polypogon monspeliensis</i>	Annual Rabbitfoot Grass	Poaceae
<i>Populus fremontii</i> subsp. <i>fremontii</i>	Fremont Cottonwood	Salicaceae
<i>Quercus lobata</i>	Valley Oak	Fagaceae
<i>Rhamnus ilicifolia</i>	Hollyleaf Redberry	Rhamnaceae
<i>Rosa californica</i>	California Wild Rose	Rosaceae
<i>Rumex crispus</i>	Curly Dock	Polygonaceae
<i>Scrophularia californica</i>	California Figwort	Scrophulariaceae
<i>Toxicodendron diversilobum</i>	Poison Oak	Anacardiaceae
<i>Xanthium strumarium</i>	Cocklebur	Asteraceae

Friday, November 18, 2011

Exhibit 1: HCP/NCCP FEE CALCULATOR WORKSHEET

PROJECT APPLICANT INFO:

Project Applicant: East Bay Regional Park District
Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra
 Project Name: Costa County
 APN (s): 007-050-002-0
 Date: May 3, 2012 Jurisdiction: Covered through EBRPD

DEVELOPMENT FEE (see appropriate ordinance or HCP/NCCP Figure 9-1 to determine Fee Zone)

Acreage of land to be permanently disturbed (from Table 1)¹

	Full Development Fee		Fee per Acre (subject to change on 3/15/13)	
Fee Zone 1		x	\$10,584.32	= \$0.00
Fee Zone 2	0.15	x	\$21,168.64	= \$3,175.30
Fee Zone 3		x	\$5,292.61	= \$0.00
Fee Zone 4 ²		x	\$15,876.48	= \$0.00
Development Fee Total =				\$3,175.30

**WETLAND MITIGATION FEE

	Acreage of wetland		Fee per Acre (subject to change on 3/15/13)	
Riparian woodland / scrub		x	\$69,992.40	= \$0.00
Perennial Wetland		x	\$120,428.10	= \$0.00
Seasonal Wetland		x	\$252,178.50	= \$0.00
Alkali Wetland		x	\$234,680.40	= \$0.00
Ponds		x	\$120,428.10	= \$0.00
Aquatic (open water)		x	\$59,699.40	= \$0.00
Slough / Channel		x	\$127,633.20	= \$0.00

Linear Feet

Streams				
Streams 25 Feet wide or less (Fee is per Linear Foot)		x	\$418.93	= \$0.00
Streams greater than 25 feet wide (Fee is per Linear Foot)		x	\$630.96	= \$0.00

Wetland Mitigation Fee Total = \$0.00

FEE REDUCTION

Development Fee reduction (authorized by Implementing Entity) for land in lieu of fee _____
 Development Fee reduction (up to 33%, but must be approved by Conservancy) for permanent assessments _____
 Wetland Mitigation Fee reduction (authorized by Implementing Entity) for wetland restoration/creation performed by applicant _____

Reduction Total = \$0.00

CALCULATE FINAL FEE

Development Fee Total	\$3,175.30
Wetland Mitigation Fee Total +	\$0.00
Fee Subtotal	\$3,175.30

Contribution to Recovery + _____

TOTAL AMOUNT TO BE PAID = \$3,175.30

Notes:

1 City/County Planning Staff will consult the land cover map in the Final HCP/NCCP and will reduce the acreage subject to the Development Fee by the acreage of the subject property that was identified in the Final HCP/NCCP as urban, turf, landfill or aqueduct land cover.

2 "Fee Zone 4" is not shown on Figure 9.1 of the HCP/NCCP but refers to the fee applicable to those few covered activities located in northeastern Antioch (see page 9-21 of the HCP)

Template date: March 15, 2012

Exhibit 2: TEMPORARY IMPACT FEE CALCULATOR WORKSHEET

PROJECT APPLICANT INFO:

Project Applicant: East Bay Regional Park District

Project Name: Round Valley Bridge, Round Valley Regional Preserve, Contra Costa County

APN (s): 007-050-002-0

Date: May 3, 2012 Jurisdiction: Covered through EBRPD

TEMPORARY DEVELOPMENT IMPACT FEE (see appropriate ordinance or HCP/NCCP Figure 9-1 to determine Fee Zone)

	Acreage of land to be temporarily disturbed (from Table 1) ¹		Years of Disturbance (2 years is the minimum for ground-disturbing)		Fee per Acre (subject to change on 3/15/13)	
Fee Zone 1		X		/30	x	\$10,584.32 = \$0.00
Fee Zone 2	0.83	X	2	/30	x	\$21,168.64 = \$1,171.33
Fee Zone 3		X		/30	x	\$5,292.61 = \$0.00
Fee Zone 4 ²		X		/30	x	\$15,876.48 = \$0.00

Temporary Impact Fee Total = \$1,171.33

**TEMPORARY WETLAND MITIGATION FEE

	Acreage of wetland		Yrs. Of Disturbance (minimum shown)		Fee per Acre (subject to change on 3/15/13)	
Riparian woodland / scrub			5.00	x	\$69,992.40 = \$ -	
Perennial Wetland			2.00	x	\$120,428.10 = \$ -	
Seasonal Wetland			2.00	x	\$252,178.50 = \$ -	
Alkali Wetland			2.00	x	\$234,680.40 = \$ -	
Ponds			2.00	x	\$120,428.10 = \$ -	
Aquatic (open water)			2.00	x	\$59,699.40 = \$ -	
Slough / Channel			2.00	x	\$127,633.20 = \$ -	

Linear Feet

Streams						
Streams 25 Feet wide or less (Fee is per Linear Foot)	0.00		2.00	x	\$418.93 = \$0.00	
Streams greater than 25 feet wide (Fee is per Linear Foot)			2.00	x	\$630.96 = \$0.00	

Wetland Mitigation Fee Total = \$ -

FEE REDUCTION

Development Fee reduction (authorized by Implementing Entity) for land in lieu of fee _____
 Development Fee reduction (up to 33%, but must be approved by Conservancy) for permanent assessments _____
 Wetland Mitigation Fee reduction (authorized by Implementing Entity) for wetland restoration/creation performed by applicant _____

Reduction Total = \$0.00

CALCULATE FINAL TEMPORARY IMPACT FEES

Development Fee Total \$1,171.33
 Wetland Mitigation Fee Total + \$0.00
Fee Subtotal = \$1,171.33

TOTAL TEMPORARY IMPACT FEES TO BE PAID = \$1,171.33

Notes:

1 City/County Planning Staff will consult the land cover map in the Final HCP/NCCP and will reduce the acreage subject to the Development Fee by the acreage of the subject property that was identified in the Final HCP/NCCP as urban, turf, landfill or aqueduct land cover.

2 "Fee Zone 4" is not shown on Figure 9.1 of the HCP/NCCP but refers to the fee applicable to those few covered activities located in northeastern Antioch (see page 9-21 of the HCP).

Template date: March 15, 2012

**INITIAL STUDY
and
PROPOSED MITIGATED NEGATIVE DECLARATION
for
ROUND VALLEY PEDESTRIAN BRIDGE
ROUND VALLEY REGIONAL PRESERVE
CONTRA COSTA COUNTY, CALIFORNIA**



March 30, 2012

Lead Agency:
East Bay Regional Park District
P.O. Box 5381, Oakland, CA 94605
www.ebparks.org

TABLE OF CONTENTS

Section	Page
1.0 INTRODUCTION	1
1.1 INTRODUCTION AND REGULATORY GUIDANCE.....	1
1.2 LEAD AGENCY	1
1.3 PURPOSE	1
1.4 SUMMARY OF FINDINGS	1
 2.0 PROJECT DESCRIPTION	 2
2.1 INTRODUCTION	2
2.2 PROJECT LOCATION	2
2.3 PROJECT PURPOSE AND GOALS	2
2.4 PROJECT BACKGROUND & ENVIRONMENTAL SETTING	2
2.5 PROJECT DETAILS	6
2.6 REGULATORY SETTING	9
2.7 PROJECT REVIEW & APPROVAL	10
 3.0 SUMMARY OF MITIGATION MEASURES	 11
 4.0 INITIAL STUDY CHECKLIST	 14
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED.....	15
DETERMINATION	16
4.1. AESTHETICS	17
4.2. AGRICULTURE & FOREST RESOURCES.....	19
4.3. AIR QUALITY	22
4.4. BIOLOGICAL RESOURCES	24
4.5. CULTURAL RESOURCES.....	36
4.6. GEOLOGY AND SOILS.....	38
4.7. GREENHOUSE GASES.....	42
4.8. HAZARDS AND HAZARDOUS MATERIALS	44
4.9. HYDROLOGY AND WATER QUALITY.....	47
4.10. LAND USE AND PLANNING.....	50
4.11. MINERAL RESOURCES.....	52
4.12. NOISE	53
4.13. POPULATION AND HOUSING	55
4.14. PUBLIC SERVICES.....	56
4.15. RECREATION	58
4.16. TRANSPORTATION/TRAFFIC	59
4.17. UTILITIES AND SERVICE SYSTEMS	62
4.18. MANDATORY FINDINGS OF SIGNIFICANCE.....	64
 5.0 REPORT PREPARATION, ACRONYMS & REFERENCES	 66
5.1 REPORT PREPARERS.....	66
5.2 ACRONYMS	66
5.3 REFERENCES.....	66
 TABLES AND FIGURES	
Figure 1 - Project Location	3
Figure 2 - Site Plan	4
Figure 3 - Bridge Profile	8
Figure 4 - Views of the Project Site	18
Table 4-1 - Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors	22
Table A-1 – Round Valley Bridge – Plant Survey I - 01-2011	69

I.0 INTRODUCTION

I.1 INTRODUCTION AND REGULATORY GUIDANCE

The East Bay Regional Park District (EBRPD) has prepared construction documents to describe the proposed project; *Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County*. The purpose of this Initial Study (IS) is to determine whether the implementation of these Preserve infrastructure improvements could result in potentially significant effects to the environment, and, if so, to incorporate mitigation measures to eliminate or reduce the project's potentially significant adverse effects to less than significant levels.

If, after consideration of this IS, and any comments received during the public review period, the District finds no substantial evidence that the proposed project would have a significant adverse effect on the environment, then a Mitigated Negative Declaration (MND) will be submitted for adoption by the EBRPD Board of Directors, as provided in the California Environmental Quality Act (CEQA), Section 21064.

I.2 LEAD AGENCY

The District is the CEQA Lead Agency and has prepared this Initial Study to provide agencies and the public with information about the proposed project's potential impacts on the local and regional environment. This document has been prepared in compliance with CEQA (1970) as amended and the State CEQA Guidelines, California Administrative Code, Title 14, Division 6, Chapter 3.

I.3 PURPOSE

The purpose of this document is to evaluate the potential environmental effects of the proposed *Round Valley Pedestrian Bridge* project in Round Valley Regional Preserve, Contra Costa County and to provide, as appropriate, mitigation measures into the project to avoid any potentially significant impacts or reduce them to a less than significant level.

I.4 SUMMARY OF FINDINGS

Chapter 4 of this document contains the IS Checklist which identifies the potential environmental impacts by resource area and provides a brief discussion of each impact that could potentially result from implementation of the proposed project. Based on the IS and supporting environmental analysis provided in this document, together with the incorporation of mitigation measures, the proposed project would eliminate or result in less than significant impacts for the following issues: aesthetics, agriculture and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

In accordance with §15064(f) of the CEQA Guidelines, a MND shall be prepared if the proposed project would not have a significant effect on the environment after the inclusion of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation of mitigation measures, the proposed project would have a significant effect on the environment. It is proposed that a MND be adopted in accordance with the CEQA Guidelines.

2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

Project Name: *Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County, California.*

Project Summary: The EBRPD is proposing to construct access improvements at Round Valley Regional Preserve. Activities involved in implementing the proposed project include:

- Installation of abutments and a 60-foot clear span, prefabricated steel bridge over Round Valley Creek; and
- Minor realignment of the existing natural surface trails to conform to the bridge approaches.

The IS for the proposed project has been prepared in conformance with the specifications of CEQA, and the State CEQA Guidelines. Compliance with CEQA is required due to state and local jurisdiction over the proposed project.

EBRPD would assume the lead agency role under CEQA, with the East Contra Costa Habitat Conservancy and California Department of Fish and Game acting as local and state responsible, interested, or trustee agencies.

2.2 PROJECT LOCATION

Round Valley Preserve is located approximately six miles west of Brentwood in Contra Costa County and is situated within two USGS 7.5 Quads. The Marsh Creek Staging Area (Preserve entrance) on the south side of Marsh Creek Road is within the Byron Hot Springs Quad, while the bridge site is on the Tassajara Quad. Construction activities and construction staging would take place within an approximately one acre site contained within APN 007-050-002-0 (Latitude 37d 51' 45"N, Longitude 121d 46' 25" W) (See *Figure 1 - Project Location*).

2.3 PROJECT PURPOSE AND GOALS

The purpose of the *Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County, California* is to improve public access across Round Valley Creek through the construction of a pedestrian/bike bridge that would connect to existing trails on either side of the creek.

2.4 PROJECT BACKGROUND AND ENVIRONMENTAL SETTING

Preserve History. Round Valley Regional Preserve consists of approximately 2,024 acres, comprised of the former Murphy, Purviance and Aswad properties owned in fee by East Bay Regional Park District (EBRPD) and a ten-acre leased parcel adjacent to Marsh Creek Road owned by the Cowell Foundation. The 700-acre former Murphy lands that form the core of what is now known as Round Valley was purchased by EBRPD in 1988.

Project Setting. The project site is located at Round Valley Creek approximately one and one-half miles from the Marsh Creek Staging Area.

The proposed bridge would cross Round Valley Creek, a tributary of Marsh Creek that originates in the uplands surrounding Round Valley. The creek flows until late spring or early summer, after which the water pools at intervals along the stream course. The elevation at the top of the creek bank is 384.5. The elevation at the toe of the bank is 373.5. At the project site, the creek has incised a channel that runs through an alluvial plain. The area is generally level with minor elevation changes in the vicinity of the creek banks. The channel is

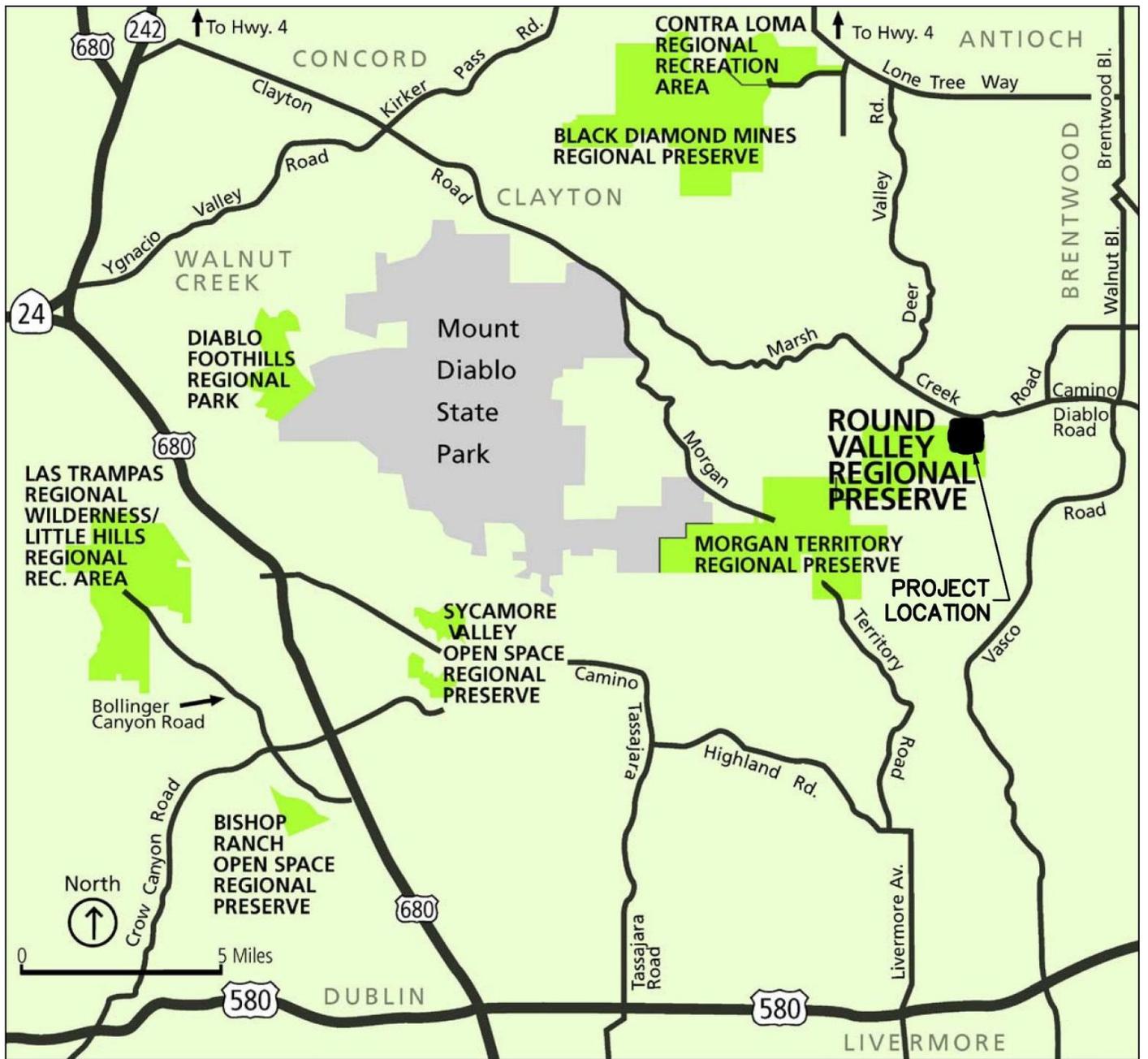


Figure 1 – Project Location

approximately 30 feet wide and 11 feet deep at the proposed bridge site. The creek banks are marked by erosion and shallow landsliding upstream and downstream of the proposed bridge site.

Biological Resources.

Round Valley Creek, a tributary of Marsh Creek that originates in the uplands surrounding Round Valley crosses through the site. The proposed trail bridge would cross Round Valley Creek and the trail approaches would be routed through open non-native annual grasslands. Grassland habitat comprises 0.83 acre of the site with a 0.09-acre area of intermittent stream habitat bisecting the grassland area. Grassland plants include annual rabbitfoot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and golden monkey flower (*Mimulus guttatus*). Tree cover, which is comprised predominately of valley oak (*Quercus lobata*), is confined to a narrow band along the banks of the creek. A spring survey is planned to confirm the absence/presence of other species that may occur within the project area. (Refer to *Table A-1 – Round Valley Bridge - Plant Survey 11-01-2011* for a more comprehensive list of plants).

Round Valley Creek supports the federally threatened California red-legged frog (*Rana draytonii*) and the project site constitutes suitable habitat for the following special status species: California tiger salamander (*Ambystoma californiense*), western burrowing owl (*Actinemys marmorata*), Alameda whipsnake (*Masticophis lateralis euryxanthus*), golden eagles (*Aquila chrysaetos*), western burrowing owl (*Athene cunicularia*), and white tailed kite (*Elanus leucurus*). The Preserve is also within the northern habitat range extremes in California for the Federal and State listed species, San Joaquin kit fox (*Vulpes macrotis mutica*).

(Sources: California Natural Diversity Database [CNDDDB], environmental impact reports from nearby projects [Jones and Stokes, 1986-1993] Los Vaqueros biological surveys [California Department of Fish and Game, 1983] and EBRPD biological field surveys: California red-legged frogs 1996 –present, California tiger salamander 1996, 2000, 2004, 2008, San Joaquin kit fox 1997, 1998, 1999, Golden Eagle 2005-2011, plant surveys 1996, 1997, 2011. In addition, from 1999 to present the District biologists have annually conducted surveys for a variety of species throughout the Preserve. Each year District biologists conduct between three and sixteen biological and habitat suitability assessments for a variety of listed and non-listed species within the Preserve, including San Joaquin Kit Fox, California red-legged frogs, California tiger salamander, Golden Eagle, burrowing owl, white tailed kite and Alameda whipsnake, which are documented in the District staff field logs).

Existing Facilities and Infrastructure. Preserve facilities include: the Marsh Creek Road Staging Area; a preserve residence with electrical and phone service; approximately nine miles of natural surface trails; and the reservable Round Valley Group Camp with water service, picnic tables and vault toilets.

Access. The Preserve entrance is located along Marsh Creek Road, an east-west connector road. This staging area is located approximately six miles south of Brentwood and six miles west of Byron in Contra Costa County. The staging area consists of a compacted gravel parking area for 40 cars and 10 horse trailers, restroom facilities (vault toilets), and a family picnic area with water service.

Access to the project site from the staging area is available from the Miwok (1.7 miles) or Hardy Canyon Trails (3.2 miles). The bridge would connect these two trails to the Fox Tail Trail and the Murphy Meadow Trail, which provide access to the Round Valley Group Camp located 1.3 miles from the project site.

There are three emergency vehicle and maintenance access (EVMA) roads available for EBRPD use; one easement over Contra Costa Water District lands along the southern Preserve boundary; one easement

over private lands on the north side of the Preserve; and the third access that begins at the Marsh Creek Staging Area.

Land Uses. Biking, hiking, and equestrian trail use (dogs are prohibited) are the primary recreation activities supplemented by picnicking and group camping (on a reservable basis). Livestock grazing serves to reduce fire hazard risk and benefit annual grassland species. The project would not alter current recreation use or rangeland activities. It would reconfigure and upgrade the trail approaches and improve access across Round Valley Creek through the installation of the clear span pedestrian/bike bridge. Refer to *Figure 2 – Site Plan Round Valley Pedestrian Bridge* for the layout of the proposed improvements.

Surrounding Land Uses. Uses on lands surrounding the Preserve include ranching, agriculture, undeveloped open space and dispersed rural residential. The western edge of Round Valley Preserve is contiguous with Morgan Territory Regional Preserve. The southern edge of Round Valley Preserve is located along the northern edge of the Los Vaqueros watershed, owned by the Contra Costa Water District.

2.5 PROJECT DETAILS

The project details contained in this section of the project description address the recommendations and actions contained in the *Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County, California* construction documents (referred to collectively as the “Project”) that would result in physical changes to the baseline environmental conditions at this regional preserve.

Construction Period. Construction activities would occur over a three month period commencing in the summer with completion by October 31st. Hours of work would generally be between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday.

Construction of Project Components. The project proposes the installation a 60-foot clear span pedestrian/bike bridge to connect to existing trails on either side of the creek. This bridge would be designed with a five ton (10,000 pounds) vehicle weight limit that could also accommodate maintenance vehicles. Work would include: design, fabrication, delivery, assembly and installation of the prefabricated steel bridge; construction of the abutments; and grading of the trail approaches. These trail and creek crossing improvements would create reliable and safe public access across Round Valley Creek.

Heavy equipment likely to be needed to complete the work would include:

- Graders
- Excavators and drilling/driver equipment for the piers
- Cement mixers to mix concrete and a pumper to deliver the concrete mix
- A crane to set prefabricated steel bridge superstructure in place
- Haul trucks.

Anticipated Construction Materials. Materials included in the construction of the proposed project would include: concrete and steel reinforcement for the piers and abutments and bridge decking, and a prefabricated weathering steel pedestrian/bike bridge. The total weight of the bridge would be less than 30,000 pounds and would likely be transported to the site in two sections.

Construction Access and Staging. Access to the construction site would be through either the Marsh Creek Staging Area located along Marsh Creek Road or via Los Vaqueros Road which traverses Contra Costa Water District Los Vaqueros Reservoir property. Construction vehicles utilizing the Marsh Creek Staging Area would travel on an existing dirt road crossing over two existing 12-foot wide 20-ton limit bridges and three concrete fords to reach the construction staging area which would be situated on the

northeast side of Round Valley Creek. Access via Los Vaqueros Road would be along an existing dirt road and would not require any bridge or ford crossings.

A construction staging area would be designated for storing construction equipment and tools a minimum distance of 100 feet from Round Valley Creek in an open area composed of non-native annual grasslands as indicated on the plans and/or as approved by the District inspector. Development of the temporary construction staging area will consist of clearing and grubbing these grasslands. This construction staging area will be used to store equipment, supplies and stockpiled materials. Fueling of equipment and vehicles would be required to be completed a minimum of 200 feet from the top of creek bank. It is possible that the Marsh Creek Staging Area may also be employed to store some of the construction materials depending on the timing of deliveries. Best management practices (BMPs) would be required to be deployed by the contractor to prevent unwanted run-off and dust related problems at these construction staging sites.

Earthwork. Earthwork would involve grading for the abutments, approximately 550 linear feet of trail to conform the trail alignment to the bridge approaches, and clearing and grubbing grassland to create a temporary construction staging area. Changes in elevations as a result of these activities would be negligible. The total anticipated grading volume would be 50 cubic yards of soil that would be excavated over a 3,600 square foot area. At the conclusion of the bridge and trail construction work strippings accumulated from grading activities will be distributed over the temporary construction area and abandoned trail segments to encourage recovery of annual grasslands. The project would not involve hauling any soil off the District Preserve lands. Erosion control materials would be incorporated to minimize impacts of sediments entering the creek, but would not employ any plastic netting materials that could result in entanglement and death of reptiles and amphibians. Use of vegetative materials (e.g., hay bales, fiber rolls) would be certified as free of noxious weeds. All trash items would be removed from the construction/staging areas to reduce the potential for attracting predators.

No additional furnishings, water fountains or trash/recycling receptacles would be installed as part of this project.

Bridge Abutments. The bridge would be supported by two abutments approximately 3-foot wide by 12-foot long with the piers extending a minimum of 5 feet into the bedrock. The piers would be located outside of the creek bed between 10 and 15 feet from the top of bank at elevation 384.5. The bridge would not impact, nor be impacted by, changes to the creek flow line as the structure would extend well beyond the top of the bank of the 30-foot wide creek channel (See *Figure 3 - Bridge Profile*).

Bridge Fabrication & Installation. The steel bridge framework would be manufactured in a shop off-site and delivered to the site for assembly and placement onto the completed abutments. The bridge framework would be constructed of welded weathering steel and would be fabricated with some bolted connections to allow disassembly for transportation and reassembly at the site. A crane would be used to install the bridge. The bridge would not require painting, but would require installation of a concrete deck on site once the bridge infrastructure has been installed. The resulting shaded area of bridge would be approximately 540 square feet.

Vehicle Trips. Delivery of materials would account for most of the vehicle trips. Approximately 20-24 total vehicle trips are anticipated to handle deliveries and waste removal. Six to eight five-yard concrete deliveries would be anticipated for the foundation and one or two deliveries for the concrete deck. Three truck trips would be needed to deliver the concrete reinforcing steel and two trucks to carry the formwork and miscellaneous supplies. The bridge delivery would entail one crane along with two trucks carrying the bridge superstructure, and one more truck to carry the remainder of the bridge parts. Two trips would

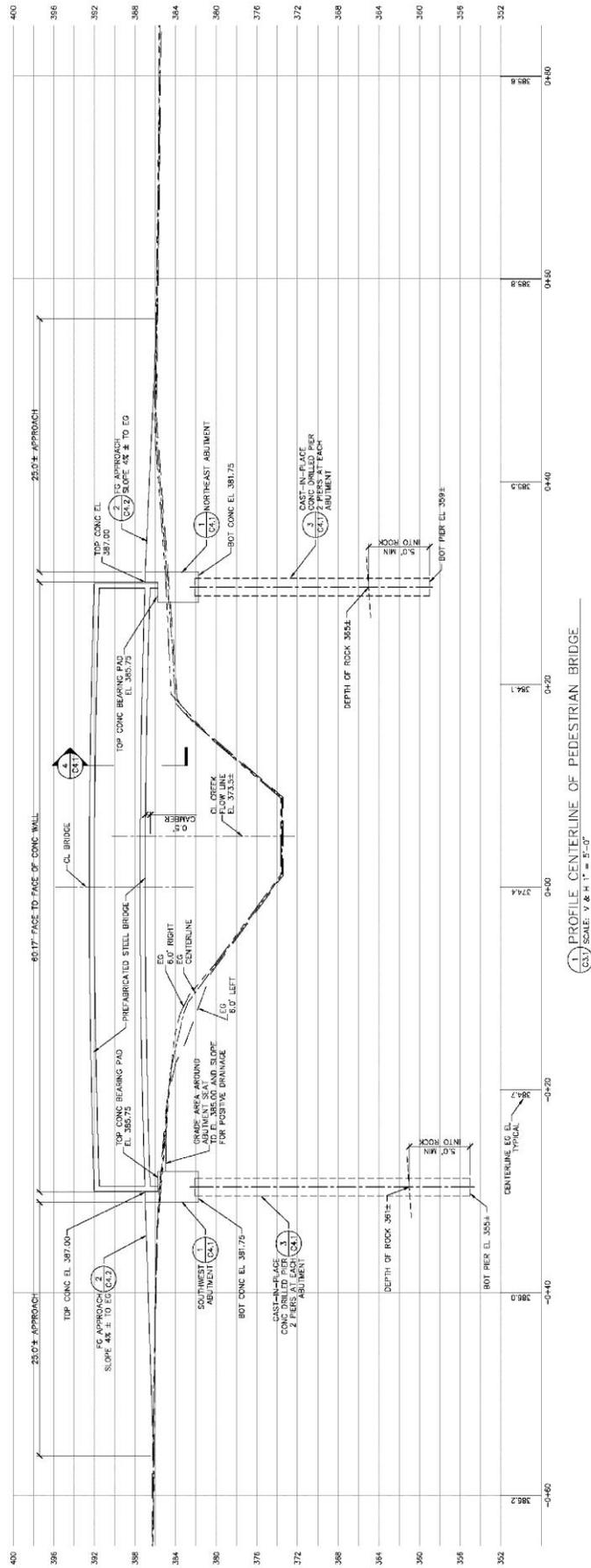


Figure 3 – Bridge Profile

be needed for the drill rig; two to deliver the excavating equipment for the abutments. One truck load would include delivery of a gate and remains of a short section of fence. In addition there would be several trips by laborers, inspectors, etc. traveling to and from the site in small trucks. All trips are assumed to be round trips. In some cases, it is possible that larger vehicles may be used to deliver materials to the Marsh Creek Staging Area, with smaller vehicles used to transport materials to the bridge site.

Disposal of Waste Materials. Waste materials generated as part of the site preparation would be minimal. The site preparation work would not involve any demolition. Graded material would be composed of strippings that would be disposed within and adjacent to the work area. Any remaining soil resulting from the grading activities would be distributed within the Preserve. The bridge structure would be sited so that the existing trees would be retained in place.

Public Access & Public Outreach/Notification. During major deliveries (less than 10 days total) the Miwok Trail may be closed at the staging area and the Marsh Creek Staging Area may also be closed. To minimize disruption to recreation use of the Preserve it may be possible to allow the trails and staging area to remain open during other construction activities. There would be no weekend closures.

Concurrent with the construction work, the District would develop and implement an outreach program. This public outreach component would include: posting informational signs regarding work under progress at the project site and on the District web site. In addition, the Contractor would be required to provide flaggers, barricades and /or signs as needed to assure the public's safety.

2.6 REGULATORY SETTING

Required Actions. The East Bay Regional Park District proposes to:

1. Adopt the Mitigated Negative Declaration and Mitigation Monitoring Plan; and
2. Approve the plans and specifications for the *Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County, California.*

Approvals and Permits. The following responsible and trustee agencies have jurisdiction over some or all of the proposed project components:

- California Department of Fish and Game
- United States Fish and Wildlife Service
- East Contra Costa County Habitat Conservancy
- Contra Costa County Department of Public Works
- Contra Costa County Water District

Permits and/or approvals required from the following agencies include:

- Take Coverage will be issued through the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan with concurrence from USFWS and CDFG that incidental take coverage may be issued for the Project
- Contra Costa County Department of Public Works –Construction Permit
- Contra Costa County Water District – Access permit

Legal Authority of the Wildlife Agencies

Legal Authority of USFWS. In accordance with the provisions of the East Contra Costa HCP/NCCP Implementing Agreement (January 2007) and Section 10(a)(2)(B) of the Federal Endangered Species Act (FESA), the Fish and Wildlife Coordination Act, and the Fish and Wildlife Act of 1956 expressly

authorizes USFWS to issue a Section 10(a) Permit to allow the incidental Take of animal species listed as threatened or endangered under FESA.

Legal Authority of CDFG. In accordance with the provisions of the East Contra Costa HCP/NCCP Implementing Agreement (January 2007) and pursuant to its separate and independent authority under NCCPA, CDFG may authorize the Take of Covered Species pursuant to California Fish and Game Code Section 2835.

2.7 PROJECT REVIEW AND APPROVAL

In accordance with Section 15073 of the CEQA Guidelines, this Initial Study and Mitigated Negative Declaration are being distributed for review by local, state and federal agencies with jurisdiction over the project site. A notice of availability of the IS/MND has been sent to nearby property owners and other interested parties. The document is available for review at the following locations:

East Bay Regional Park District
Planning, Stewardship and GIS Services
P.O. Box 5381
2950 Peralta Oaks Court
Oakland, CA 94605
Web site: www.ebparks.org
Phone: (510) 544-2323
Fax: (510) 635-3478
Email: jbondurant@ebparks.org

Brentwood Library
104 Oak Street
Brentwood, CA 94513

A Public Hearing on the project will be held at a regular District Board meeting at 2:00 p.m. at the close of the public review period in the EBRPD headquarters 2950 Peralta Oaks Court in Oakland.

Written comments on the IS/MND should be submitted in writing to EBRPD before the conclusion of the 30-day public comment period. These comments should be mailed, emailed or faxed to the Planning, Stewardship and GIS Services Department, attention: Julie Bondurant Round Valley IS/MND at the East Bay Regional Park District Administration Office at the above address, email or fax number.

In reviewing the IS/MND, affected public agencies, organizations and interested citizens should focus on the sufficiency of the document in identifying and analyzing any potential impacts to the environment, and the proposed ways in which any significant effects of the project are to be avoided or reduced.

The District will review and evaluate written comments received during the public review period, and determine whether any substantial new environmental issues have been raised. If there are substantial new environmental issues, not covered in the IS/MND, further documentation, such as an Environmental Impact Report or an expanded IS/MND, may be required. If not, the EBRPD Board of Directors will adopt the Mitigated Negative Declaration and approve the project. The District will then file a Notice of Determination with the Contra Costa County Clerk-Recorder's Office within five days following project approval.

3.0 SUMMARY OF PROJECT MITIGATIONS

AIR QUALITY

MITIGATION AIR-1. To minimize dust associated with construction activities the contractor shall be required to employ the following Best Management Practices for managing dust:

- Regularly water access routes and construction areas using a water source which would either be self-propelled or attached to a vehicle
- Excavate during calm periods
- Cover all truck beds hauling soil, vegetation and other loose construction materials
- Reestablish bare soils resulting from grading and staging activities [with the exception of the natural surface trail approaches] by applying stripping from the project site
- Routinely cover, water or apply non-toxic soil binders to exposed stockpiled materials as appropriate
- Maintain all equipment engines in good condition, in proper tune (per manufacturer's specifications), and in compliance with all State and Federal requirements
- Limit traffic speed to 15 mile per hour
- Suspend earth moving activities if winds exceed 25 mile per hour and/or as directed by the District Inspector.

BIOLOGICAL RESOURCES

MITIGATION BIO- 1. The HCP requires that fees be paid to the ECCHCP Conservancy for total project impacts. These fees will be used to purchase land or easements and enhance habitat within the core habitat areas under the jurisdiction of the HCP as mitigation for project-related effects.

For this project, the HCP/NCCP fee for temporary impacts [0.83 acres, 36,015 square feet] includes the areas that will be temporarily disturbed by the project including the construction staging areas. The HCP/NCCP fee for permanent impacts [0.15 acres, 6,560 square feet] covers the area that will be disturbed to create the abutments and new trail approaches required to conform to the bridge crossing. These fees will be paid before or at the time the construction permit is issued.

MITIGATION BIO-2. The District shall communicate and enforce the following Best Management Practices (BMP) to the construction contractor to avoid damage to the trees scheduled for protection. All trees designated for protection shall be clearly marked by the District Representative and these trees shall be identified in the field at a pre-construction meeting with the Contractor. At this meeting the contractor shall be directed:

- To install protective fencing to demarcate the drip line of protected trees
- To avoid trenching, grading, or paving into the drip line area
- Not to change, by more than two feet, grade elevations within 30 feet of the drip line
- Not to park or operate any motor vehicle within the drip line area
- Not to place or store any equipment or construction materials within the drip line
- Not to attach any signs, ropes, cables, or any other items to any tree
- Not to place or allow to flow into or over the drip line area of any protected tree any oil, fuel, concrete mix, or other deleterious substance.

Pruning shall be minimized to the greatest extent feasible. Where pruning is required for equipment access and to facilitate construction activities it shall be performed under the direction of the District Inspector.

CULTURAL RESOURCES

MITIGATION CULT-1. A District representative shall monitor ground-disturbing activities to ensure there are no impacts to prehistoric or historic resources, and comply with District Cultural Resources Policy (EBRPD Board Resolution 1989-4-124) if resources are encountered.

MITIGATION CULT-2. In the event that prehistoric, archaeological or paleontological artifacts or remains are encountered during project construction, all ground disturbing activities shall be halted within a minimum of 50 feet and artifacts shall be protected in place (in accordance with EBRPD Board Resolution

No. 1989-4-124 and State and federal law) until the find is evaluated by an archaeologist or, trained cultural resource professional, and appropriate mitigation, such as curation, preservation in place, etc., if necessary, is implemented.

MITIGATION CULT-3. In the event of accidental discovery of human remains, the County Coroner shall be notified, and, if the remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) would be notified to identify the Most Likely Descendant (MLD), in accordance with State and federal law. The disposition of the remains shall be coordinated between EBRPD, the County Coroner, NAHC, MLD and the archaeological consultant.

GEOLOGY AND SOILS

MITIGATION GEO-1. The Contractor shall prepare, submit and implement a Storm Water Pollution Plan (SWPPP). The SWPPP shall be prepared by a Qualified SWPPP Developer (QSD) and managed on-site by a Qualified SWPPP Practitioner (QSP) to ensure implementation of appropriate Best Management Practices for minimizing potential erosion and sedimentation within the project area during construction. These measures include, as appropriate to the site conditions: conducting activities during the dry season (August 1- October 31); using dikes, basins, ditches, straw, erosion control fabric and other temporary measures (e.g., water bars, fiber rolls) as catchments for source pollutants.

HAZARDS & HAZARDOUS MATERIALS

MITIGATION HAZ-1. The transport, storage and use of potentially hazardous materials shall conform to the following provisions:

- All equipment shall be inspected for leaks immediately prior to the start of project activities and regularly inspected henceforth until equipment is removed from the premises.
- The contractor(s) shall prepare an emergency spill response plan prior to the start of the project and maintain a spill kit on-site throughout the duration of the proposed project. In the event of a spill or release of any chemicals during activities associated with the proposed project, on or adjacent to Preserve property, the contractor shall immediately notify the appropriate District Representative (e.g., project manager or supervisor). Emergency containment procedures shall be initiated immediately to prevent contamination.
- Hazardous materials required for construction shall be contained within vessels engineered for safe storage. Large quantities of such materials shall not be stored on-site.
- Equipment shall be refueled, cleaned and repaired outside Preserve boundaries, or within a contained area on site away from creeks and drainages, except during emergency situations. All contaminated water, spill residue, or other hazardous compounds shall be disposed of outside Preserve boundaries at an authorized location.

MITIGATION HAZ-2. Contractor shall comply with the fire safety requirements set forth in the project specifications for the project. Measures contained in the project specifications include, but may not limited to, the following measures to reduce fire hazards:

- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers shall be required for all heavy equipment.
- Work crews shall be required to clear and grub an area of dry grass and brush at a location agreed upon by the Contractor and District Representative prior to project commencement. This area is to be used as a construction staging area for parking construction vehicles and supplies. The strippings from this site shall be stockpiled for redistribution onto the grubbed site at the close of construction.
- District staff shall be required to have a District radio on-site, which would allow for direct contact to Calfire and the centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire. Fire suppression equipment (i.e., fire extinguishers) shall also be available at the project site.

PUBLIC SERVICES

MITIGATION PUB SER-1: The District shall develop a noticing and outreach component to inform the public about scheduled closures. Noticing and outreach shall include the following components:

- The District shall post notices at key access points in Round Valley Regional Preserve that detail

the proposed project's construction schedule, including a map of the project site, and the timing and duration of planned closures

- The District shall post a large visible sign in proximity to the project site warning the public of ongoing construction activities and intermittent disruption of recreational access to the Preserve and along some of the trails
- The District reservation staff shall be informed of the project and briefed as to potential construction related disruptions (e.g., added noise and dust in a normally tranquil setting, occasional traffic disruptions, potential reduction in available parking as the contractor may elect to stockpile supplies for short periods of time to facilitate deliveries)
- The District shall provide notice of the project on its website.

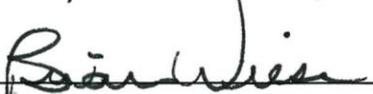
4.0 INITIAL STUDY CHECKLIST

PROJECT INFORMATION	
1. Project Title:	<i>Round Valley Pedestrian Bridge, Round Valley Regional Preserve, Contra Costa County, California</i>
2. Lead Agency Name & Address:	East Bay Regional Park District, 2950 Peralta Oaks Ct., P.O. Box 5381, Oakland, CA 94605-0381
3. Contact Person & Phone Number:	Julie Bondurant, (510) 544-2323
4. Project Location:	Round Valley Regional Preserve, Contra Costa County, California is located approximately six miles west of Brentwood in Contra Costa County. The park entrance is located on the south side of Marsh Creek Road. Construction activities and construction staging would take place wholly within Round Valley Regional Preserve
5. Project Sponsor Name & Address:	East Bay Regional Park District, 2950 Peralta Oaks Ct., P.O. Box 5381, Oakland, CA 94605-0381
6. Plan Designation:	Round Valley Regional Preserve, Contra Costa County, California
7. Zoning:	Recreation and Resource Management Uses
8. Description of Project:	The <i>Round Valley Pedestrian Bridge Project</i> at Round Valley Regional Preserve, Contra Costa County would involve installation of a prefabricated weathering steel bridge over Round Valley Creek and realignment of a natural surface trail to connect to the bridge
9. Surrounding Land Uses & Setting:	Refer to Section 2.4 - <i>Background and Setting</i> and Section 4.10 of the Checklist - <i>Land Use Planning</i>)
10. Approval Required from Other Public Agencies:	Refer to Section 2.6 <i>Regulatory Setting</i>

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture & Forest Resources	<input checked="" type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input checked="" type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Hazards & Hazardous Materials	<input checked="" type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input checked="" type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Service Systems	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

DETERMINATION	
<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION , including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
<p>Prepared by: Julie Bondurant, Senior Park Planner</p> <p>  Signature 3-28-12 Date </p> <p>Approved by: Brian Wiese, Chief, Planning, Stewardship and GIS Services Department</p> <p>  Signature 3/28/12 Date </p>	

4.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, c) Have a substantial adverse effect on a scenic vista; or c) substantially degrade the existing visual character or quality of the site and its surroundings? Construction materials would include a combination of: aggregate at the bridge approaches, concrete (abutments, bridge decking) and welded weathering steel (bridge framework). The bridge would be sited so that the existing riparian corridor along Round Valley Creek would remain intact with no loss of trees. As the bridge span is significantly longer than the creek width, the bridge would not impact, nor be impacted by changes to the creek flow line, so hard armor would not be required to protect the abutments. Earthwork construction at the site would involve grading of approximately 550 linear feet of trail to align to the bridge approaches, but would not result in grade changes or changes to the natural trail surface or trail width. As the bridge would be constructed of visually non-obtrusive materials and sited within a grouping of mature trees within a riparian corridor, the proposed project would not have substantial adverse effect on a scenic vista or substantially degrade the existing visual character or quality of the site and its surroundings.

Potential Impact: Less than Significant Impact

Mitigation: None required

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? The project site is not located within the vicinity of a designated State scenic highway and no views from a scenic highway would be directed toward the site. Nor would the project site provide views looking out toward a state scenic highway. Therefore, the project would not have an impact on scenic resources located within a State scenic highway.

Potential Impact: No Impact

Mitigation: None required

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? Project improvements would not introduce new sources of light or materials that would induce glare. Construction materials would include a combination of concrete (abutments, bridge decking) and welded weathering steel (bridge). No night lighting would be introduced and construction would occur only during daylight hours so no night lighting is anticipated over the short or long term. Therefore, no long- or short- term lighting or glare impacts would occur as a result of the project.

Potential Impact: No Impact

Mitigation: None required

Figure 4 - Views of the Project Site



View Round Valley looking north toward Round Valley Creek Bridge Site



View of Round Valley Creek Bridge Site from top of the east bank looking west



View of Round Valley Creek Bridge Site from top of the east bank looking south



View of Round Valley Creek Bridge Site looking south from bottom of creek channel

4.2 Agriculture & Forest Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE & FOREST RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, e) a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use; or e) involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? The project site is wholly contained within Round Valley Regional Preserve owned by East Bay Regional Park District and designated as natural open space since 1988. The lands are identified as farmland of local importance. The farmlands in this category are included in the U.S. natural resources conservation service's land capability Classes I, II, III, and IV. These lands are typically used for livestock grazing. The project site is currently grazed as part of the District's vegetation management program and the Preserve would continue to be grazed to reduce fire hazards and benefit grassland vegetation. Thus, the proposed project, which is wholly contained within a public preserve, would not conflict with existing agricultural zoning, nor facilitate conversion of agricultural land in areas adjacent to the project site to a non-agricultural use. (Source: *Contra Costa County Important Farmland, 2008 FTP directory* [www.conservation.ca.gov/dlrp/fmmp/product_page.asp]; Accessed April 19, 2011).

Potential Impact: No Impact

Mitigation: None required

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? The Preserve is not zoned for agricultural use and none of the Preserve lands are under Williamson Act contracts. Therefore, implementation of the project would not conflict with existing zoning for agricultural uses or Williamson Act contracts.

Potential Impact: No Impact

Mitigation: None required

c, d) c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526); or d) result in the loss of forest land or conversion of forest land to non-forest use? The California Public Resources Code (PRC Section 12220[g] defines forest land or timberland for timber production as “...*land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits...*”

The lands comprising Round Valley Regional Preserve have been set aside as protected open space since 1988 and are not zoned as timberland for timber production. The dominant landscape characteristic of the Preserve is open, non-native annual grasslands. Tree cover is sparse, limited in the project area to a very narrow riparian corridor paralleling Round Valley Creek. The proposed project improvements would not result in the removal of any of these trees so there would be no net loss of existing riparian forest resources. Once the bridge has been installed, this riparian corridor would continue to be managed for aesthetics, wildlife biodiversity, water quality and recreation. Thus, implementation of the proposed project would not result in the loss or conversion of forest land.

Potential Impact: No Impact

Mitigation: None required

4.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a b, c a) Conflict with or obstruct implementation of the applicable air quality plan; b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation; or c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? The analysis in this section is based on a review of existing air quality conditions in the region and air quality regulations administered by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the Bay Area Air Quality Management District (BAAQMD). This analysis includes methodologies identified in both the existing (1999) and updated *CEQA Air Quality Guidelines* adopted by BAAQMD on June 2, 2010.

The study area for the proposed project is within the jurisdiction of San Francisco Bay Area Air Quality Management District (BAAQMD). The San Francisco BAAQMD is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards based on BAAQMD's adopted CEQA thresholds of significance (BAAQMD CEQA Guidelines June 2010). The BAAQMD Table 4-1 below excerpted from the BAAQMD CEQA Guidelines presents the *Thresholds of Significance* for construction-related criteria air pollutant and precursor emissions.

Based on these thresholds, an increase of nitrogen oxides (NOx) above 54 lbs/day for short-term effects (construction) would result in a significant impact. An increase of NOx or reactive organic gases (ROG), above 54 lbs/day for long-term effects (operation) would result in a significant impact. For PM10, the construction-related impact of a project would be significant if it would emit pollutants at a level equal to or greater than the 82 lbs/day during periods of peak construction, while the threshold for PM10 would be

54 lbs/day. Examples of the level of construction activity that could exceed threshold as shown in *Table 4-1: Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors* would include:

- A construction site with minimal earthmoving exceeding 8.1 acres per day.
 - A construction site with earthmoving (grading, excavation) exceeding 2.2 acres per day
- (Source: *Bay Area Air Quality Management District CEQA Guidelines* June 2010).

Table 4-1 - Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lb/day)
ROG	54
NO _x	54
PM ₁₀	82*
PM _{2.5}	54*
<small>* Applies to construction exhaust emissions only. Notes: CO = carbon monoxide; lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; SO₂ = sulfur dioxide.</small>	

The construction phase of the project would include operation and periodic idling of heavy equipment, temporarily generating dust and equipment exhaust emissions. However, the daily average emissions are not anticipated to reach or exceed the air pollutants or precursors levels identified in *Thresholds of Significance* listed in Table 4.1 above as the total graded area would be less than one acre. Nor would the activities from the proposed project improvements result in a net increase in emissions over the long term as the bridge would benefit existing non-motorized hiking, biking, and equestrian activities. Implementation of Mitigation AIR-1 would reduce impacts associated with the release of dust and loss of loose debris associated with the grading activities to a less than significant level.

Potential Impact: Less than Significant with Mitigation Incorporated
Mitigation: See **AIR-1**

MITIGATION AIR-1. To minimize dust associated with construction activities the contractor shall be required to employ the following Best Management Practices for managing dust:

- Regularly water access routes and construction areas using a water source which would either be self-propelled or attached to a vehicle
- Excavate during calm periods
- Cover all truck beds hauling soil, vegetation and other loose construction materials
- Reestablish bare soils resulting from grading and staging activities [with the exception of the natural surface trail approaches] by applying strippings from the site
- Routinely cover, water or apply non-toxic soil binders to exposed stockpiled materials as appropriate
- Maintain all equipment engines in good condition, in proper tune (per manufacturer’s specifications), and in compliance with all State and Federal requirements
- Limit traffic speed to 15 mile per hour
- Suspend earth moving activities if winds exceed 25 mile per hour and/or as directed by the District Inspector.

c) Expose sensitive receptors to substantial pollutant concentrations? Sensitive receptors within the project area would include recreational users (e.g., hikers, equestrians, bicyclists) and common and rare wildlife, including Federal and State listed species (See Section 4.3 *Biological Resources*).

Heavy equipment required to grade the bridge approaches, construct the abutments and install the prefabricated bridge would generate dust and equipment exhaust emissions. However, the project is located wholly within a regional preserve. Potential exposure to sensitive receptor sites (e.g., group campground, picnic sites, staging area and Preserve residence) are located more than one mile from the project site and the nearest residents live several miles from the project site. Preserve visitors using nearby trails would be protected from emissions pollutant concentrations through intermittent closures for those areas of the Preserve that would potentially be adversely impacted by the construction activities. Summer-fall pre-construction biotic surveys would ensure that there are no wildlife nesting sites in the construction area. With these standard construction measures the project would not subject sensitive receptors to substantial pollutant concentrations during construction. Nor would the project result in any activities that would result in the generation of substantial pollutant concentrations in the long term.

Potential Impact: Less than Significant

Mitigation: None required

Create objectionable odors affecting a substantial number of people? The thresholds of significance for odor impacts are qualitative in nature and related to some degree to the distance of the activities from sensitive receptors. This project, which is limited to non-motorized public access improvements would not involve new source of odors resulting in long term generation of odors or the exposure of new receptors to existing or planned odors. Project-related emissions may result in short-term generation of odors emitting from construction equipment such as diesel exhaust and fuel vapors. However, sensitive receptor sites (e.g., group campground, picnic sites, staging area and Preserve residence) are located more than one mile from the project site and the nearest residents live several miles from the project site. Visitors using nearby trails would be protected from odorous emissions pollutant concentrations through intermittent closures for those areas of the Preserve where the construction activities would occur. Thus, potential exposure to short-term, odorous emissions associated with construction, which would dissipate rapidly in the air and decrease with increasing distance from the source, would not present a potentially adversely impact to potential sensitive receptor sites. Thus, the project would not result in a significant odor impact.

Potential Impact: Less than Significant Impact

Mitigation: None Required

4.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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 U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The project is located within Round Valley Regional Preserve approximately six miles south of Brentwood and six miles west of Byron in Contra Costa County (Refer to *Figure 1 - Project Location*). The project site is located at Round Valley Creek approximately one and one-half miles from the Marsh Creek Staging Area. The elevation at the top of bank of Round Valley Creek is 384.5. The elevation at the toe of the bank is 373.5. Grassland habitat is the dominant plant community with Round Valley Creek, an intermittent stream that typically flows until late spring or early summer, bisecting the open grasslands.

At the project site the creek has incised a channel that runs through an alluvial plain. The area is generally level with minor elevation changes in the vicinity of the creek banks. The channel is approximately 30 feet wide and 11 feet deep at the proposed bridge site. The creek banks are marked by erosion and shallow landsliding upstream and downstream of the proposed bridge location.

The trail bridge will cross Round Valley Creek, a tributary of Marsh Creek originating in the uplands surrounding Round Valley. The trail approaches will be routed through open, non-native, annual grasslands. Grassland plants in this area include annual rabbitfoot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and golden monkey flower (*Mimulus guttatus*). Tree cover, which is comprised predominately of valley oak (*Quercus lobata*) is confined to a narrow band along the banks of the creek. A spring survey is planned to confirm the absence/presence of other species that may occur within the project area. (Refer to *Table A - Round Valley Bridge - Plant Survey 11-01-2011* for a more comprehensive plant list).

Round Valley Creek supports the federally threatened California red-legged frog (*Rana draytonii*). Trees lining the creek corridor and the adjacent grasslands support or have the potential to support golden eagles (*Aquila chrysaetos*), western burrowing owl (*Athene cunicularia*) and white tailed kite (*Elanus leucurus*), which are protected by State and Federal law. The project site constitutes suitable habitat for California tiger salamander (*Ambystoma californiense*), Western pond turtles (*Actinemys marmorata*) formally (*Clemmys marmorata marmorata*) and Alameda whipsnake (*Masticophis lateralis euryxanthus*). The Preserve is within the extreme northwestern range of San Joaquin kit fox (*Vulpes macrotis mutica*), a Federal endangered species and State threatened species.

Regulatory Setting

The project area is located within the East Contra Costa County Habitat Conservancy's East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan (HCP/NCCP or Plan) inventory area. Therefore, the project will follow specific avoidance and minimization measures for covered activities that have potential to impact HCP/NCCP-covered special-status species, sensitive habitats, natural communities, and jurisdictional wetlands and other waters in eastern Contra Costa County. These measures are consistent with the USFWS and CDFG guidelines. Special-status species not covered under the HCP/NCCP were also addressed.

Although the project is comprised of less than one acre, the District will require the Contractor to comply with the protective measures of the State Water Resources Control Board (SWRCP) Construction General Permit, 2009-0009-DWQ (CGP) as set forth in the construction specifications, including management of the site by a Qualified SWPPP Practitioner (QSP).

Additional provisions contained in the project construction specifications follow.

- The bridge approaches will be stabilized using compacted aggregate to minimize the potential for sediment to enter the creek
- The strippings resulting from clearing and grubbing the construction staging area will be stockpiled at the start of construction and covered or surrounded by erosion control BMPs (e.g., silt fence, wattles, fiber rolls – absent of plastic netting and certified as free of noxious weeds) for replacement at the end of construction
- Soil disturbed around the abutments, former trail alignment and construction staging areas will be covered with the strippings from the project site to encourage reestablishment of the annual grasslands
- Construction equipment and tools will be maintained and stored within the construction staging area which will be located a minimum of 100 feet from the banks of Round Valley Creek
- Construction activities will be conducted during the dry season (August 1- October 31)
- On-site monitoring will be conducted throughout the construction period to ensure that disturbance limits, BMPs, and HCP/NCCP avoidance and minimizations are being implemented properly
- Active construction areas will be watered regularly to minimize the impact on dust on adjacent vegetation and wildlife habitats, as warranted.

Wildlife and Plant Surveys

Planning surveys assessing the location, quantity, and quality of suitable habitat for specified covered species on the project site have been conducted by USFWS/CDFG–approved District biologists annually at Round Valley Regional Preserve from 1997 to the present. Survey results are recorded in the biologists’ field logs and notable species, specifically listed species, are routinely entered into the District database and mapped.

Project Design Features to Ensure Wildlife Permeability

The project proposes the installation a 60-foot clear span pedestrian/bike bridge to connect to existing trails on either side of the creek. The bridge would not impact, nor be impacted by, changes to the creek flow line or limit wildlife movement as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel.

HCP Avoidance, Minimization and Mitigation Measures

There are a number of species specific avoidance and minimization measures that are required by the HCP/NCCP. These measures are discussed in detail for each of the special-status wildlife species that could potentially be found at the project site. In addition to species-specific avoidance and minimization measures, the HCP/NCCP utilizes a variety of development –based fees to fund mitigation that will offset losses of land cover types, covered species habitat, and other biological values. This project will have permanent and temporary impacts to grassland habitat. Therefore, the EBRPD will pay applicable mitigation fees to the East Contra Costa Habitat Conservancy as identified in the Mitigation Fee Table 9-5 in Chapter 9 of the HCP/NCCP and described within the mitigation sections below.

a, b, d) a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; or b) 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 U.S. Fish and Wildlife Service; or d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Several special-status species were identified to have the potential to occur in the project area and surrounding vicinity as described below. Species-specific avoidance and minimization measures as described in Section 6.4.3 of the HCP/NCCP (and summarized below in species specific discussions) will be implemented as a component of the project. Because the HCP addresses mitigation for species and habitat impacts on a program-level basis rather than a project-by-project or species-by-species basis, the mitigation for species impacts are noted at the end of this section rather than within each individual species or habitat discussion. References cited in the wildlife discussions refer to sources identified in *Appendix D – Species Profiles* of the HCP/NCCP.

Wildlife

California red-legged frog (*Rana draytonii*), is a Federally threatened species and a State “rare, threatened or endangered species” under CEQA. Its range extends from sea level to about 5,000 feet above sea level (U.S. Fish and Wildlife Service 2002) though almost all of the documented occurrences of this species are located below 3,500 feet. Breeding sites include a variety of aquatic habitats - larvae, tadpoles and metamorphs use streams, deep pools, backwaters within streams and creeks, ponds, marshes, sag ponds, dune ponds, and lagoons. Breeding adults are commonly found in deep (more than 2 feet), still

or slow-moving water with dense, shrubby riparian or emergent vegetation (Hayes and Jennings 1988). Adult frogs have also been observed in shallow sections of streams that are not shrouded by riparian vegetation. Generally, streams with high flows and cold temperatures in spring are unsuitable for eggs and tadpoles. Stock ponds are frequently used by this species if they are managed to provide suitable hydro period, pond structure, vegetative cover, and control of nonnative predators.

During dry periods, California red-legged frogs are seldom found far from water. However, during wet weather, individuals may make overland excursions through upland habitats over distances up to 2 miles. These dispersal movements are generally straight-line, point-to-point migrations rather than following specific habitat corridors. Dispersal distances are believed to depend on the availability of suitable habitat and prevailing environmental conditions.

Minimization. Written notification to USFWS, CDFG, and the ECCHC, including photos and habitat assessment, is required prior to disturbance of any suitable breeding habitat. The project proponent will also notify these parties of the approximate date of removal of the breeding habitat at least 30 days prior to this removal to allow USFWS or CDFG staff to translocate individuals, if requested. USFWS or CDFG must notify the project proponent of their intent to translocate California red-legged frog within 14 days of receiving notice from the project proponent. The applicant must allow USFWS or CDFG access to the site prior to construction if they request it.

There are no restrictions under this Plan on the nature of the disturbance or the date of the disturbance unless CDFG or USFWS notify the project proponent of their intent to translocate individuals within the required time period. In this case, the project proponent must coordinate the timing of disturbance of the breeding habitat to allow USFWS or CDFG to translocate individuals. USFWS and CDFG shall be allowed 45 days to translocate individuals from the date the first written notification was submitted by the project proponent (or a longer period agreed to by the project proponent, USFWS, and CDFG).

Project Impacts. The HCP/NCCP minimization measure for California red-legged frog (CRLF) only requires notification if breeding habitat will be impacted. The Project will not impact CRLF breeding habitat, but could potentially affect estivation habitat. Direct effects on the project on CRLF include permanent loss of estivation, migration, and dispersal habitat, mortality or any individual estivating with the project action area; and disruption or loss of reproduction. Implementation of the project would result in 0.15 acres of permanent impacts to non-native annual grasslands. Potential temporary impacts to estivation habitat for CRLF would comprise 0.83 acres of grassland habitat. No permanent loss of riparian habitat will occur because the clear span bridge will not result in changes to the creek flow line, or impact access to, or movement along the creek channel, as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel.

California tiger salamander (*Ambystoma californiense*) is a Federal Threatened species (U.S. Fish and Wildlife Service 2004a, 2004b, 2005) and a State Species of Special Concern. California tiger salamanders require two major habitat components: aquatic breeding sites and terrestrial estivation or refuge sites. California tiger salamanders inhabit valley and foothill grasslands and the grassy understory of open woodlands, usually within 1 mile of water (Jennings and Hayes 1994). The California tiger salamander is terrestrial as an adult and spends most of its time underground in subterranean refugia. Underground retreats usually consist of ground-squirrel burrows and occasionally human-made structures. Adults emerge from underground to breed, but only for brief periods during the year.

Tiger salamanders breed and lay their eggs primarily in vernal pools and other ephemeral ponds that fill in winter and often dry out by summer (Loredo et al. 1996); they sometimes use permanent human-made ponds (e.g., stock ponds), reservoirs, and small lakes that do not support predatory fish or bullfrogs (Stebbins 1972, Zeiner et al. 1988). Streams are rarely used for reproduction.

The proximity of refuge sites to aquatic breeding sites also affects the suitability of salamander habitat. Although the variation in distances between breeding and refuge sites is poorly studied (Jennings and Hayes 1994), juvenile salamanders are known to migrate distances up to 1 mile (1.6 km) from breeding sites (Austin and Shaffer 1992, Mullen *in* U.S. Fish and Wildlife Service 2000). Loredó et al. (1996) found that tiger salamanders may use burrows that are first encountered during movements from breeding to upland sites. In their study area, where the density of California ground squirrel burrows was high, the average migration distances between breeding and refuge sites for adults and juveniles was 118 feet (35.9 m) and 85 feet (26.0 m), respectively. Therefore, although salamanders may migrate up to 1 mile, migration distances are likely to be less in areas supporting refugia closer to breeding sites. Also, habitat complexes that include upland refugia relatively close to breeding sites are considered more suitable because predation risk and physiological stress in California tiger salamanders probably increases with migration distance.

Minimization. Written notification to USFWS, CDFG, and the ECCHC, including photos and breeding habitat assessment, is required prior to disturbance of any suitable breeding habitat. The project proponent will also notify these parties of the approximate date of removal of the breeding habitat at least 30 days prior to this removal to allow USFWS or CDFG staff to translocate individuals, if requested. USFWS or CDFG must notify the project proponent of their intent to translocate California tiger salamanders within 14 days of receiving notice from the project proponent. The applicant must allow USFWS or CDFG access to the site prior to construction if they request it. There are no restrictions under this Plan on the nature of the disturbance or the date of the disturbance unless CDFG or USFWS notify the project proponent of their intent to translocate individuals within the required time period. In this case, the project proponent must coordinate the timing of disturbance of the breeding habitat to allow USFWS or CDFG to translocate the individuals. USFWS and CDFG shall be allowed 45 days to translocate individuals from the date the first written notification was submitted by the project proponent (or a longer period agreed to by the project proponent, USFWS, and CDFG).

Project Impacts. The HCP/NCCP minimization measure for California Tiger Salamander (CTS) only requires notification if breeding habitat will be impacted. The Project will not impact CTS breeding habitat, but could potentially affect estivation habitat. Direct effects on the project on CTS include permanent loss of estivation, migration, and dispersal habitat, mortality or any individual estivating with the project action area; and disruption or loss of reproduction. Implementation of the project would result in 0.15 acres of permanent impacts to non-native annual grasslands. Potential temporary impacts to estivation habitat for CTS would comprise 0.83 acres of grassland habitat. No permanent loss of riparian habitat will occur because the clear span bridge will not result in changes to the creek flow line, or impact access to, or movement along the creek channel, as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel.

Alameda whipsnake (*Masticophis lateralis euryxanthus*), is a Federal and State Threatened species and the habitat areas in which it resides has been designated as Critical Habitat (Designated in 2000 (USFWS 2000), but rescinded in 2003; proposed again in 2005 (USFWS 2005).

The Alameda whipsnake occurs primarily in coastal scrub and chaparral communities, but also forages in a variety of other communities in the inner Coast Range, including grasslands and open woodlands (Swaim 1994). Rock outcrops with deep crevices or abundant rodent burrows are important habitat components for overnight dens, refuges from predators and excessive heat, and foraging (Swaim 1994). According to USFWS (2000), suitable habitat for this species includes communities that support mixed chaparral, coastal scrub, and annual grassland and oak woodlands that are adjacent to scrub habitats. Grassland areas that are linked to scrub by rock outcrops or river corridors are also considered primary constituent elements (U.S. Fish and Wildlife Service 2000).

The Alameda whipsnake requires open and partially open, low-growing shrub communities for many of its biological needs. This habitat provides cover for snakes during dispersal, cover from predators, and a variety of microhabitats where whipsnakes can move to regulate their body temperature (Swaim 1994). Whipsnakes exhibit a high degree of stability and a high mean activity in body temperature (33.4 degrees centigrade). Whipsnake habitat must consist of a mix of sunny and shady sites in order to provide a range of temperatures for the snake's activities (Swaim 1994, U.S. Fish and Wildlife Service 2000). A sparse shrub canopy is ideal because it also provides a visual barrier from avian predators (Swaim 1994).

Other important habitat features include small mammal burrows, rock outcrops, talus, and other forms of shelter that provide snakes with alternative habitats for temperature regulation, protection from predators, egg-laying sites, and winter hibernaculum (winter residence where the snakes hibernate). Alameda whipsnakes spend November through March in a winter hibernaculum (U.S. Fish and Wildlife Service 2000).

Home-range size for male snakes in Alameda and Contra Costa counties (Tilden Park and Moller Ranch) varies in size from 1.9 to 8.7 hectares (ha) (mean = 5.5 ha). Home-range size for female snakes was 3.9 and 2.9 hectares (Swaim 1994).

When movements of individual snakes were monitored (2 males and 1 female) in these areas, results indicated that most of the home range was not used. Both male and female snakes repeatedly returned to core retreat areas within their home range after intervals of non-use. These snakes did exhibit overlap in use of these relatively large home ranges, and there was no evidence of territorial behavior in this species (Swaim 1994).

Minimization. While Alameda whipsnakes are not specifically covered by the HCP; the following avoidance and minimization measures will effectively avoid and minimize potential impacts to the Alameda whipsnake. A USFWS-approved biologist will conduct a preconstruction survey no more than 24 hours before construction in suitable habitat and will be on site during construction activities in potential habitat to ensure that individuals of Alameda whipsnake encountered during construction will be avoided. The biologist will provide USFWS with a field report form documenting the monitoring efforts within 24 hours of commencement of construction activities. Alameda whipsnake encountered during construction activities should be allowed to move away from the construction area on their own. Only personnel with a USFWS recovery permit pursuant to Section 10(a)(1)(A) of the ESA will have the authority to capture and/or relocate Alameda whipsnakes that are encountered in the construction area. The project area will be reinspected whenever a lapse in construction activity of 2 weeks or more has occurred. Construction personnel will be trained to avoid harming Alameda whipsnakes.

Project Impacts. Since 1995, District biologists have annually conducted between three and sixteen biological surveys within the Preserve focusing on listed and special status species. During this period, six Alameda whipsnakes (*Masticophis lateralis euryxanthus*) were observed within the riparian corridor of Round Valley Creek. This includes the August 19, 1998 observation of adult Alameda whipsnake foraging along the stream bank of Round Valley Creek within 0.5 miles of the proposed bridge project site (CNDDDB and District records). Implementation of the project would result in 0.15 acres of permanent impacts to non-native annual grasslands. Potential temporary impacts to lands designated as Critical Habitat for Alameda whipsnakes would comprise 0.83 acres of grassland habitat. No permanent loss of riparian habitat will occur because the clear span bridge will not result in changes to the creek flow line, or impact access to, or movement along the creek channel, as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel.

Western pond turtles (*Actinemys marmorata*) formally (*Clemmys marmorata*), is a State Species of Special Concern. Western pond turtles occur in a variety of aquatic habitats from sea level to elevations of 1,980 meters (6,500 feet). They are found in rivers, streams, lakes, ponds, wetlands, reservoirs, and brackish estuarine waters. (Holland 1994; Jennings and Hayes 1994.) Western pond turtles use aquatic habitats primarily for foraging, thermoregulation, and avoidance of predators. They prefer habitats with large areas for cover (logs, algae, vegetation) and basking sites (boulders or other substrates) and have been observed to avoid areas of open water lacking these habitat features (Holland 1994). The turtles use basking sites for thermoregulation. Western pond turtles can be found in waters with temperatures as low as 1°C (34°F) or as high as 39–40°C (102–104°F) (Jennings and Hayes 1994).

Western pond turtles overwinter in both aquatic and terrestrial habitats and the species is “obligately tied to” terrestrial habitat for nest construction and egg laying. Upland areas are also habitat requirements and they are used for dispersal, basking, nest building, estivation, and other purposes. Aquatic refugia consist of rocks, logs, mud, submerged vegetation, and undercut areas along banks. Terrestrial overwintering habitat consists of burrows in leaf litter or soil. The presence of a duff layer seems to be a general characteristic of overwintering habitat.

Avoidance and Minimization and Construction Monitoring. While western pond turtles were not observed during planning surveys, adherence to the project specifications will effectively avoid and minimize potential impacts to the western pond turtle. Avoidance and minimization measures incorporated into the project specifications include: having a biological monitor present during construction; providing construction worker training that will include species identification and an overview of regulatory requirements; and implementation of the SWPPP, which will decrease or eliminate sedimentation of the water course. Should any western pond turtle be found prior to construction or during construction monitoring, CDFG will be notified prior to moving the animal out of harm’s way.

Project Impacts. Implementation of the project would result in 0.15 acres of permanent impacts to non-native annual grasslands. Potential temporary impacts to upland habitat for western pond turtle would comprise 0.83 acres of grassland habitat. No permanent loss of riparian habitat will occur because the clear span bridge will not result in changes to the creek flow line, or impact access to, or movement along the creek channel, as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel.

Golden Eagles (*Aquila chrysaetos*), is protected under the Federal Bald Eagle and Golden Eagle Protection Act and is a Fully Protected species under State law. Golden eagles use nearly all terrestrial habitats of the western states except densely forested areas. In the interior central Coast Ranges of California, golden eagles favor open grasslands and oak savanna, with lesser numbers in oak woodland and open shrublands (Hunt et al. 1998). Secluded cliffs with overhanging ledges and large trees are used for nesting and cover. Nest trees include several species of oak (*Quercus spp.*), foothill pine (*Pinus sabiniana* and *P. coulteri*), California bay laurel (*Umbellularia californica*), eucalyptus (*Eucalyptus spp.*), and western sycamore (*Plantanus racemosa*) (Hunt et al. 1998). Preferred territory sites include those that have a favorable nest site, a dependable food supply (medium to large mammals and birds), and broad expanses of open country for foraging. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats (Johnsgard 1990). Deeply cut canyons rising to open mountain slopes and crags are ideal habitat (Beebe 1974).

Avoidance and Minimization and Construction Monitoring. A USFWS/CDFG approved biologist will conduct a preconstruction survey to establish whether nests of golden eagles are occupied. If nests are identified, the project proponent will avoid and minimize impacts to the maximum extent practicable.

Project Impacts. The project will result in 0.15 acres of permanent impacts to foraging habitat and 0.83 acres of temporary impacts to foraging habitat from construction activities that could affect prey activity, availability, or accessibility within and around the project area.

To minimize permanent impacts on grassland habitat and the species that reside in this habitat, fiber rolls and erosion control blankets containing netting that could trap prey animals will be prohibited and soil disturbed around the abutments, former trail alignment and construction staging areas will be covered with the strippings from the project site to encourage reestablishment of the annual grasslands that serves as foraging habitat, thereby minimizing the development imprint on adjacent open space.

No permanent loss of woodland habitat will occur because the project will not alter the existing habitat characteristics of the Round Valley Creek. The bridge has been designed to span the 30-foot wide Round Valley Creek channel without removing any of the mature oak trees that line the creek. To ensure no loss of mature trees occurs, existing trees in the project vicinity would be protected in place during construction.

White tailed kite (*Elanus leucurus*) is protected under the Federal Bald Eagle and Golden Eagle Protection Act and is Fully Protected species under State law.

Avoidance and Minimization and Construction Monitoring. There are no known breeding locations documented for white-tailed kite at the project site and white tailed kites are not specifically covered by the HCP; the avoidance and minimization measures required by the HCP for another raptor species, Golden eagle (discussed above), will effectively avoid and minimize potential impacts to the white tailed kite.

Project Impacts. The project will result in 0.15 acres of permanent impacts to foraging habitat and 0.83 acres of temporary impacts to foraging habitat from construction activities that could affect prey activity, availability, or accessibility within and around the project area.

To minimize permanent impacts on grassland habitat and the species that reside in this habitat, fiber rolls and erosion control blankets containing netting that could trap prey animals will be prohibited and soil disturbed around the abutments, former trail alignment and construction staging areas will be covered with the strippings from the project site to encourage reestablishment of the annual grasslands that serves as foraging habitat, thereby minimizing the development imprint on adjacent open space.

No permanent loss of woodland habitat will occur because the project will not alter the existing habitat characteristics of the Round Valley Creek. The bridge has been designed to span the 30-foot wide Round Valley Creek channel without removing any of the mature oak trees that line the creek. To ensure no loss of mature trees occurs, existing trees in the project vicinity would be protected in place during construction.

Western Burrowing Owl (*Athene cunicularia*) is a State Species of Special Concern. Burrowing owls require habitat with three basic attributes: open, well-drained terrain; short, sparse vegetation; and underground burrows or burrow facsimiles (Klute et al. 2003). During the breeding season, they may also need enough permanent cover and taller vegetation within their foraging range to provide them with sufficient prey, such as small mammals (Wellicome 1997). Burrowing owls occupy grasslands, deserts, sagebrush scrub, agricultural areas (including pastures and untilled margins of cropland), earthen levees and berms, coastal uplands, and urban vacant lots, as well as the margins of airports, golf courses, and roads.

Burrowing owls select sites that support short vegetation, even bare soil, presumably because they can easily see over it. However, they will tolerate tall vegetation if it is sparse. Owls will perch on raised burrow mounds or other topographic relief, such as rocks, tall plants, fence posts, and debris piles, to attain good visibility (Haug et al. 1993).

The most important habitat consideration for the western burrowing owl is the availability of underground burrows throughout their life cycle. Although the owls nest and roost in these burrows, they do not (contrary to their name) create them. Rather, the owls rely on other animals to dig their burrows. Throughout their range, they use burrows excavated by fossorial (i.e., digging) mammals or reptiles, including prairie dogs, ground squirrels, badgers, skunks, armadillos, woodchucks, foxes, coyotes, and gopher tortoises (Karalus and Eckert 1987).

Where the number and availability of natural burrows is limited (e.g., where burrows have been destroyed or ground squirrels eradicated), owls will occupy drainage culverts, cavities under piles of rubble, discarded pipe, and other tunnel-like structures (Haug et al. 1993).

For western burrowing owls, what constitutes an isolated habitat patch and the minimum size of a viable patch of habitat (i.e., habitat capable of sustaining a population over a long time period) are not well documented. These parameters are affected by habitat quality, the juxtaposition of the site relative to other suitable habitat, surrounding land uses, and prey availability. Burrowing owls have been observed in small (i.e., 1 acre) lots nearly surrounded by development, and owls will fly through urban areas to forage in nearby areas. However, the type and minimum extent of development that constitutes a movement barrier between occupied patches and nearby foraging areas are not known.

It is assumed that corridors between small habitats and other suitable areas would partly offset the insular effects of small or isolated habitats on owl populations by increasing foraging potential and facilitating dispersal or colonization. The size and dimensions of corridors that would be adequate to facilitate movements of burrowing owls between suitable habitats has not been studied. Also, these requirements probably vary with the distance between suitable habitats, surrounding land uses, and the type and quality of habitat within the corridor.

Avoidance and Minimization and Construction Monitoring. Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFG survey guidelines (California Department of Fish and Game 1993).

On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFG guidelines. All burrows or burrowing owls will be identified and mapped.

Surveys will take place no more than 30 days prior to construction. During the breeding season (February 1– August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted. If burrowing owls are located during the breeding season (February 1–August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include the

establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg laying and incubation or that the juveniles from the occupied burrows have fledged.

During the nonbreeding season (September 1– January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone (described below).

Mitigation for unavoidable impacts include:

- If occupied burrows for burrowing owls are not avoided, passive relocation will be implemented. Owls should be excluded from burrows in the immediate impact zone and should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow.
- Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

Project Impacts. Direct, permanent effects to this species include the loss of nesting and foraging habitat (grassland). A temporary effect may be increased exposure to humans (construction crews), rendering the area in and around the project area unsuitable. Also the noise and movement of large construction-related equipment may temporarily impact burrowing owl. Potential temporary impacts to habitat for burrowing owls would comprise 0.83 acres of grassland habitat. Construction of the project would result in 0.15 acres of permanent impacts to grassland habitat. To minimize permanent impacts on grassland habitat and the species that reside in this habitat fiber rolls and erosion control blankets containing netting that could trap small animals will be prohibited and soil disturbed around the abutments, former trail alignment and construction staging areas will be covered with the strippings from the project site to encourage reestablishment of the annual grasslands.

San Joaquin Kit Fox (*Vulpes macrotis mutica*), is a Federally Endangered species and State threatened species. San Joaquin kit foxes occur in a variety of habitats, including grasslands, scrublands, vernal pool areas, alkali meadows and playas, and an agricultural matrix of row crops, irrigated pastures, orchards, vineyards, and grazed annual grasslands (U.S. Fish and Wildlife Service 1998). They prefer habitats with loose-textured soils (Grinnell et al. 1937, Hall 1946, Egoscue 1962) that are suitable for digging, but they occur on virtually every soil type. Dens are generally located in open areas with grass or grass and scattered brush, and seldom occur in areas with thick brush. Preferred sites are relatively flat, well-drained terrain (U.S. Fish and Wildlife Service 1998, Roderick and Mathews 1999).

Avoidance and Minimization Measures. Prior to any ground disturbance related to covered activities, a USFWS/CDFG approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as supporting suitable breeding or denning habitat for San Joaquin kit fox. The surveys will establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines (U.S. Fish and Wildlife Service 1999). Preconstruction surveys will be conducted within 30 days of ground disturbance. On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 250 foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens.

Adjacent parcels under different land ownership will not be surveyed. The status of all dens will be determined and mapped. Written results of preconstruction surveys will be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance. Concurrence is not

required prior to initiation of covered activities.

If a San Joaquin kit fox den is discovered in the proposed development footprint, the den will be monitored for 3 days by a USFWS/CDFG–approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.

- Unoccupied dens should be destroyed immediately to prevent subsequent use.
- If a natal or pupping den is found, USFWS and CDFG will be notified immediately.
- The den will not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFG.
- If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional 5 consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied it may be excavated under the direction of the biologist. Alternatively, if the animal is still present after 5 or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal’s normal foraging activities).

Project Impacts. Implementation of the avoidance and minimization measures will reduce or eliminate the potential for direct mortality, harassment, or disruption/loss of reproduction to occur for kit fox as a result of construction activities.

The direct effects of the project include permanent and temporary loss of habitat and lost hunting opportunities. Implementation of the project would result in 0.15 acres of permanent impacts to non-native annual grasslands. Potential temporary impacts to habitat for kit fox would comprise 0.83 acres of grassland habitat.

To minimize permanent impacts on grasslands, which provide habitat and opportunities for hunting prey that resides in this habitat, placement of fiber rolls and erosion control blankets will be limited to the period of construction and erosion materials containing netting that could trap small animals will be prohibited. Additionally, disturbed areas around the abutments, former trail alignment and construction staging areas will be covered with the strippings from the project site to encourage reestablishment of the annual grasslands that support prey species.

Plants

Plant communities within the project area have been mapped and identified on aerial photographs. Inventories of specific plant species have been conducted on foot on with a checklist of plant list species previously seen in the same park or area with the latest survey occurring on November 18, 2011. Where a positive identification is obvious, the plant is checked off on (or added to) the District database list. Where an in-field identification is not possible, plant samples with characteristics necessary for positive identification are collected, along with any necessary photographs, and the samples are keyed out later indoors using a binocular dissecting scope, plus printed and on-line references. When the correct species cannot be determined, the plant is identified generally to genus. The final species list is entered into the District Wild Plant database and an appropriate query and report are generated.

Avoidance and Minimization. “No Covered” or “No-take” plant species have been identified within the project area and it has been determined that no-take plants are absent from the project site, and the project will not result in indirect impacts if such plants are found adjacent to the project site.

Project Impacts. The project will result in 0.15 acres of permanent impacts to non-native annual grasslands and 0.83 acres of temporary impacts. To minimize permanent impacts on the non-native annual grassland habitat soil disturbed around the abutments, former trail alignment and construction staging areas will be covered with the strippings from the project site to encourage reestablishment of the annual grasslands thereby minimizing the development imprint on adjacent open space. No permanent loss of woodland habitat will occur because the project will not alter the existing habitat characteristics of the Round Valley Creek. The bridge has been designed to span the 30-foot wide Round Valley Creek channel without removing any of the mature oak trees that line the creek. To ensure no loss of mature trees occurs, existing trees in the project vicinity would be protected in place during construction.

Mitigations: See **BIO-1**

MITIGATION BIO-1. The HCP requires that fees be paid to the ECCHCP Conservancy for total project impacts. These fees will be used to purchase land or easements and enhance habitat within the core habitat areas under the jurisdiction of the HCP as mitigation for project-related effects.

For this project, the HCP/NCCP fee for temporary impacts (0.83 acres, 36,015 square feet) includes the areas that will be temporarily disturbed by the project including the construction staging areas. The HCP/NCCP fee for permanent impacts [0.15 acres, 6,560 square feet] covers the area that will be disturbed to create the abutments and new trail approaches required to conform to the bridge crossing. These fees will be paid before or at the time the construction permit is issued.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? Neither the bridge structure nor the installation activity would impact, or be impacted by, changes to the creek flow line as the 60-foot long structure would extend well beyond the top of the bank of the 30-foot wide creek channel. As the bridge will be a clear span installation, this action will result in 0 acres of temporary or permanent impacts to jurisdictional wetlands or waters (Refer to *Figure 3 - Bridge Profile*).

Potential Impact: None
Mitigation: None required

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? The placement of the bridge has been set so that no trees would need to be removed and so that the bridge would not impact, nor be impacted by, changes to the creek flow line consistent with the District and ECC HCP/NCCP policies and ordinances. Implementation of the mitigation measure BIO-2 would ensure protection of the trees scheduled for retention during construction.

Potential Impact: Less than Significant with Mitigation Incorporated
Mitigation: See **BIO-2**

MITIGATION BIO-2. The District shall communicate and enforce the following Best Management Practices (BMP) to the construction contractor to avoid damage to the trees scheduled for protection. All trees designated for protection shall be clearly marked by the District Representative and these trees shall be identified in the field at a pre-construction meeting with the Contractor. At this meeting the contractor shall be directed:

- To install protective fencing to demarcate the drip line of protected trees

- To avoid trenching, grading, or paving into the drip line area
- Not to change, by more than two feet, grade elevations within 30 feet of the drip line
- Not to park or operate any motor vehicle within the drip line area
- Not to place or store any equipment or construction materials within the drip line
- Not to attach any signs, ropes, cables, or any other items to any tree
- Not to place or allow to flow into or over the drip line area of any protected tree any oil, fuel, concrete mix, or other deleterious substance.

Pruning shall be minimized to the greatest extent feasible. Where pruning is required for equipment access and to facilitate construction activities it shall be performed under the direction of the District Inspector.

f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan? Round Valley Regional Preserve is located within the boundaries of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (ECCC - HCP/NCCP) plan area. The ECCC - HCP/NCCP acknowledges that providing recreational opportunities on Park District lands is integral to the Park District's mission and that it is appropriate to integrate the Park District's recreation planning goals and objectives for low-intensity recreational uses (e.g., trails) within the ECCC - HCP/NCCP Preserve System.

In addition, the HCP/NCCP provides specific avoidance and mitigation measures for direct, indirect, and cumulative impacts to covered special-status species and habitats and jurisdictional wetlands in eastern Contra Costa County. EBRPD will implement the applicable avoidance and minimization measures, and will pay the applicable mitigations fees as summarized in this section. Therefore, the project will have no impact as it will not conflict with the provisions of the HCP/NCCP.

Potential Impact: None

Mitigation: None

4.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the <i>CEQA Guidelines</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the <i>CEQA Guidelines</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a, b, c, d) a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?; b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines; c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? or d) Disturb any human remains, including those interred outside of formal cemeteries? Section 15064.5 of the *CEQA Guidelines* defines a resource as “historically significant” if it is associated with events important to California’s history, is associated with the lives of important persons, embodies distinctive construction characteristics, or contributes important prehistoric or historic information. A significant adverse impact would occur if the project would cause the historical resource to be “materially impaired,” as defined in Section 15064.5 of the *CEQA Guidelines*. Cultural resources are places or objects that are important for scientific, historic or religious reasons to cultures, communities, groups or individuals. Cultural resources include human-made artifacts, structures and sites possessing archaeological or historic significance such as a Native-American burial or an architectural landmark. District Cultural Resources Policy (EBRPD Board Resolution 1989-4-124) calls for the preservation and protection of known archaeological resources in place according to State and federal law. Furthermore, as archaeological resources are vulnerable to disturbance and destruction the District keeps the location of known sites confidential.

A literature review and Phase I (walk-through survey) were conducted to identify historic and prehistoric resource sites in the Preserve and recommend appropriate management (Holman and Associates, June, September 1996, verified D. Bailey and A. Smith 2009). Seven historic and prehistoric sites have been identified in the Preserve. These include two sites of prehistoric stone grinding mortars (sites CA-CCo-540 and CA-CCo-320), of which one site (CA-CCo-320) also contains “midden” soils, (soils that may indicate prehistoric habitation) and prehistoric artifacts. The Phase I survey identified site CA-CCo-320 as an important archaeological resource due to its probable age and stratigraphic integrity. At a third, location, a single isolated bedrock mortar has been identified. Three historic sites with farming buildings and equipment were also present at the time the Preserve lands were purchased. One site is estimated to date back to the 1920s-1930s (CA-CC-0677H). Site CA-CCo-543H and site CA-CCo-541H circa 1890s

may be considered important resources under CEQA. Site CA-CCo-543H also contains midden soils. A fourth historic site may contain the remains of a home site.

None of these sites is located within 500 feet of the project area. However, given the sensitivity of the general area it is possible that unknown historic, archaeological or paleontological material could be uncovered during ground-clearing and other earth-moving activities associated with the project, resulting in a potentially significant adverse impact under CEQA. If this were to happen, the District would follow its established protocol for appropriate treatment of these materials.

Implementation of District Cultural Resources Policy (EBRPD Board Resolution 1989-4-124) along with Mitigation Measures CULT-1, CULT -2, and CULT-3 would avoid or reduce potentially significant impacts to archaeological and paleontological resources to a less-than-significant level.

Potential Impact: Less than Significant with Mitigation Incorporated
Mitigation: See CULT-1, CULT -2, and CULT-3

MITIGATION CULT-1. A District representative shall monitor ground-disturbing activities to ensure there are no impacts to prehistoric or historic resources, and comply with District Cultural Resources Policy (EBRPD Board Resolution 1989-4-124) if resources are encountered.

MITIGATION CULT-2. In the event that prehistoric, archaeological or paleontological artifacts or remains are encountered during project construction, all ground disturbing activities shall be halted within a minimum of 50 feet and artifacts shall be protected in place (in accordance with EBRPD Board Resolution No. 1989-4-124 and State and federal law) until the find is evaluated by an archaeologist or, trained cultural resource professional, and appropriate mitigation, such as curation, preservation in place, etc., if necessary, is implemented.

MITIGATION CULT-3. In the event of accidental discovery of human remains, the County Coroner shall be notified, and, if the remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) would be notified to identify the Most Likely Descendant (MLD), in accordance with State and federal law. The disposition of the remains shall be coordinated between EBRPD, the County Coroner, NAHC, MLD and the archaeological consultant.

4.6 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-I-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. The project site is located outside the State mandated “Alquist-Priolo” Earthquake Fault Zoning Act - Special Studies Zone” for active faults. The closest fault, Marsh Creek (Mount Diablo) Fault runs in a north-southerly direction approximately two miles from the Preserve. Therefore, a less than significant impact is anticipated. [Source: Alquist-Priolo” earthquake zones - http://www.quake.ca.gov/gmaps/ap/ap_maps.htm accessed April 19, 2011]

Potential Impact: Less than Significant
Mitigation: None required

ii) Strong Seismic Ground Shaking. The proposed project area is located within the seismically active San Francisco Bay Area. The closest fault is the Marsh Creek (Mount Diablo)

Fault, which is located about two miles southwest of the Preserve (CDMG, State of California Special Studies Zones, Tassajara, Official Map, 1982). This fault has produced a number of minor earthquakes; two recent significant earthquakes (magnitude 5.5 and 5.6) occurred in 1980.

A study of the U.S. Geological Survey (2003) suggests that there is a 62 percent chance of one or more large magnitude (7.0 or greater) earthquakes in the San Francisco Bay region within the next 30 years. The main hazard from earthquakes is expected to be related to the strong ground shaking that is produced by faults in the site vicinity.

In response to this known hazard, the site geotechnical engineering study has reviewed hazards from earthquakes at the site and has determined that the short-period spectral acceleration for the site is approximately 1.55g and the one-second spectral acceleration is approximately 0.75g. The study recommends using *California Building Code (CBC) Site Class D* for seismic design [Source: *Geotechnical Engineering Study, Round Valley Pedestrian Bridge, Round Valley Regional Preserve*, Jensen-Van Lienden Associates, Inc. May 2011]. In response, the bridge would be designed to nationally recognized standards including the *American Association of State Highway and Transportation Officials (AASHTO), LRFD Bridge Design Specifications* and *LRFD Guide Specifications for the Design of Pedestrian Bridges*. By following the recommendations of the site study, potential substantial adverse effects, including the risk of loss, injury, or death, related to strong seismic ground shaking from an earthquake would be lessened and no further mitigation is required.

Potential Impact: Less than Significant

Mitigation: None required.

iii) Seismic-related Ground Failure and Liquefaction. Liquefaction is a soil behavior in which a soil loses a significant amount of strength due to high excess pore water pressure generated by strong earthquake shaking. The potential for liquefaction is a function of the occurrence of strong ground shaking and soil susceptibility. When strong ground shaking occurs, loose to medium dense, saturated sandy soils (i.e., located below groundwater level) are susceptible to liquefaction. Sands that have fines (particles finer than No. 200 sieve) tend to be less susceptible to liquefaction than those sands with fewer fines.

Near surface soils within the project site consist of four to five feet of dark brown slightly to very sandy silty clay to very clayey sand. These surface soils are underlain by mottled gray and red brown silty and sandy clay extending to a depth of between 13 to 17 feet deep. Light gray and brown clayey soil overlaying medium dense, gray and brown coarse sand and gravel at a depth of about 17 feet persists to a depth of 24 feet on the west side of the creek and 19 feet on the east side of the creek. These soils do not meet the criteria that would make the site susceptible to liquefaction. Therefore, implementation of the project would have a less-than-significant adverse impact related to seismic-related ground failure and liquefaction.

Potential Impact: Less than Significant

Mitigation: None required

iv) Landslides. Slope failure can occur as either rapid movement of large masses of soil (landslide) or slow, continuous movement (creep). The primary factors influencing the stability of a slope are: the nature of the underlying soil or bedrock; the geometry of the slope (height and steepness); rainfall; and the presence of previous landslide deposits. The project site is in a generally flat central valley area within Round Valley Regional Preserve. As such, there are no slopes that would be subject to slope failure either as a single event (landslide) or slow, continuous movement (creep).

Potential Impact: Less than Significant
Mitigation: None required

b) Result in substantial soil erosion or the loss of topsoil? The project site is located at Round Valley Creek. This creek is incised a channel that runs through an alluvial plain. The area is generally level with minor elevation changes in the vicinity of the creek banks with the land rising gradually until it reaches the base of hills both east and west of the banks. The channel width is about 30 feet wide at the proposed bridge location. The corresponding channel depth is about 11 feet. The creek banks are marked by erosion and shallow landsliding upstream and downstream of the bridge site, as well as both banks at the proposed bridge location.

Near surface soils around the project site generally consist of slightly to very sandy silty clay to very clayey sand to a depth of up to 17 feet deep and coarse sand and gravel extending up to a depth of 24 feet (See above for a more detailed description of the site soils).

While the creek banks show the effects of erosion from stream flows, the single span bridge at 60 feet long would have abutments set back far enough from the top of bank (between 10 and 15 feet) so as not to be affected by seasonal peak stream flows. The proposed use of piers and reinforced concrete walls/grade beams to resist forces directed towards the creek channel installed in these soils would meet the criteria for the site established by the geotechnical engineer [Source: *Geotechnical Engineering Study, Round Valley Pedestrian Bridge, Round Valley Regional Preserve*, Jensen-Van Lienden Associates, Inc. May 2011). Therefore, implementation of the project would have a less-than-significant adverse impact related to soil erosion.

Over the short term a total volume of approximately 50 cubic yards of soil would be excavated for the abutments and bridge approaches extending over approximately 550 linear feet of trail (affecting approximately 3,600 square feet) to conform the existing trail alignments to the bridge approaches. This grading activity has the potential to exacerbate erosion resulting in sedimentation entering Round Valley Creek within the project area.

To reduce the potential for erosion and sedimentation associated with the construction activities the contractor would be required to comply with the protective measures of the State Water Resources Control Board (SWRCP) Construction General Permit, 2009-0009-DWQ (CGP) as set forth in the construction specifications including management of the site by a Qualified SWPPP Practitioner (QSP) per mitigation GEO-1.

To further minimize the potential for sediment to enter the creek, the bridge approaches would be stabilized using compacted aggregate, and soil disturbed around the abutments, former trail alignment and construction staging areas would be covered with the strippings resulting from clearing and grubbing activities to encourage reestablishment of the annual grasslands. There would be no in-water work. Implementation of Mitigations AIR-1 and GEO-1 would reduce to potential erosion and sedimentation associated with the construction activities within the project area to a less than significant impact.

Potential Impact: Less than Significant with Mitigations Incorporated
Mitigations: See AIR-1 (Section 4.3), GEO-1

MITIGATION GEO-1. The Contractor shall prepare, submit and implement a Storm Water Pollution Plan (SWPPP). The SWPPP shall be prepared by a Qualified SWPPP Developer (QSD) and managed on-site by a Qualified SWPPP Practitioner (QSP) to ensure implementation of appropriate Best Management Practices for minimizing potential erosion and sedimentation within the project area during construction. These measures include, as appropriate to the site

conditions: conducting activities during the dry season (August 1- October 31); using dikes, basins, ditches, straw, erosion control fabric and other temporary measures (e.g., water bars, fiber rolls) as catchments for source pollutants.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. The bedrock geology of the Preserve is Cretaceous Panoche shale and sandstone with deposits of recent alluvium on the surface in valleys and creek drainages (Source: California Division of Mines and Geology [CDMG], Geologic Map of California 1977, U.S. Geological Survey [USGS], Preliminary Geologic Map of the Tassajara Quadrangle, 1980)

The project site is in a generally flat central valley area within Round Valley Regional Preserve. As such, there are no slopes that would be subject to slope failure either as a single event (landslide) or slow, continuous movement (creep). (Source: *USGS, Preliminary Photointerpretation Map of Landslide and Other Surficial Deposits of the Tassajara 7 1/2' Quadrangle*, 1975).

Soils from the near surface extending down to a depth of 24 feet on the west side and 19 feet on the east of Round Valley Creek consist of silty and sandy clays. These soils range from moderately to highly plastic to plastic and stiff. As such, these soils do not contain characteristics associated with liquefaction [Source: *Geotechnical Engineering Study, Round Valley Pedestrian Bridge, Round Valley Regional Preserve*, Jensen-Van Lienden Associates, Inc. May 2011]

Potential Impact: No Impact

Mitigation: None required

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? The 2010 California Building Code [updated from the Uniform Building Code (1994) which does not include Table 18-1-B] has criteria for defining expansive soil in Section 1803.5.3. Based on these criteria, a soil with a plasticity index rating greater than 20 is considered to be an expansive soil. The project geotechnical report test results show that one of the two samples tested has a PI of 24 and would therefore be considered expansive [Source: *Geotechnical Engineering Study, Round Valley Pedestrian Bridge, Round Valley Regional Preserve*, Jensen-Van Lienden Associates, Inc. May 2011]. However, while the upper layers consist of silty clay and sandy silty clay with a relatively high plasticity index rating, they are overlain on weathered siltstone (sedimentary rock). The bridge foundation piers would extend through the upper layer of expansive soils and 5 feet into the underlying rock per the recommendations of the geotechnical engineering study [Source: *Geotechnical Engineering Study*, Jensen-Van Lienden Associates, Inc. May 2011]. Thus, the structural integrity of the bridge would not be compromised by the near surface soil composition and risks to life or property as a result of construction of a bridge at this site would be less than significant.

Potential Impact: Less than Significant

Mitigation: None required

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? No septic tanks or alternative waste disposal systems are required or being constructed for the proposed project, and no potential impacts associated with septic systems would occur. Therefore, the capacity of the soils to adequately support waste disposal systems is not applicable.

Potential Impact: No Impact

Mitigation: None required

4.7 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the earth, similar to a greenhouse. The accumulation of GHGs has been implicated as a driving force for global climate change generally described as the changing of the earth's climate caused by natural fluctuations and anthropogenic activities that alter the composition of the global atmosphere. Individual projects contribute to the cumulative effects of climate change by emitting GHGs during demolition, construction, and operational phases. The primary GHGs associated with land use development projects are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Although the presence of the primary GHGs in the atmosphere is naturally occurring, CO₂, CH₄, and N₂O are largely emitted from human activities, accelerating the rate at which these compounds accumulate in the earth's atmosphere. CO₂ is the "reference gas" for GHG emissions, meaning that emissions of total GHGs are typically reported in "carbon dioxide equivalent" (CO₂e). Emissions of CO₂ are largely by-products of fossil fuel combustion.

The construction phase of the project would include the transport of workers to and from the project site and the operation and idling of heavy equipment, temporarily increasing CO₂ emissions and generating heat. These construction-related impacts are limited in scope and short-term in duration. Long term, once the project is completed, management of the site would continue to be accomplished by existing EBRPD staff so vehicle trips and associated emissions would return to current levels. Thus, the project-related emissions would be characterized as a temporary, construction-related impact.

In terms on ongoing operational impacts, the project is anticipated to encourage non-motorized recreation activities by improving trail access across Round Valley Creek through the installation of the bridge. These recreation activities would not add to cumulative accumulation of GHGs implicated as a driving force of projected climate change.

Fuel energy is used by Preserve patrol vehicles, by maintenance vehicles and equipment, and by Preserve visitors who travel to and from the Preserve. However, it is anticipated that the proposed project would not result in an increase of emissions from any of these sources as this project only involves the enhancement of the existing trail system already used by Preserve visitors and maintained by District employees.

Therefore, the proposed project would have a less-than-significant impact with respect to construction or operational GHG emissions.

Potential Impact: Less than Significant

Mitigation: None required

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? The California Office of Public Resources (OPR) has updated Appendix G of the State CEQA Guidelines to address impacts of GHG emissions, as directed by SB 97 (2007). The amendments became effective March 18, 2010. Although the amendments provide criteria to evaluate a project's GHG emissions, they do not establish quantitative significance thresholds. According to the revised Appendix G of the State CEQA Guidelines, an impact related to global climate change is considered significant if the proposed project would: generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

It is anticipated that the proposed project would not raise the level of annual operational emissions after build-out as this project only involves the installation of a pre-fabricated pedestrian bridge that would connect the Miwok and Hardy Canyon Trails to the Fox Tail and Murphy Meadow Trails, existing trails already used by Preserve visitors and maintained by District employees. Thus, completion of the project would not result in an increase of motorized traffic or other human activities that would result in an increase in average global temperatures and associated changes in climatic conditions over the long term thereby conflicting with any adopted applicable plan, policy or regulation.

To minimize one-time construction related emissions the contractor would be required to adhere to best management practices to reduce GHG emissions including turning off engines when not needed thereby reducing the amount of fuel burned through unnecessary idling. Heat sources would be shielded by equipment covers protecting nearby objects from high heat. Additionally, the effects of residual heat would diminish rapidly within a short distance of the equipment and permanently after the work ceases.

Life-cycle emissions are not included in the analysis in accordance with a California Air Pollution Control Officers Association (CAPCOA) white paper that states: *"The full life-cycle of GHG emissions from construction activities is not accounted for in the modeling tools available, and the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level."*

Accordingly, the BAAQMD *CEQA Air Quality Guidelines* (June, 2010), establish no construction-related thresholds for GHG emission. Furthermore, the project would not be expected to increase the level of recreational use or vehicle trips or emissions. Therefore, this project would have a less-than-significant impact with respect to cumulative GHG emissions.

Potential Impact: Less than Significant

Mitigation: None required

4.8 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a), b) a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? The proposed project construction activities would require use of small quantities of potentially hazardous materials, such as fuels, oils, and solvents used for equipment. Spills, upsets, or other project-related accidents, along with the transporting of materials could result in the release of fuel or other hazardous substances into the environment. Toxic substances used at the construction site, including gasoline, lubricants, and other petroleum-based products could enter Round Valley Creek as a result of spills or leakage from machinery or storage containers if not appropriately controlled. These substances could kill aquatic organisms through exposure to lethal

concentrations or exposure to non-lethal levels that could cause physiological stress and increased susceptibility to other sources of mortality.

Implementation of Mitigation Measure HAZ-1 would reduce the potential for adverse impacts from incidents associated with the transport and use of potentially hazardous materials to a less than significant level.

Potential Impact: Less than Significant with Mitigation Incorporated
Mitigations: See HAZ-1

MITIGATION HAZ-1: The transport, storage and use of potentially hazardous materials shall conform to the following provisions:

- All equipment shall be inspected for leaks immediately prior to the start of project activities and regularly inspected henceforth until equipment is removed from the premises.
- The contractor(s) shall prepare an emergency spill response plan prior to the start of the project and maintain a spill kit on-site throughout the duration of the proposed project. In the event of a spill or release of any chemicals during activities associated with the proposed project, on or adjacent to Preserve property, the contractor shall immediately notify the appropriate District Representative (e.g., project manager or supervisor). Emergency containment procedures shall be initiated immediately to prevent contamination.
- Hazardous materials required for construction shall be contained within vessels engineered for safe storage. Large quantities of such materials shall not be stored on-site.
- Equipment shall be refueled, cleaned and repaired outside Preserve boundaries, or within a contained area on site a minimum of 200 feet away from creeks and drainages, except during emergency situations. All contaminated water, spill residue, or other hazardous compounds shall be disposed of outside Preserve boundaries at an authorized location.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? There are no existing or proposed schools within one-quarter mile of the proposed project site. The closest schools are located in adjacent community of Brentwood located approximately six miles from the Preserve.

Potential Impact: No Impact
Mitigation: None required

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? The proposed project area is not included on the Department of Toxic Substances Control's (DTSC's) Hazardous Waste and Substances Site List - Site Cleanup (Cortese List) pursuant to Government Code §65962.5 (AB 3750) (Source: Internet site: http://www.dtsc.ca.gov/SiteCleanup/index.cfm#Cleanup_Sites accessed April 21, 2011).

Potential Impact: No Impact
Mitigation: None required

e, f) e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; or f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? The project site is not located within an airport land use plan or within two miles of a public airport or public use airport; nor is the proposed project in the vicinity of a private

airstrip with the closest airport being located in Byron approximately five miles from the southern Preserve boundary. Therefore, implementation of the proposed project would not expose people working in the project area to airport related hazards.

Potential Impact: No Impact
Mitigation: None required

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? The project would not impair implementation of, or physically interfere with, an adopted emergency response or evacuation plan. The proposed pedestrian bridge across Round Valley Creek would facilitate visitor egress from the Preserve in the event of an emergency.

Potential Impact: No Impact
Mitigation: None required

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? Round Valley Regional Preserve is designated as a Moderate Fire Hazard Severity Zone in an area of State responsibility in the vicinity of the Marsh Creek Staging Area and High Fire Hazard Severity Zone in the area of the proposed construction site (Source: Internet www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.php, accessed April 21, 2011). These conditions are accentuated by dry, windy climatic conditions during summer/fall months (June through October) and a landscape consisting largely of annual grasses. However, the proposed project would not add any new uses that would create additional long term or permanent increased fire risks.

Over the short term the proposed project would involve the use of heavy equipment that could magnify fire risk, particularly during warmer days. Sparks could generate from improperly outfitted exhaust systems or friction between metal parts. Implementation of Mitigation Measure HAZ-2 would ensure that heavy equipment operators take appropriate precautions to reduce fire risk to a less than significant level.

Potential Impact: Less than Significant with Mitigation Incorporated
Mitigation: See **HAZ-2**

MITIGATION HAZ-2: Contractor shall comply with the fire safety requirements set forth in the project specifications for the project. Measures contained in the project specifications include, but may not be limited to, the following measures to reduce fire hazards:

- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers shall be required for all heavy equipment.
- Work crews shall be required to clear and grub an area of dry grass and brush at a location agreed upon by the Contractor and District Representative prior to project commencement. This area is to be used as a construction staging area for parking construction vehicles and supplies. The strippings from this site shall be stockpiled for redistribution onto the grubbed site at the close of construction.
- District staff shall be required to have a District radio on-site, which would allow for direct contact to Calfire and the centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire. Fire suppression equipment (i.e., fire extinguishers) shall also be available at the project site.

4.9 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, f) a) Violate any water quality standards or waste discharge requirements; or f) otherwise substantially degrade water quality? Water quality objectives for the project area are specified in the Water Quality Control Plan prepared by the Central Valley Regional Water Quality Control Board (CVRWQCB) in compliance with the federal and State (California Water Code section 13240) regulations. The CVRWQCB Plan contains water quality objectives for lakes, rivers and their tributaries within its jurisdiction.

Construction activities within the .9- acre project site located in proximity to the Round Valley Creek would have the potential to contribute to erosion adversely affecting the quality of the storm water runoff and of the waters of the creek over the short term. To reduce the discharge of pollutants in stormwater discharges to the maximum extent practicable during construction Best Management Practices are set forth in the *Round Valley Pedestrian Bridge, Round Valley Regional Preserve* construction specifications storm water pollution control program including control techniques, design and engineering methods, and other measures as appropriate. These actions are summarized in mitigations AIR- 1 and GEO-1. These actions would reduce potential short term impacts associated with sediment and pollutant discharges to a less than significant level.

Potential Impact: Less than Significant with Mitigations Incorporated
Mitigation: See **AIR- 1** (Section 4.3) and **GEO-1** (Section 4.6)

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The project does not propose to use groundwater supplies nor does it propose the construction of infrastructure or facilities that would increase impervious surfaces leading to a substantial depletion of groundwater supplies. Therefore, the proposed project would not substantially or permanently affect groundwater levels.

Potential Impact: No Impact
Mitigation: None required

c, d) c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? The bridge would be supported by two abutments approximately 3-foot wide by 12-foot long with the piers extending a minimum of 5 feet into the bedrock. The piers would be located outside of the creek bed between 10 and 15 feet from the top of bank at elevation 384.5. As a result, the bridge would not impact, nor be impacted by, changes to the creek flow line as the structure would extend well beyond the top of the bank of the 30-foot wide creek channel. The steel bridge framework will be manufactured in a shop off site and delivered to the site for assembly. A crane would be used to install the bridge onto the abutments. These activities would not result in alterations to the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

In the short term potential sediment discharges resulting from the proposed grading activities would involve moving approximately 50 cubic yards of soil to realign an existing trail to conform to the bridge approaches and to construct the bridge abutments. These activities could create or contribute to sediment runoff thereby adversely affecting the quality of the runoff water and the water within the creek. However, the construction activities would commence in the summer and be completed by October 31 when the likelihood of rain is low and surface water in Round Valley Creek is non-existent or confined to small pools.

Adherence to the protective measures of the State Water Resources Control Board (SWRCP) Construction General Permit, 2009-0009-DWQ (CGP) as set forth in the construction specifications including management of the site by a Qualified SWPPP Practitioner (QSP). Adherence to these

conditions as set forth in Mitigations AIR- 1 and GEO-1 would reduce potential erosion and sedimentation discharges associated the proposed construction activities to a less than significant level.

Potential Impact: Less than Significant with Mitigation Incorporated

Mitigation: See AIR- 1 (Section 4.3) and GEO-1 (Section 4.6)

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? The project site which is located wholly in Round Valley Regional Preserve is an undeveloped open space area that has no existing or planned man-made stormwater drainage systems. The proposed construction improvements would not alter the existing drainage patterns of the site or area such that on- or off-site flooding would result. As the proposed bridge span is significantly longer than the 30-foot creek width, it would not impact, nor be impacted by, changes to the creek flow line. Nor would it create or contribute to an increase in runoff water which would exceed the capacity of Round Valley Creek or its tributaries.

Furthermore, to reduce the potential for erosion and sedimentation associated with the construction activities, the Contractor would be required to comply with the protective measures of the State Water Resources Control Board (SWRCP) Construction General Permit, 2009-0009-DWQ (CGP) as set forth in the construction specifications including management of the site by a Qualified SWPPP Practitioner (QSP). Adherence to these conditions as set forth in Mitigations AIR- 1 and GEO-1 would reduce prevent the discharge of polluted runoff associated the proposed construction activities to a less than significant level.

Potential Impact: Less than Significant with Mitigation Incorporated

Mitigation: See AIR- 1 (Section 4.3) and GEO-1 (Section 4.6)

g), i) g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. For purposes of this environmental document, an impact is considered significant if the proposed project would substantially increase exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood. The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRM) that delineate flood hazard zones for communities. In this case, as the project site is located approximately six miles from Brentwood, the closest community, the site is not included on Flood Insurance Rate Maps (FIRM) prepared by FEMA. (Source: Internet Federal Emergency Management Agency Flood Insurance Rate Map Contra Costa County, California Unincorporated Areas: www.fema.gov/hazard/map/firm.shtm accessed April 21, 2011). However, the project does not include construction of housing or any other structures in the project area that would be affected by localized flooding. Nor does the project involve the development or modification of any levee or dam; so completion of the project would not expose people to a significant risk of injury or death or structures to a significant risk of damage or loss from flooding as a result of the failure of a levee or dam.

Potential Impact: No Impact

Mitigation: None required

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows. While the project consists of a bridge and trail approaches, the bridge span from abutment to abutment of approximately 60 feet is significantly longer than the 30-foot creek width. These design elements would allow water to flow unimpeded without impacting, or be impacting by peak season flows.

Potential Impact: Less than Significant
Mitigation: None required

j) **Inundation by seiche, tsunami, or mudflow?** As Round Valley Regional Preserve is located in an interior valley there is no potential of inundation by seiche or tsunami during a high magnitude seismic event because there are no water bodies of sufficient size that could generate seiche or tsunami force wave action.

The project site is in a generally flat central valley area within Round Valley Regional Preserve. As such, there are no slopes that would be subject to slope failure either as a single event (landslide, mudflow) or slow, continuous movement (creep).

Potential Impact: Less than Significant
Mitigation: None required

4.10 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project physically divide an established community? The construction area is located wholly within Round Valley Regional Preserve with the closest community, Brentwood, located approximately six miles from the Preserve and the project is limited in scope to improvements to the existing recreation trail system. As such, the project area would not physically divide any established communities.

Potential Impact: No Impact

Mitigation: None required

b, c) b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect or c) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? The project does not propose to change any adopted land use plans. It is consistent with goals and policies pertaining to recreation activities, services and emergency access set forth in the *Round Valley Regional Preserve Land Evaluation for Interim Use, Resolution No. 1996-10-281* approved October 15, 1996 and the District's 1997 Master Plan policies. It is also consistent with the Contra Costa County General Plan Land Use Designations that identifies Round Valley Regional Preserve as "Parks and Recreation." According to Chapter 3 - Land Use Element item (g) Parks and Recreation (PR), the "Parks and Recreation" designation includes: "*publicly owned city, district, County and regional parks facilities, as well as golf courses, whether publicly or privately owned. Appropriate uses in this designation are passive and active recreation-oriented activities, and ancillary commercial uses such as snack bars, and restaurants. The construction of new privately owned residences or commercial uses, and the subdivision of land would be inconsistent with this General Plan designation*" (Source: www.co.contra-costa.ca.us/depart/cd/current/advance/cddmap.htm accessed April 21, 2011). Thus, the proposed project would be consistent with all applicable land use plans and polices governing the project (Also refer to Section 4.4 – *Biological Resources* for a discussion of the applicability and consistency of the project to the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan [ECCC - HCP/NCCP]).

Potential Impact: No Impact

Mitigation: None required

4.11 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

a, b) a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? The project, which is located wholly within Round Valley Regional Preserve, involves the installation of a prefabricated bridge and realignment of a natural surface trail to connect to the bridge. These proposed actions would not affect any mineral resources.

Potential Impact: No Impact

Mitigation: None required

4.12 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a), b), d) Would the project result in exposure of persons to or generation of: a) exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; b) excessive ground borne vibration or ground borne noise levels; or d) substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? The Noise Element of the Contra Costa County General Plan establishes a Day-Night Sound Level (DNL) standard for outdoor noise levels in low density residential areas of 60 dB and a generally acceptable outdoor noise level for Neighborhood Parks of less than 70dB. (Source: Contra Costa County General Plan, Noise Element, <http://www.co.contra-costa.ca.us/depart/cd/current/advance/GeneralPlan.htm>, accessed April 25, 2011).

In general, the noise levels in the Preserve may be characterized as those of rural areas which typically range from 40 to 50 decibels on a 24-hour noise scale called the Community Noise Equivalent Levels (CNEL). Intermittent noise levels for heavy equipment construction levels typically range from 75-100 dB. Sensitive noise receptors (those that may be affected by changes in ambient noise levels) within the project would include recreational users (e.g., hikers; equestrians; bicyclists); and wildlife (See Section 4.4 - *Biological Resources*).

Certain activities involving heavy equipment (e.g., grading and abutment construction) would generate temporary, periodic increases in ambient noise levels in the project vicinity. However, the generation of construction related noise levels would be of short duration and would not result in a substantial permanent increase in ambient noise levels in the project vicinity.

Moreover, as ambient noise levels decrease with distance, the nearest residential areas which are located more than five miles from the project site are not likely to be affected by the proposed construction activities. Impacts to Preserve visitors from the proposed construction activities associated with the site work would be minimized through an outreach program that would warn visitors regarding work under progress. This public outreach component would include: posting informational signs at the project site and on the District web site. Further, the Round Valley Group Campground is located approximately one mile away from the project site so ambient noise levels would likely be at acceptable outdoor noise levels during the day and construction work would cease after 7PM when receptors would be more sensitive to ambient noise levels. So campers are not likely to be affected by the construction activities.

Upon project completion construction related noise would cease when equipment and materials are removed. Noise levels would then return to existing levels that now occur as part of ongoing recreation and management activities.

Potential Impact: Less than Significant

Mitigation: None required

c) Would the project result in exposure of a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? The project would not result in a substantial permanent increase in ambient noise levels as the proposed improvements would support existing recreation uses. It can be expected that existing noise levels that now occur as part of ongoing recreation and management activities would continue at current levels.

Potential Impact: No Impact

Mitigation: None required

e, f) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? The proposed project area is not located within a private airport land-use plan or within two miles of a public airport or public-use airport or the vicinity of a private airstrip. Therefore, implementation of the project would not expose people living, recreating or working in the project area to excessive noise levels associated with airport or aircraft operations.

Potential Impact: No impact

Mitigation: None required

4.13 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? The proposed project would involve trail and creek crossing improvements including installation of a clear span bridge and natural surface trail approaches to improve public access from the staging area to existing trails within Round Valley Regional Preserve. The project area is wholly contained within Round Valley Regional Preserve dedicated as regional preserve open space since 1988. No habitable improvements such as residential housing uses are permitted within the project area, nor are any habitable structures proposed that would add to localized daytime population growth.

Moreover, the project would not induce substantial population growth in the area because construction activities are limited in scope and short-term in duration so relatively few workers would be involved in completing the construction work. Long term management of the site would continue to be accomplished by existing EBRPD staff. Therefore, the proposed project would not directly result in population growth through the construction of new houses, nor indirectly add capacity-allowing population growth in the surrounding area.

Potential Impact: No impact

Mitigation: None required

b, c) Would the project: b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? The proposed project would involve public access improvements at Round Valley Creek in land dedicated as regional open space. As such, the proposed project would not displace existing housing, displace temporarily nor permanently persons residing in the area, nor require the construction of replacement housing. Thus, the project would not have any impact on population growth in the area.

Potential Impact: No impact

Mitigation: None required

4.14 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) Would the project result in substantial adverse physical impacts associated with fire protection, police protection, schools or parks? The construction area is located wholly within Round Valley Regional Preserve with the closest community, Brentwood, located approximately six miles from the Preserve. The project is limited in scope to improvements to the existing recreation trail system. As a public open space, implementation of the proposed project would not create a need for additional parks, schools or other public facilities. The level of services required for the proposed project is expected to remain relatively static. District rangers and police officers would continue to patrol and respond to emergencies within the Preserve via District vehicles and helicopters.

While the project would not alter current recreation use or other rangeland activities or result in an increase in visitor use over the long term, there would be minor disruptions in recreation use to protect the public from construction related activities and impacts. Generally, the parking area and most of the trails would remain open to the public during the construction of the project improvements. However, the Miwok Trail would be closed at the staging area during major deliveries (less than 10 days total) and the Marsh Creek Staging Area may also be completely closed at these times. There would be no weekend closures.

These actions would require noticing and additional monitoring by District staff as well as the contractor, to ensure that Preserve visitors do not enter the construction area at times that could pose a safety risk. The public outreach component would include: posting informational signs regarding work under progress at the project site and on the District web site. In addition the Contractor would be required to provide flaggers, signs and/or barricades as needed to assure the public's safety.

As noted in Section 4.8-*Hazards and Hazardous Materials*, the use of heavy equipment near flammable vegetation presents an increased fire risk during the high fire hazard season that could result in additional demands on District fire response teams. However, any impact on services associated with the use of heavy equipment would be temporary and nothing in the project scope would contribute to the need for an increased level of public services on a permanent basis.

Implementation of Mitigation Measures PUB SER-1, which requires public warnings, and HAZ-2, which requires readily available on-site fire suppression equipment (e.g., fire extinguishers) and an on-site radio to facilitate the rapid dispatch of control crews and response equipment in case of a fire or other emergency, would reduce potential short-term project impacts to public services associated with public safety and heightened fire hazard risk to less than significant levels.

Potential Impact: Less than Significant with Mitigation Incorporated

Mitigation: See **PUB SER-1** and **HAZ-2**, Section 4.8

MITIGATION PUB SER-1. The District shall develop a noticing and outreach component to inform the public about scheduled closures. Noticing and outreach shall include the following components:

- The District shall post notices at key access points in Round Valley Regional Preserve that detail the proposed project's construction schedule, including a map of the project site, and the timing and duration of planned closures
- The District shall post a large visible sign in proximity to the project site warning the public of ongoing construction activities and intermittent disruption of recreational access to the Preserve and along some of the trails
- The District reservation staff shall be informed of the project and briefed as to potential construction related disruptions (e.g., added noise and dust in a normally tranquil setting, occasional traffic disruptions, potential reduction in available parking as the contractor may elect to stockpile supplies for short periods of time to facilitate deliveries)
- The District shall provide notice of the project on its website.

4.15 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? The construction area is located wholly within Round Valley Regional Preserve with the closest community, Brentwood, located approximately six miles from the Preserve and the work is limited in scope to improvements to the existing recreation trail system. As such, implementation of the proposed project would not result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated.

Potential Impact: Beneficial impact

Mitigation: None required

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project would reconfigure and upgrade the trail approaches and improve access across Round Valley Creek through the installation of the clear span bridge that would connect the existing Miwok and Hardy Canyon Trails to the Fox Tail and Murphy Meadow Trails. No trees would be removed and no changes would occur to the creek channel as a result of the proposed bridge construction. Provision of a bridge across Round Valley Creek would improve access to the Preserve's recreational trails and reduce public use of the creek channel bed resulting in improved water quality and reduced impacts on the riparian habitat.

Potential Impact: Beneficial impact

Mitigation: None required

4.16 TRANSPORTATION/TRAFFIC

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION/TRAFFIC -- Would the project:				
a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a), d) a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit or d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? All activities associated with the project would occur within the boundaries of the Round Valley Regional Preserve with implementation of the project possibly resulting in short term internal circulation impacts while equipment and personnel are transported to and from the site.

Access to the construction site would be from either the Marsh Creek Staging Area located along Marsh Creek Road or Los Vaqueros Road which traverses Contra Costa Water District Los Vaqueros Reservoir property. Construction vehicles utilizing the Marsh Creek Staging Area would travel on an existing dirt road crossing over two existing 12-foot wide 20-ton limit bridges and three concrete fords to reach the construction staging area. The construction staging area would be situated on the northeast side of Round Valley Creek. Access via Los Vaqueros Road would be along an existing dirt road and would not require any bridge or ford crossings.

Disruptions to recreation activities would be minor and short term in nature directed at protecting public safety. The Miwok Trail would be closed at the Marsh Creek Staging Area during major deliveries (less

than 10 days total). The staging area may also be completely closed at these times. It may be possible to allow other construction traffic to share the trails with the public. There would be no weekend closures.

Project activities would involve installation of a clear span bridge and realignment of an existing trail resulting in safer passage with less mobility restrictions. The project would not alter current recreation use or rangeland activities. As such, a change in parking demand is not anticipated.

The project does not include any proposals to change the design of roadways, intersections or parking areas. As the project is wholly contained within Round Valley Preserve it would not affect the Level of Service (LOS) of any intersections in the project vicinity. Nor would it conflict with any adopted policies, plans, or programs that support alternative transportation.

Potential Impact: No Impact

Mitigation: None required

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? As described above, work associated with the proposed project would not restrict access to or block any public road as all activities associated with the project would occur within Round Valley Regional Preserve. Therefore, the impact on congestion resulting from project-generated vehicles on normal traffic on the Interstates or surface roads would be minimal and have no impact on the acceptable LOS for this area.

Potential Impact: No Impact

Mitigation: None required

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? Implementation of the project would not result in a change in air traffic patterns as all work take place on the ground and the proposed project area is not located within a private airport land-use plan or within two miles of a public airport or public-use airport or the vicinity of a private airstrip.

Potential Impact: No Impact

Mitigation: None required

e) Result in inadequate emergency access? Implementation of the project would not alter roads or other infrastructure used or identified as emergency access routes. Work associated with the proposed project would not restrict access to or block any public road as all activities associated with the project would occur within Round Valley Regional Preserve. Additionally, most areas within the Preserve would remain open to the public during the project construction activities, with no closures of areas identified as emergency access routes. While there could be intermittent and temporary restrictions at the Marsh Creek Staging Area and along the Miwok Trail relating to transporting and storing construction equipment and supplies, these disruptions would be short term in nature.

Potential Impact: No Impact

Mitigation: None required

f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? There are approximately nine miles of service roads within the Preserve used for maintenance and fire protection that also serve as hiking, and equestrian trails. Nearly six miles of this trail system is also available to bicyclists. All of the trails are unpaved. Bicycle,

pedestrian and equestrian access to the project area is provided via the Miwok and Hardy Canyon Trails. The installation of pre-fabricated bridge would connect these two existing trails to the Fox Tail and Murphy Meadow Trails, which provide access to the Round Valley Group Camp located 1.3 miles from the project site. The proposed improvements are consistent with goals and policies pertaining to recreation activities, services and emergency access set forth in the *Round Valley Regional Preserve Land Evaluation for Interim Use, Resolution No. 1996-10-281* approved October 15, 1996 and the District's 1997 Master Plan policies. It is also consistent with the Contra Costa County General Plan Land Use Designations that identifies Round Valley Regional Preserve as "Parks and Recreation."

The closest bus service is provided by Tri Delta Transit Service, which serves the cities of Antioch, Pittsburg, Brentwood, Oakley, Bay Point, Discovery Bay and Concord operating 14 local bus routes Monday-Friday (including Express Route 300) and three bus routes on weekends and holidays. Brentwood, the closest community served, is located approximately six miles from the Preserve entrance. All Tri Delta Transit buses are equipped with bicycle racks. Each rack can hold up to two bikes. However, there are no bike lanes or sidewalks along Marsh Creek Road, the primary access into the Preserve. As such, while the proposed project does not conflict with adopted policies, plans, or programs supporting alternative service, the project does not benefit (or adversely impact) alternative transportation on lands outside the District's jurisdiction either.

Potential Impact: No Impact

Mitigation: None required

4.17 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a), b), e) a) **Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; b) require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?** Implementation of the project would not result in the construction of any new permanent structures that would generate wastewater or require wastewater treatment adding to the capacity of any wastewater treatment provider. Nor, would the project require irrigation or construction of facilities or uses that would require large quantities of water. Therefore, implementation of the project would not exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board (CVRWQCB) or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities.

Potential Impact: No impact

Mitigation: None required

c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?** The

project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities.

Potential Impact: No Impact

Mitigation: None required

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? The proposed project would not require new or expanded water supply entitlements, or result in any new demands on existing water sources. Therefore, the proposed project would have no impact on water entitlements or supplies.

Potential Impact: No impact

Mitigation: None required

f), g) f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and g) comply with federal, state, and local statutes and regulations related to solid waste? The long term volume of waste generated from existing recreation uses are expected to remain static as visitor use is not anticipated to expand as a result of the project.

Over the short term waste materials generated as part of the as part of the site preparation would be negligible as there are no existing structures in the project vicinity and the bridge structure would be sited so that none of the existing trees would need to be removed. Thus, potential impacts to landfill capacity resulting from implementation of the project would be less than significant.

Potential Impact: Less than Significant

Mitigation: None required

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The proposed project would not degrade the quality of the environment. The project would not substantially reduce the habitat or affect populations of any fish or wildlife species (see Section 4.4 - *Biological Resources*) or eliminate important examples of the major period of California history or prehistory (see Section 4.5 - *Cultural Resources*).

Project impacts would be less than significant with mitigation.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As discussed in Section 4.4 - *Biological Resources* and Section 4.5 - *Cultural Resources* impacts would be reduced to less than significant through the incorporation of mitigation measures. As discussed in Sections 4.1- 4.3 and 4.6 - 4.16 the project would have no impacts or impacts would be less than significant with mitigation. Cumulatively, considerable impacts would be less than significant.

Project impacts would be less than significant with mitigation.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Environmental effects from the proposed project would generally not have substantial adverse effects on humans. However, possible impacts from construction accidents, noise, and other safety hazards do exist. With the incorporation and implementation of the proposed mitigation measures, impacts to humans from the proposed project would be reduced to less than significant.

Project impacts would be less than significant with mitigation.

5.0 REPORT PREPARATION

5.1 REPORT PREPARERS

East Bay Regional Park District Staff. Brian Wiese, Chief of Planning and Stewardship, Glenn Gilchrist, Civil Engineer, Steve Bobzien, Ecological Services Coordinator, Mathew Graul, Water Resources Manager, and Julie Bondurant, Senior Park Planner.

5.2 ACRONYMS

BAAQMD	Bay Area Air Quality Management District
BMPs	Best Management Practices
CAPCOA	California Air Pollution Control Officers Association
CASQA	California Stormwater Association
CCWQCB	Contra Costa Water Quality Control Board
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CGP	Construction General Permit, 2009-0009-DWQ
CH ₄	Methane
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Levels
CO ₂	Carbon Dioxide
CVRWQCB	
District	East Bay Regional Park District
EBRPD	East Bay Regional Park District
ECCC - HCP/NCCP	East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan
ECCHC	East Contra Costa County Habitat Conservancy
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
GHGs	Greenhouse Gases
IS	Initial Study
MEP	Maximum Extent Practicable
MND	Mitigated Negative Declaration
N ₂ O	Nitrous Oxide
QSP	Qualified SWPPP Practitioner
RWQCB	Regional Water Quality Control Board
SRA	Shaded Riverine Aquatic
SWPPP	Storm Water Pollution Prevention Plan
SWRCP	Storm Water Resources Control Board
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

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Appendix A

Table A-1- Round Valley Proposed Bridge - Plant Survey 11-01-2011

Survey conducted on November 1, 2011 by Wilde Legard - EBRPD Botanist

Scientific Name (Jepson eFlora - November 2011)	Common Name	Family
<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish Clover	Fabaceae
<i>Artemisia douglasiana</i>	California Mugwort	Asteraceae
<i>Asclepias fascicularis</i>	Whorled/Narrow-leaf Milkweed	Apocynaceae
<i>Brassica nigra</i>	Black Mustard	Brassicaceae
<i>Bromus diandrus</i>	Ripgut Brome	Poaceae
<i>Bromus hordeaceus</i>	Soft Brome	Poaceae
<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i>	Italian Thistle	Asteraceae
<i>Centaurea solstitialis</i>	Yellow Star Thistle	Asteraceae
<i>Croton setigerus</i>	Turkey Mullein	Euphorbiaceae
<i>Elymus caput-medusae</i>	Medusahead	Poaceae
<i>Elymus glaucus</i> subsp. <i>glaucus</i>	Blue Wild Rye	Poaceae
<i>Festuca bromoides</i>	Six-weeks Fescue	Poaceae
<i>Holocarpha obconica</i>	San Joaquin Tarplant	Asteraceae
<i>Juncus</i> sp.	Rush	Juncaceae
<i>Malvella leprosa</i>	Alkali Mallow	Malvaceae
<i>Mimulus guttatus</i>	Golden Monkey Flower	Phrymaceae
<i>Polypogon monspeliensis</i>	Annual Rabbitfoot Grass	Poaceae
<i>Populus fremontii</i> subsp. <i>fremontii</i>	Fremont Cottonwood	Salicaceae
<i>Quercus lobata</i>	Valley Oak	Fagaceae
<i>Rhamnus ilicifolia</i>	Hollyleaf Redberry	Rhamnaceae
<i>Rosa californica</i>	California Wild Rose	Rosaceae
<i>Rumex crispus</i>	Curly Dock	Polygonaceae
<i>Scrophularia californica</i>	California Figwort	Scrophulariaceae
<i>Toxicodendron diversilobum</i>	Poison Oak	Anacardiaceae
<i>Xanthium strumarium</i>	Cocklebur	Asteraceae

Friday, November 18, 2011

