Prairie City SVRA
Barton Ranch Property Acquisition

Initial Study/
Mitigated Negative Declaration

August 2012

State of California
Department of Parks and Recreation,
Off-Highway Motor Vehicle Recreation Division

Prairie City SVRA
Barton Ranch Property Acquisition

Initial Study/
Mitigated Negative Declaration

August 2012

Prepared for:

State of California, Department of Parks and Recreation
Off-Highway Motor Vehicle Recreation Division
1725 23rd Street, Suite 200
Sacramento, CA 95816
(916) 324-4442
www.ohv.parks.ca.gov

Prepared by:

TRA Environmental Sciences, Inc.
545 Middlefield Road, Suite 200
Menlo Park, CA 94025
(650) 327-0429
(650) 327-4027 Fax
www.traenviro.com

MITIGATED NEGATIVE DECLARATION

Project: Barton Ranch Property Acquisition

Lead Agency: California Department of Parks and Recreation (CDPR), Off-Highway Motor Vehicle Recreation (OHMVR) Division

Availability of Documents: The Initial Study for this Negative Declaration is available for review at:

- Prairie City State Vehicular Recreation Area (SVRA)
  13300 White Rock Road
  Rancho Cordova, CA 95742
  (916) 985-1094
  Contact – Jason De Wall, Sector Superintendent

- CDPR, OHMVR Division
  1725 23rd Street, Suite 200
  Sacramento, CA 95816
  (916) 445-9152
  Contact – Ryan Miller

PROJECT DESCRIPTION

The OHMVR Division proposes acquisition of a 68-acre property located next to Prairie City SVRA in Rancho Cordova, Sacramento County. The primary purpose of acquiring the property is to add it to Prairie City SVRA as buffer land and to use as much as 10 acres contiguous with the existing property boundary for water quality improvement facilities. An additional five acres of undisturbed land may be used as a spray field for collected stormwater.

Soon after purchase, Prairie City SVRA staff would place fencing around the periphery of the property that does not already have fencing; the property would not be open to the public. A gate would be installed that would allow authorized access to the property for resource management. Resource management would focus on maintaining existing native habitat values on the site and removing downed trees, tree limbs, and other debris from Coyote Creek and other areas of the property, as needed.

In order to treat runoff from the existing SVRA, the OHMVR Division proposes installing sediment basin and/or a biofiltration swale (bioswale) or other stormwater control feature on as much as 10 acres of the acquired buffer land. Although not designed yet, the proposed basin and/or bioswale system would be designed to remove sediment from the stream system and improve water quality so that flows offsite meet the regulatory requirements. Prior to designing the basin and/or bioswale system, a hydrologic model would be prepared for the project. In addition to the sediment basin or bioswale methods, other measures may be used including sediment barriers and a stormwater sprayfield. The projected timeline for installation is 2015 to 2020.

MITIGATION MEASURES

Mitigation Measure AIR-1: Prairie City SVRA shall implement all SMAQMD Basic Construction Emission Control Practices as follows:

- Water all exposed surfaces two times daily, including soil piles, graded areas, unpaved parking areas, and staging areas.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil. Any haul trucks travelling on freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- Minimize idling time by shutting equipment off when not in use or reducing idling time to five minutes; provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Mitigation Measure BIO-1: Prior to construction and ground disturbance for water quality improvement facilities, a survey for Sanford's arrowhead shall be conducted during the plant's blooming period (May to October). If the plant is found, every effort shall be made to avoid the species. If avoidance is not possible, the OHMVR Division shall attempt relocation to a risk-free location, or, in consultation with experts, determine another means to mitigate for the loss of the plant(s) such as obtaining seeds from other sources and planting seedlings in risk-free areas.

Mitigation Measure BIO-2: A survey shall be completed to search for potential western spadefoot burrows prior to the rainy season the year before construction of the water quality improvements is scheduled to begin. If potential burrows are found, a search for spadefoots should take place on rainy nights during the wet season in the construction area. If spadefoots are located on site, potential loss of individual animals shall be avoided through active trapping and relocation to suitable and nearby off-site habitat by a qualified biologist.

Mitigation Measure BIO-3: Construction of water quality improvement facilities shall be avoided from February 1 through August 31, the bird nesting season, to the extent feasible. If no construction is proposed during the nesting season, no surveys are required. If construction is unavoidable during the nesting season, a qualified biologist shall conduct a survey for tree/shrub and ground nesting birds within five days prior to the proposed start of work. If active nests are not present, project activities can take place as scheduled. Additionally, if more than 5 days elapse between the initial nest search and construction activities, it is possible for new birds to move into the project area and begin building a nest. If there is such a delay, another nest survey should be conducted. If any active nests are detected, the OHMVR Division shall delay the removal of the applicable tree or shrub while the nest is occupied with eggs or young who have not yet fledged. A no-disturbance buffer zone shall be designated and maintained around the nest until a qualified biologist has determined that the young have fledged from the

nest. The size of the no-disturbance zone shall be determined in consultation with the California Department of Fish and Game. A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used.

Mitigation Measure BIO-4: A survey shall be completed to search for badger dens within one week prior to the start of water quality facility construction. If dens are found and are occupied, potential loss of individual animals shall be avoided through active trapping and relocation of badgers to suitable and nearby off-site habitat by a qualified biologist and in coordination with and approval of the CDFG.

Mitigation Measure BIO-5: If trees are to be removed or trimmed, the OHMVR Division shall retain a qualified biologist ("bat biologist") to conduct a pre-activity survey for roosting bats in trees to be removed. If no roosting bats are found, no further mitigation is required. If a bat roost is found, the project sponsor shall implement the following measures to avoid impacts to roosting bats.

If non-breeding bats are found in a tree or structure to be removed, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity. Project activities should then follow at least one night after initial disturbance for airflow. This action should allow bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight.

If active maternity roosts are found in structures that would be removed as part of project implementation, demolition of that structure shall commence before maternity colonies form (generally before March 1) or after young are flying (generally by July 31).

Mitigation Measure BIO-6: Once the specific design for the water quality improvements facilities has been completed and the extent to which modifications to Coyote Creek become known, the OHMVR Division shall determine the need to obtain a Streambed Alteration Agreement from CDFG, a permit from the USACE, and a certification from the RWQCB. If such authorizations are required, the OHMVR Division should consult with the appropriate agencies and fill out and submit applicable agreement/permit applications.

PROPOSED FINDING

The OHMVR Division has reviewed the attached Initial Study and determined that the Initial Study identifies potentially significant project effects, but:

1. Revisions to the project plans and incorporated herein as mitigation would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

2. There is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. Pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15064(f)(3) and 15070(b), a Mitigated Negative Declaration has been prepared for consideration as the appropriate CEQA document for the project.

BASIS OF FINDING

Based on the environmental evaluation presented in the attached Initial Study, and with implementation of the mitigation measures listed above, the project would not cause significant adverse effects related to aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology/soils, greenhouse gas emissions, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, transportation/traffic, and utilities/service systems. In addition, substantial adverse effects on humans, either direct or indirect, would not occur. The project does not affect any important examples of the major periods of California prehistory or history. Nor will the project 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. The project does not have impacts that are individually limited, but cumulatively considerable.

RECORD OF PROCEEDINGS AND CUSTODIAN OF DOCUMENTS

The record, upon which all findings and determinations related to the approval of the Project are based, includes the following:

1. The Mitigated Negative Declaration and all documents referenced in or relied upon by the Negative Declaration.
2. All information (including written evidence and testimony) provided by OHMVR Division staff to the decision maker(s) relating to the Mitigated Negative Declaration, the approvals, and the Project.
3. All information (including written evidence and testimony) presented to the OHMVR Division by the environmental consultant who prepared the Mitigated Negative Declaration or incorporated into reports presented to the OHMVR Division.
4. All information (including written evidence and testimony) presented to the OHMVR Division from other public agencies and members of the public related to the Project or the Mitigated Negative Declaration.
5. All applications, letters, testimony, and presentations relating to the Project.

6. All other documents composing the record pursuant to Public Resources Code section 21167.6(e).s

The OHMVR Division is the custodian of the documents and other materials that constitute the record of the proceedings upon which the OHMVR Division's decisions are based. The contact for this material is:

Contact: Ryan Miller
CDPR, OHMVR Division
1725 23rd Street, Suite 200
Sacramento, CA 95816
(916) 445-9152
rdmiller@parks.ca.gov

Pursuant to Section 21082.1 of CEQA, the OHMVR Division has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the proposed project and finds these documents reflect the independent judgment of the OHMVR Division.

PRAIRIE CITY SVRA
BARTON RANCH PROPERTY ACQUISITION PROJECT INITIAL STUDY

TABLE OF CONTENTS

FIGURES, PHOTOS, AND TABLES

APPENDICES

Chapter 1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study (IS) and Mitigated Negative Declaration (MND) has been prepared by the Off-Highway Motor Vehicle Recreation (OHMVR) Division of the California Department of Parks and Recreation (CDPR) for acquisition of a 68-acre parcel adjacent to Prairie City State Vehicular Recreation Area (SVRA). This IS evaluates the potential environmental effects of acquisition and incorporation of the property into Prairie City SVRA and use of an approximately 10-acre portion of the property contiguous with Prairie City SVRA for water quality control improvements. As a result, the environmental assessment of the project is based on a 10-acre impact area as shown in Figure 4. Should there be need to expand the water quality improvement facilities such that more than 10 acres of the property are needed, additional environmental review would be completed.

The California Environmental Quality Act (CEQA); Public Resources Code (PRC) §21000 et seq.) and the CEQA Guidelines (14 CCR §15000 et seq.) establish the OHMVR Division as the lead agency. The lead agency is defined in CEQA Guidelines section 15367 as "the public agency which has the principal responsibility for carrying out or approving a project." The lead agency decides whether an Environmental Impact Report (EIR), Negative Declaration (ND), or MND is required for the project and is responsible for preparing the appropriate environmental review document.

According to CEQA Guidelines Section 15070, a public agency shall prepare a proposed ND or a MND when:

1. The IS shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

2. The IS identifies potentially significant effects, but:

   - Revisions in the project plans made before a proposed MND and IS are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

   - There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

Pursuant to Section 15070, the OHMVR Division has determined an IS/MND is the appropriate environmental review document for the project. This IS has been prepared by the OHMVR Division of CDPR in accordance with CEQA and the CEQA Guidelines.

1.2 BACKGROUND

The 836-acre Prairie City SVRA is located 20 miles east of Sacramento and is accessed off of U.S. Highway 50. The park contains blue oak savannah and open grasslands among the rolling hill topography. There are several areas of cobbled mine tailings left over from gold dredging during the late 1880's. Most of the land that surrounds the park is in private ownership including lands of Aerojet, Teichert, and Barton Ranch. The OHMVR Division has been purchasing

suitable properties adjacent to the park as the opportunity arises. The Yost Property, located at the north edge of Prairie City SVRA next to White Rock Road, was acquired most recently.

Presently, the OHMVR Division has the opportunity to purchase a 68-acre property owned by the Barton Ranch adjacent to the southern boundary of the SVRA. It is a logical property to acquire as it would provide additional buffer land for Prairie City SVRA, can be used as biological mitigation for any future off-highway vehicle (OHV) expansion on the northern property, and is a suitable place for the OHMVR Division to install additional water quality control facilities. The property includes an easement to Teichert Construction, which allows Teichert to install a conveyor belt around and on the property (refer to Figure 4 for the location of the easement). Installation of the conveyor belt would not conflict with using part of the property for water quality improvement facilities.

1.3 LEAD AGENCY CONTACT INFORMATION

The lead agency for the proposed project is the OHMVR Division, the agency that would be approving the permit. The contact person for the lead agency is:

Jason De Wall, Sector Superintendent
Prairie City State Vehicular Recreation Area
13300 White Rock Road
Rancho Cordova, CA 95742
(916) 985-1094

1.4 DOCUMENT PURPOSE AND ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of acquiring the Barton property, adding it to the SVRA as buffer land, and using as much as 10 acres (~ 15%) for water quality control improvements.

This document is organized as follows:

- Chapter 1 – Introduction

  This chapter provides an introduction to the project and describes the purpose and organization of this document.

- Chapter 2 – Project Description

  This chapter describes the project location, project area, site description, objectives, characteristics, and related projects.

- Chapter 3 – Environmental Checklist and Responses

  This chapter contains the Environmental (IS) Checklist that identifies the significance of potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project. This chapter also contains the Mandatory Findings of Significance.

- Chapter 4 – References

  This chapter identifies the references and sources used in the preparation of this IS/ND.

- Chapter 5 – Report Preparation

This chapter provides a list of those involved in the preparation of this document.

1.5 REQUIRED PERMITS AND APPROVALS

The State Public Works Board would need to approve acquisition of the Barton Ranch property. Construction of water quality improvement facilities may require permits from the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Game (CDFG) (see Regulated Waters in Section 3.4.1).

Chapter 2 PROJECT DESCRIPTION

2.1 OVERVIEW

The OHMVR Division proposes acquisition of a 68-acre property located next to Prairie City SVRA in Rancho Cordova, Sacramento County (Figure 1). The primary purpose of acquiring the property is to add it to Prairie City SVRA as buffer land and to use as much as 10 acres (~15%) contiguous with the existing property boundary for water quality improvement facilities. The area within where the facilities would be placed is shown in Figure 4. In addition to the 10 acres of installed facilities, an additional 5 acres of undisturbed land may be used as a spray field for collected stormwater (Figure 4). The property includes an easement to Teichert Construction which allows them to install a conveyor belt around and on the property (refer to Figure 4 for the location of the easement). Installation of the conveyor belt would not conflict with the use of the property for water quality improvement facilities.

2.2 PROJECT LOCATION AND SITE DESCRIPTION

Prairie City SVRA is located in Rancho Cordova at the base of the Sierra Nevada foothills, 20 miles east of downtown Sacramento (Figure 1). The park is three miles south of U.S. Highway 50 and accessed from the west by White Rock Road, from the north by Prairie City Road, and from the east by Scott Road (Figure 2, Aerial with Site Location).

The park offers a variety of terrain, trails, and tracks for motorcycles, all terrain vehicles (ATVs) and 4x4 vehicles. Additional facilities include a go-kart track, a quarter midget track, and an environmental training center offering instruction on how to ride/operate motorcycles and ATVs. Other improvements to the park include a score tower, seating, and restrooms at the Hangtown Track; shade ramadas, a restroom and landscaping at the main staging area; and an entry station. The park facilities are shown in Figure 3, Prairie City SVRA Facilities.

The park allows day use only (no camping, except during certain special events) and is open every day except for Wednesdays. Hours vary depending on the season and are limited to daylight hours. Annual attendance at Prairie City SVRA is approximately 140,000 visitors per year based on 2011 visitation records. Of this total, about 50-60,000 attend special events. Annual growth in park attendance is expected due to the popularity of the sport, limited availability of riding areas, and regional proximity to metropolitan areas.

The Barton property (project area) comprises about 68 acres and is undeveloped. It is currently used for cattle grazing by the existing landowner. Vegetation on site comprises oak savannah (Photo 1). Coyote Creek traverses the project area generally in a north-south direction (Photo 2). The surrounding land is primarily undeveloped agricultural land used for cattle grazing. The property is surrounded by open space on all sides, with OHV use within Prairie City SVRA to the north and west. The property has fencing along the property boundaries that abut Prairie City SVRA (on the north and west sides). Elevation ranges from approximately 200 to 300 feet. Coyote Creek flows to Carson Creek, which flows to Deer Creek, which flows into the Consumnes River southeast of the property (ARCADIS 2008).

2.3 NEED FOR WATER QUALITY CONTROL IMPROVEMENTS

There are several sediment basins located below (south of) the Hangtown Track (Photo 3). These basins were developed to capture sediment coming off of the track and other dirt areas

at Prairie City SVRA. The purpose of these "water quality control features" is to make sure that sediment loads generated at Prairie City SVRA remain within Prairie City SVRA. CDPR hydrologists and consultants have determined that the existing water quality control features are not adequate to capture sediment during average year storm events.

2.4 PROJECT DESCRIPTION

2.4.1 Land Acquisition and Property Stewardship

Soon after purchase, Prairie City SVRA staff would place fencing around the periphery of the property that does not already have fencing; the property would not be open to the public. A gate would be installed that would allow authorized access to the property for resource management. Resource management would focus on maintaining existing native habitat values on the site and removing downed trees, tree limbs, and other debris from Coyote Creek and other areas of the property, as needed.

2.5 CONCEPTUAL DESCRIPTION OF THE WATER QUALITY CONTROL IMPROVEMENTS

Several sediment basins and other water quality control best management practices (BMPs) are located throughout Prairie City SVRA and are intended to reduce sediment loads to Coyote Creek and improve water quality. However, the sediment load below the Hangtown Track warrants additional water quality control improvements for average and above average storm events. In order to treat a generating source of over 400 acres (approximately 1/2 the SVRA), the OHMVR Division proposes installing an additional sediment basin and/or a biofiltration swale (bioswale) or other stormwater control feature on as much as 10 acres (~15%) of the project area near the current SVRA boundary (Figure 4). These improvements are included in the OHMVR Division BMP Manual (Salix and Geosyntec 2007).

Although not designed yet, the proposed basin and/or bioswale system would be designed to remove sediment from the stream system and improve water quality so that flows offsite meet the requirements of the RWQCB. Prior to designing the basin and/or bioswale system, a hydrologic model would be prepared for the project. In addition to the sediment basin or bioswale methods, other BMPs may be used including sediment barriers (also described in the 2007 BMP Manual (refer to Chaper 8)).

The conceptual plan would be modified based on site-specific conditions, but the completed basin and/or bioswale system is not expected to exceed 10 acres. As a result, the environmental assessment of the project is based on an impact area of 10 acres within the area shown in Figure 4. Should there be need to expand the water quality improvement facilities such that more than 10 acres of the property are needed, additional environmental review would be completed.

<u>Sediment Basin Option</u>

If a sediment basin is preferred, the basin would likely be constructed with an earthen berm and be excavated to attain an effective depth adequate for containing and treating the stormwater flows. The top of the berm would be approximately 10 feet wide to provide access to the basin for routine maintenance and sediment removal. An overflow outlet would be located six feet above the bottom of the basin. The primary outlet for the basin would be a skimmer, which would be designed to take only the cleanest water from the top portion of the water column. Figure 6 includes an example grading plan for a sediment basin.

Bioswale Option

Bioswales use plants to capture and biologically degrade pollutants carried by stormwater runoff. As an additional benefit, bioswales also reduce the velocity and volume of stormwater runoff. Bioswales are one of several BMPs for treatment of stormwater runoff from project areas anticipated to produce pollutants of concern (e.g., sediment, petroleum products, etc.). Bioswales are vegetated, typically low aspect ratio trapezoidal channels, which receive and convey storm water flows while meeting water quality criteria and other flow criteria (Photo 4). Pollutants are removed by filtration through the vegetation, uptake by plant biomass, adsorption to soil particles, and infiltration through the soil.

When properly implemented, bioswales are aesthetically pleasing. Due to vegetation, bioswales look like a landscaped setting. Bioswales have been determined to be highly effective BMPs in reducing sediment and heavy metals and stormwater runoff volumes (Salix and Geosyntec 2007). Bioswales have been determined to be very cost effective and among the least expensive BMP per volume of runoff treated. Figure 5 includes an example bioswale design.

Spray Irrigation of Collected Stormwater

Spray irrigation is a method for disposing of collected stormwater by spraying it on the land surface (Photo 5). The sprayed water evaporates into the air, soaks into the soil, and percolates through the soil. Land application of ponded water has advantages over conventional means of disposal by direct discharge to streams because the water recharges the groundwater system and increases base flow in streams. Additional benefits are derived from the "natural" treatment of the water that takes place in the soil (USGS 2005). The area of spray field, as much as five acres of the property, would be contained in the area identified for the water quality improvement facilities (Figure 4).

Sediment Barriers

Sediment barriers are BMPs that are intended to separate sediment from sheet flow runoff. They function by reducing runoff velocity and ponding small quantities of storm water. Sediment barriers are only intended for areas experiencing sheet flow, and they must be installed in areas that can pond water and accumulate sediment and, most importantly, they must be accessible for cleanout (Salix and Geosyntec 2007). Some examples of sediment barriers are:

- Silt fence
- Fiber rolls (straw rolls)
- Compost berms and compost socks

2.6 RESOURCE PROTECTION MEASURES INCORPORATED INTO THE PROJECT

The following measures would be incorporated into the project as required under OHMVR Division Resource Management Guidelines.

1. Compliance with the Soil Conservation Standard. The Prairie City SVRA Master Plan incorporates the Soil Conservation Standard as required under California PRC Section 5090.35, which governs soil and habitat protection in SVRAs. The Soil Conservation Standard (CDPR 2008) requires that soils of OHV areas be maintained in a condition where rehabilitation can

occur. This is accomplished through annual monitoring of soil erosion areas and implementation of corrective measures to restore grade, control drainage, and close areas as needed. Compliance with the Soil Conservation Standard mitigates the ongoing impact of soil loss by water and wind erosion from OHV use.

2. Revegetation of Disturbed Areas. Any removal of vegetation in areas disturbed by the water quality control improvements would be subject to revegetation as required by the Prairie City SVRA Master Plan.

3. Facility Development. Prairie City SVRA contains Vleck, Pentz, and the Hadselville soil series, which have limitations affecting construction areas. The OHMVR Division resource guidelines specify adherence of facilities development to construction requirements for the Vleck, Pentz, and the Hadselville soil series. Prairie City SVRA Master Plan policy states, "Facilities development should be restricted in the Vleck series and dependent upon design, from the Pentz and Hadselville series. This requirement mitigates the impact of developing the water quality control improvements in constrained soils. Refer to Section 3.6 Geology and Soils for more discussion on soils.

4. Cultural Resource Guidelines. The Prehistoric Resources Goal for this proposed project is to identify, protect, preserve, and interpret the significant prehistoric resources within the project area. The recorded prehistoric site within the project area has the potential to contain important information about the prehistoric lifeways of the area and would be preserved. Refer to Section 3.5 Cultural Resources for a detailed discussion of these guidelines.

2.7 PROJECT SCHEDULE

2.7.1 Acquisition

Purchase of the property is scheduled to take place by the end of 2013. After acquisition, the property would be fenced and signed as State Property. Stewardship of the property would begin immediately after acquisition. The property would be off-limits to public use and No Entry signs will be posted along the new fence.

2.7.2 Water Quality Improvement Facilities

The water quality improvement facilities have not been designed and, at present, are not in a funding schedule for the park. This means that no funds have been identified for design or installation of the facilities. The park intends to prepare a capital outlay proposal for the facilities in the next five years. If the proposal is accepted and funds become available, the facilities would be installed. The projected timeline for installation is 2015 to 2020.

Figure 1. Regional Location

Figure 2. Aerial with Site Location

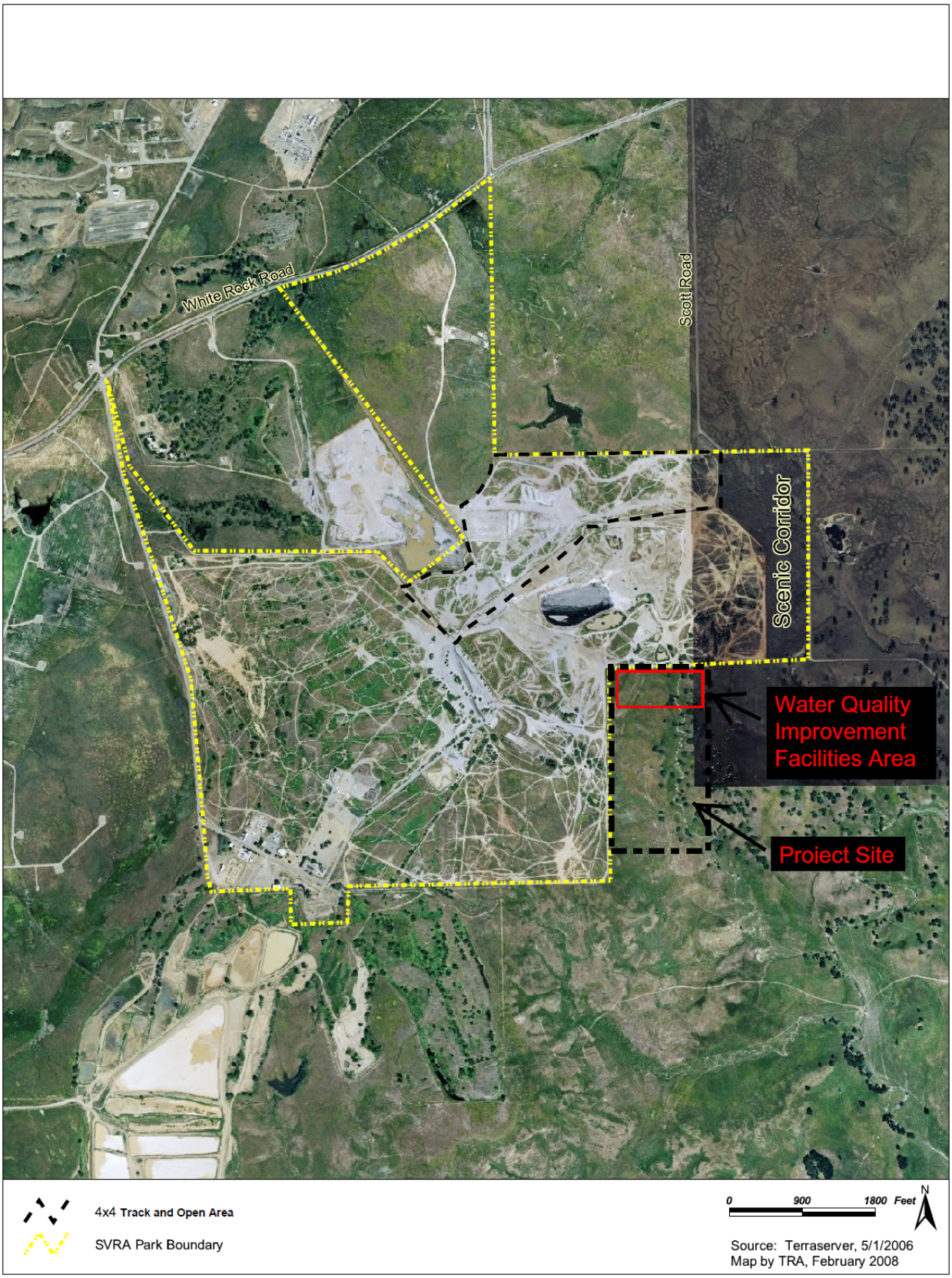


Figure 3. Prairie City SVRA Facilities

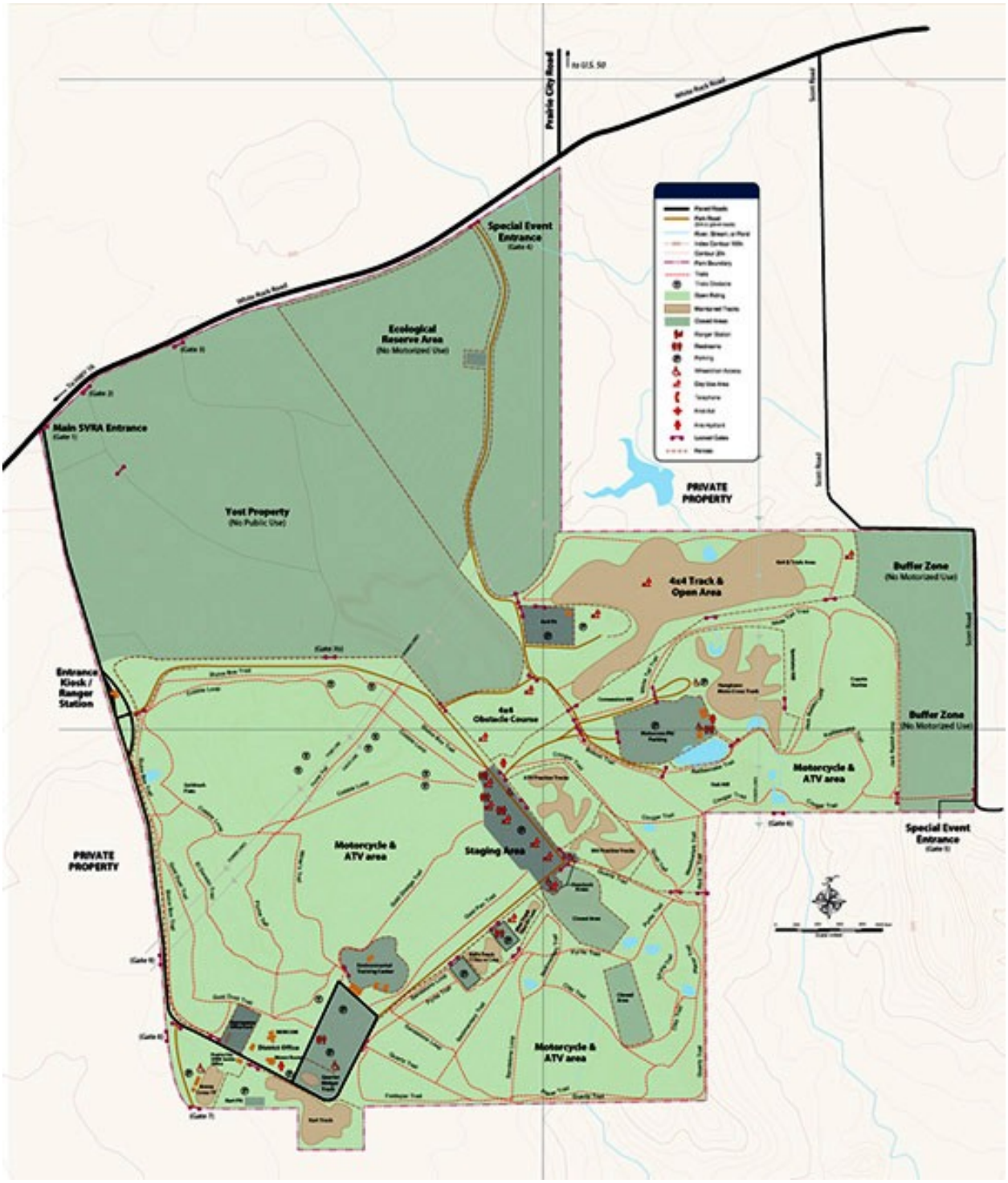


Figure 4. Project Site with Conveyor Belt Easement

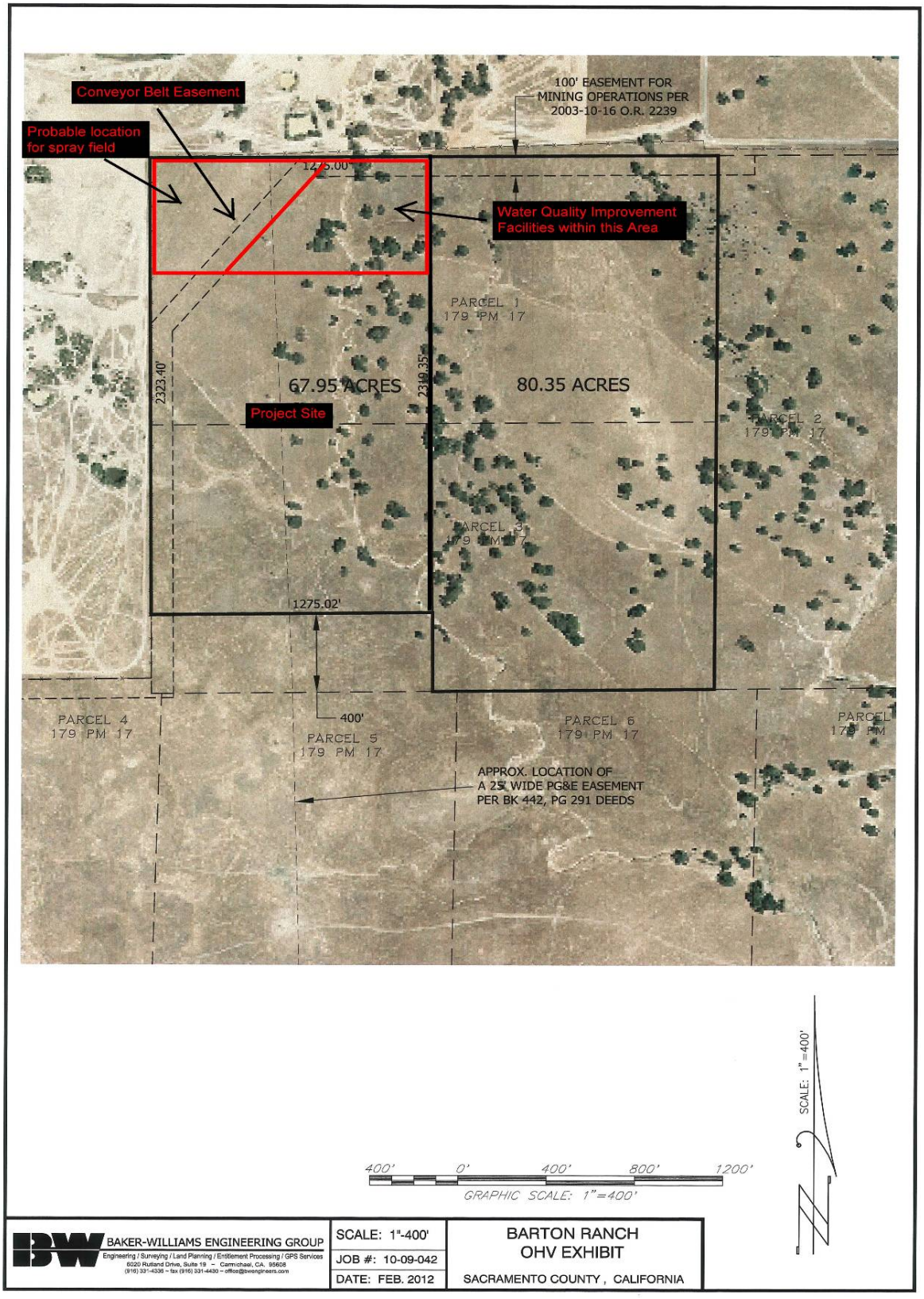
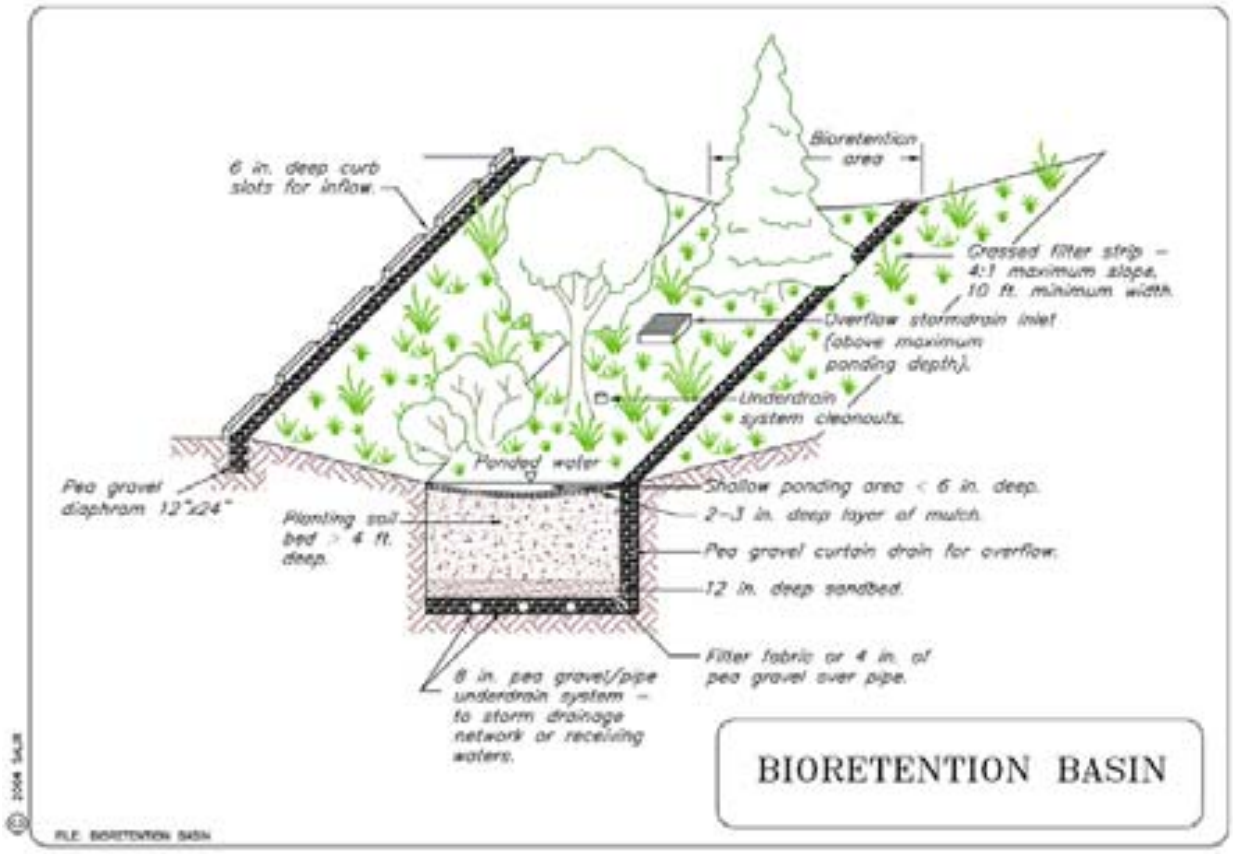


Figure 5. Example Bioswale Design (Not for Project Site)



Source: Salix and Geosyntec 2007

Figure 6. Example Sediment Basin Design (Not for Project Site)

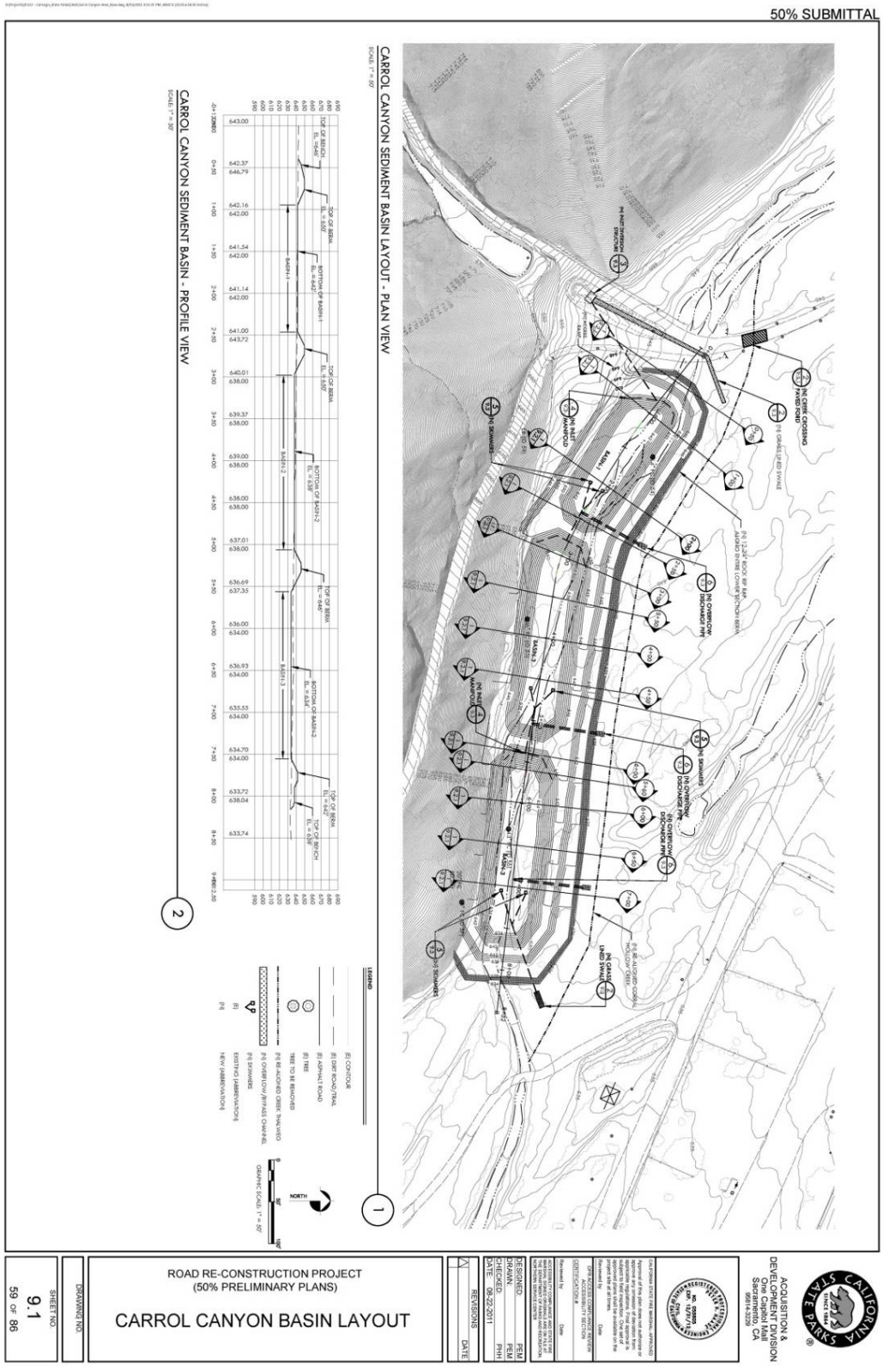


Photo 1. Project site looking south from Prairie City SVRA

Photo 2. Coyote Creek crossing through project site

Photo 3. SVRA looking north from project site showing water quality controls

Photo 4. Example of bioswale from Salix and Geosyntec 2007

Photo 5: Example of spray field irrigation

Chapter 3 ENVIRONMENTAL CHECKLIST AND RESPONSES

PROJECT INFORMATION

1. **Project Title:** Barton Ranch Property Acquisition
2. **Lead Agency Name & Address:** CDPR, OHMVR Division
   1725 23rd Street, Suite 200
   Sacramento, CA 95816
3. **Contact Person & Phone Number:** Jason De Wall, (916) 985-1094
4. **Project Location:** Prairie City SVRA, Rancho Cordova, CA
5. **Project Sponsor Name & Address:** Same as Lead Agency
6. **General Plan Designation:** Park
7. **Zoning:** Recreation
8. **Description of Project:** See Chapter 2 Project Description
9. **Surrounding Land Uses & Setting:** Refer to Chapter 2 (Section 2.1) and Chapter 3 (Section 3.10)
10. **Approval Required from Other Public Agencies:** The property acquisition would need to be approved by the State Public Works Board. Construction of water quality improvement facilities may require permits from CDFG, USACE, and RWQCB.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project involving at least one impact that is a "Potentially Significant Impact" if mitigation measures are not implemented as indicated by the checklist on the following pages. Note measures contained in this chapter can avoid or minimize all impacts to less than significant levels.

☐ Aesthetics	☐ Agricultural/Forestry Resources	☒ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards &Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	
☒ Mandatory Findings of Significance	☐ None	

DETERMINATION:

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that although the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION WILL** be prepared. ☒

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

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. ☐

I find that although the proposed project could have had a significant effect on the environment, because all potentially significant effects (a) have been adequately analyzed 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. ☐

_____

Jason De Wall, Sector Superintendent, Prairie City SVRA

_____

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and leaf agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any to reduce the impact to less than significance.

3.1 AESTHETICS

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

3.1.1 Environmental Setting

Prairie City SVRA is located in a rural area of Sacramento County between Rancho Cordova and Folsom. The surrounding land, including the subject parcel, is used for cattle grazing. There is also mineral resource extraction in the project vicinity. Scott Road parallels the eastern boundary of Prairie City SVRA and is designated a County scenic road from White Rock Road to Latrobe Road. Designated scenic roads are protected by restrictive zoning and by sign control on adjacent properties. The OHMVR Division maintains a 35-acre buffer zone between the eastern boundary of Prairie City SVRA active area and Scott Road to protect the scenic quality of the views from Scott Road. The nearest scenic highway to Prairie City SVRA is U.S. Highway 50, which is designated as scenic from Placerville to South Lake Tahoe. The segment of U.S. Highway 50 nearest Prairie City SVRA is located three miles north and is not designated as scenic.

3.1.2 Discussion

Would the proposed project:

a. Have a substantial adverse effect on a scenic vista?

No Impact. Except for a 10-acre portion of the property adjacent to the SVRA boundary that would be used for water quality improvements, the property would not change in appearance. Even the water quality improvements would have a natural appearance when completed. A fence would be installed around the property, but would blend in with the surrounding area. There are no sensitive receptor viewpoints in the project vicinity such as residential areas. Therefore, the acquisition and proposed water quality improvements would not adversely impact a scenic vista.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The project site contains many scenic resources such as trees, a stream channel, and rock outcroppings. Except for a 10-acre portion of the site adjacent to the existing SVRA boundary, however, the site would not be modified, and even within the 10-acre area, no substantial damage to trees or other scenic resources would occur. Furthermore, the area of the improvements is not visible from U.S. Highway 50 which is the nearest state scenic highway. The improvements are not visible from Scott Road, which borders the eastern boundary of Prairie City SVRA, and is designated as a County scenic highway.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. Acquiring the Barton property would not significantly alter the existing visual character of the surrounding landscape. Most of the property (~58 acres) would remain in a natural condition and be used as buffer land. The water quality improvements (~10 acres) would appear natural when completed and would only be visible from a close perspective.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The project would not create a new source of substantial light or glare affecting day or nighttime views in the area as no exterior lighting or reflective surfaces are proposed. The completed water quality improvements would not be lighted.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☒	☐
*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 forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				

3.2.1 Environmental Setting

The Barton property is currently designated "general agriculture" in the Sacramento County General Plan and is used for cattle grazing by the existing landowner. There is an "aggregate resource area" overlay over the site as well. The Department of Conservation Sacramento County Important Farmland 2010 map shows the parcel as "grazing land" which is "land on which the existing vegetation is suited to the grazing of livestock" (CDC 2010).

3.2.2 Discussion

Would the proposed 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?

No Impact. The project area, although included on the Sacramento County Important Farmland map as grazing land, is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. There would be no conversion of such designated lands as a result of the property acquisition or water quality control improvements.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less than Significant Impact. The project site is not covered by an existing Williamson Act contract. Upon purchase of the property, it would revert to a state-owned parcel and be incorporated into the SVRA as buffer lands. The County general plan and zoning designation of general agricultural would no longer be applicable to the property as it would become state park land. The change of land use designation to state park land would not conflict with the existing zoning designation because of the change in ownership from private to state-owned.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. (Responses c-d) The project area does not contain any forest land or timberland. The project would not cause any loss of forest land of convert any forest land to non-forest use.

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?

Less than Significant Impact. Since the project does not involve conversion of open land to more intensive uses, such as quarrying, residential or commercial development, or expanded OHV use, there would be no need to expand roads, utilities, or other infrastructure to the site that could lead to additional growth in the area and thus farmland conversion. Although the acquired lands would not be grazed, acquisition of the lands as buffer would prevent development or additional growth that could cause further reduction of existing grazing land.

3.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
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?	☐	☒	☐	☐
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)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Regulatory and Environmental Setting

The federal and state governments have established ambient air quality standards for "criteria" pollutants considered harmful to the environment and public health. National Ambient Air Quality Standards (NAAQS) have been established for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), fine particulate matter (particles 2.5 microns in diameter and smaller, or PM2.5), inhalable coarse particulate matter (particles between 2.5 and 10 microns in diameter, or PM10), and sulfur dioxide (SO_2). California Ambient Air Quality Standards (CAAQS) are more stringent than the national standards for the pollutants listed above and include the following additional pollutants: hydrogen sulfide (H_2S), sulfates (SO_X), and vinyl chloride. In addition to these criteria pollutants, the federal and state governments have classified certain pollutants as hazardous air pollutants (HAPs) or toxic air contaminants (TACs), such as asbestos.

Mobile Source Emission Standards

In addition to ambient air quality standards, the federal and state governments have established exhaust emission standards for heavy-duty diesel construction equipment as well as the fuels these vehicles use. The EPA has established progressive emission standards for non-highway diesel engines to be implemented in a series of "tiers." Tier 2 standards apply for equipment manufactured between 2001 and 2006. Tier 3 standards apply for equipment manufactured between 2006 and 2008. The most stringent standards, Tier 4 standards, consist of an interim and final set of standards. The standards for engines less than 75 horsepower (hp) began in 2008, the standards for engines between 76 and 174 hp begin in 2012, and the standards for

engines 175 hp and greater began in 2011. The U.S. EPA estimates that Tier 2 and Tier 3 standards will reduce ozone precursor and PM emissions from non-highway diesel vehicles by 50 and 40 percent by 2020, and that Tier 4 standards will achieve a further 90 percent NOx reduction and 95 percent PM reduction from these vehicles by 2030 (U.S. EPA 1998 and 2004).

In addition, the California Air Resources Board's (CARB) In-Use Off-Road Diesel Vehicles Regulation *(*13 CCR §2449 – 2449.3*)*, adopted in 2007 and amended in 2010, aims to reduce emissions of NOx and PM from in-use off-road (i.e., non-highway) diesel vehicles over 25 horsepower. The regulation requires equipment reporting, imposes limits on engine idling (no more than five consecutive minutes), and buying and selling older (typically pre-1996) off-road diesel vehicles and, beginning in 2014, requires fleets to gradually reduce emissions of oxides of nitrogen and particulate matter by getting rid of older engines, using newer equipment, and installing exhaust retrofits (CARB 2012).

Naturally Occurring Asbestos

The U.S. EPA, CARB, and the Sacramento Metropolitan Air Quality Management District (SMAQMD) have adopted regulations to control emissions of asbestos-laden dust. According to asbestos hazard maps prepared by the California Geological Survey, however, the proposed project is not located in an ultramafic rock unit or an area otherwise known or suspected to contain naturally-occurring asbestos (CDC 2000).

Fugitive Dust Control

SMAQMD Regulation 4 – Prohibitory Rules, Rule 403, *Fugitive Dust* regulates operations which may emit fugitive dust, including construction operations, by requiring the operator to take reasonable precautions to control fugitive dust emissions, e.g., watering, applying soil stabilizers, etc.

3.3.2 Environmental Setting

Air quality is a function of pollutant emissions and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality. Federal, state, and local governments control air quality through the implementation of laws, ordinances, regulations, and standards.

The project area lies within Sacramento County, in the Sacramento Valley Air Basin (SVAB). The SVAB is bounded by the North Coast Ranges on the west and the Northern Sierra Nevada Mountains on the east; the intervening terrain is mostly flat. Climate throughout the SVAB is characterized as Mediterranean with hot dry summers and mild rainy winters. The mountains surrounding the SVAB act as a barrier to air flow and can serve to trap pollutants in the valley under certain meteorological conditions such as stagnant winds or temperature inversions.

Air quality and attainment status within SVAB varies both inter- and intra-county. In general, Sacramento County is either unclassified or in attainment of all state and federal ambient air quality standards except federal fine particulate matter (PM2.5), state suspended, or respirable particulate matter (PM10), state ozone, and federal ozone standards (CARB 2011, U.S. EPA 2011a and 2011b). Although Sacramento County is designated non-attainment for federal PM10, air quality monitoring data shows that Sacramento County meets the federal PM10 standard; the District must request re-designation and submit a maintenance plan to US. EPA in

order for the County to be designated in attainment of the federal PM10 standard (SMAQMD 2011).

The SMAQMD is responsible for maintaining air quality and regulating emissions of criteria and toxic air pollutants from stationary sources within Sacramento County. The SMAQMD carries out its responsibility by preparing, adopting, and implementing plans, regulations, and rules that are designed to achieve attainment of state and national air quality standards. The SMAQMD currently has 10 regulations containing approximately 80 rules designed to control and limit emissions from sources of air pollutants and administer state and federal air pollution control requirements. In 2008, the SMAQMD submitted the *Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan Draft Report*. This plan demonstrates how existing control strategies will provide the emission reductions through 2011 necessary for reasonable progress towards attaining the federal 8-hour ozone standard. Also in 2008, the SMAQMD requested EPA reclassify the Sacramento Metropolitan Area to severe non-attainment for ozone, providing additional time for the region to attain the 8-hour ozone standard. In 2009, the SMAQMD prepared its 2009 Triennial Report and Plan Revision, which evaluates the progress made towards attaining state air quality standards and the implementation of stationary and mobile source control measures that reduce air pollutants.

Sensitive Receptors

Sensitive receptors to air quality impacts are defined by SMAQMD as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. Prairie City SVRA is located in unincorporated Sacramento County. The state park and project area is outside the urban services boundary and is surrounded by and includes undeveloped land used primarily for cattle grazing. There are three residences adjacent to Prairie City SVRA that are owned by the OHVMR Division; these residences are occupied by OHVMR Division staff and their families but are not within 1,000 feet of the proposed property acquisition. No other sensitive receptors are located adjacent to or closer than two miles from the project site. The closest rural residences are generally south and west and are two miles distant or greater; the closest built-up urban area is 2.5 miles north, across U.S. Highway 50.

3.3.3 Discussion

Would the proposed project:

a. Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed project would not conflict with or obstruct implementation of regional ozone air quality plans. These plans include ozone pre-cursor emissions from construction activities such as off-road equipment in their emission inventories and plans for achieving attainment of air quality standards. As demonstrated below, the project would not exceed SMAQMD's CEQA significance threshold for NOx and would therefore not conflict with or obstruct implementation of an applicable air quality plan (SMAQMD 2011).

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact with Mitigation. The proposed project would generate less than significant short-term construction and long-term operational emissions.

Project construction activities would include construction of water quality control improvements such as a bioswale, sediment basin, spray irrigation system, or sediment barrier. Of these improvements, the OHMVR Division considers construction of a sediment basin to have the "worst-case" construction emissions scenario due to the need to excavate the basin and import soil to construct earthen berms around the basin.

Sediment basin construction would require the use of up to three off-road pieces of construction equipment (e.g., an excavator, grader, and bulldozer) that could operate 8 hours per day for up to 70 construction days (approximately three months) as soon as 2015. Based on recent experience improving several sediment basins at Carnegie SVRA, the OHMVR Division expects that up to 37,200 cubic yards of soil import could be required to construct a 10-acre sediment basin, or approximately 4,650 total hauling trips. Table 1 presents the project's potential short-term construction emissions, as estimated using CalEEMod Version 2011.1.1.

Table 1. Project Construction Emissions

Scenario	Pollutant Emissions (lbs per day)			
	ROG[A]	NOx	Total PM_{10}[B]	Total $PM_{2.5}$[B]
Maximum Daily Emission	6.4	53.7	66.1	3.8
AQMD Significance Criteria[C]	**--**	**85**	**--**	**--**

Source: TRA Environmental Sciences, Inc. See Appendix A.

A. Reactive Organic Gases

B. PM10 emissions estimates reflect application of SMAQMD Basic Construction Emission Control Practices as described below.

C. The AQMD does not maintain mass emission thresholds for construction activities for ROG or PM. The AQMD does maintain concentration based thresholds for PM consistent with state ambient air quality standards.

The SMAQMD recommends that Lead Agencies evaluate construction-generated NOx emissions on a daily mass emission basis because NOx is an ozone precursor and a pollutant of regional concern. Table 1 shows that the NOx emissions associated with the construction activities anticipated to install a 10-acre sediment basin would be less than AQMD significance criteria and therefore result in a less than significant impact.

The SMAQMD does not maintain daily mass emission thresholds for PM10 and PM2.5 because these are considered pollutants of localized concern that should be analyzed on a concentration-based level. The SMAQMD recommends that lead agencies model PM10 emission concentrations generated by construction activity for all projects except those that implement all SMAQMD Basic Construction Emission Control Practices and result in a maximum daily disturbed area of 15 acres or less. The proposed project would disturb less than 15 acres per day and would incorporate all SMAQMD Basic Construction Emission Control Practices in accordance with Mitigation Measure AIR-1 below.

Impact AIR-1: Project construction activities would generate PM10 and PM2.5 emissions.

Mitigation Measure AIR-1: Prairie City SVRA shall implement all SMAQMD Basic Construction Emission Control Practices as follows:

- Water all exposed surfaces two times daily, including soil piles, graded areas, unpaved parking areas, and staging areas.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil. Any haul trucks travelling on freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- Minimize idling time by shutting equipment off when not in use or reducing idling time to five minutes; provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Consistent with SMAQMD CEQA guidance, projects that implement all SMAQMD Basic Construction Emission Practices and disturb 15 acres or less do not have the potential to exceed SMAQMD CEQA significance thresholds for PM10 and PM2.5.

Bio-swales, sediment basins, spray irrigation systems, and sediment barriers would operate during the rainy season only. Maintenance and other water quality improvement infrastructure operations would be performed by existing Prairie City SVRA staff; these maintenance activities are expected to be limited to the non-rainy season and would included sediment removal operations once or twice per year under worst case conditions (construction of the sediment basin). Thus, operation and maintenance of the proposed water quality improvement infrastructure would not result in significant emissions of pollutants.

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)?

Less than Significant Impact. As discussed in a) and b) above, the project would not result in construction or operational emissions that exceed established thresholds of significance. In developing its CEQA significance thresholds, the SMAQMD considered the emission levels at which a project's individual emissions would be cumulatively considerable. Since the project would not individually exceed any SMAQMD CEQA significance thresholds, the project would result in less than significant cumulative air quality impacts.

d. Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Construction would be short-term and intermittent in nature, and construction equipment would be subject to the CARB's *In-Use Off-Road Diesel Vehicles Regulation*, which requires construction fleets to reduce their NOx and PM emission over time.

In addition, Prairie City SVRA staff would limit diesel idling to no more than five minutes (see response b. above) during work periods. The project would thus not expose nearby sensitive receptors to substantial pollutant concentrations.

e. Create objectionable odors affecting a substantial number of people?

Less than Significant Impact. Potential odors generated during intermittent project activities, including odors associated with fuel combustion, would not affect a substantial number of people and would not result in a significant impact.

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
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?	☐	☒	☐	☐
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?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 Regulatory Setting

In addition to CEQA, other federal and state laws apply to the biological resources identified in this report. Each of these laws is identified and discussed below.

Federal Endangered Species Act (ESA)

The federal ESA of 1973 (16 USC §§1531 et seq.) protects fish and wildlife species that are listed as threatened or endangered, and their habitats. “Endangered” refers to species, subspecies, or distinct population segments that are in danger of extinction in all or a significant portion of their range. “Threatened” refers to species, subspecies, or distinct population segments that are considered likely to become endangered in the future.

Federal ESA Section 9 protects federally listed endangered and threatened wildlife species from unlawful take (16 U.S.C. §1538 (a)(1)). “Take” is defined to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S.C. §1532 (19)). “Harm” is defined as an act that “actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR 17.3). FESA does not extend the take prohibition to federally listed plants on non-federal land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

Section 7 of the ESA requires federal agencies, in consultation with and with the assistance of, the Secretary of the Interior or the Secretary of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modifications of critical habitat for these species. Critical habitat is defined as specific geographic areas, whether occupied by listed species or not, that are determined to be essential for the conservation and management of listed species, and that have been formally described in the Federal Register. Section 10 of the ESA provides a means whereby a nonfederal action with a potential to result in the take of a listed species could be allowed under an incidental take permit. An incidental take permit is required when non-federal activities would potentially result in the take of a threatened or endangered species.

Under the ESA, the Secretary of the Interior and the Secretary of Commerce have the authority to list species as threatened or endangered. The ESA is enforced by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). NMFS’s jurisdiction under ESA is limited to the protection of marine mammals, marine fishes, and anadromous fishes; all other species are subject to USFWS jurisdiction. The USFWS also publishes a list of candidate species. Species on this list receive "special attention" from federal agencies during environmental review, although they are not protected otherwise under the ESA. The candidate species are those for which the USFWS has sufficient biological information to support a proposal to list as endangered or threatened.

The Migratory Bird Treaty Act (MBTA)

The federal Migratory Bird Treaty Act (MBTA) (16 USC §§703 et seq.) enacted the provisions of treaties between the United States, United Kingdom, Mexico, Japan, and the Soviet Union, and authorizes the Secretary of the Interior to protect and regulate take of migratory birds. It establishes seasons and bag limits for hunted species, and renders taking, possession, import, export, transport, sale, purchase, and barter of migratory birds, their occupied nests, and their eggs illegal except when authorized by a federal permit. Take is defined more narrowly under the MBTA than under the ESA and includes only the death or injury of individuals of a migratory bird species or their eggs. As such, take under the MBTA does not include the concepts of harm and harassment as defined under the ESA. Under the MBTA it is illegal to disturb a nest in active use that results in killing a bird or destroying an egg. The USFWS oversees implementation of the MBTA.

More than 800 species of birds are protected under the MBTA. Specific definitions of migratory bird are addressed in the international treaties. In general, birds that migrate to complete different stages of their life history or to take advantage of different habitat opportunities during different seasons are “migratory birds” subject to the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 USC §§668 et seq.) makes it unlawful to import, export, take, sell, purchase, or barter any bald eagle or golden eagle, or their parts, products, nests, or eggs. “Take” includes pursuing, shooting, poisoning, wounding, killing, capturing, trapping, collecting, molesting, or disturbing. Exceptions may be granted by the USFWS for scientific or exhibition use, and for cultural use by Native Americans; however, no permits may be issued for import, export, or commercial activities involving eagles.

California Endangered Species Act

The California Endangered Species Act (CESA), administered by CDFG, protects wildlife and plants listed as “threatened” or “endangered” by the California Fish and Game Commission, as well as species identified as candidates for listing. CESA restricts all persons from taking listed species except under certain circumstances. The state definition of take is similar to the federal definition, except that CESA does not prohibit indirect harm to listed species by way of habitat modification. Under CESA, an action must have a direct, demonstrable detrimental effect on individuals of the species.

CDFG maintains lists of animal species of special concern (CSSC) that serve as "watch lists." A CSSC is not subject to the take prohibitions of CESA. The CSSC are species that are declining at a rate that could result in listing under the federal ESA or CESA and/or have historically occurred in low numbers, and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals and is intended to focus attention on the species to help avert the need for costly listing under federal and state endangered species laws. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them.

State agencies should not approve projects as proposed that would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy (Fish and Game Code §2053). Under Sections 2080.1 or 2081(b) of the California Fish and Game Code, CDFG may permit incidental take of species listed under CESA, except for species that are designated as fully protected.

California Fish and Game Code

The California Fish and Game Code protects a variety of species, separate from the protection afforded under CESA. The following specific statutes afford some limits on take of named species: Section 3503 (nests or eggs), 3503.5 (raptors and their nests and eggs), 3505 (egrets, osprey, and other specified birds), 3508 (game birds), 3511 (fully protected birds), 4700 (fully protected mammals), 4800 et seq. (mountain lions), 5050 (fully protected reptiles and amphibians), and 5515 (fully protected fish). Fully protected species may not be taken or possessed except for scientific research or an incidental take permit issued pursuant to a natural community conservation plan approved by the Department.

Section 3503 simply states, “it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” The exceptions generally apply to species that are causing economic hardship to an

industry. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted." Section 3505 prohibits taking, selling, or purchasing egrets, osprey, and other named species or any part of such birds.

California Native Plant Protection Act (CNPPA)

The California Native Plant Protection Act (CNPPA) of 1977 preserves, protects, and enhances endangered and rare plants in California by specifically prohibiting the importation, take, possession, or sale of any native plant designated by the California Fish and Game Commission as rare or endangered, except under specific circumstances identified in the Act. Various activities are exempt from the CNPPA, although take as a result of these activities may require other authorization from CDFG under the California Fish and Game Code.

Regulated Waters

Impacts to stream channels (bed and bank) are addressed by Fish and Game Code Sections 1600 *et seq*. and may fall under the jurisdiction of the federal Clean Water Act (CWA) Sections 404 and 401 permit process and the California Porter-Cologne Water Quality Control Act. These regulatory processes are discussed below.

Clean Water Act, Section 404

The discharge of dredged or fill material into waters of the U.S. is prohibited under the Clean Water Act (CWA) except when it is in compliance with Section 404 of the Act. Waters of the U.S. include navigable waters of the U.S.; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; tributaries to any of these waters; and many wetlands. Jurisdictional wetlands must be adjacent to traditional navigable waters, must directly abut relatively permanent waters, or must have a significant nexus with a traditional navigable water. Excavation and changes in drainage are also regulated under Section 404. The USACE has enforcement authority for Section 404, which it accomplishes under its regulatory branch.

A preliminary jurisdictional delineation of the project waters and wetlands was prepared for the SVRA and the proposed acquisition parcel. In 2008, the USACE made a positive jurisdiction determination of the waters and wetlands delineated. The presence of jurisdictional waters means that any activities that would cause a discharge to those waters require a permit from the USACE pursuant to Section 404. Information about the quality and quantity of the aquatic resources that would be affected by the proposed activity, the types of impacts that are expected to occur, and compensatory mitigation are obtained by the USACE during permit processing.

The Nationwide Permits (NWP) program streamlines the evaluation and approval process for certain types of activities that have only minimal impacts to the aquatic environment. Several types of NWPs could potentially apply to water quality control improvements proposed in the project area. The project must meet certain conditions to qualify for an NWP, including no significant impacts to endangered species. Projects that do not qualify for the NWP program require an individual permit or a Letter of Permission (LOP).

Individual permits are generally reserved for projects with potential for substantial environmental impacts. An individual permit requires a full public interest review, including public notices and coordination with involved agencies, interested parties and the general public. Another type of individual permit used for very minor impacts and in special circumstances is the LOP, which authorizes certain fill activities that have an overall minimal impact to the aquatic ecosystem. The LOP uses an abbreviated processing procedure and can only be used for those projects where the applicant provides evidence of thorough pre-application coordination among the regulatory and resource agencies.

Clean Water Act, Sections 401 and 402

Pursuant to CWA Section 401, any applicant for a Section 404 permit, including a NWP where pre-construction notification is required, must also provide to the USACE a Water Quality Certification (WQC) or waiver from the respective state. In California, the local RWQCB is authorized to issue WQCs, which ensure discharges meet state water quality standards.

The RWQCB recommends the application for Section 401 WQC or waiver be made at the same time that any applications are provided to other agencies, such as the USACE or the USFWS. Application is not final until completion of environmental review under CEQA. Mitigation must include a replacement ratio of 2:1, or twice as many acres of wetlands provided as are removed. The RWQCB looks for mitigation that is on site and in-kind, with functions and values as good as or better than the wetland that is being removed.

The CWA prohibits the discharge of pollutants to navigable waters (waters of the U.S.) unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program regulates both point source discharges (a municipal or industrial discharge at a specific location or pipe) and non-point source discharges (diffuse runoff of water from adjacent land uses). Section 402 of the CWA contains general requirements regarding NPDES permits.

The RWQCB is authorized to issue an NPDES permit for any stormwater outfall to the waters of the U.S. under Section 402 of the CWA. The RWQCB requires that an NPDES permit be obtained for construction grading activities for all projects greater than one acre. This permit requires implementation of non-point source control of stormwater runoff through the application of a number of BMPs. BMPs typically used by the OHMVR Division to manage runoff water quality include incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs. These practices are meant to reduce the amount of constituents entering streams and other water bodies.

The proposed water quality control improvements may be regulated under the WQC program and the NPDES Permit program. If so, the improvements would require a WQC from the Central Valley RWQCB and a General Permit for Discharge of Storm Water Associated with Construction Activities because they involve disturbance to over one acre of land. The General Construction Activity NPDES permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP), which is required to identify the sources of sediment and other pollutants on-site, and to ensure the reduction of sediment and other pollutants in storm water discharged from the site. A monitoring program is required to aid the implementation of, and assure compliance with, the SWPPP. The permit requirements of the RWQCB must be satisfied prior to project construction.

Porter-Cologne Water Quality Control Act

The RWQCB's jurisdiction also includes state protected waters under California's Porter-Cologne Water Quality Control Act. A water of the state is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally protected under Section 401 provided they meet the definition of waters of the state.

Fish and Game Code Section 1602

CDFG administers California Fish and Game Code Section 1602, which requires CDFG notification of any proposed activity that may substantially modify a river, stream, or lake. The notification requirement applies to any work undertaken in or near a lake, river, or stream, including any bed and channel with a perennial, intermittent, subsurface or ephemeral flow, and may also apply to work undertaken within the flood plain of a body of water. Notification is required by any person, business, state or local government agency, or public utility proposing an activity that would:

- Substantially divert or obstruct the natural flow of any river, stream or lake
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake

If Section 1602 notification applies to the water quality control improvements, and CDFG determines the improvements may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement (Agreement) would be prepared. The Agreement would include reasonable conditions necessary to protect those resources and must comply with CEQA. CDFG uses the USFWS definition of wetlands when regulating these activities.

CDFG and CEQA

As a trustee agency, CDFG comments on the biological impacts of development projects reviewed under CEQA. CEQA gives CDFG jurisdiction to comment on the protection of habitats deemed necessary for any species to survive in self-sustaining numbers, but does not allow CDFG to govern land use. It stipulates that the state lead agency shall consult with, and obtain written findings from, CDFG in preparing an EIR on a project, as to the impact of the project on the continued existence of any endangered or threatened species (PRC §21104.2).

3.4.2 Environmental Setting

A TRA biologist visited the project site on two occasions, on March 20, 2012 and June 5, 2012. The property was walked, and plant communities, dominant plant species, and wildlife noted.

Vegetation Communities

The project area supports mixed oak woodland/savannah, annual grassland, depressional, seasonal wetlands, and intermittent drainages (Coyote Creek and tributaries). Figure 4 provides

an aerial view of the site showing the oak trees interspersed throughout the annual grassland. Coyote Creek can be seen meandering through the property in a north-south direction.

Plant vegetation communities were determined using the classification system outlined in *A Manual of California Vegetation, Second Edition* (Sawyer and Keeler-Wolf 2008). The property primarily supports grasslands, most closely fit the description of *Bromus hordeaceus* Semi-Natural Herbaceous Stands (annual brome grassland). Other commonly occurring annual grass species include wild oat (*Avena* sp.), Italian ryegrass (*Lolium multiflorum*), rattail fescue (*Vulpia myuros*), and quaking grass (*Briza minor*), among others. The grasslands also support various forbs, both native and non-native species. Forbs were not in bloom at the time of the March 20 survey, but common grassland forbs in the Sacramento area include filaree, storksbill, and cranesbill (*Erodium botrys, E. moschatum, E. cicutarium*), butter and eggs (*Triphysaria eriantha*), bicolor or miniature lupine (*Lupinus bicolor*), California poppy (*Eschscholzia californica*), turkey mullein (*Eremocarpus setigerus*), a variety of tarweeds (*Holocarpha virgata, Hemizonia pungens, H. fitchii*), Spanish clover (*Lotus purshianus*), prickly lettuce (*Lactuca serriola*), vinegar weed (*Trichostema lanceolatum*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), alkali mallow (*Malvella leprosa*), whitetip clover, tomcat clover, and other clovers (*Trifolium variegatum, T. willdenovii, T. dubium*).

The oak woodland present on the property is best described as *Quercus douglasii* Woodland Alliance (blue oak woodland), with occasional valley oak (*Quercus lobata*). A few scattered elderberry (*Sambucus mexicana*) were also observed. The oaks are mature, with no nature oak regeneration occurring likely due to cattle grazing. The oak understory is that of annual brome grassland as described above.

A wetland delineation prepared by Arcadis in January 2008 mapped waters along Coyote Creek and three small areas of adjacent wetlands (Arcadis 2008). The Barton Ranch property was called Zone 4 in the wetland delineation, is shown in Figure 7, and is described in the delineation report as follows:

> Zone 4 covers land owned by Barton Ranch to the south of the property, and consists of one continuous reach of Coyote Creek that was identified as Waters 7. Flow is captured in Waters 7 from two discharge points along the southern property boundary and flows south through Barton Ranch. Waters were delineated between a river-left and river-right (facing downstream) OHW mark, as defined in 33 CFR §328.3(e). Vegetation was generally absent within the stream channel, but above top of bank was generally characterized as scattered blue oaks, and occasional valley oaks, with an exotic grassland understory. The approximate area of Waters 7 is 1.6 acres (68,874.0 sf).
>
> Three wetlands adjacent to Waters 7 were also delineated within Zone 4 based on criteria articulated in the 1987 Manual. Primary and secondary indicators of wetland hydrology were used, including (1) water marks; and (2) oxidized root channels in the upper 12 inches. Hydrophytic vegetation was not observed given the ubiquitous cover of exotic range grasses indicative of the long-term grazing pressures. Taking into consideration the active land-use, these areas were still determined to meet the wetland criteria as defined by the 1987 Manual. The approximate area of the three wetlands is 0.03 acres (1,289.6 sf).

Seasonal wetland habitat was inundated at the time of the March survey. However, a follow-up site visit on June 5 found the seasonal wetlands dominated by coyote thistle (*Eryngium vaseyi*),

and the vegetation community corresponds to the *Erynigium* alliance. Seasonal wetlands on site may be vernal pools; however, the wetland delineation (Aracadis 2008) did not differentiate between seasonal wetlands and vernal pools. Further soil analysis would need to be done to make that determination.

Wildlife

Wildlife habitat values depend on the availability of water, food, and cover. While some wildlife species are restricted to specific vegetation communities, others range across communities and biotic zones. Grasslands provide important foraging habitat for many species, and oak woodlands provide nesting habitat for a variety of birds. Common wildlife species that may occur on site include red-shouldered hawk (*Buteo lineatus*), great horned owl (*Bubo virginianus*), acorn woodpecker (*Melanerpes formicivorus*), northern flicker (*Colaptes auratus*), western scrub jay (*Aphelocoma californica*), oak titmouse (*Baeolophus inornatus*), white-breasted nuthatch (*Sitta carolinensis*), yellow-rumped warbler (*Setophaga coronata*), western kingbird (*Tyrannus verticalis*), western bluebird (*Sialia mexicana*), California myotis (*Myotis californicus*), and black-tailed jackrabbit (*Lepus californicus*), among others. Rare species are described below under “Special-Status Species.”

Wildlife Movement Corridors

Habitat corridors facilitate wildlife migration and movement within landscapes and are essential to the viability and persistence of many wildlife populations. Wildlife movement includes migration (i.e., usually one-way per season), inter-population movement (i.e., long-term genetic flow), and small travel pathways (i.e., daily movement corridors within an animal’s territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main corridor, permitting an increase in gene flow among populations. These linkages among habitats can extend for miles and occur on a large scale throughout California.

A variety of species such as those listed under “Wildlife” above move within and through the Barton Ranch property. Barton Ranch is part of a larger corridor of open space located between Highway 50 to the north and Highway 16 to the south.

Special-Status Species

Special-status species are those plants and animals that are legally protected or otherwise recognized as vulnerable to habitat loss or population decline by federal, state, or local resource conservation agencies and organizations. Special-status species include:

- Species that are federal or state listed as threatened or endangered
- Species considered as candidates or proposed for federal or state listing as threatened or endangered
- CDFG Species of Special Concern
- Fully protected species per California Fish and Game Code
- Plants considered by the California Native Plant Society (CNPS) and CDFG to be rare, threatened, or endangered (California rare plant ranked [CRPR]; e.g. CRPR 1B)

The special-status species with potential for occurrence in the project area are listed in Appendix B. The tables were prepared consistent with the CEQA Guidelines using information from the California Natural Diversity Database (CNDDB 2012) and CNPS Rare Plant Inventory (2012). For the CNDDB and CNPS searches, the Buffalo Creek USGS 7.5 minute quad and eight adjacent quads were searched.

Special-Status Plants

Of the 21 plants analyzed for their potential to occur on the Barton Ranch property, 8 were determined to have a low potential to occur on site. None of these species to date have been recorded to occur on the Barton Ranch property or Prairie City SVRA (CNDDB 2012, Sara Cumber-Lose, pers. comm.). Seven of the eight special-status species with potential to occur are species that occur in vernal pools, including dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Ahart's dwarf rush (*Juncus leiospermus*), legenere (*Legenere limosa*), pincushion navarretia, (*Navarretia myersii* ssp. *myersii*) slender Orcutt grass (*Orcuttia tenuis*), and Sacramento Orcutt grass (*O. viscida*). In addition, Sanford's arrowhead may occur in standing or slow moving freshwater habitat on site. As discussed above, a soil analysis would be needed to determine if the seasonal wetland patches on site are vernal pools. The seasonal wetlands did not appear to support special-status vernal pool plant species when observed during a site visit performed on June 5, 2012. However, as 2012 was a relatively dry year, absence of these species could not be definitively confirmed. Regardless, no seasonal wetlands are present within the 10 acres proposed for water quality improvement facilities or within the 5 acre spray field area.

Special-Status Wildlife

A total of 20 special-status wildlife species are included in Appendix B. Of these, 6 species were determined to have no potential to occur on site, either because the project is outside of the species' range, or the species' habitat requirements are not met on site. The remaining 14 species have either a moderate or low potential to occur on site. These species include vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot, Cooper's hawk, northern harrier, golden eagle, Swainson's hawk, white-tailed kite, burrowing owl, loggerhead shrike, California horned lark, pallid bat, western red bat, and American badger.

There is only a potential for vernal pool fairy shrimp and vernal pool tadpole shrimp if the seasonal wetlands on site are vernal pools since vernal pools hold water longer and better meet the lifecycle needs of the shrimp. The 10 acre water quality improvements facilities area and the 5 acre spray field area do not encompass any of the three seasonal wetland areas that were mapped as part of the wetland delineation (Arcadis 2008). These species would thus not be affected by the project.

Western spadefoot may be present on site as suitable habitat is present, and the species historically occurred in the region (CNDDB 2012). Western spadefoot breeds in vernal pools, seasonal wetlands, other temporary rain pools, cattle tanks, and occasionally in pools of intermittent streams. Suitable breeding habitat may be present in the seasonal wetlands on site; however, it is not known how long the wetlands hold water and if they meet the lifecycle requirements of the spadefoot. Regardless, none of the seasonal wetlands occur within the water quality improvements or spray field areas. Western spadefoot spends most of its life in uplands buried underground in earth-filled burrows and is active on the surface for only a short period each year, typically between October to May, depending on rainfall. The species may be

present in upland habitat on the property, including within the water quality improvements and spray field areas.

Mature trees and shrubs on site provide nesting habitat for Cooper's hawk, Swainson's hawk, white-tailed kite, and loggerhead shrike, and grasslands provide suitable nesting habitat for northern harrier, burrowing owl and California horned lark. All of these species were determined to have a moderate potential to occur on site. Burrowing owls require the presence of small mammal burrows for nesting, and the species has been recorded in Prairie City SVRA (Sarah Cumber-Lose, pers. comm.). Golden eagles may forage over the site, but the property does not support nesting habitat. The small amount of acreage disturbed for the water quality improvements project would not cause a significant loss of foraging habitat.

American badger is typically found in open grasslands with friable soils. There is a single occurrence from 1990 of this species in the region, but the species is presumed extirpated from the record location due to development (CNDDB 2012). American badger has never been recorded in Prairie City SVRA (Sarah Cumber-Lose, pers. comm.). The species is unlikely to occur on the Barton Ranch property, but presence cannot be ruled out.

There is potential for pallid bats to forage on site, but since the property does not support suitable roosting habitat, the potential is low. Western red bats may both forage on site and roost in tree foliage.

3.4.3 Discussion

Would the proposed 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?

Less than Significant Impact with Mitigation. The area of the Barton Ranch property that would contain the water quality improvement facilities does not support seasonal wetlands or potential vernal pools and thus would not result in any impacts to the seven special-status vernal pool plant species with potential to occur on site. Although not observed there, Sanford's arrowhead may occur in standing or slow moving freshwater habitat present within Coyote Creek and could be impacted during construction of the water quality improvement facilities. Implementation of Mitigation Measure BIO-1 would mitigate impacts to Sanford's arrowhead to less than significant.

There are no seasonal wetlands, stock ponds, or pools within the water quality improvement or spray field areas, and thus no potential suitable breeding habitat for western spadefoot. However, there is potential suitable breeding habitat on other areas of the Barton Ranch property and outside the property seasonal wetland habitat exists. Thus, there is potential for the species to be present within the property's upland habitat. Implementation of Mitigation Measure BIO-2 would mitigate impacts to western spadefoot to less than significant.

It is unlikely that construction of water quality improvement facilities would result in the trimming or removal of trees or shrubs. However, if trees or shrubs were to be removed or trimmed during the bird nesting season from February 1 to August 31, nesting birds, including special-status

species Cooper's hawk, Swainson's hawk, white-tailed kite, or loggerhead shrike, may be impacted. In addition, ground disturbance for construction of the improvement facilities, if conducted during the bird nesting season, may impact ground nesting birds, including special-status northern harrier, burrowing owl, and California horned lark. Implementation of Mitigation Measure BIO-3 would mitigate impacts to nesting birds to less than significant.

Although unlikely, there is potential for American badger to occur within the area proposed for water quality improvement facility construction. Implementation of Mitigation Measure BIO-4 would mitigate impacts to American badger to less than significant.

If any trees are to be removed or trimmed, there is potential for impact to roosting red bats if present. Implementation of Mitigation Measure BIO-5 would mitigate impacts to red bat to less than significant.

Impact BIO-1: Development of water quality improvement facilities within the identified 10 acre area may result in adverse impact to Sanford's arrowhead, if present.

Mitigation Measure BIO-1: Prior to construction and ground disturbance for water quality improvement facilities, a survey for Sanford's arrowhead shall be conducted during the plant's blooming period (May to October). If the plant is found, every effort shall be made to avoid the species. If avoidance is not possible, the OHMVR Division shall attempt relocation to a risk-free location, or, in consultation with experts, determine another means to mitigate for the loss of the plant(s) such as obtaining seeds from other sources and planting seedlings in risk-free areas.

Impact BIO-2: Ground disturbance for the construction of water quality improvement facilities may adversely impact western spadefoot, if present in upland burrows.

Mitigation Measure BIO-2: A survey shall be completed to search for potential western spadefoot burrows prior to the rainy season the year before construction of the water quality improvements is scheduled to begin. If potential burrows are found, a search for spadefoots should take place on rainy nights during the wet season in the construction area. If spadefoots are located on site, potential loss of individual animals shall be avoided through active trapping and relocation to suitable and nearby off-site habitat by a qualified biologist.

Impact BIO-3: Ground disturbance for construction of water quality improvement facilities may impact ground nesting birds if conducted during the avian nesting season, from February 1 to August 31. In addition, shrub and tree nesting birds may be impacted if any trees or shrubs are to be removed or trimmed during the avian nesting season.

Mitigation Measure BIO-3: Construction of water quality improvement facilities shall be avoided from February 1 through August 31, the bird nesting season, to the extent feasible. If no construction is proposed during the nesting season, no surveys are required. If construction is unavoidable during the nesting season, a qualified biologist shall conduct a survey for tree/shrub and ground nesting birds within five days prior to the proposed start of work. If active nests are not present, project activities can take place as scheduled. Additionally, if more than 5 days elapse between the initial nest search and construction activities, it is possible for new birds to move into the project area and begin building a nest. If there is such a delay, another nest survey should be conducted. If any active nests are detected, the OHMVR Division shall delay the removal of the applicable tree or shrub while the nest is occupied with eggs or young who have not yet fledged. A no-disturbance buffer zone shall be designated and maintained around the nest until a qualified biologist has determined that the young have fledged from the

nest. The size of the no-disturbance zone shall be determined in consultation with the California Department of Fish and Game. A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used.

Impact BIO-4: Construction of water quality improvement facilities may result in impacts to American badgers if occupied dens are present in the construction area.

Mitigation Measure BIO-4: A survey shall be completed to search for badger dens within one week prior to the start of water quality facility construction. If dens are found and are occupied, potential loss of individual animals shall be avoided through active trapping and relocation of badgers to suitable and nearby off-site habitat by a qualified biologist and in coordination with and approval of the CDFG.

Impact BIO-5: If any trees are to be removed or trimmed for construction of water quality improvement facilities, red bats may be adversely impacted if roosting in tree foliage.

Mitigation Measure BIO-5: If trees are to be removed or trimmed, the OHMVR Division shall retain a qualified biologist ("bat biologist") to conduct a pre-activity survey for roosting bats in trees to be removed. If no roosting bats are found, no further mitigation is required. If a bat roost is found, the project sponsor shall implement the following measures to avoid impacts to roosting bats.

If non-breeding bats are found in a tree or structure to be removed, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity. Project activities should then follow at least one night after initial disturbance for airflow. This action should allow bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight.

If active maternity roosts are found in structures that would be removed as part of project implementation, demolition of that structure shall commence before maternity colonies form (generally before March 1) or after young are flying (generally by July 31).

Implementation: OHMVR Division

Effectiveness: The use of pre-construction surveys and/or limited operating periods are effective ways of avoiding impacts to special-status species as they assure 1) that special-status species are not present during the construction period, or 2) that the species, if present, are not disturbed or are flushed or relocated outside of the construction area.

Monitoring: The Twin Cities District shall report implementation and results of these measures to an Environmental Scientist at the OHMVR Division Headquarters upon completing surveys and again upon implementing any avoidance or minimization measures.

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 US Fish and Wildlife Service?

Less than Significant Impact. Potential sensitive natural communities on site include vernal pools, which may be present within the areas mapped as seasonal wetlands. Acquisition of the Barton Ranch property and subsequent management of native vegetation and oak woodland and grassland habitat would not result in adverse effect on any seasonal wetlands or vernal pools. Rather, management is intended to protect and conserve sensitive natural communities. Likewise, creation of water quality improvements and the placement of fencing around the periphery of the property that does not already have fencing would not result in adverse effect on any seasonal wetlands or vernal pools. Water control improvement facilities, spray field, and fencing are not proposed in any seasonal wetland areas. There would be no disturbance to seasonal wetland habitat.

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?

Less than Significant Impact with Mitigation. Construction of water quality improvement facilities would likely result in fill or interruption of Coyote Creek, a water of the U.S. (Arcadis 2008). Impacts to stream channels (bed and bank) are specifically addressed by Fish and Game Code Section 1600 *et seq*. and may fall under the jurisdiction of the Clean Water Act §404 permit process and the Porter-Cologne Water Quality Control Act. Permit provisions of the CWA regulating dredge and fill operation are enforced by the USACE. Permit provisions of the Porter-Cologne Water Quality Control Act are enforced by the RWQCB.

Impact BIO-6: Construction of water quality improvement facilities would likely result in fill or interruption of Coyote Creek and would likely necessitate permits from the regulatory agencies, which include CDFG, USACE, and RWQCB.

Mitigation Measure BIO-6: Once the specific design for the water quality improvements facilities has been completed and the extent to which modifications to Coyote Creek become known, the OHMVR Division shall determine the need to obtain a Streambed Alteration Agreement from CDFG, a permit from the USACE, and a certification from the RWQCB. If such authorizations are required, the OHMVR Division should consult with the appropriate agencies and fill out and submit applicable agreement/permit applications.

Implementation:	OHMVR Division
Effectiveness:	The receipt of an agreement, permit, and certification from regulatory agencies would assure OHMVR Division compliance with regulations pertaining to stream alterations, modifications of waterways, and degradation of water quality.
Monitoring:	The Twin Cities District shall submit copies of final agreements, permits, and certifications to an Environmental Scientist at the OHMVR Division Headquarters upon receipt.

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?

Less than Significant Impact. Construction and creation of water quality improvements and a five-acre spray field and the placement of fencing around the periphery of the property that does not already have fencing, would not interfere substantially with wildlife movement of wildlife use of nursery sites. Areas proposed for water quality improvements and storm water irrigation spraying are small in size and are adjacent to land that would remain undisturbed. Fencing is already present around much of the property, and additional fencing would be strand, allowing for wildlife movement. Water quality improvement facilities would occupy only 10 acres and would not prevent wildlife movement through the area. Thus, creation of these facilities is not expected to interfere substantially with wildlife movement. Spraying storm water over 5 acres of undisturbed land would not substantially impede wildlife movement or use of wildlife nursery sites, such as tree and ground nesting habitat.

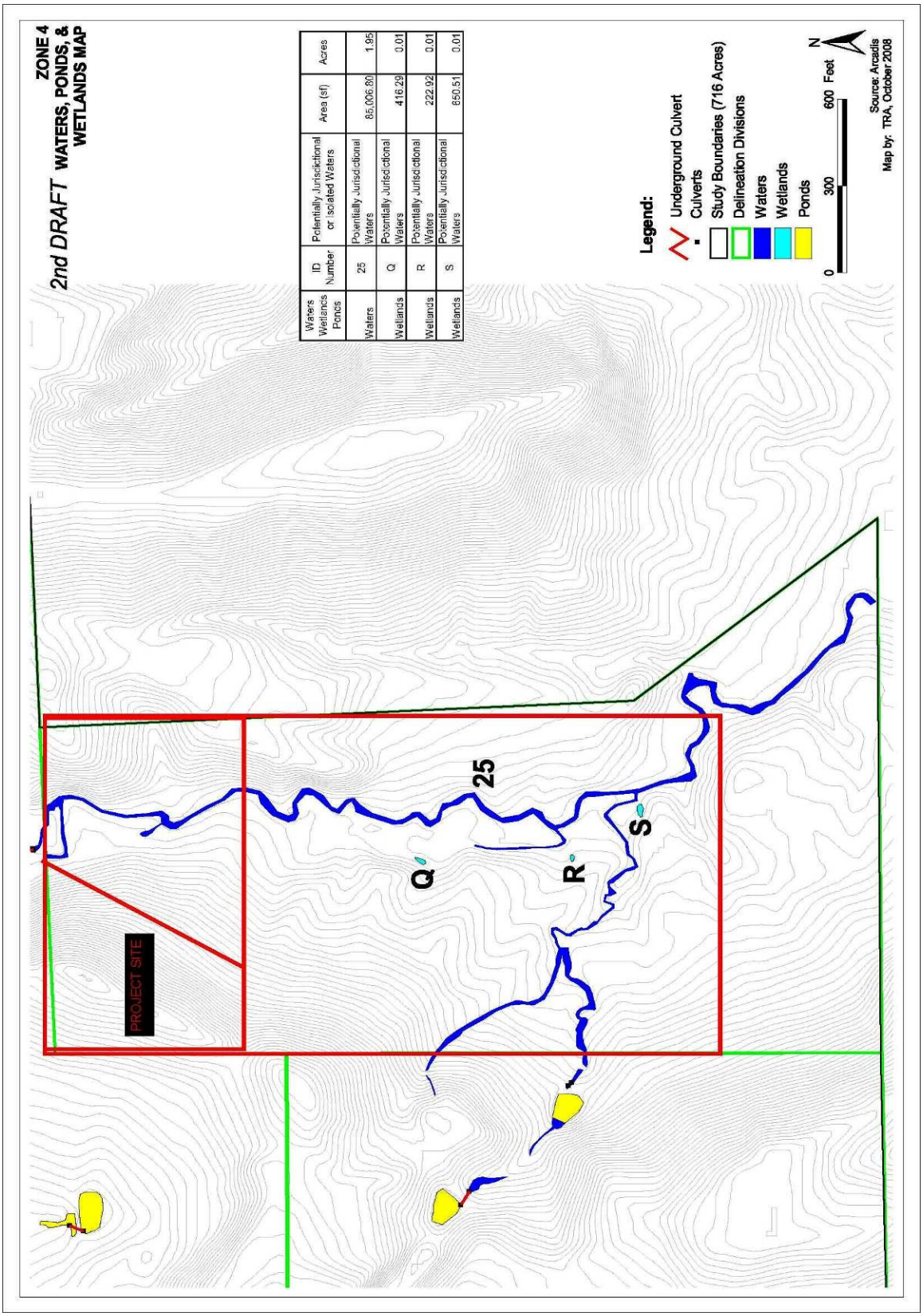
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The project does not conflict with any local policies or ordinances protecting biological resources. There would be no impact, directly or indirectly, on local policies or ordinances by the implementation of this project.

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?

No Impact. The project area is not covered under a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there would be no impact, either directly or indirectly, on any such plans.

Figure 7. Waters and Wetlands on the Project Site



3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

3.5.1 Regulatory Setting

California Environmental Quality Act

An effective determination of whether or not a project will adversely affect archaeological resources is contingent upon supporting baseline data that includes, but is not limited to, archaeological archival research, field work, analyses, and resource evaluations. A record search to determine whether any previously identified resources exist within the project boundary is the first step in determining whether there may be archaeological resources present. A record search is conducted at the applicable California Historical Resources Information System (CHRIS). There are 11 regional centers that maintain the State Archaeological Inventory as part of the Historical Resources File System. This system maintains current information on recorded archaeological sites, as well as resources listed in the California Register of Historical Resources. Additional sources of information include colleges and universities within archaeology departments, the local historical or archaeological society, local Native American groups, or appropriate archives and repositories. Most importantly, the Native American Heritage Commission maintains a file of sacred lands which contain information unavailable elsewhere. If the project area has never been surveyed for archaeological resources, the lead agency should require a field survey by a qualified state professional archaeologist to identify, record, and evaluate known archaeological resources within the project boundary.

CEQA recognizes archaeological resources as part of the environment. For the purpose of CEQA, “environment” is defined to include “the physical conditions which exist within the area which will be affected by the proposed project, including...objects of historic or aesthetic significance” (PRC §21060.5). A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (§21084.1). Additionally, if the lead agency determines that a project may have a significant effect on unique archaeological resources, these effects will be addressed in an environmental impact report (PRC §21083.2), or proper mitigations can be incorporated into the project to lessen or avoid impacts all together. PRC §21084.1 and 21083.2 operate

independently to ensure that potential effects on archaeological resources are considered as part of a project's environmental analysis. The former applies to archaeological sites that are listed on or eligible for listing on the California Register of Historical Resources, the latter applies to other "unique" archaeological resources. Either of these benchmarks may indicate that a proposed project may have a potential adverse effect on archaeological resources.

Historical Resources

A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (PRC §21084.1). Pursuant to 14 CCR 15064.5 (a) the term "historical resources" includes the following:

(1) A resource listed, or determined to be eligible by the State Historical Resources Commission for listing, in the California Register of Historical Resources (PRC §5024.1, Title CCR, §4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in PRC section 5020.1 (k) or identified as significant in a historical resource survey meeting the requirements of PRC section 5024.1 (g), shall be presumed historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC §5024.1, Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to PRC section 5020.1 (k)), or identified in a historical resources survey (meeting the criteria in PRC section 5024.1 (g)) does not preclude a lead agency from determining that the resource may be a historical resource as defined by PRC sections 5020.1 (j) or 5024.1.

Aside from meeting the above listed criteria, in order for an archaeological resource to be a historical resource it must also be at least 50 years old and embody several aspects of integrity (location, design, setting, material, workmanship, feeling, and association).

Unique Archaeological Resources

PRC §21083.2 explicitly requires that the initial study examine whether the project may have a significant adverse effect on "unique archaeological resources." Pursuant to part (g) of that section, a unique archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person

The resource must also be at least 100 years old, possess "substantial stratigraphic integrity" (i.e., is substantially undisturbed), and involve "important research questions that historical research has shown can be answered only with archaeological methods."

It is important to note that if it is proven that an archaeological resource is neither a historical or unique resource the effects of the project on those resources shall not be considered a significant effect on the environment, and no further CEQA review is required (14 CCR §15064.5).

Public Resources Code Sections 5024 and 5024.5

As a state agency, CDPR is also required to follow PRC §5024 and PRC §5024.5 when it comes to resource management. The PRC §5024 requires each state agency to make a good faith effort to formulate policies to preserve and maintain all state-owned historical resources under its jurisdiction and to submit to the State Historic Preservation Officer (SHPO) an inventory of all state-owned structures over 50 years of age under its jurisdiction. Additionally, PRC §5024 permits the SHPO to determine which historical resources identified in inventories meet National Register of Historic Places and state historical landmark criteria for inclusion on the master list of historical resources. The SHPO will maintain this master list comprised of all inventoried structures submitted and determined significant pursuant to PRC Section 5024 (d) along with all state-owned historical resources currently listed in the National Register or registered as a state historical landmark under state agency jurisdiction. In an effort to keep an updated master list, each state agency is required to submit inventory updates to the SHPO along with an annual report of preservation activities. The SHPO shall provide state agencies with advice and assistance as needed with regards to historical resources, for instance, during projects that may affect historical resources listed in or eligible to the National Register, or registered or eligible as a state historical landmark. CDPR has had an active and on-going historic preservation program with the SHPO since 1982 and is required to submit annual inventory updates as well as preservation and protection measures of historical resources to SHPO.

Department of Parks and Recreation Native American Consultation Policy and Implementation

It is CDPR's policy to involve Native California Indian groups in all plans and practices that have impacts on the cultural resources under CDPR's stewardship. Prior to implementing projects or policies that may have impacts to Native American sites within the State Park System, CDPR actively consults with local Native California Indian groups regarding the protection, preservation, and/or mitigation of cultural sites and sacred places in the State Park System. Departmental Notice 2007 Native American Consultation Policy and Implementation Procedures identifies the following nine areas of activity where consultation between local Native California Indian groups and California State Parks is required:

1. Acquisition of properties where cultural sites are present
2. During the General Plan process and/or development of Management Plans
3. Planning, design, and implementation of capital outlay projects
4. Issues of concern identified by the tribes
5. Plant and mineral gathering by Native people
6. Access to Native California Indian ceremonial sites
7. Archaeological permitting
8. Mitigation of vandalism and development of protective measures at Native American sites
9. When using the Native voice in presenting the story of California native Indian people in park units

Executive Order B-10-11

In September of 2011 California Governor Edmund G. Brown Jr. filed with the Office of the Secretary of the State Executive Order B-10-11. This Executive Order acknowledges the important relationship that many Native American California Tribes have with their native home of California. As described in the Executive Order, the term "Tribes" includes all Federally Recognized Tribes and additional California Native Americans. The Executive Order affirms that the State of California recognizes and reaffirms the inherent right of these Tribes to exercise sovereign authority over their members and territory. Most importantly, it is ordered that it is the policy of this Administration that every state agency and department subject to Governor Edmund G. Brown's control shall encourage communication and consultation with California Indian Tribes.

3.5.2 Environmental Setting

OHMVR Division Associate State Archaeologists have prepared an Archaeological Survey Report for the proposed project (CDPR 2012). Results are summarized in this section; all citations are as given in that report. Copies are available at the OHMVR Division Headquarters in Sacramento; all data considered confidential pursuant to California Government Code

Sections 6253, 6254, and 6254.10 in regards to disclosure of archaeological site information would be withheld.

In compliance with CEQA and PRC §5024 and PRC §5024.5, a cultural resource inventory was completed by OHMVR Division Associate State Archaeologists to determine the significance of impacts to resources within the proposed Barton Ranch acquisition project area. A record search was conducted of the project area on March 6, 2012, at the North Central Information Center at California State University, Sacramento. The record search included a search for previously recorded resources in the project area as well as previous archaeological surveys conducted in the project area. Other files and documents referenced included: Office of Historic Preservation Historic Property Data File (2011), Determination of Eligibility (2011) for Sacramento County, National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listings (2008 & updates), California Inventory of Historic Resources (1976), California State Historical Landmarks (1996), Points of Historic Interest (1992), California Place Names (Gudde 1975), California Gold Camps (Gudde 1969), Historic Spots in California (Hoover et al. 1990), Caltrans Bridge Inventory, and historic maps.

The record search determined that three previously recorded historic-era resources exist within the vicinity of the project area and include CA-SAC-308H (P-34-335), CA-SAC-950H (P-34-1573) and P-34-2195. CA-SAC-308H (P-34-335) is the American River Placer Mining District, an area that was used by the Natoma Company for dredging for gold. The District is marked by cobble tailings from the dredging operations. CA-SAC-950H (P-34-1573) is a rock fence alignment. P-34-2195 is a historic-era transmission line that extends from Halsey to Newark. Additionally, the Gold Rush-era city of Prairie City is located near the project area. The record search also determined the proposed project area has never been surveyed for cultural resources.

A complete visual intensive pedestrian survey of the 68-acre project area was completed by OHMVR Division Associate State Archaeologists Alicia Perez and Kelly Long on April 12, 2012. Additionally, Marco Guerrero and Daniel Rey from the United Auburn Indian Community of the Auburn Rancheria also participated during a portion of the survey. The purpose of the pedestrian survey was to complete an archaeological survey of all lands within the project area in order to: a) relocate and update all previously recorded sites, and b) to record newly identified resources. A complete visual intensive survey is one in which archaeologically-trained individuals systematically traverse the area at 10-meter intervals or less, inspecting the ground surface for all evidence of prior human activity. Vegetation coverage impaired ground visibility. All site boundaries were recorded using GPS.

As a result of the pedestrian survey, one prehistoric site (04232012) was newly recorded and one previously recorded historic-era linear feature (P-34-1295) was updated. 04232012 is a prehistoric site that consists of three milling station features. The site is situated at the eastern edge of an open prairie that transitions into a creek drainage. Much of the bedrock is covered in reddish-brown soil, and there appears to be seasonal soil build-up covering the site. The mortar cups have depth and appear well-used. The site is very discrete and appears to be restricted to the area immediately around the features. However, given the amount of soil build-up covering these feature, it is likely that there are buried milling features and possibly middens. Other areas in the vicinity where bedrock is exposed could also contain milling features as well.

Dense grasses and forbs also cover the site making ground visibility poor. Large oak trees are sparsely located along the creek drainage and the eastern reaches of the bench. No cultural constituents were found in association.

P-34-1295 is a historic-era linear feature that consists of a 0.4 mile segment of a PG&E transmission line that extends from Halsey Junction to the Newark Substation. The segment within the Barton Ranch acquisition area is composed of three metal towers (numbers 241 through 243) along the western side of an unnamed seasonal drainage that flows into Coyote Creek.

It is also important to note that the western side of the unnamed upper drainage of Coyote Creek contains a linear band of bedrock that is currently buried under reddish-brown soil. It is highly probable that this area contains buried prehistoric-era archaeological sites and has been documented as a culturally sensitive area with potentially buried archaeological constituents.

3.5.3 Discussion

Would the proposed project:

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. The only designated historic feature found on the property is a 0.4 mile segment of a PG&E transmission line that extends from Halsey Junction to the Newark Substation (P-34-1295). The segment within the Barton Ranch acquisition area is composed of three metal towers (numbers 241 through 243) along the western side of an unnamed seasonal drainage that flows into Coyote Creek. The acquisition or future installation of water quality improvements would not affect the PG&E transmission line.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact. As described above, two known cultural resources and a culturally sensitive area are located within the acquisition area; however, the known cultural resources and culturally sensitive area are located outside of the ground disturbing activity footprint of the future water quality improvement facilities as described in the project description. The Prehistoric Resources Goal for this proposed project is to identify, protect, preserve, and interpret the significant prehistoric resources within the project area. The recorded prehistoric site within the project area has the potential to contain important information about the prehistoric lifeways of the area and would be preserved. To ensure the Prehistoric Resources Goal is attained, the following Cultural Resource Guidelines will be followed by the OHMVR Division as required by the PRC.

<u>Preservation in Place</u>

In pursuant to part 14 CCR 15126.4, public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. Planning construction to avoid archaeological sites is an example of how to ensure the preservation in place of archaeological sites, and it is the OHMVR Division's preferred manner for mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context, and most importantly this option can help to avoid conflict with religious or cultural values of groups associated with the site. Thus, the preferred method to avoid significant project impacts to known cultural resources within the proposed Barton Ranch acquisition project area is for all ground disturbing activities to not occur within known cultural resource boundaries or culturally sensitive areas.

Mitigation Monitoring and Reporting Program

A public agency must adopt a mitigation monitoring or reporting program when it finds significant project impacts would be avoided or minimized to a less than significant level based on mitigation (PRC §21081.6). It is important to note that the western side of the unnamed upper drainage of Coyote Creek has a linear band of bedrock that is currently buried under reddish-brown soil. Prehistoric milling features are likely to be found on bedrock outcroppings. Additionally, prehistoric milling features and villages are also predominantly located in close proximity to water sources and areas with an abundant amount of resources. The linear band of bedrock is located near an existing water source and an abundant amount of old Oak trees, a resource that was significantly utilized by indigenous populations for resource procurement and processing of acorns. Given the abundant amount of natural resources, this area would have made for an ideal location for a prehistoric village or community. Therefore it is highly probable that this area contains buried prehistoric archaeological components such as midden, additional bedrock milling features, and artifacts that could include handstones, projectile points, among additional habitation evidence. All projects that involve ground disturbing activities within the vicinity site 04232012 and the known culturally sensitive area should have an archaeological monitoring plan drafted and in place prior to the commencement of project activities. This monitoring plan should also include Native American consultation and involvement.

Accidental Discoveries

As part of the objectives, criteria, and procedures required by PRC §21082, provisions for resources accidently discovered during a project will be drafted prior to ground disturbing activities. The provisions should include an immediate evaluation of the find by a qualified state archaeologist. In the event the find is determined to be a historical or unique archaeological resource, avoidance measures or appropriate mitigations will be made by the archaeologist. Work could continue in other parts of the project area while historical or unique archaeological mitigations take place (14 CCR 15064.5).

Native American Consultation and Monitoring

Native American consultation will continue during the immediate, as well as future, ground disturbing activities within the project area. Regular consultation with California Indian Tribes and organizations who are interested in the project area will ensure productive, collaborative working relationships, especially when considering management practices involving the project area's natural and cultural resources of interest and concern to them. Native American monitoring will also occur for ground disturbing related activities during the current and future ground disturbing projects within the project area.

Future Cultural Resource Management Guidelines

Upon acquisition, all known resources within the project area would be incorporated within the existing OHMVR Division Cultural Resource Program and would be subject to the following Cultural Resource Management Guidelines:

1. In accordance with PRC 5024, evaluate the significance of each recorded cultural resource according the NRHP and/or CRHR criteria. Obtain a Determination of Eligibility (DOE) from the SHPO for listing the resource on the NRHP/CRHR. If resources are determined to be eligible for NRHP/CRHR, consult with an OHMVR Division archaeologist or other qualified cultural resource specialist to develop and implement

protection measures consistent with Section 106 of the National Historic Preservation Act, the Secretary of Interior's Standards for the Treatment of Historic Properties, and CEQA. These measures could include, but would not necessarily be restricted to the following: good documentation is essential to good management; repair and retain historic fabric instead of replacing; replace with only "like-kind" materials, styles, finishes, colors and craftsmanship; avoid the false historicity that is created by using features that are undocumented or period styles that never were there; make treatments reversible whenever possible; and protect archaeological resources. Until inventorying and evaluation is completed, treat all cultural resources as potentially significant for listing in the NRHP/CRHR in accordance with CDPR policy.

2. Identify significant cultural resources that are in need of data recovery, or are in areas of high risk of impact/vandalism. Initiate a data recovery effort, including surveys, GIS mapping, analysis, and documentation to develop specific management guidelines for the monitoring, site treatment and protection of significant cultural resources.

3. Areas with eligible and/or potentially eligible resources should be set aside as educational and scientific preserves with limited and/or controlled public access to prevent further destruction of these national treasures.

4. Determine the eligibility of the cultural resources within the project area prior to undertaking any projects or construction at or within the vicinity of each resource that have the potential to disturb the integrity of the resource. If significant cultural resources are discovered within or adjacent to areas that will be affected by planned or proposed activities, the activities will be designed to avoid or minimize impacts to the identified resources. If cultural resources are discovered inadvertently during construction activities, cease construction activities within and in the vicinity of the find and consult an OHMVR Division archaeologist or other qualified cultural resource specialist to determine the potential significance of the find per NRHP/CRHR criteria. If the find is determined to be significant, develop and implement mitigation measures in consultation with the archaeologist consistent with Section 106 of the National Historic Preservation Act, the Secretary of Interior's Standards for the Treatment of Historic Properties, and CEQA. Mitigations could include and are not limited to avoidance, site capping, project redesign, and data recovery.

5. Maintain appropriate confidentiality of all cultural resources in conformance with Government Code Sections 6254 "Restriction of Archaeological Record Disclosure" and 6254.10 "Information Maintained by Department of Parks and Recreation."

6. If historic-era resources are identified during future surveys in the project area, conduct a focused archival research on the history of the project area. Complete focused historic contexts for the park that will provide more meaningful significance evaluations. Identify and record historic buildings, structures, sites, objects, and landscape features for those that lack such documentation. Develop treatment recommendations for significant historic structures and identify compatible and non-compatible uses.

As a result of the mandatory requirements that the OHMVR Division must follow under state law, no additional mitigation measures are recommended.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. No unique paleontological resources or sites or unique geologic features occur in the project area.

d. Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. Resources have not been identified within the project area as having Native American human remains on the surface; however, it is not safe to assume that subsurface remains do not exist. In the event that human remains are accidently discovered, the following Cultural Resource Guideline will be followed by the OHMVR Division as required by the PRC.

Human Remains

If human remains are found the project must come to a complete stop and no further excavation or disturbance of the area or vicinity will occur. The county coroner is to be called immediately to determine whether the remains are of Native American ancestry. If the coroner confirms that the remains are Native American, within a 24 hours of the discovery the coroner is to contact the Native American Heritage Commission. The Commission will identify the person(s) believed to be the Most Likely Descendent (MLD), and the MLD will decide, along with the property owner, on appropriate treatment or disposal of the human remains and associated grave goods as provided in PRC Section 5097.98. If the Native American Heritage Commission cannot identify the MLD, the MLD fails to make a recommendation, or the property owner rejects the MLD's recommendations, the property owner can rebury the remains and associated burial goods in an area not subject to ground disturbance (14 CCR §15064.5).

As a result of the mandatory requirements that the OHMVR Division must follow under State law, no additional mitigation measures are recommended.

3.6 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.6.1 Environmental Setting

Project Soils

Prairie City SVRA and the project site are located in California Soil Region IV, the Sacramento Valley Region. This region is characterized by igneous alluvium on the east side of the Sacramento Valley. The soils of the project site include the Hadselville-Pentz Complex (2 to 30 Percent Slopes), and the Pentz-Lithic Xerorthents Complex (30 to 50 Percent Slopes) (TRA 2008). The Pentz and Hadselville series are sensitive to uses that require soil depths exceeding about sixteen inches.

Seismicity

The closest active fault is the Foothill Fault System located 25 miles east of Prairie City SVRA in the foothills of the Sierra Nevada (TRA 2008). No active faults are present on the project site.

3.6.2 Discussion

Would the proposed 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?

No Impact. The project area is not located within any active fault zones as delineated by the Alquist-Priola Earthquake Fault Zone Maps. The probability of ground breaking because of active faulting is considered extremely low as no known faults are present at or in the immediate vicinity of Prairie City SVRA (ECOS 1991). Cracking of the ground due to shaking from a seismic event is also not considered a significant hazard due to the rock types that underlie the site and the lack of active faulting in the area.

ii. Strong seismic ground shaking?

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. (Responses ii-iii) No faults occur on the project site. However, the project area could be subject to strong seismic shaking from a seismic event on a regional fault line. In the event of strong ground shaking, the water quality improvement facilities, if they include sediment basins, could fail, but failure of a sediment basin berm would not cause harm to humans or structures due to the remote location of the facilities and the absence of any sensitive receptors downstream of the facilities.

iv Landslides?

No Impact. Seismically induced landslides/rock fall is not considered a significant hazard condition due to the consolidated nature of the underlying rock types and the generally subdued and level land surface topography (ECOS 1991).

b. Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. One of the purposes of acquiring the property is to allow the OHMVR Division to install additional water quality improvement facilities in the park. The facilities would be designed to assure water quality leaving the state property is similar to or better than the water quality coming on to the property. This would be done through the installation of sediment basins, bioswales, irrigation spray fields, and/or other sediment control BMPs.

In addition, the OHMVR Division must adhere to the Soil Conservation Standard (CDPR 2008), including annual monitoring to determine if the standard is being met throughout the SVRA. The Soil Loss Standard and monitoring would continue to apply to the project area during and after project installation. As a result, project impacts on soil loss and erosion are considered less than significant.

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?

No Impact. Seismically induced liquefaction and ground settlement is not expected to occur due to the consolidated nature of the underlying rock types at Prairie City SVRA (EDAW 2003).

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?

No Impact. The water quality improvement facilities would not be installed on expansive soils.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. Alternative waste water or septic tank systems are not proposed for the project.

3.7 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

3.7.1 Regulatory and Environmental Setting

Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHGs). Common GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), and sulfur hexafluoride (SF_6).

GHG emissions from human activities contribute to overall GHG concentrations in the atmosphere, and climate scientists have become increasingly concerned about the effects of these emissions on global climate change. Human (anthropogenic) production of GHGs has increased steadily since pre-industrial times and atmospheric CO_2 concentrations have increased from a pre-industrial value of approximately 280 ppm to a global monthly mean of 394 ppm in 2012 (NOAA 2012). The United Nations' International Panel on Climate Change (IPCC) fourth assessment report (AR4) concluded that recent regional climate changes, particularly temperature increases, are affecting many natural systems including water, ecosystems, food, coasts, and health (IPCC 2007). The AR4 concluded that most of the observed increase in global average temperature since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations (IPCC 2007a).

GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO_2, which has a GWP of one. By comparison, CH_4 has a GWP of 21, which means that one molecule of CH_4 has 21 times the effect on global warming as one molecule of CO_2. Multiplying the estimated emissions for non-CO_2 GHGs by their GWP determines their carbon dioxide equivalent (CO_2e), which enables a project's combined global warming potential to be expressed in terms of mass CO_2 emissions.

In 2006, the California State Legislature adopted the California *Global Warming Solutions Act of 2006*, Assembly Bill (AB) 32, which required CARB to: 1) determine 1990 statewide GHG emissions, 2) approve a 2020 statewide GHG limit that is equal to the 1990 emissions level, 3) adopt a mandatory GHG reporting rule for significant GHG emission sources, 4) adopt a Scoping Plan to achieve the 2020 statewide GHG emissions limit, and 5) adopt regulations to achieve the maximum technologically feasible and cost-effective reductions.

In 2007, CARB approved a statewide 1990 emissions level and corresponding 2020 GHG emissions limit of 427 million metric tons of carbon dioxide equivalents (MMTCO2e) (CARB 2007). In 2009, CARB adopted its 2008 *Climate Change Scoping Plan*, which projects, absent

regulation or under a "business as usual" (BAU) scenario, 2020 statewide GHG emissions levels of 596 million MTCO2e and identifies the numerous measures (i.e., mandatory rules and regulations and voluntary measures) that will achieve at least 174 MMTCO2e of reductions and reduce statewide GHG emissions to 1990 levels by 2020 (CARB 2009a). In 2011, CARB released a supplement to the 2008 Scoping Plan Functional Equivalent Document that included an updated 2020 BAU statewide GHG emissions level projection of 507 million MTCO2e (CARB 2011a). CARB has also adopted a Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Title 17, CCR, Section 95100 – 95133 (17 CCR §95100 – 95133)), which requires facilities that emit greater than or equal to 25,000 metric tons of CO_2 annually to report their GHG emissions to CARB.

Regionally, the Sacramento Area Council of Governments Climate Change and Air Quality Committee is responsible for developing recommendations relative to air quality, energy conservation, climate change, and related issues.

3.7.2 Discussion

Would the proposed project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Global climate change is the result of GHG emissions worldwide; individual projects do not generate enough GHG emissions to influence global climate change. Thus, the analysis of GHG emissions is by nature a cumulative analysis focused on whether an individual project's contribution to global climate change is cumulatively considerable.

Less than Significant Impact. Project construction activities would emit approximately 261 total MTCO2e, as estimated using CalEEMod Version 2011.1.1 (See Appendix A). Project operation would also create minor amounts of GHG emissions during maintenance activities. The SMAQMD does not maintain numeric significance thresholds for GHG emissions; however, as a point of reference, the Bay Area Air Quality Management District considers land use projects that result in more than 1,100 $MTCO_2e$ of operational GHG emissions per year to have a significant GHG impact. The magnitude of the project's GHG emissions would not impede state GHG reduction goals and is considered a less than significant impact.

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Off-road GHG emissions are identified and planned for in the CARB's GHG emissions inventory and Scoping Plan, which contains measures designed to achieve the state's GHG reduction goals outlined in AB32. The project would not contain any stationary sources that are subject to state or federal GHG permitting or reporting regulations.

3.8 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☒	☐

3.8.1 Discussion

Would the proposed project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact. The project does not involve the routine transport, use, or disposal of hazardous materials.

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?

No Impact. No hazardous materials would be used on the project site. The Project does not involve the handling of hazardous materials.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or hazardous waste within one-quarter mile of an existing or proposed school?

No Impact. The proposed Project does not involve the handling of hazardous materials and would not cause the emission of hazardous substances. None of the project components are within one-quarter mile of an existing or proposed school.

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?

No Impact. No hazardous material sites are known to occur on or in the vicinity of the project site. The project site is not on the Department of Toxic Substance Control's Hazardous Waste and Substance Site List (Cortese List; Department of Toxic Substances 2012).

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?

No Impact. The project area is not within two miles of a public airport or a private airstrip. Mather Field Airport is eight miles west of Prairie City SVRA, and flights in and out of that airport would not pose a safety hazard for people working in the project area.

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?

No Impact. There are no private air strips within two miles of the project site, so the project would not result in a safety hazard for people residing or working in the project area.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

h. Expose people or structures to a significant risk of loss, injury, or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?

Less than Significant Impact. The project would not 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. The project is

not located within the urban/wildland interface as there is no urbanization near the project site. Park staff can handle fire fighting capabilities in the event of small fires within the park, and for larger fires, park staff would be augmented by local firefighting agencies.

3.9 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
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)?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

3.9.1 Regulatory and Environmental Setting

The NPDES was established in the CWA to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and non-point source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the U.S. Section 402 of the CWA contains general requirements regarding NPDES permits. These permits serve as the mechanism for enforcement of the program.

The RWQCB requires that a NPDES permit be obtained for construction grading activities for all projects greater than one acre. This permit requires implementation of non-point source control of stormwater runoff through the application of a number of BMPs. BMPs typically used to manage runoff water quality include controlling roadway and parking lot contaminants by installing oil and grease separators at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs. These practices are meant to reduce the amount of constituents entering streams and other water bodies.

Coyote Creek traverses the project area generally in a north-south direction (Photo 2). Coyote Creek flows to Carson Creek, which flows to Deer Creek, which flows into the Consumnes River southeast of the property (Arcadis 2008). As described in Section 3.4.2, a wetland delineation prepared by Arcadis in January 2008 mapped waters along Coyote Creek and three small areas of adjacent wetlands (Arcadis 2008). Flow is captured in Coyote Creek from two discharge points along the southern property boundary and flows south through Barton Ranch.

3.9.2 Discussion

Would the proposed project:

a. Violate any water quality standards or waste discharge requirements?

No Impact. The project would not violate any water quality standards. The project is intended to improve water quality and movement through the installation of additional water quality improvement facilities meant to control sediment runoff from the SVRA and assure that water leaving the property has the same water quality or better water quality than runoff entering the property. No sewer facilities would be connected to existing sanitary sewer infrastructure, so there would be no violations of waste discharge requirements.

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)?

No Impact. The project does not propose to extract groundwater. The project does not involve significant amounts of cut or fill that could change the direction or rate of groundwater flow. The project does not involve the installation of wells to extract groundwater.

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?

Less than Significant Impact. The existing drainage pattern of the area would not be altered significantly from the existing drainage pattern. A small segment of Coyote Creek, approximately 600 linear feet, would be incorporated into the water quality improvement facilities. However the altered segment along with the improvement facilities would be designed so that there would be no significant amount of erosion borne soils or silt leaving the improvement facilities and reentering Coyote Creek downstream of the facilities. Temporary impacts to storm water quality during construction of the water quality improvement facilities would be minimized through the implementation of BMPs such as silt fencing, fiber rolls, and compost socks. The BMPs would be included in a SWPPP, if required for the project (see Regulated Waters in Section 3.4.1).

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?

Less than Significant Impact. The existing drainage pattern of the area would not be altered significantly from the existing drainage pattern. A small segment of Coyote Creek, approximately 600 linear feet, would be incorporated into the water quality improvement facilities. However the altered segment along with the improvement facilities would be designed to hold runoff so there would be no significant flooding on- or off-site, unless the flood event was beyond the design parameters (100-year flood).

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

f. Otherwise substantially degrade water quality?

Less than Significant Impact. (Responses e-f) The project would not create or contribute runoff water or degrade water quality. The project is intended to improve water quality and movement through the installation of additional water quality improvement facilities meant to control sediment runoff from the SVRA and assure that water leaving the property has the same water quality or better water quality than runoff entering the property.

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?

No Impact. The project does not involve construction of residential or any other structures.

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The project is designed to control sediment but does not involve construction of any structures that would impede or redirect flood flows.

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?

No Impact. The project would not expose people or structures to a significant risk of loss or injury or death involving flooding as the small amount of water to be contained by a possible sediment basin would not pose any risk in the event of berm failure.

j. Result in inundation by seiche, tsunami, or mudflow?

No Impact. The project is not located in an area that is subject to inundation by seiche, tsunami, or mudflow.

3.10 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.1 Discussion

Would the proposed project:

a. Physically divide an established community?

No Impact. There is no established community within the project area.

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?

No Impact. The project area would be incorporated into Prairie City SVRA. The 1991 Prairie City SVRA Master Plan identified the project site as being in the "Zone of Interest" for the park. Such Zones "are intended for long-range planning purposes only and are not a commitment for acquisition" (CDPR 1991).

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. There are no habitat conservation plans or natural community conservation plans in effect for the project area.

3.11 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.11.1 Discussion

Would the proposed 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?

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?

No Impact. (Responses a – b) The project would not affect any known mineral resources of regional or local importance as none are mapped to exist in the area. In 2010 the nearby proposed Teichert Quarry project site was designated as MRZ-2 by Sacramento County – this designation denotes the presence of mineral resources on the property. The Barton acquisition project site contains an easement that allows Teichert to construct a conveyor belt through the property that will start at the new quarry and proceed to their existing Grant Line facility. Property acquisition would thus not interfere with mineral extraction at the Teichert Quarry.

3.12 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.12.1 Environmental Setting

Sound Measurement

Noise is unwanted sound. Sound intensity is measured on the logarithmic decibel scale (dB), usually with a frequency sensitivity that matches the human ear, called "A-weighting." Thus, environmental measurements are reported in dBA, meaning decibels on the A-scale. The logarithmic scale means that a sound level reported as 60 dBA has 10 times the sound energy as a sound with a level of 50 dBA.

Human hearing matches the logarithmic A-weighted scale: it normally takes an increase of 3 dB to be perceptible as a change in intensity, although in a complex noise environment such as along a busy street, it may take an increase of 5 dB to be noticeable. A 10 dB increase makes a sound seem twice as loud.

Normal conversation is in the range from 50 to 65 dBA, with levels rising as the distance between speakers increases or as background noise level rises. Generally, as environmental noise exceeds 50 dBA, it becomes intrusive and above 65 dBA, noise becomes excessive. Table 2 lists various noise sources and their effects.

Table 2. Noise Sources and Their Effects

Noise Source	Decibel Level	Noise Effect
Jet take-off (at 25 meters)	150	Eardrum rupture
Aircraft carrier deck	140	Earphones at high level
Jet take-off (at 100 meters)	130	
Thunderclap, live rock music, chain saw	120	
Steel mill, riveting, auto horn at 1 meter	110	Human pain threshold
Jet take-off (at 305 meters), outboard motor, power lawn mower, motorcycle, chain saw, farm tractor, jackhammer, garbage truck	100	Serious hearing damage (8 hrs)
Busy urban street, diesel truck, food blender	90	Hearing damage (8 hrs)
Garbage disposal, dishwasher, average factory, freight train (at 15 meters)	80	Possible hearing damage
Freeway traffic (at 15 meters), vacuum cleaner	70	Annoying
Conversation in restaurant, office, background music	60	Quiet
Quiet suburb, conversation at home	50	"
Library	40	"
Quiet rural area	30	Very Quiet
Whisper, rustling leaves	20	"
Breathing	10	"
	0	Threshold of hearing

Source: Temple University Department of Civil/Environmental Engineering (www.temple.edu/departments/CETP/environ10.html)

Environmental sound levels usually vary over time. The weighted average of a variable sound is expressed as the equivalent noise level (Leq) which is the continuous sound level with the same total energy over a given time period. Other noise descriptors of variable sound are values such as L10, L25, L50, and L90 – decibel levels that are exceeded 10 percent, 25 percent, 50 percent, and 90 percent of the time, respectively. Those measures help show how “noisy” it gets (L10) or what the background level is (L90).

Noise exposure over a day can be described by the DNL (day/night level), a measurement that represents a 24-hour noise impact on a community. The 24-hour day is divided into a 15-hour daytime period and a 9-hour nighttime period. A 10 dB “penalty” is added to noise levels occurring during the nighttime hours (10 p.m. to 7 am), meaning 10 dB is added to actual levels measured during the nighttime when calculating the 24-hour average. For example, a 45 dBA nighttime sound level contributes as much to the overall average as a 55 dBA daytime sound level.

Community Noise Equivalent Level (CNEL) is similar to the DNL except that it includes an additional 5 dBA penalty for noise events that occur during the evening (7 p.m. to 10 p.m.) time

period. Either DNL or CNEL may be used to identify community noise impacts; in practice, the difference between them is small.

Existing Conditions

The daytime noise environment at treatment sites is typical of a public park setting ranging from 60 to 70 dBA depending on the level and nature of the public activities taking place, particularly if OHV use is taking place nearby (up to 90 dBA).

3.12.2 Discussion

Would the proposed project:

a. Expose 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?

Less than Significant Impact. The acquisition itself would not change the noise environment on or near the project area. The future installation and maintenance of the water quality improvement facilities would increase noise levels by as much as 30 dBA during the use of heavy equipment. The noise would not be constant, but intermittent as equipment use is needed, and would be limited to the hours between 7:00 a.m. and 9:00 p.m., Monday through Friday, and between 8:00 a.m. and 5:00 p.m. Saturday or Sunday. This level of noise could be annoying to people in the immediate project vicinity.

There are no permanent residents in close proximity to the project site, however, and visitors to the SVRA would have limited exposure to the noise generated during construction as they would recreate away from the site. Noise associated with the work would not result in a violation of any local noise standards as the noise associated with the facilities construction would be temporary and limited to the daytime hours. Furthermore, no sensitive receptors would be affected by construction noise.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

No Impact. Installation of the water quality improvement facilities would not expose persons to excessive ground borne vibration or noise.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The project does not involve any activities that would permanently increase ambient noise levels.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. The project would not create a substantial temporary or periodic increase in ambient noise levels. As mentioned above, use of heavy equipment would result in a temporary increase in noise levels at during construction and maintenance of the water quality

improvement facilities. These are common noises associated with maintenance of parks that do not rise to a level of significance if performed during the normal daytime hours stated above.

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?

No Impact. Mather Field Airport is eight miles west of Prairie City SVRA, and flights in and out of that airport would not expose people working in the project to excessive airplane noise.

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?

No Impact. The proposed project is not within the vicinity of a private airstrip.

3.13 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.13.1 Discussion

Would the proposed 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)?

No Impact. The project would not induce population growth in the area. The project site would be incorporated into a SVRA, and no permanent population or housing would be generated as a result of the project. The project would not add any new permanent residents to the area.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project would not displace existing housing as there is no housing on or near the project site.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The project would not displace any people as none are present on site, and the site is not subject to use by people because it is undeveloped private open space.

3.14 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

3.14.1 Discussion

Would the proposed project:

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:

i. Fire protection?

ii. Police protection?

No Impact. (Responses i-ii) The project would not increase the need for fire or police protection services or create an adverse impact on such protection services, as it only involves creating a buffer around the SVRA and installing a small area of water quality improvement facilities.

iii. Schools?

No Impact. The project would not result in an increased number of students served by local schools, as it only involves creating a buffer around the SVRA and installing a small area of water quality improvement facilities.

iv. Parks?

No Impact. The project would not result in an increased number of residents or visitors in the area using community parks.

v. Other public facilities?

No Impact. No other public facilities would be affected by the project.

3.15 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.15.1 Discussion

Would the proposed project:

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?

No Impact. The project would not increase the visitor use of Prairie City SVRA or affect the use of other parks as the acquisition is primarily for the creation of an expanded buffer zone around the SVRA and for the placement of water quality improvement facilities.

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?

No Impact. The project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

3.16 TRANSPORTATION/TRAFFIC

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

3.16.1 Discussion

Would the proposed project:

a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

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?

No Impact. (Responses a-b) The project would not increase visitation at Prairie City SVRA or otherwise increase traffic in the area.

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?

No Impact. The project would have no effect on air traffic.

d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e. Result in inadequate emergency access?

No Impact. The project would not affect local roads, and adequate, safe access is available for any heavy equipment that may need to access the site for construction and maintenance of the water quality improvement facilities. Similarly, the project would not affect emergency access.

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No impact. The project would not increase visitation at Prairie City SVRA or otherwise affect public transit, bicycle, or pedestrian facilities.

3.17 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) 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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

3.17.1 Discussion

Would the proposed project:

a. 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?

No Impact. (Responses a-b) No water uses are proposed that would exceed wastewater treatment requirements. No uses or activities are proposed at the site that would generate wastewater that would exceed treatment requirements. Wastewater disposal is not a part of the project. The project would not require construction of new or expanded water or wastewater treatment facilities.

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?

Less than Significant Impact. The project includes the development of storm water drainage facilities to help the OHMVR Division assure that water quality leaving its property is the same as or better than the water coming onto the property. Installation of these facilities would not cause unmitigated significant environmental effects.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. No new water supplies or entitlements would be needed. There would be no expansion of existing water use associated with this project.

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?

No Impact. The project does not require any wastewater treatment.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No Impact. The project would not generate any solid waste. Any soil removed to install the water quality improvement facilities would be spread in appropriate areas within the SVRA.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The project would not affect nor solid waste nor conflict with any regulations related to solid waste.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially 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, substantially 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?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the efforts of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

3.18.1 Discussion

Would the proposed project:

a. Have the potential to substantially 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, substantially 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?

Less than Significant Impact with Mitigation. The project would employ on-site monitoring during construction activities by qualified specialists to preserve quality of the environment and sensitive habitats and species. Mitigation measures (BIO-1 to BIO-6) are proposed to avoid impacting sensitive species and habitats. Furthermore, the OHMVR Division would consult with regulatory agencies to be sure that any impacts to special-status species or regulated waters receive proper authorization. The project would employ on-site monitoring during construction activities by qualified specialists to assure cultural resources are not impacted during installation of the water quality improvement facilities.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in

connection with the efforts of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact. The project would not have environmental effects that are individually limited, but cumulatively considerable. The project does not propose new uses at the project site that would result in cumulative impacts. The project does not propose new housing or new permanent sources of air pollutant emissions.

c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. The project would not have environmental effects that would cause substantial adverse effects on humans, either directly or indirectly. Temporary impacts to air quality during water quality improvement facility construction would be avoided through the use of best management practices to minimize PM_{10} emissions during construction.

Chapter 4 REFERENCES

Bibliography

Aracadis. 2008. Delineation of the Geographic Extent of Waters of the U.S., Including Wetlands within the State of California Department of Parks and Recreation Prairie City State Vehicular Recreation Area in Rancho Cordova, Sacramento County, California. January.

California Air Resources Board (CARB). 2007. *Staff Report California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit.* Sacramento, CA. November 16, 2007. http://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf

_____2009a. *Climate Change Scoping Plan – A Framework for Change.* Endorsed by ARB December 2008.Sacramento, CA. May 11, 2009. http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm

_____2011. "Area Designation Maps / State and National." *Air Quality and Emissions, Standards and Area Designations.* ARB. February 2011. Web. July 8, 2012. <http://www.arb.ca.gov/desig/adm/adm.htm>

_____2011a. *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document.* Released August 19, 2011. Sacramento, CA. Approved August 24, 2011. <http://www.arb.ca.gov/cc/scopingplan/fed.htm>

_____2012. "Knowledge Center for the Off-Road Diesel Vehicle Regulation." *Diesel Programs and Activities, Mobile Vehicles and Equipment, In-Use Off-Road Equipment.* ARB. February 29, 2012. Web. March 13, 2012. <http://www.arb.ca.gov/msprog/ordiesel/knowcenter.htm>

California Department of Conservation, Division of Mines and Geology. 2000. *A General Location Guide for Ultramafic Rocks In California – Areas More Likely To Contain Naturally Occurring Asbestos*. Sacramento, CA. August 2000. <http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/index.aspx>

California Department of Conservation (CDC). 2010. Farmland Mapping and Monitoring Program. Internet address: www.consrv.ca.gov/dlrp/FMMP/.

California Department of Parks and Recreation (CDPR), Off-Highway Motor Vehicle Recreation (OHMVR) Division. 1991. Prairie City State Vehicular Recreation Area Master Plan.

_____. 2008. 2008 Grants and Cooperative Agreements Program Regulations, 2008 Soil Conservation Standard and Guidelines.

_____. 2012. Archaeological Survey Report, Prairie City State Vehicular Recreation Area, Barton Ranch Acquisition. K. Long, Associate State Archaeologist, April 24, 2012.

California Native Plant Society (CNPS). 2012. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed on June 5, 2012.

California Natural Diversity Database (CNDDB). 2012. California Department of Fish and Game, Biogeographic Data Branch. Sacramento, CA. Updated May, 2012.

Department of Toxic Substance Control's Hazardous Waste and Substance Site List. 2012 (Cortese List; Department of Toxic Substances 2012).

ECOS, Inc. 1991. Final EIR for the Prairie City SVRA. SCH#91012070.

EDAW. 2003. Prairie City SVRA Adventure Park Project IS/MND.

Intergovernmental Panel on Climate Change (IPCC) 2007. *Summary for Policymakers*. In: "Climate Change 2007: Impacts, Adaptation and Vulnerability". Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 7-22.

_____2007a. *Climate Change 2007: Synthesis Report*. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp.

National Oceanic and Atmospheric Administration (NOAA) 2012. "Recent Global CO2." *Trends in Atmospheric Carbon Dioxide*. NOAA, Earth System Research Laboratory, Global Monitoring Division. May 2012. Web. July 18, 2012. <http://www.esrl.noaa.gov/gmd/ccgg/trends/global.html>

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2011. "The CEQA Guide". Land Use & Transportation, CEQA Tools, CEQA Guide to Air Quality Assessment. SMAQMD. June 2011. Web. July 17, 2011. <http://www.airquality.org/ceqa/ceqaguideupdate.shtml>

Salix Applied Earthcare and Geosyntec Consultants. November 2007. OHV BMP Manual for Erosion and Sediment Control.

Sawyer, John O. et al. 2009. A Manual of California Vegetation, 2nd Edition. California Native Plant Society Press. Sacramento, CA.

TRA Environmental Sciences, Inc. 2008. Prairie City SVRA Four-Wheel Drive Improvements Initial Study/Mitigated Negative Declaration. June 2008.

U.S. Environmental Protection Agency (U.S. EPA). 1998. "Control of Emissions of Air Pollution From Nonroad Diesel Engines; Final Rule." Volume 63 *Federal Register,* October 23, 1998: 56967-57023.

_____2004. "Control of Emissions of Air Pollution From Nonroad Diesel Engines and Fuel." Volume 69 *Federal Register,* June 29, 2004: 38958-39273.

_____2011a. "Currently Designated Nonattainment Areas for All Criteria Pollutants, Listed by State, County then Pollutant." *Green Book, Currently Designated Nonattainment Areas for all Criteria Pollutants.* U.S. EPA. August 30, 2011. Web. March 8, 2011. <http://www.epa.gov/oaqps001/greenbk/ancl.html#CALIFORNIA>

_____2011b. "Detailed Description of Certain Area Boundaries for Partial Counties." *Green Book, 8-hour Ozone 1997 Standard, 8-hour Ozone Nonattainment Areas.* U.S. EPA. August 30, 2011. Web. March 8, 2012. <http://www.epa.gov/oaqps001/greenbk/gnp.html>

U.S. Geological Survey (USGS). 2005. Fact Sheet 2005-3092, Effects of Spray-Irrigated Municipal Wastewater on a Small Watershed in Chester County, Pennsylvania, By Curtis L. Schreffler and Daniel G. Galeone

Sacramento County. 2008. Teichert Quarry Draft EIR. Control Number 02-GPB-RZB-UPB-REB-DGB-0636. Project Description and Biological Resource Sections.

Personal Communications

Sarah Cumber-Lose, Environmental Scientist

OHMVR Division, Twin Cities District, Prairie City Sector

Personal communication (email), June 18, 2012.

Chapter 5 REPORT PREPARATION

TRA Environmental Sciences, Inc.
545 Middlefield Road, Suite 200
Menlo Park, CA 94025
(650) 327-0429
www.traenviro.com

Paula Hartman – Program Manager
Victoria Harris – Senior Project Manager
Autumn Meisel – Senior Biologist
Christopher Dugan – Senior Analyst
Sandy Ho – Graphics

Prairie City SVRA

Barton Ranch Property Acquisition Project IS/MND

APPENDIX A

AIR QUALITY EMISSION CALCULATIONS

TRA Environmental Sciences, Inc.

CalEEMod Version: CalEEMod.2011.1.1 Date: 7/18/2012

Prairie City SVRA Barton Ranch Property Acquisition

Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Other Non-Asphalt Surfaces	10	Acre

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	Sacramento Municipal Utility District
Climate Zone	6		3.5		
		Precipitation Freq (Days)			
			58		

1.3 User Entered Comments

Project Characteristics -

Land Use - Project is a 10-acre sediment basin

Construction Phase - Estimate based on Carnegie IS/MND

Off-road Equipment - CPD Override

Trips and VMT - CPD Override

On-road Fugitive Dust - CPD Override

Grading - CPD Override

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	6.44	53.66	37.11	0.08	25,775.86	2.19	25,778.04	2,568.66	2.19	2,570.85			0.00	0.49	0.00	8,242.69
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	6.44	53.66	37.11	0.08	63.94	2.19	66.12	1.64	2.19	3.83			0.00	0.49	0.00	8,242.69
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**				**0.00**	**0.00**	**0.00**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**				**0.00**	**0.00**	**0.00**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.28	0.00	6.28	3.33	0.00	3.33						0.00
Off-Road	4.21	32.65	21.10	0.04		1.53	1.53		1.53	1.53				0.38		4,008.75
Total	**4.21**	**32.65**	**21.10**	**0.04**	**6.28**	**1.53**	**7.81**	**3.33**	**1.53**	**4.86**				**0.38**		**4,008.75**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.17	20.96	15.44	0.04	25,725.31	0.66	25,725.97	2,560.92	0.66	2,561.58				0.11		4,126.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.05	0.57	0.00	44.26	0.00	44.27	4.41	0.00	4.41				0.01		107.05
Total	**2.23**	**21.01**	**16.01**	**0.04**	**25,769.57**	**0.66**	**25,770.24**	**2,565.33**	**0.66**	**2,565.99**				**0.12**		**4,233.94**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.83	0.00	2.83	1.50	0.00	1.50						0.00
Off-Road	4.21	32.65	21.10	0.04		1.53	1.53		1.53	1.53				0.38		4,008.75
Total	**4.21**	**32.65**	**21.10**	**0.04**	**2.83**	**1.53**	**4.36**	**1.50**	**1.53**	**3.03**				**0.38**		**4,008.75**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.17	20.96	15.44	0.04	61.00	0.66	61.65	0.14	0.66	0.80				0.11		4,126.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.05	0.57	0.00	0.11	0.00	0.11	0.01	0.00	0.01				0.01		107.05
Total	**2.23**	**21.01**	**16.01**	**0.04**	**61.11**	**0.66**	**61.76**	**0.15**	**0.66**	**0.81**				**0.12**		**4,233.94**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2011.1.1 Date: 7/18/2012

Prairie City SVRA Barton Ranch Property Acquisition

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Other Non-Asphalt Surfaces	10	Acre

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	Sacramento Municipal Utility District
Climate Zone	6		3.5		
		Precipitation Freq (Days)			
			58		

1.3 User Entered Comments

Project Characteristics -

Land Use - Project is a 10-acre sediment basin

Construction Phase - Estimate based on Carnegie IS/MND

Off-road Equipment - CPD Override

Trips and VMT - CPD Override

On-road Fugitive Dust - CPD Override

Grading - CPD Override

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.23	1.88	1.36	0.00	758.77	0.08	758.84	75.64	0.08	75.71			260.67	0.02	0.00	261.00
Total	**0.23**	**1.88**	**1.36**	**0.00**	**758.77**	**0.08**	**758.84**	**75.64**	**0.08**	**75.71**			**260.67**	**0.02**	**0.00**	**261.00**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.23	1.88	1.36	0.00	1.83	0.08	1.91	0.06	0.08	0.13			260.67	0.02	0.00	261.00
Total	**0.23**	**1.88**	**1.36**	**0.00**	**1.83**	**0.08**	**1.91**	**0.06**	**0.08**	**0.13**			**260.67**	**0.02**	**0.00**	**261.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**			**0.00**	**0.00**	**0.00**	**0.00**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**			**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.22	0.00	0.22	0.12	0.00	0.12			0.00	0.00	0.00	0.00
Off-Road	0.15	1.14	0.74	0.00		0.05	0.05		0.05	0.05			127.00	0.01	0.00	127.25
Total	**0.15**	**1.14**	**0.74**	**0.00**	**0.22**	**0.05**	**0.27**	**0.12**	**0.05**	**0.17**			**127.00**	**0.01**	**0.00**	**127.25**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.08	0.74	0.60	0.00	757.24	0.02	757.27	75.39	0.02	75.41			130.60	0.00	0.00	130.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	1.30	0.00	1.30	0.13	0.00	0.13			3.08	0.00	0.00	3.08
Total	**0.08**	**0.74**	**0.62**	**0.00**	**758.54**	**0.02**	**758.57**	**75.52**	**0.02**	**75.54**			**133.68**	**0.00**	**0.00**	**133.75**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.10	0.00	0.10	0.05	0.00	0.05			0.00	0.00	0.00	0.00
Off-Road	0.15	1.14	0.74	0.00		0.05	0.05		0.05	0.05			127.00	0.01	0.00	127.25
Total	**0.15**	**1.14**	**0.74**	**0.00**	**0.10**	**0.05**	**0.15**	**0.05**	**0.05**	**0.10**			**127.00**	**0.01**	**0.00**	**127.25**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.08	0.74	0.60	0.00	1.73	0.02	1.75	0.00	0.02	0.03			130.60	0.00	0.00	130.67

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00			3.08	0.00	0.00	3.08
Total	**0.08**	**0.74**	**0.62**	**0.00**	**1.73**	**0.02**	**1.75**	**0.00**	**0.02**	**0.03**			**133.68**	**0.00**	**0.00**	**133.75**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		

Prairie City SVRA

Barton Ranch Property Acquisition Project IS/MND

APPENDIX B

SPECIAL-STATUS SPECIES LISTS

TRA Environmental Sciences, Inc.

Special-status Plant Species Potentially Occurring within the Project Area			
Species	**Listing Status[1]**	**Habitat**	**Potential for Occurrence in Project Area**
Ione manzanita (*Arctostaphylos myrtifolia*)	FT, CRPR 1B.2	Chaparral and cismontane woodland acidic, ione soil, clay or sandy	No. No suitable habitat present.
Pine Hill ceanothus (*Ceanothus roderickii*)	FE, CRPR1 B.2	Chaparral and cismontane woodland; serpentinite or gabbroic (nutrient-deficient forms of gabbro-derived soils characterized by low concentrations of available K, P, S, Fe, and Zn)	No. No suitable habitat present.
Red Hills soaproot (*Chlorogalum grandiflorum*)	CRPR1 B.2	Chaparral and cismontane woodland, serpentinite or gabbroic, rocky	No. No suitable habitat present.
Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*)	CRPR1 B.2	Chaparral, cismontane woodland, lower montane coniferous forest; often roadcuts	No. No suitable habitat present.
dwarf downingia (*Downingia pusilla*)	CRPR2. 2	Valley and foothill grassland (mesic), vernal pools	Low. Wetlands present on site are not characteristic of vernal pools that support this species
Ione buckwheat (*Eriogonum apricum* var. *apricum*)	CRPR1 B.1	Chaparral (openings, Ione soil)	No. No suitable habitat present.
Irish Hill buckwheat (*Eriogonum apricum* var. *prostratum*)	CRPR1 B.1	Chaparral (openings, Ione soil)	No. No suitable habitat present.
Tuolumne button-celery (*Eryngium pinnatisectum*)	CRPR1 B.2	Volcanic soils; vernal pools and mesic sites within other natural communities	No. No suitable habitat present.
Pine Hill flannelbush (*Fremontodendron decumbens*)	CRPR1 B.2	Chaparral and cismontane woodland, serpentinite or gabbroic, rocky	No. No suitable habitat present.
El Dorado bedstraw (*Galium californicum* ssp. *sierrae*)	FE, CRPR1 B.2	Chaparral, cismontane woodland, lower montane coniferous forest; gabbroic	No. No suitable habitat present.
Boggs Lake hedge-hyssop (*Gratiola heterosepala*)	CRPR1 B.2	Marshes and swamps (freshwater), vernal pools	Low. Wetlands present on site are not characteristic of vernal pools that support this species
Bisbee Peak rush-rose (*Helianthemum suffrutescens*)	CRPR3. 2	Chaparral (often serpentinite, gabbroic, or Ione soil)	No. No suitable habitat present.
Parry's horkelia (*Horkelia parryi*)	CRPR1 B.2	Chaparral, cismontane woodland; Ione formation and other soils	No. No suitable habitat present.

Special-status Plant Species Potentially Occurring within the Project Area			
Species	**Listing Status[1]**	**Habitat**	**Potential for Occurrence in Project Area**
Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*)	CRPR1 B.2	Vernal pools.	Low. Wetlands present on site are not characteristic of vernal pools that support this species
legenere (*Legenere limosa*)	CRPR1 B.1	In beds of vernal pools	Low. Wetlands present on site are not characteristic of vernal pools that support this species
pincushion navarretia (*Navarretia myersii* ssp. *myersii*)	CRPR1 B.1	Vernal pools, often acidic	Low. Wetlands present on site are not characteristic of vernal pools that support this species
slender Orcutt grass (*Orcuttia tenuis*)	CRPR1 B.1	Vernal pools	Low. Wetlands present on site are not characteristic of vernal pools that support this species
Sacramento Orcutt grass (*Orcuttia viscida*)	CRPR1 B.1	Vernal pools	Low. Wetlands present on site are not characteristic of vernal pools that support this species
Layne's ragwort (*Packera layneae*)	CRPR1 B.2	Chaparral and cismontane woodland, serpentinite or gabbroic, rocky	No. No suitable habitat present.
Sanford's arrowhead (*Sagittaria sanfordii*)	CRPR1 B.2	In standing or slow-moving freshwater ponds, marshes, and ditches.	Low. Seasonal wetland habitat present.
El Dorado County mule ears (*Wyethia reticulata*)	CRPR1 B.2	Chaparral, cismontane woodland, lower montane coniferous forest; gabbroic, clay.	No. No suitable habitat present.

Special-status Plant Species Potentially Occurring within the Project Area			
Species	**Listing Status[1]**	**Habitat**	**Potential for Occurrence in Project Area**
[1] Listing Status Key FE – Federal Endangered; FT – Federal Threatened California Rare Plant Rank: CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere. CRPR 2: Plants rare, threatened, or endangered in Calif. but more common elsewhere. CRPR 3: Plants about which we need more information CRPR Threat Code extensions and their meanings: .1 – Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) .2 – Fairly endangered in California (20-80% occurrences threatened) .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)			

Source: CNDDB 2012; CNPS 2012

Special-status Animals Potentially Occurring within the Project Area			
Species	**Listing Status[1]**	**Habitat**	**Potential for Occurrence in Project Area**
vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Vernal pools	Low. Wetlands present on site are not characteristic of vernal pools that support this species
vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	Vernal pools	Low. Wetlands present on site are not characteristic of vernal pools that support this species
valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Occurs only in the central valley of California, in association with blue elderberry (*Sambucus mexicana*)	No. Two elderberry plants found on site, but plants too small to support the beetle.
California tiger salamander (*Ambystoma californiense*)	FT, CSSC	Ponds for breeding that hold water for 4 months; grasslands for upland habitat	No. No suitable habitat present.

Special-status Animals Potentially Occurring within the Project Area			
Species	**Listing Status[1]**	**Habitat**	**Potential for Occurrence in Project Area**
western spadefoot (*Spea hammondii*)	CSSC	Vernal pools, seasonal wetlands, stock ponds, quite pools along creeks for breeding; grasslands for upland habitat	Low. Seasonal wetlands and Coyote Creek are relatively shallow and not suitable for spadefoot breeding. Species may use pools elsewhere and be present in uplands on site.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Found within permanent and semi-permanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; may aestivate in rodent burrows or cracks during dry periods	No. Project does not occur within known or suspected species range.
western pond turtle (*Emys marmorata*)	CSSC	An aquatic turtle found in ponds, marshes, rivers, streams, and irrigation ditches. Requires basking sites and suitable (sandy banks or grassy open fields) upland habitat	No. Project does not occur within known or suspected species range.
Cooper's hawk (*Accipiter cooperii*)	CSSC	Nests in dense riparian or oak habitat; forages and winters in a wide variety of habitats	Moderate. Suitable nesting habitat present in oak woodland.
northern harrier (*Circus cyaneus*)	CSSC	Nests in tall grasses and marshes; forages in open areas	Moderate. Suitable nesting habitat present in grassland.
golden eagle (*Aquila chrysaetos*)	CSSC, FP	Rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas	Low. Suitable foraging habitat, but not suitable nesting habitat.
Swainson's hawk (*Buteo swainsoni*)	ST	Nests in large trees in riparian and oak habitats adjacent to large open areas with rodents for foraging	Moderate. Suitable nesting habitat present in oak woodland.
white-tailed kite (*Elanus leucurus*)	FP	Nests in top of large oak or riparian trees; forages in open grasslands.	Moderate. Suitable nesting habitat present in oak woodland.
burrowing owl (*Athene cunicularia*)	CSSC	Nests and winters in grassy areas with short vegetation and abundant small mammal burrows	Moderate. Suitable grassland habitat and species has been observed at the SVRA.

Special-status Animals Potentially Occurring within the Project Area			
Species	**Listing Status[1]**	**Habitat**	**Potential for Occurrence in Project Area**
tricolored blackbird (*Agelaius tricolor*)	CSSC	Nests in large colonies in dense bulrush or cattail vegetation adjacent to fresh water	No. No suitable habitat present.
grasshopper sparrow (*Ammodramus savannarum*)	CSSC	Native grasslands with a mix of grasses, forbs & scattered shrubs	No. No suitable habitat present. No CNDDB records of species occurrence in Buffalo Creek USGS quad.
loggerhead shrike (*Lanius ludovicianus*)	CSSC	Shrubs and other woody vegetation for nesting, adjacent open areas for foraging.	Moderate. Suitable foraging and nesting habitat present.
California horned lark (*Eremophila alpestris actia*)	CSSC	Nests on ground in grasslands with short vegetation; forages widely in open habitats	Moderate. Suitable nesting habitat present in grassland.
pallid bat (*Antrozous pallidus*)	CSSC	Most commonly found in open, dry habitats with rocky areas for roosting within deserts, grasslands, shrublands, woodlands, and forests. Below 6,000 ft	Low. Moderately suitable foraging habitat present, but no roosting habitat.
western red bat (*Lasiurus blossevillii*)	CSSC	Typically associated with riparian areas for foraging and roosting below 3,000 ft. They tend to roost in tree foliage, especially near water	Moderate. Suitable foraging and roosting habitat.
American badger (*Taxidea taxus*)	CSSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils and open, uncultivated ground	Low. Moderately suitable habitat present, but no dens were observed and species has never been recorded at the SVRA.

[1] Listing Status Key:

FE – Federal Endangered
FT – Federal Threatened
ST – State Threatened
FP – State Fully Protected
CSSC – California Species of Special Concern

Source: CNDDB 2012