

DRAFT

INITIAL STUDY
MITIGATED NEGATIVE DECLARATION

Gaines Parcel
Immediate Public Use Project



April 2008



State of California
DEPARTMENT OF PARKS AND RECREATION
Acquisition and Development
One Capitol Mall
Sacramento, CA 95814

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Mitigated Negative Declaration

Project: Immediate Public Use Project

Lead Agency: California Department of Parks and Recreation

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

- Northern Service Center
California Department of Parks & Recreation
One Capitol Mall - Suite 410
Sacramento, CA 95814
- Northern Buttes District Headquarters
California Department of Parks & Recreation
400 Glenn Drive
Oroville, California 95966
- Willows Public Library
201 N. Lassen Street
Willows, California 95988
- California Department of Parks and Recreation Internet Website
http://www.parks.ca.gov/?page_id=980

Project Description:

The Department of Parks and Recreation proposes to provide immediate public access facilities on the Gaines Parcel, a new acquisition located on the west side of the Butte City Bridge State Route 162 crossing of the Sacramento River. The parcel will be added to Colusa-Sacramento River State Park. The following is a brief summary of the proposed work:

- Install 22 parking spaces, including two spaces that are Americans with Disabilities Act (ADA) compliant with perimeter vehicle barrier fencing.
- Construct two restrooms, one would be ADA compliant.
- Construct two ADA compliant drinking fountains
- Create nine picnic sites
- Construct concrete pathways to connect picnic sties, restrooms, and parking.
- Remove six acres of existing walnut orchard and temporarily retain 23 walnut trees
- Revegetate with native plants.
- Extend electricity from an existing power source to the parcel.
- Install a well, 2 hose bibs and irrigation capabilities.
- Install irrigation capabilities to temporarily maintain 23 remaining walnut trees and new native plants

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study/Mitigated Negative Declaration should be submitted in writing to:

Patricia DuMont – Environmental Coordinator
California Department of Parks & Recreation
Northern Service Center
One Capitol Mall - Suite 500
Sacramento, CA 95814

E-Mail Address: CEQANSC@Parks.ca.gov
Include "Gaines Parcel" on the subject line.

Fax: 916-445-8883

Submissions must be in writing and postmarked, or received by fax or e-mail, no later than May 16, 2008. The originals of any faxed document must be received by regular mail within ten (10) working days following the deadline for comments, along with proof of successful fax transmission.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation and minimization measures detailed in these documents are feasible and will be implemented as stated in the Mitigated Negative Declaration.



Patricia DuMont
Environmental Coordinator

4-15-08
Date

Lucena Westergaard / for Bob Foster
Robert Foster

Northern Buttes District Superintendent

4.15.08
Date

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Chapter 1 Introduction

1.1 Introduction and Regulatory Guidance

The Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Immediate Public Use Project at the new acquisition, Gaines Parcel, in Glenn County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq.*

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less-than-significant level, a Mitigated Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements under CEQA Guidelines §15071.

1.2 Lead Agency

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR. The contact person for the lead agency is:

Laura Westrup
Staff Park and Recreation Specialist
Northern Buttes District
400 Glenn Drive
Oroville, California 95966
Phone: 530-538-2213

Questions or comments regarding this Initial Study/Mitigated Negative Declaration should be submitted to:

Patricia DuMont – Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall, Suite 500
Sacramento, California 95814

E-Mail Address: CEQANSC@parks.ca.gov
Include “Gaines Parcel” on the Subject line.

Fax Number: 916-445-8883

Submissions must be in writing and postmarked, or received by fax or e-mail, no later than May 16, 2008. The originals of any faxed document must be received by regular mail within ten (10) working days following the deadline for comments, along with proof of successful fax transmission.

1.3 Purpose and Document Organization

The purpose of this document is to evaluate the potential environmental effects of the proposed Immediate Public Use Project at the Gaines Parcel. Minimization and mitigation measures have been incorporated into the project to eliminate any potentially significant impacts or reduce them to a less-than-significant level.

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 reasons for the project, scope of the project, and project objectives.
- Chapter 3 - Environmental Setting, Impacts, and Mitigation/Minimization Measures.
This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Mitigation and minimization measures are incorporated, where appropriate, to reduce potentially significant impacts to a less-than-significant level.
- Chapter 4 - Mandatory Findings of Significance
This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the Initial Study.

- Chapter 5 - Summary of Minimization and Mitigation Measures.
This chapter summarizes the minimization and mitigation measures incorporated into the project as a result of the Initial Study.
- Chapter 6 - References.
This chapter identifies the references and sources used in the preparation of this IS/MND.
- Chapter 7 - Report Preparation
This chapter provides a list of those involved in the preparation of this document.

1.4 Summary of Findings

Chapter 3 of this document contains the Environmental (Initial Study) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project.

Based on the IS and supporting environmental analysis provided in this document, the proposed Immediate Public Use Project would result in less-than-significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

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

Chapter 2 Project Description

2.1 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Immediate Public Use Project at the Gaines Parcel, located near Butte City, Glenn County, California. The parcel will be added to Colusa-Sacramento River State Park. The proposed project would provide temporary recreational facilities on the west side of the Butte City Bridge State Route 162 crossing of the Sacramento River.

2.2 Project Location

The proposed project is located approximately 10 miles east of Willows, California where State Route 162 crosses the Sacramento River, 60 miles north of Sacramento. The property is triangular shaped with the long (east) side of the triangle, adjacent to the River; Route 162 bisects the triangle. The parcel is otherwise bordered by the Sacramento River National Wildlife Refuge (SRNWR), Sul Norte unit, maintained by the United States Fish and Wildlife Service (USFWS).

2.3 Background and Need for the Project

Construction of the Butte City Bridge in 1948 (altered in 1961) removed public access to the river at this location. In 2007, River Partners gifted a 37 acre parcel below the Butte City Bridge in Glenn County to the Department of Parks and Recreation for the expressed purpose of creating access to the Sacramento River.

This project would provide a river-front park to allow the public access to the riverbank and river riparian habitat along this stretch of the river. The proposed project would provide day-use opportunities and access to the west side of the Sacramento River. In addition, this project would re-establish natural riparian habitat along the river.

Without this project, the Department of Parks and Recreation would be unable to provide access to the Sacramento River and would not revegetate the area with riparian habitat.

2.4 Project Objectives

The mission of the California Department of Parks and Recreation is to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality recreation.

The intent of this project is to provide temporary recreational facilities along the Sacramento River. The recommended work is expected to:

- To provide river access in area that access was previously removed due to construction project to improve transportation.

The proposed Immediate Public Use Project would allow the Department to meet its mission to provide visitors high-quality recreational opportunities.

2.5 Project Description

The Department of Parks and Recreation proposes to provide immediate public access facilities on the Gaines Parcel, a new acquisition located on the west side of the Butte City Bridge State Route 162 crossing of the Sacramento River. The parcel will be added to Colusa-Sacramento River State Park. The following is a brief summary of the proposed work:

- Install 22 parking spaces, including two spaces that are Americans with Disabilities Act (ADA) compliant with perimeter vehicle barrier fencing.
- Construct two restrooms, one would be ADA compliant.
- Construct two ADA compliant drinking fountains
- Create nine picnic sites, one would be ADA compliant; install ADA compliant concrete picnic tables on all sites.
- Construct concrete paths of travel connecting ADA compliant picnic sites, restrooms and parking.
- Remove six acres of existing walnut orchard; temporarily retain 23 walnut trees.
- Revegetate with native plants approved by the Central Valley Flood Protection Board.
- Extend electricity approximately 250 feet from an existing power source to the parcel.
- Install a well, 2 hose bibs, one hose bib would be ADA compliant
- Install irrigation capabilities to temporarily maintain remaining walnut trees and newly established native vegetation

2.6 Project Implementation

Construction of facilities would occur in Fall 2008, or soon thereafter, and continue for approximately six months. Work would occur only during daylight hours; however, weekend work could be implemented to accelerate construction or address emergency or unforeseen circumstances.

Heavy equipment, such as backhoe, excavator, grader, bulldozer, compressor, and dump truck would be used during construction of facilities. Most equipment would be transported to the site and remain until associated work is completed. Transport vehicles for material or equipment delivery trucks, and crew vehicles would also be present intermittently at the site. Staging areas for equipment would be confined to the Gaines Parcel access road.

Best Management Practices (BMPs) would be incorporated into this project design to ensure that the natural and cultural resources in and around the project area are adequately protected during and after construction. The BMPs discussed in this document and used in the implementation of this project were obtained from the *California Stormwater Quality Association (CSQA), Stormwater Best Management Practices Construction Handbook*. Temporary BMPs would be used to keep sediment on-site throughout the duration of the project; during construction, BMPs would be

checked daily, maintained, and modified as needed; and BMPs would be used after construction to stabilize the site and minimize erosion.

The Department of Parks and Recreation has consistently referenced CSQA BMPs and has identified them as an acceptable standard for use in all State Parks.

2.7 Visitation to the Gaines Parcel

As mentioned in the introduction, DPR acquired this parcel from River Partners in 2007. Although visitors to adjacent lands owned by U.S. Fish and Wildlife have been able to access this parcel and informally use the area for picnicking and river access, DPR has no formal attendance records at this time.

2.8 Consistency with Local Plans and Policies

The proposed project to install immediate public use facilities would include work within the Gaines Parcel as well as along abandoned County Road 61 for staging equipment. The Gaines Parcel is being added to the Colusa-Sacramento State Recreation Area. Although this park does not have a General Plan, work to rehabilitate an existing facility is permitted under Public Resources Code §5002.2 (c). This project is consistent with DPR's mission and its management directives aimed at creating opportunities for high-quality outdoor recreation.

As previously stated, the Gaines Parcel is bordered by the Sacramento River and the Sacramento River National River Wildlife Refuge, Sul Norte Unit. This refuge is part of the Sacramento National Wildlife Refuge Complex, which consists of five national wildlife refuges and three wildlife management areas that comprise over 35,000 acres of wetlands and uplands in the Sacramento Valley. The United States Fish and Wildlife Service developed an approved Comprehensive Conservation Plan in 2005 to guide Refuge management for the next 15 years.

Although the Gaines Parcel is located entirely within DPR property, the abandoned County Road 61 is located within the SRNWR. Any proposed DPR work that occurs within the SRNWR would comply with the Comprehensive Conservation Plan.

2.9 Discretionary Approvals

The California Department of Parks and Recreation retains approval authority for the proposed Immediate Public Use Project on the Gaines Parcel. However, this project could require consultation with:

- California Department of Fish and Game
- Central Valley Flood Protection Board
- Regional Water Quality Control Board
- United State Army Corps of Engineers
- United States Fish and Wildlife Service

Additional internal document reviews include compliance with the Americans with Disabilities Act and Public Resources Code § 5024. The Department of Parks and Recreation would acquire all necessary reviews and permits prior to implementing any project components requiring regulatory review.

2.10 Related Projects

Parks and Recreation often has smaller maintenance programs and rehabilitation projects planned for a park unit. According to District staff, the following projects are planned for the proposed project area in the foreseeable future:

- Completion of an Interagency Agreement with USFWS to access the Gaines Parcel, DPR property, via abandoned County Road 61.
- Habitat restoration for the remaining 31 acres of the Gaines parcel

Chapter 3 Environmental Checklist

PROJECT INFORMATION

1. Project Title: Immediate Public Use Project
2. Lead Agency Name & Address: California Department of Parks and Recreation
3. Contact Person & Phone Number: Laura Westrup
Staff Park and Recreation Specialist
Northern Buttes District
530-538-2213
4. Project Location: Gaines Parcel, Glenn County, California
5. Project Sponsor Name & Address: California Department of Parks and Recreation
Northern Buttes District
400 Glenn Drive
Oroville, California 95966
6. General Plan Designation: No Park General Plan has been prepared
7. Zoning: County Designated: Public Facilities & Open Space
8. Description of Project: The Department of Parks and Recreation proposes to provide immediate public access facilities on the Gaines Parcel, a new acquisition located on the west side of the Butte City Bridge State Route 162 crossing of the Sacramento River. The parcel will be added to Colusa-Sacramento River State Park. The following is a brief summary of the proposed work:
 - Install 22 parking spaces, including two spaces that are Americans with Disabilities Act compliant.
 - Construct two restrooms, one would be ADA compliant.
 - Construct two ADA compliant drinking fountains
 - Create nine picnic sites.
 - Construct concrete pathways to connect picnic sites, restrooms, and parking.
 - Remove six acres of existing walnut orchard and temporarily retain 23 walnut trees.
 - Revegetate with native plants.
 - Extend electricity from an existing power source to the parcel.
 - Install a well, 2 hose bibs and irrigation capabilities
 - Install irrigation capabilities to temporarily maintain 23 remaining walnut trees and new native plants.
9. Surrounding Land Uses & Setting: Refer to Chapter 3 of this document (Section IX, Land Use Planning)
10. Approval Required from Other Public Agencies: Refer to Chapter 2 of this document (Section 2.9, Discretionary Approvals)

1. 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", as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | <input checked="" type="checkbox"/> 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 original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. 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** or its functional equivalent will be prepared.

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents.

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required.

Patricia DuMont
Environmental Coordinator

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, construction, and operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.
4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
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 (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:
 - a) Identify the earlier analysis and state where it is available for review.
 - b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.
 - c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.
6. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist or appendix (e.g., general plans, zoning ordinances, biological assessments). Reference to a previously prepared or outside document should include an indication of the page or pages where the statement is substantiated.
7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.
8. Explanation(s) of each issue should identify:
 - a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question **and**
 - b) the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

ENVIRONMENTAL ISSUES

I. AESTHETICS

Environmental Setting

The Gaines Parcel is located along the west side of the Sacramento River at the Butte City State Route 162 Bridge in Glenn County, California. The Sacramento River National Wildlife Refuge (SRNWR) surrounds the north, west, and southern boundaries of the property. Vegetation in the proposed project site consists of a walnut orchard and a remnant patch of native vegetation growing along a portion of the abandoned County Road 61.

California State Parks acquired the property to increase public access opportunities to the Sacramento River for bank fishing and picnicking, and to restore and enhance riparian habitat by replacing four acres of orchard crops along the river with native vegetation. Views from the property are generally limited to the river, the orchard crops, and the riparian vegetation growing adjacent to the river. The SRNWR Sul Norte Unit is adjacent to the proposed project site and also provides views of cottonwood forest and elderberry savannah habitat; on clear days you can see the Coast Range Mountains in the background. Expansive views from the banks of the river are limited by its meandering nature to the north and by the bridge and the causeway to the south.

The California Legislature initiated the California Scenic Highway Program in 1963, with the goal of preserving and protecting the state's scenic highway corridors from changes that would reduce their aesthetic value. The State Scenic Highway System consists of eligible and officially designate routes. A highway may be identified as eligible for listing as a state scenic highway if it offers travelers scenic views of the natural landscape, largely undisturbed by development. Eligible routes advance to officially designated status when the local jurisdiction adopts ordinances to establish a scenic corridor protection program and receives approval from the California Department of Transportation. There is no Officially Designated or Eligible State Scenic Highways in Glenn County (California Department of Transportation 2008).

The expansion of recreational facilities (i.e. fishing, camping, and day-use facilities) along the Sacramento River corridor, such as this proposed project, is consistent with the State Parks Central Valley Vision project (DPR 2006).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Aesthetics is based on criteria I a-d, described in the environmental checklist above.

DISCUSSION

- a & c) The day use facilities would be visible from the State Route 162 Bridge and the Sacramento River. However, with the restoration of riparian habitat, views would improve over time blending in with the surroundings. In addition, the facilities would improve access to scenic views. Less than significant impact.
- b) None of the roadways in Glenn County are designated State Scenic Highways. No impact.
- d) There is no lighting component to this project, and all construction work shall take place during daylight hours. No impact.

II. AGRICULTURAL RESOURCES

Environmental Setting

Agriculture is the most extensive land use in Glenn County and the most significant component of the county's economy. Two-thirds of Glenn County's 1,317 square miles are comprised of agricultural croplands and pasture. Croplands are found in the areas of prime agricultural soil in the eastern third of the county along the floodplain of the Sacramento River. (Glenn County General Plan)

The table below demonstrates the total number of acres in walnut production in Glenn County between 1981-1990. A six acre walnut orchard is currently located on the proposed project site, which translates to 0.14% of the total acres of walnuts in production.

	1981	1982	1983	1984	1985	1986	1987	1989	1990
Walnut Production (in acres)	4,292	4,473	4,565	4,585	4,656	5,765	5,773	5,470	5,681

Source: Glenn County General Plan

Farmland Mapping and Monitoring Program

Prime Farmland has the best combination of physical and chemical characteristics for crop production. Farmland of statewide importance is not as productive as prime soil, though it still has supported crop production for at least the three preceding years. Unique farmland ranks below prime and statewide important farmlands, though it is still capable of producing "high economic value crops" such as olives, avocados, or grapes. Finally, farmland of local importance ranks below the other three, yet "may be important to the local economy due to its productivity" (Department of Conservation, Important Farmland Map Categories).

The California Department of Conservation Farmland Mapping and Monitoring Program, Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance for Glenn County Report includes Columbia silt loam, 0-1% slopes. As stated in Section IV, Geology and Soils, the project area is located within an area of Columbia silt loam, 0-2% slope.

Williamson Act

The Williamson Act--enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are lower than normal because they are based upon farming and open space uses as opposed to full market value. (Department of Conservation, Williamson Act)

In Glenn County, lands under a Williamson Act contract must be no less than 80-160 acres. The County currently has 276 executed contracts covering 45,559 acres of prime agricultural land and 270,920 acres of non-prime land. To date, five notices of nonrenewal have been processed in the county and one cancellation application has been approved. The County is currently processing a request for cancellation on 370 acres for which a notice of nonrenewal had previously been filed. (Glenn County General Plan, 2003)

The proposed project is located adjacent to 1,000 acres of the Sacramento River National Wildlife Reserve, a U.S. Fish and Wildlife property, on the west side of the Sacramento River.

The Department of Parks and Recreation acquired this 37 acre parcel from River Partners in 2003, with the support of the Glenn County Supervisors and Sheriff, for use development as an access point to the Sacramento River (River Partners 2007). The current project addresses 6.5 acres of this parcel.

The Glenn County Land Use Maps display this property as zoned “Public Facilities & Open Space’.

WOULD THE PROJECT*:	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* 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 Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Agricultural Resources is based on criteria II a-c, described in the environmental checklist above.

DISCUSSION

- a) The proposed project is nestled on a relatively narrow strip of land that is bordered by the Sacramento River on the east and the Sacramento River National Wildlife Reserve on all other sides. Although the parcel of land is contained within an area of Prime Farmland, the proposed project is consistent with the County zoning as ‘Public Facilities & Open Space’. In addition, the installation of the restrooms, picnic sites, and parking would be a temporary feature, therefore a reversible condition. Less than significant.
- b) The land proposed for temporary facilities is not under a Williamson Act Contract. No impact.
- c) The land bordering the proposed project site on the west side is owned by the United States Fish and Wildlife Service; the border of the project on the south side is the State Route 162 causeway; and the Sacramento River borders the east side of the project. The proposed project would not precipitate other changes in the existing environment, which due to location or nature would result in conversion of Farmland to non-agricultural use. No impact.

III. AIR QUALITY and CLIMATE CHANGE

Environmental Setting

The proposed project is located in the Northern Sacramento Valley Air Basin (NSVAB), managed by the Glenn County Air Pollution Control District (APCD) and under the jurisdiction of the United States Environmental Protection Agency Region IX (USEPA). The NSVAB is comprised of Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba. Glenn County is located within the west central portion of the Sacramento Valley Air Basin. The proposed project is located adjacent to the Sacramento River near Butte City in Glenn County.

Climate

The Sacramento Valley Air Basin is characterized by mountain ranges to the north, east, and west. The County's climate is generally Mediterranean with hot dry summers and moderate to cool wet winters. Average daily maximum temperatures range from the mid-fifties in January to the high nineties in July, and average daily minimum temperatures range from the mid-thirties in January to the mid-sixties in July. Nearly 90 percent of the County's annual rainfall occurs between November and April, usually from frontal systems from the west. During the winter, snowfall in the valley is infrequent and only in trace amounts. Totals increase to the west, reaching 4 to 8 inches on the lower slopes of the mountains. Normal annual precipitation across the county varies widely, from 15 inches in the southeast to as much as 50 or 60 inches at the highest elevations. Wind directions and speeds reflect the channeling effect of the Coast Range on the west, with the Sierra Nevada on the east and the Cascade Range on the north. Wind flow direction in the county varies seasonally, but the predominant wind flow in the county is from the south-southeast and can be described as generally light over the entire area with an annual average wind speed of about eight mph. (Glenn County General Plan)

Air Quality Designations

The California Air Board makes state area designations for ten criteria pollutants (an air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set): ozone, suspended particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), carbon monoxide, nitrogen dioxide, sulfur dioxide, sulfates, lead, hydrogen sulfide, and visibility reducing particles (VRPs). At the State level, ozone is designated as non-attainment/transitional; PM₁₀ is designated as non-attainment; PM_{2.5}, carbon monoxide, hydrogen sulfide, and visibility reducing particles are designated unclassified; and nitrogen dioxide, sulfur dioxide, and lead are designated in attainment.

If a pollutant concentration is lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "non-attainment" for that pollutant. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified". Non-attainment/transitional is a subcategory of the non-attainment designation; an area is designated non-attainment/transitional to signify that the area is close to attaining the standard for that pollutant

In contrast to the State area designations, the USEPA makes National area designations for five criteria pollutants: ozone (8 hour standard; the National 1-hour standard was revoked in June 2005), particulate matter (PM), carbon monoxide, nitrogen dioxide, and sulfur dioxide. At the National level: ozone, carbon monoxide, PM_{2.5}, and nitrogen dioxide are designated

unclassified/attainment; PM₁₀ and sulfur dioxide are designated unclassified.

If an area does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant, it is designated as non-attainment. If an area meets the national primary or secondary ambient air quality standard for the pollutant, it is designated in attainment. An area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant is designated unclassifiable (USEPA, 2008)

The following table illustrates the criteria pollutant designations at both the State and federal levels.

Criteria Pollutant Designations

Criteria Pollutant	State	Federal
Ozone	Non-Attainment / Transitional	Unclassified / Attainment
Carbon Monoxide	Unclassified	Unclassified / Attainment
Nitrogen Dioxide	Attainment	Unclassified / Attainment
PM ₁₀	Non-Attainment	Unclassified
PM _{2.5}	Unclassified	Unclassifiable / Attainment
Sulfur Dioxide	Attainment	Unclassified
Lead	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Sulfates	Attainment	No Federal Standard
Visibility Reducing Particles	Unclassified	No Federal Standard

State designations were updated July 2007; National designations were current as of September 2006

Source: California Air Resources Board

Sources

During personal and business activities, Californians release thousands of tons of pollutants into the air every day. Although each of us may only produce a small amount of air pollution, the combined pollution from the 33 million Californians adds up to problems. Some air pollutants are formed and released during the combustion (burning) of petroleum-based products and other fuels such as wood. Examples include gasoline and diesel-powered vehicles and fireplaces, respectively. Many tons of pollutants also enter the air through evaporation, such as fuel from gasoline storage and dispensing facilities, and car and truck gasoline tanks, and gasoline storage containers (CARB).

On hot, sunny days, pollutants emitted by vehicles, industry, and many products (nitrogen oxides and volatile organic compounds) react with each other to form ozone, the main ingredient of smog. During the winter, temperature inversions can trap tiny particles of smoke and exhaust from cars, trucks, fireplaces, and anything else that burns fuel. This keeps the pollution close to the ground - at the level where people are breathing (CARB).

Glenn County experiences rural-type pollution (dust and smoke) and pollution transport. Such problems stem from the county's agricultural economy which necessitates land cultivation and agricultural waste burning, and the prevailing wind patterns that transport pollutants from the Sacramento Metropolitan Area to the northern Sacramento Valley Air Basin. Agricultural activities generate large quantities of dust, also known as PM₁₀ (Glenn County General Plan).

Air Monitoring Stations

The monitoring stations in the state are operated by the California Air Resources Board (CARB), by local Air Pollution Control Districts (APCD) or Air Quality Management Districts (AQMD), by private contractors, and by the National Park Service (NPS). These entities operate more than 250 air monitoring stations in California. The ARB operates air monitoring stations throughout the State. Most of the local districts operate air monitoring stations within their jurisdictions. In some portions of the State, private contractors operate monitoring stations under contract with businesses that are required by permit conditions to conduct monitoring. The National Park Service also operates a number of air monitoring stations in the National Parks and National Monuments throughout California (CARB, 2008). One monitoring station is located in Glenn County: Willows-Colusa. This monitoring station located in Willows monitors O₃, PM₁₀, PM_{2.5}, Outdoor Temperature, Relative Humidity, Wind Direction, and Horizontal Wind Speed (CARB).

Health Hazards

Ozone and particulate matter are the most common air pollutants in California. Ozone, also known as smog, can irritate your respiratory system, causing coughing, irritation in your throat or a burning sensation in your airways. It can reduce lung function, so that you may have feelings of chest tightness, wheezing, or shortness of breath. Particle pollution, also known as particulate matter, is composed of microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. When exposed to these small particles, people with heart or lung diseases and older adults are more at risk of hospital and emergency room visits or, in some cases, even death from heart or lung disease. Carbon monoxide can cause harmful health effects by reducing oxygen delivery to the body's organs (like the heart and brain) and tissues. Sulfur dioxide causes a wide variety of health and environmental impacts because of the way it reacts with other substances in the air. Impacts include; respiratory effects, visibility impairments, acid rain, plant and water damage, and aesthetic damage (building decay). People, animals, and fish are mainly exposed to lead by breathing and ingesting it in food, water, soil, or dust. Lead accumulates in the blood, bones, muscles, and fat. Nitrogen dioxide contributes to ozone; causes respiratory problems; contributes to the formation of acid rain; contributes to nutrient overload, which deteriorates water quality; contribute to atmospheric particles, which causes visibility impairment; reacts to from toxic chemicals; and contributes to global warming (USEPA).

Sensitive Receptors

Sensitive receptors include individuals as well as groups relating to specific land uses. Some individuals are considered to be more "sensitive" than others to air pollutants. The reasons for greater sensitivity than average include health problems, proximity to the emission source, or duration of exposure to air pollutants. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, the old and the infirm are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential uses are considered sensitive receptors because people in residential areas are often at home for extended periods of time, so they can be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous

exercise associated with recreation places a high demand on the human respiratory function. Sensitive receptors in the vicinity of the proposed project area are limited to recreational users (hunters, boaters, trail-users, etc.).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT*:				
a) Conflict with or obstruct implementation of the applicable air quality plan or regulation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations.

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Air Quality is based on criteria III a-e, described in the environmental checklist above.

DISCUSSION

- a) Work proposed by this project would not conflict or obstruct the implementation of any applicable air quality management plan for the Glenn County Air Pollution Control District.
- b,c) The proposed project would not emit air contaminants at a level that by themselves would violate any air quality standard, or contribute to a permanent or long-term increase in any air contaminant. However, project implementation would generate short-term emissions of fugitive dust and involve the use of equipment and materials that would emit ozone precursors. Increased emissions of fugitive dust (particulate matter) and ozone precursors could contribute to existing non-attainment and non-attainment/transitional conditions, which could interfere with achieving the projected attainment standards. Integration of the following minimization measure into the project design would reduce potential impacts to a less than significant level.

MINIMIZATION MEASURES AIR-1
<ul style="list-style-type: none"> • All construction areas (dirt/gravel roads and surrounding dirt/gravel area) will be

watered at least twice daily during dry, dusty conditions.

- All trucks hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard.
- All construction-related equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.
- Earth or other material that has been transported onto paved roadways by trucks, construction equipment, erosion, or other project-related activity will be promptly removed.

- d) As mentioned above, project construction would generate dust and equipment exhaust emissions for the duration of the project. Although sensitive receptors are limited in the area, there is the possibility that during construction, recreational users on adjacent property could be affected. However, members of the public with conditions that make them sensitive to these emissions would have the option of moving to areas further away and avoiding the area altogether or remain in areas that would be upwind or protected from blowing dust or other emissions. Integration or Minimization Measure Air 1 above would reduce potential impacts to less than significant.
- e) Construction activities do not usually emit offensive odors and are generally confined to the vicinity of the source. Although construction activities occurring in association with the proposed project could generate airborne odors with the operation of construction vehicles (i.e., diesel exhaust), these emissions would only occur during daytime hours, would generally be restricted to the immediate vicinity of the construction site, and due to the remote location of the project site would not affect a substantial number of people. No impact.

Climate Change

California Assembly Bill (AB) 32 is California's roadmap to greenhouse gas (GHG) emission reduction by listing goals and timelines and giving new authority to existing agencies to meet these goals. AB 32 begins with the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

This statement is meant to effectively end the scientific debate in California over the existence and consequences of global warming. The bill requires that statewide GHG emissions must be reduced to 1990 levels by the year 2020 and requires the California Air Resources Board to adopt rules and regulations. (Jones & Stokes, 2007)

In California, there are no statewide significance criteria or approved mitigation methods

concerning GHG emissions; therefore, this section discusses climate change qualitatively with no significance conclusion.

In discussing climate change, three fundamental questions must be addressed:

1) How would the project affect climate change?

In general, a project would affect climate change if it altered the earth's radiative ability through direct emissions of GHG; indirect emissions of GHG; alteration of sinks of GHG; or changes in land albedo (reflectivity). The project proposes to provide immediate public access facilities (picnic sites, trails, restrooms, and parking) on the Gaines Parcel on the west side of the Butte City Bridge adjacent to Route 162 in a rural area of Glenn County. The project would not increase the earth's radiative ability through direct or indirect emissions of GHG, would not alter sinks of GHG, nor would it change the land reflectivity.

2) How would the project be affected by climate change?

In general, the project would be affected by climate change if there is a change in water availability and quality; an increase in the frequency and severity of extreme weather events; changes in cloud cover and rainfall patterns; increases in frequency of ozone exceedances; and sea level rise. The proposed project could be affected by a change in water availability and quality similar to any business that provides employment opportunities. The proposed immediate public use project and the associated temporary facilities (picnic areas, restrooms, trails, and parking) would not be affected by an increase in the frequency or severity of storm events or an increase in cloud cover and rainfall patterns, sea level rise or an increase in seawater intrusion into estuaries. The proposed project could be affected by exceedances of ozone because the NSVAB is designated non-attainment/transitional; however, as stated above, the area is close to attaining the standard for ozone.

3) If the project contributions to climate change are considered a significant impact on the environment, what constitutes feasible 'fair share' mitigation?

As stated above, California has no statewide significance criteria; therefore, at this time DPR is unable to provide analysis and determination as to the significance of climate change in relation to this project and the overall environment or the feasibility of 'fair share' mitigation.

Although significance can not be determined, the Department of Parks and Recreation is committed to reducing the impacts of climate change in its development projects.

IV. BIOLOGICAL RESOURCES

Environmental Setting

The thirty-seven acre Gaines Parcel is covered with approximately 28 acres of a producing (See Section II, Agricultural Resources) English walnut orchard and nine acres of remnant riparian habitat. The property is bounded by the steep bank of the Sacramento River on its east, which CalTrans stabilized with four rock groins protruding from the bank into the river north of State Route 162. The southwest boundary of the parcel is a producing walnut orchard of English walnuts (*Juglans regia*). The northwest boundary of the parcel is restored herbaceous shrubland that was planted to mugwort (*Artemisia douglasiana*), Santa Barbara sedge (*Carex barbarae*), purple needlegrass (*Nassella pulchra*), deer grass (*Muhlenbergia rigens*), creeping wild rye (*Leymus triticoides*), goldenrod (*Solidago sp.*), sandbar willow (*Salix sessilifolia*), blue elderberry (*Sambucus mexicana*), rose (*Rosa californica*) and coyote brush (*Baccharis pilularis*) in year 2000 by The Nature Conservancy (TNC, 2000).

The project area consists of 6.5 acres of walnut orchard north of the State Route 162 causeway. Alien, invasive grasses and forbs cover the ground beneath the rows of English walnuts. A remnant patch of riparian vegetation is located in the northwest border of the project area along the shoulders of an abandoned road. Vegetation in this patch includes: blue elderberry (*Sambucus mexicana*), Himalayan blackberry (*Rubus discolor*), California blackberry (*Rubus ursinus*), Fremont cottonwood (*Populus fremontii*), box elder (*Acer negundo var. californicum*), California wild grape (*Vitis californica*), man-root (*Marah fabaceus*), and horse tail (*Equisetum sp.*).

Three sensitive vegetation types (Holland 1986) are known to occur within two miles of the project site and could have covered the area prior to its conversion to an orchard (CNDDDB 2008):

- 1) Great Valley Mixed Riparian Forest: This is a tall, dense, winter-deciduous, broadleafed riparian forest. The tree canopy is usually fairly well closed and moderately to densely stocked with several species including; box elder (*Acer negundo var. californicum*), California black walnut (*Juglans californica var. hindsii*), sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), Gooddings black willow (*Salix gooddingii*), red willow (*Salix laevigata*), and shining willow (*Salix lucida*). The understory consists of these taxa plus shade-tolerant shrubs like button willow (*Cephalanthus occidentalis*) and Oregon ash (*Fraxinus latifolia*). Lianas are conspicuous in both tree and shrub canopies.
- 2) Great Valley Cottonwood Riparian Forest: A dense, broadleafed, winter-deciduous riparian forest dominated by Fremont cottonwood and Goodding's willow. The understory is dense, with an abundance of Fremont cottonwood and Goodding's willow seedlings and saplings. California wild grape is the most conspicuous liana. Scattered seedlings and saplings of shade-tolerant species such as Box elder and Oregon ash may be found, but frequent flooding prevents them from maturing into the canopy.
- 3) Great Valley Willow Scrub: An open to dense, broadleafed, winter-deciduous shrubby streamside thicket dominated by any of several willow (*Salix spp.*) species. Dense stands usually have little understory or herbaceous component. More open stands have grassy understories, usually dominated by introduced species.

Special-Status Species¹

Queries of the California Department of Fish and Game's Natural Diversity Database (CNDDDB, 2008) and the California Native Plant Society's On-line Inventory (CNPS, 2008) were conducted for sensitive biological resources that are known to occur within the Butte City and Princeton 7.5-minute U.S.G.S. quadrangle maps.

Sensitive biological resources include plants and animals that have been given special recognition by federal, state, or local resource agencies and organizations. Also included are habitats that are listed as critical for the survival of a listed species or have special value for wildlife species, and plant communities that are unique or of limited distribution and are considered sensitive. Threatened and Endangered plants and wildlife species and Species of Concern are special-status species that have legal protection.

Three special-status plant species, 10 special-status wildlife species, and 5 sensitive plant communities are listed in the CNDDDB (2008) as occurring within the Butte City and Princeton USGS quadrangle maps. In addition to these species, the U.S. Fish and Wildlife Service (USFWS) website lists another 10 fish and wildlife species with the potential to be affected by the proposed project that may be impacted by projects within the Butte City and Princeton quadrangles. However, only species that have the potential to occur on the project site based upon the presence of suitable habitat or proximity to known sightings are addressed in this document.

Sensitive Species That are Known to Occur, or Could Potentially Occur Within the Project Area

PLANTS

Ferris's milk-vetch (*Astragalus tener* var. *ferrisiae*) – A CNPS List 1B plant species that occurs in vernal mesic meadows and seeps and subalkaline flats within valley and foothill grasslands. Blooming period is from April to May. Six occurrences have been reported for this species (CNDDDB 2008). Based upon the presence of suitable habitat, the proposed project has the potential to impact this species.

INVERTEBRATES

Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) – This species is listed as Federal Threatened and is restricted to its host plant, the blue elderberry, for reproduction and survival. Elderberry plants occur along the margins of the project area including under the drip line of State Route 162 causeway and along the abandoned road bounding the western diagonal of the property. Exit holes indicating potential presence of this

¹ For the purposes of this document, special-status species are defined as plants and animals that are legally protected or that are considered sensitive by federal, state, or local resource conservation agencies and organizations. Specifically, this includes species listed as state or federally Threatened or Endangered, those considered as candidates for listing as Threatened or Endangered, species identified by the USFWS and/or CDFG as Species of Concern, animals identified by CDFG as Fully Protected or Protected, and plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (i.e., plants on CNPS lists 1 and 2).

beetle have been located in several of the elderberry plants along the margins of the project area. No elderberry plants would be cut or removed and additional measures would be implemented to avoid potential impacts to valley elderberry longhorn beetles.

FISH

Green sturgeon (*Acipenser medirostris*) – This species is listed as Federal Threatened and a California Special Concern species. It lives in the Sacramento River which floods the project area. However, construction would not occur during flooding nor would the existence or use of the proposed facilities affect the fish during flooding. Therefore, this fish would not be affected by the proposed project.

Delta smelt (*Hypomesus transpacificus*) – This species is listed as Federal Threatened. It migrates in the Sacramento River which floods the project area. However, construction would not occur during flooding nor would the existence or use of the proposed facilities affect the fish during flooding. Therefore, this fish would not be affected by the proposed project.

Central Valley steelhead (*Oncorhynchus mykiss*) – This species is listed as Federal Threatened. It is known to migrate in the Sacramento River adjacent to the project area. The Sacramento River floods the project area. However, construction would not occur during flooding nor would the existence or use of the proposed facilities affect the fish during flooding. Therefore, this fish would not be affected by the proposed project.

Chinook salmon – Central Valley winter run (*Oncorhynchus tshawytscha*) – This salmon run is listed as California Endangered and Federal Endangered. These fish spawn in streams where females deposit eggs in depressions in gravel spawning beds. The Sacramento River and its tributaries were designated as critical habitat for the species in 1993. The Sacramento River floods the project area. However, construction would not occur during flooding nor would the existence or use of the proposed facilities affect the fish during flooding. Therefore, this fish will not be affected by the proposed project.

Chinook salmon – Central Valley spring run (*Oncorhynchus tshawytscha*) – This run is listed as California Threatened and Federal Threatened. This salmon run is also known to migrate through the Sacramento River to upstream spawning grounds. The Sacramento River floods the project area. However, construction would not occur during flooding nor would the existence or use of the proposed facilities affect the fish during flooding. Therefore, this fish would not be affected by the proposed project.

BIRDS

Bank swallow (*Riparia riparia*) – This species is listed as California Threatened and nests in colonies primarily in riparian habitats. The species requires vertical banks or cliffs with fine-textured sandy soils near streams, rivers, lakes or ocean. Known occurrences have been reported within the general vicinity of the project area (CNDDDB 2008). If this species nests within the project area, potential impacts could occur as a result of project implementation.

Osprey (nesting) (*Pandion haliaetus*) – This species is listed as a California Species of Concern and is known to nest in tree-tops within 15 miles of good fish-producing bodies of

water. Suitable nesting habitat for this species occurs in the vicinity of the project area and a pair of osprey currently nests on top of a power pole east and across the Sacramento River over 500 feet from the project site. As a result, osprey could be impacted by the proposed project implementation.

Swainson's hawk (nesting) (*Buteo swainsoni*) – This species is listed as California Threatened and is known to nest in riparian areas and oak savannah with adjacent suitable foraging areas such as grasslands or grain fields that support rodent populations. The CNDDDB (2008) lists several occurrences of nesting Swainson's hawks within the vicinity of the project area. Implementation of the proposed project during the breeding season could impact this species.

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) – This species is listed as California Endangered and is a federal Candidate for listing. Western yellow-billed cuckoo requires large patches of mature cottonwood riparian forest for nesting. CNDDDB (2008) lists several past observations of this species within two miles of the project area. While adjoining land within a half mile north of the property provides high quality habitat for this species, there is no potential habitat in the project area. Implementation of the proposed project would not impact this species.

MAMMALS

Western red bat (*Lasiurus blossevillii*) – This is a California Species of Concern that is found roosting in forests and woodlands and feeding over a wide variety of habitats including grasslands, shrublands, open woodlands, forests, and croplands (Zeiner et al., 1990). It has been detected within the vicinity of the project from the State Route 162 Bridge over the Sacramento River (CNDDDB 2008). Since this is a tree roosting species, removal of trees may significantly affect this species.

Hoary bat (*Lasiurus cinereus*) – This species has no state or federal list status, although some factors exist to cause some concern such as narrow habitat or continuing threats. The species raises young in all woodlands and forests with medium to large-size trees and dense foliage. It may be found at any location in California but winters along the coast and in southern California and breeds inland and north of its winter range (Zeiner et al., 1990). It has been detected within the vicinity of the project from the State Route 162 Bridge over the Sacramento River (CNDDDB 2008). Since this is a tree roosting species, removal of trees may significantly affect this species.

Other bat species – There are two gaps underneath the Route 162 causeway adjacent to the project area which provide potential habitat for bats. One of the gaps was occupied by a small colony of medium-sized unidentified bats. Potential sensitive bat species which could occur under the State Route 162 causeway include the **long-legged bat** (*Myotis volans*) and **Yuma myotis** (*Myotis yumanensis*). Activities underneath or in close proximity to this colony location, or permanent development in close proximity to this site could result in significant impacts to sensitive bat species.

American badger (*Taxidea taxus*) – This species is a California Species of Concern that

occurs in dry, open stages of most shrub, forest and herbaceous habitats with friable soils (Zeiner et al., 1990). The young are born in burrows that are dug in relatively dry, usually sandy soil in areas with sparse overstory cover (Zeiner et al., 1990). Suitable habitat occurs in the vicinity of the project area for this species. If badger burrows are present in or near the project area, impacts to the species could occur during project implementation.

Sensitive Plant Communities

Sensitive plant communities are regionally uncommon or unique, unusually diverse, or of special concern to local, state, and federal agencies. Removal or substantial degradation of these plant communities constitutes a significant adverse impact under CEQA. The CNDDDB record search produced a list of 5 sensitive plant communities for the Butte City and Princeton 7.5 minutes U.S.G.S. quadrangle maps. Three of these plant communities occur within two miles of the project area (CNDDDB 2008) and are described above. A small remnant patch of understory riparian vegetation occurs within the project area that is not developed enough to determine its type.

Wetlands and Waters of the United States

The U.S. Army Corps of Engineers (USACOE) defines wetlands as lands that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Typically, USACOE jurisdictional wetlands meet three criteria: they have hydrophytic vegetation, hydric soils, and wetland hydrology.

Waters of U.S. are defined as all waters used in interstate or foreign commerce, waters subject to the ebb and flow of the tide, all interstate waters including interstate wetlands and all other waters such as: intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds. Waters of the U.S. are under USACOE jurisdiction.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Clean	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Biological resources is based on criteria III a-f, described in the environmental checklist above.

DISCUSSION

- a) **Valley elderberry longhorn beetle.** The valley elderberry longhorn beetle may occur within the project area because its host plant, the blue elderberry is present. The following avoidance measure is designed to reduce project-related impacts to valley elderberry longhorn beetle to a less than significant level.

<p>Mitigation Measure Bio 1 - Valley Elderberry Longhorn Beetle Avoidance</p> <ul style="list-style-type: none"> • No work will occur between March 15 and June 30 to avoid the adult valley elderberry longhorn beetle flight period. • No elderberry plants will be cut, pruned, pulled back, removed or damaged in any way. • Prior to construction activities, a DPR-qualified Environmental Scientist will fence and flag all elderberry plants for avoidance to ensure construction crews avoid these plants. • Best Management Practices to avoid creation of dust will be employed during all construction activities.

Swainson’s hawk, osprey, and other nesting raptors. The CNDDDB (2008) lists several occurrences of nesting Swainson’s hawks within two miles of the project area and a pair of osprey nest on a utility pole across the Sacramento River from the project site. In addition, raptors and their nests are protected under Fish and Game Code §3503.5. The following avoidance measures are designed to prevent the disturbance or loss of active nests and reduce project-related impacts to nesting raptors to a less than significant level.

<p>Mitigation Measure Bio 2 - Swainson’s Hawk, Osprey, and Other Nesting Raptors Avoidance</p> <ul style="list-style-type: none"> • No work will occur between March 15 and June 30 to avoid the core of the potential nesting season. • If work is required during the beginning or end of the nesting season (February 1 to March 14, or July 1 to August 31), a DPR-qualified environmental scientist will conduct a
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focused survey for raptor nests to identify active nests within 500 feet of the project area. The survey will be conducted no more than 30 days prior to the beginning of construction.

- If nesting raptors are found within 500 feet of the project area, no construction will occur during the active nesting season of February 1 to August 31, or until the young have fledged as determined by a DPR-qualified environmental scientist.

Sensitive bird species. In addition to the Swainson's hawk, potential habitat occurs within, or near, the project area for bank swallows. The following avoidance measures are designed to reduce project-related impacts to sensitive bird species to a less than significant level.

Mitigation Measure Bio 3 - Bank Swallows Avoidance

- No work will occur between March 15 and June 30 to avoid the core of the potential nesting season.
- If construction-related activities are scheduled to begin during the nesting season between July 1 and August 31, a DPR-qualified environmental scientist will conduct nesting bird species surveys. The survey will be conducted no more than 30 days prior to the beginning of construction to identify active nests within 250 feet of the project area.
- No active nesting colony will be disturbed until all eggs have hatched and young birds have fledged. If active nests are found, no construction will occur within 250 feet of the nests during the active nesting season of February 1 to August 31, or until the young have fledged as determined by a DPR-qualified Environmental Scientist.

Nesting bird species under Migratory Bird Treaty Act. Nests of migratory bird species could occur within the proposed project area. A colony of cliff swallows is known to nest underneath the State Route 162 causeway. The following avoidance measures are designed to reduce project-related impacts to nesting migratory bird species to a less than significant level.

Mitigation Measure Bio 4 - Migratory Bird Species Avoidance

- No work will occur between March 15 and June 30 to avoid the core of the potential nesting season.
- If construction-related activities are scheduled to begin between July 1 and August 1, a DPR qualified Environmental Scientist will conduct a survey for nesting bird species within three days prior to commencement of construction at each site to ensure that no nesting birds will be impacted by the project. The survey area will include the project site and a 100 foot zone.
- If active nests are located, a 100 foot buffer will be placed around each active nest. No construction-related activities will occur within this buffer area until young have fledged and there is no evidence of a second attempt at nesting (as determined by a DPR-qualified Environmental Scientist).
- An exclusion zone will be established around the swallow nest colony location under the State Route 162 causeway bridge so that no permanent developments are placed in close proximity to this location.

American badger. Although not known to occur in the project area, suitable habitat exists. The following avoidance measures are designed to reduce project-related impacts to American badger, if present, to a less than significant level.

Mitigation Measure Bio 5 - American Badger Avoidance

- A DPR qualified environmental Scientist will conduct pre-construction survey for American badger burrows.
- If badger burrows are present, they will be mapped and protected from project-related impacts during the nesting season of June 1 through October 15.

Western red bat, hoary bat and other sensitive bat species. Sensitive bat species are known to occur in or near the project area. The following avoidance measures are designed to reduce project-related impacts to sensitive bat species to a less than significant level.

Mitigation Measure Bio 6 - Sensitive Bat Species Avoidance

- No work will occur between March 15 and June 30 to avoid the core bat breeding period.
- To the extent possible, all tree removal will occur between October 1 and January 31 when tree roosting bats are not expected to occur in the project area.
- If tree removal is required between February 1 and March 14 or between July 1 and September 31, a DPR-qualified Environmental Scientist will survey the trees immediately prior to removal.
- If bats are located, tree removal will not occur until the bats vacate the tree of their own accord.
- An exclusion zone will be established around the bat roosting location under the State Route 162 causeway bridge so that no permanent developments are placed in close proximity to this sensitive location.

Sensitive plant species. As mentioned in the Environmental Setting, the Ferris' milk-vetch, a list 1B plant species with the California Native Plant Society, could potentially occur within the project area based upon the presence of suitable habitat. Implementation of the following mitigation measure would reduce project-related impacts to this species to a less than significant level.

Mitigation Measure Bio 7 - Ferris' Milk Vetch Avoidance

- A DPR-qualified Environmental Scientist will conduct a focused survey for Ferris' milk-vetch throughout the project impact area. The survey will be conducted prior to project implementation and when the plants are in a phonological stage conducive to positive identification, usually during the blooming period.
- If Ferris' milk-vetch is found within the project area during surveys, the populations will be fenced off during construction and completely avoided, if at all possible. If complete avoidance of sensitive plant species is not possible, DPR will notify the Department of Fish and Game prior to the start of construction regarding appropriate mitigation for the impacts.

- b) As described in the Environmental Setting above, three sensitive plant communities occur within two miles of the project site and a small remnant patch of understory riparian

vegetation occurs within the project area. Because this remnant patch of understory riparian vegetation is not developed enough to determine its type, the following avoidance measure would be implemented to reduce potential impacts to a less than significant level.

- c) As stated in the Environmental Setting above, the Sacramento River is considered 'waters of the U.S.' However, no construction would occur nor would the site be open during flood periods. In addition, all activities (fishing) occurring as a result of proximity to the river would be in compliance with any state and federal regulations. No impact.
- d) As stated in the Environmental Setting above, the proposed project would not occur during periods of flooding nor would the use of the proposed facilities affect fish during flooding. No impact.
- e) This project would not with any local ordinances or tree protection policies
- f) The proposed project is located outside the boundaries of the approved Sacramento River National Wildlife Refuge Comprehensive Conservation Plan. No impact.

V. CULTURAL RESOURCES

Environmental Setting

The 37 acre parcel is in Glenn County approximately .5 miles south of Butte City. Located adjacent and west of the Sacramento River, the parcel is divided by the State Route 162 Bridge and causeway. The parcel will be added to Colusa-Sacramento River State Park.

The proposed project area is a relatively flat floodplain of the Sacramento River. The parcel may have once been an island as depicted on the 1895 Marysville 1:125,000 quadrangle. A small drainage running along the west side of the southern portion of the parcel provides minor topographic relief. This drainage area is the only area that may contain any native vegetation but is mostly dominated by blackberry brambles. The remainder of the parcel is presently a walnut orchard.

Cultural History: Archaeological studies in the mountain ranges to the west and east of the project area document early period human use from about 12,000 years Before Present (BP), the earliest documented use of the Sacramento Valley is about 5,400 years BP. The absence of pre 5,400 BP archaeological resources may be a cause of depositional processes within the Sacramento Valley, and the fact that any early deposits can be expected to be buried by sediments.

Recent archaeological excavations conducted at four sites located 15 miles south of the project area have revealed a continuum of human occupation from 4,500 BP to contact period. These recent investigations defined five distinct cultural phases. Notably many of the middle period phases are located within buried deposits. These recent archaeological investigations cast a new light on subsistence and settlement patterns along this portion of the Sacramento River during the middle period (4,500-1,200 BP). Previous perceptions about middle period cultures were based on tool inventories that indicated highly mobile groups focused on hunting. However, recent studies of macro-botanical remains acquired from flotation sampling studies conducted during recent excavations revealed significant amounts of charred acorn, nuts, and other seeds. This data coupled with the presence of fish bone and baked clay, seems to indicate a more sedentary population and are not typical signatures of highly mobile cultures focused on hunting (White 2003a, 2003b).

The earliest use of the area is represented by the Cha'dene Phase, a local variant of the Middle Archaic Period, and dates 4385-3460 BP. This phase is defined from a buried stratum located between 200-250 centimeters below surface (cmb). This stratum contained a limited inventory of tools dominated by dart projectile points, a Halotis square bead, a plummet, and a handstone. At the same site, Stratum 2 is divided into 2 phases: Si'dehe 1 from the Middle Archaic Period dated between 3222-2750 BP and Si'dehe 2 from the Upper Archaic Period dated between 2750-2200 BP. The Si'dehe 1 deposit contained Martis and Mendocino Period dart points, shell ornaments and beads, baked clay objects, and grinding/mulling tools. Si'dehe 2 contained a Mendocino Period dart projectile point, baked clay, an increase in shell ornaments and beads, and a wooden pestle. Contextually and temporally this phase relates to the Berkeley Pattern, the basic Archaic adaptation of the Central Valley (White 2003a, 2003b).

After 1200 BP, many middle period archaic technologies disappeared and were replaced by the late period manifestations that were present at contact. In this area, emergent and ethnographic

cultures are represented archaeologically by the Wi'ter-ty (780-1150 AD) and Coru (contact) Phases. Cultural material recovered from the Wi'ter-ry Phase (Emergent) includes arrow points, bone awls, soapstone bowls, j - shaped fish hooks and olivella shell beads. The presence of well made housefloors indicates residential permanence. The Coru Phase is described from excavations at Coru, the River Patwin ethnographic village at the present town of Colusa, about 15 miles south of the project area. Cultural material from the site includes Napa Valley obsidian arrow points and a core, decorated baked clay objects, and olivella and clam shell disk beads.

In 1821, the village of Coru was visited and described by Captain Luis Antonio Arguello, Commandant of the Presidio de San Francisco and his chaplain the Reverend Father Fray Blas de Ordaz. This expedition visited Patwin and Konkow villages on the west side of the Sacramento River while they looked into rumors of white settlement in the area. This early expedition's information is considered to be the most accurate ethnographic overview of the area as it predates the devastating malaria epidemic of 1832-1833. The expedition documented 11 villages between Grimes and Ordbend, including Coru. The village of Chac, aka Cha' de'-he, about 6 miles south of the project area, was estimated to include 1000-1600 inhabitants. At contact, the villages in this area were composed of both River Patwin and Konkow Maidu individuals, reflecting the cosmopolitan nature of river settlements. This area of the Sacramento River is believed to have had the highest density of population, 16.7 people per square mile, of any area of prehistoric California (White 2003a, 2003b).

The Hudson Bay Company and independent trappers visited the area, including Alexander McLeod in 1829, Peter Skene Ogden in 1830 and John Work in 1832-1833. John Work's expeditions in 1832 proved to be fatal for the local population of River Patwin and Konkow Maidu who were decimated by the introduction of malaria by Work's party. Furthermore the over-harvest by the trappers significantly affected food and game resources available to the indigenous peoples. While many of the villages regrouped and repopulated after this devastation, the life-ways, population, and territory of the Patwin and Maidu were irrevocably changed (White 2003a, 2003b). The present day population of several hundred Cachil Dehe Band of Wintu Indians, belongs to the federally recognized Colusa Rancheria located about 10 miles south of the project area.

The next surge of non indigenous peoples into the area came primarily to set up Ranchos granted to them by the Mexican government. The proposed project area is within the Larkin Children's Rancho Land grant. Scant information exists about this land grant, it is plausible that it was a land grab by Thomas O. Larkin's children and was never developed.

Transportation and agriculture seem to be the primary historic factors that drove historic use of the project area. The Butte City Ferry crossed the river within the proposed project area; its west road defines the northwest edge of the parcel. The Butte City Ferry is attributed to Husted who built it in 1873 or to the Marysville-Shasta Stage line with operation beginning about 1875; the earlier date is probably more correct as the U.S. Post Office established the postal station in Butte City in 1873. The ferry's length of service is unknown but probably short due to the numerous floods along the Sacramento River. Nevertheless, a river crossing was needed at this spot and a series of bridges succeeded the original ferry. The current bridge, bridge #11 0017, for California State Route 162 is a metal truss bridge built in 1948 and altered in 1961. Its causeway on the west creates a North/South separation of the parcel. The bridge has been determined to not be eligible for inclusion in the National Register of Historic Places. Currently most of the project area is a walnut orchard.

Archaeological Investigations: Complete inventory of the parcel has been accomplished with the result that no cultural resources have been recorded from survey observations. The inventories were completed by CalTrans, 2001-2003 (Noble and Haney, 2001; Haney and Noble 2002, 2005) for erosion projects, and DPR personnel in 2008.

No built environment resources other than 2 utility lines and an agricultural pump are located on the parcel.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Cultural Resources is based on criteria IV a-c, described in the environmental checklist above.

DISCUSSION

a) There are no previously recorded historical resources within the proposed project area; however, along the Butte City Ferry Road (State Route 45 and later State Route 162) there is a small bridge, including cement posts and railings that could be considered potentially historic. Implementation of Minimization Measure – Historic 1 described below will ensure that project activities have a less than significant impact on this potentially eligible historic resource.

<p>Minimization Measure – Historic 1 Site Protection</p> <ul style="list-style-type: none"> • Prior to the start of construction, a DPR-qualified Cultural Resource Specialist will consult with the contractor and project manager to identify all resources that must be protected. • Prior to the start of construction, a DPR-qualified Cultural Resource Specialist will delineate The Butte City Ferry Road Bridge with protective orange construction fencing. • Prior to any earthmoving activities, a DPR-qualified archaeologist will approve all subsurface work, including the operation of heavy equipment within ten feet of the ESA.

b) As stated in the Environmental Setting above, archaeological sites have not been located in the project area; however, buried archaeological deposits in this area are not unusual and are very important to the understanding of the past.

Construction and rehabilitation activities related to this project, including but not limited to earth movement, plant removal, staging areas, or operation of equipment could significantly

impact unrecorded archaeological deposits located within the proposed project area. The following minimization measure would reduce impacts to archaeological resources to a less than significant level.

Minimization Measure – Archaeology 1 Previously Undocumented Resources
<ul style="list-style-type: none"> • Prior to the start of construction, a locally knowledgeable geo-archaeologist or geomorphologist will review any ground disturbing activities that disturb soil to a depth of > 60 cm (24”). • If the specialist determines that buried archaeological deposits could be present, prior to the start of construction, a DPR-qualified Cultural Resource Specialist will prepare a research design, including appropriate trenching and/or pre-construction excavations (if necessary). • In the event that previously undocumented cultural resources (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash) are encountered during project construction by anyone, the state representative will temporarily halt at that specific location and direct contractors to other project-related tasks. A DPR-qualified archaeologist will record and evaluate the find and work with state representative to implement avoidance, preservation, or recovery measures as appropriate prior to any work resuming at that specific location. • If the DPR-qualified archaeologist determines that the find(s) are significant, a qualified historian, archaeologist, and/or Native American representative (if appropriate) will monitor all subsurface work including trenching, grading, and excavations in that area.

c) In many of California's historic townsites and rural communities discoveries have been made of non-Native American human bone including non-Anglo. Burials have not been documented or recorded in the APE; however, there is always a potential of unanticipated discoveries of human bone. If any human remains or burial artifacts were identified, implementation of minimization measure below would reduce the impact to a less than significant level.

Minimization Measure Archaeology 2 – Burial Sites
<ul style="list-style-type: none"> • In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized representative) will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative). If a Native American monitor is on-site at the time of the discovery, the monitor will be responsible for notifying the appropriate Native American authorities. • The local County Coroner will make the determination of whether the human bone is of Native American origin. • If the coroner determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the site prior to determination

- If it is determined the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives will occur as necessary to define additional site mitigation or future restrictions.

VI. GEOLOGY AND SOILS

Environmental Setting

The Immediate Public Use project site is located on the Gaines parcel along the west side of the Sacramento River in eastern Glenn County. It is approximately 11 miles southeast of the town of Willows and accessible from State Route 162.

Topography

The project site is located in the northern Sacramento River Valley on relatively flat land that borders the Sacramento River. Topography varies from steep often heavily vegetated river banks to level or nearly level gravel bars and vegetated level areas. Elevations range from approximately 75 feet at river level to 85 feet on surrounding flat lands. Slopes on the project site are typically less than 2%.

Geology

The project site is located within the northern part of the Great Valley Geomorphic Province (GVGP), a northwest trending alluvial plain about 400 miles long and 50 miles wide (Hackel 1966; CDPR 2003). The Sacramento Valley comprises the northern part of the GVGP, which is drained by the Sacramento River and its numerous tributaries. The San Joaquin Valley comprises the southern portion of this province and is drained by the San Joaquin River and its tributaries.

The GVGP is bounded by the Klamath Mountains in the north, the Tehachapi Mountains in the south, the Sierra Nevada Mountains to the east, and the Coast Ranges in the west. It consists of an elongated trough that has been filled over the past 160 million years with a sequence of marine and non-marine sediments, mostly derived from the Sierra Nevada Mountains, but with a significant contribution from the Coast Ranges to the west. This trough is an asymmetric geosyncline with a short western flank and a long, stable eastern shelf supported at depth by the granitic basement rocks of the Sierra Nevada.

The sediments deposited in the Sacramento Valley are a mixture of gravel, sand, silt, and clay, up to thousands of feet thick, deposited over time from streams originating in the surrounding mountains. The geologic formation underlying the project site is mapped as Quaternary (Holocene) stream channel deposits, associated with active stream and river systems (Helley and Harwood 1985).

Soils

The National Cooperative Soil Survey of the USDA Natural Resource Conservation Service (USDA NRCS) has identified a single soil mapping unit for the project area (USDA 2007). Columbia silt loam, 0-2 percent slopes, is a very deep soil that occurs on flood plains and formed in alluvium from mixed sources. This moderately well drained soil has a moderately rapid permeability, negligible to medium runoff, and is subject to occasional to frequent flooding, depending on location and the presence of levees or other flood control structures.

Columbia silt loam, 0-2 percent slopes, has been rated by the USDA NRCS for suitability of various uses, including septic tank absorption fields, camping, and paths and trails. All of these uses have identified limitations, although limitations can be overcome by special

planning, design, or installation.

No septic tank absorption fields are proposed for this project. While there are limitations for camping facilities due to flooding potential and saturation at < 18 inches depth, the camping proposed for this project would be sited on an existing gravel bar and would not include any site preparation. For paths and trails there are limitations due to dustiness and saturation at < 12 inches depth. However, trails most likely affected by saturation are those closest to the river, which would consist of pre-existing informal paths. Dustiness is rated as a minor problem; hence a less than significant impact.

Seismicity

Glenn County is in a relatively inactive seismic area when compared to other portions of California such as the San Francisco Bay area. There are no Alquist-Priolo Special Studies Zones within the county (Hart and Bryant 1997). These zones emphasize active faults that have a potential for ground surface rupture.

There are no known active surface faults within the project site, which is located in an area of relatively low seismicity, with the notable exception of the 1975 Oroville Earthquake. The nearest active fault to the project site is the Cleveland Hill Fault, which produced the Oroville Earthquake (Topozada and Morrison, Jr. 1982). This fault, which is part of the Foothills Fault System, produced an earthquake of magnitude 5.7 on the Richter Scale on August 1, 1975 in a location about 7 miles south of Lake Oroville. This event included a sequence of seven earthquakes at magnitudes of 4.5 or greater.

Several other major active fault systems outside Glenn County are capable of producing earthquakes which could cause moderate to severe ground shaking within the County. These faults include the Bartlett Springs Fault, Battle Creek Fault, Midland-Sweitzer Fault, the Dunnigan Hills (Zamora) Fault, and the Green Valley Fault. Large earthquakes on the Maacama Fault, the Hayward Fault, and the San Andreas Fault could also affect the project site.

Table G-1: Active Faults

Fault Name	Distance and Direction from Project Site	Maximum Moment Magnitude Earthquake	Age of Last Rupture	Comments
Cleveland Hill	29 miles west	6.5-6.7	Holocene	Source of the Oroville Earthquake
Dunnigan Hills	41 miles south southwest	6.5	Holocene	
Midland-Sweitzer	45 miles southwest	7.0	Quaternary – Pre-Quaternary	Possible source of 1892 Winters earthquakes of magnitude 6-6.9.
Bartlett Springs	51 miles west	7.1	Holocene	
Battle Creek	62 miles north	6.5	Quaternary	
Maacama	74 miles west	7.1	Holocene to Historic	Northern extension of Rodgers Creek Fault Zone

Green Valley	77 miles south southwest	6.9	Holocene to Historic	
San Andreas	94 miles west southwest	7.6	Holocene to Historic	One of the most active faults in California
Hayward	104 miles southwest	6.9	Holocene to Historic	Branch of the San Andreas Fault

Data Sources: Butte County, 2005 Jennings, 1994; Petersen, et al, 1996

Potentially active faults mapped on the Fault Activity Map of California (Jennings, 1994) could result in significant ground motion at the project site. Those faults within a 50 mile radius of the Project Site include: the Corning Fault; the Willows Fault; Chico Monocline; the Paskenta Fault; and the Cohasset Ridge Fault.

WOULD THE PROJECT:	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable, as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems, where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Geology and Soils is based on criteria V a-f, described in the environmental checklist above.

DISCUSSION

- a) The project site is located within the northern Sacramento Valley, an area relatively free of large earthquake events. The chance of the surface rupture of an earthquake fault at the project site is highly unlikely. Seismic ground-shaking is possible from earthquake events on the faults discussed previously. The Project Site may be susceptible to liquefaction, but the probability of seismic-induced landslides is extremely low.
- i) The project site is not located within an Alquist-Priolo Earthquake Fault Zone (APEFZ) as designated by the California Geological Survey (CGS). Therefore, there is no expected impact from surface rupture due to this project.
 - ii) The California Geological Survey has determined that the closest faults (Cleveland Hill and Dunnigan Hills Faults) are both capable of generating a Maximum Credible Earthquake of magnitude 6.5 (Petersen, 1996). Other faults listed in Table G-1 above are also capable of affecting the Project Site. However, the expected ground acceleration at the Project Site is very low, on the order of less than 0.1g (CGS, 2003). Any damage to property or risk to the public from seismic shaking due to this project would be less than significant.
 - iii) Seismic-induced ground failure, such as liquefaction, usually occurs in unconsolidated granular soils that are water saturated. During seismic-induced ground shaking, pore water pressure can increase in loose soils, causing the soils to change from a solid to a liquid state (liquefaction). The site soils are relatively unconsolidated and can be water saturated due to the close proximity of the Sacramento River. The project site is rated as moderate for liquefaction potential. The risk to project facilities is slight; therefore there is less than significant impact due to this project.
 - iv) No known landslides have been mapped at the project site, which is located on a relatively flat alluvial floodplain with slopes usually less than 2%. Therefore, there would be no impact from a seismically-triggered landslide.
- b) A temporary increase in erosion may occur during grading for the access road and parking lot and any other ground disturbing activities. Implementation of Minimization Measure **Hydro 1: Erosion Control BMPs** would reduce soil erosion or loss of topsoil by the proposed project to a less than significant level.
- c) The proposed project site is not located within a geologic unit or soil that is known to be unstable, based upon available data. There is a moderate potential for instability due to liquefaction or lateral spreading during an earthquake. There are no known problems due to liquefaction or subsidence to date in the project area. Therefore, the impact from these hazards is less than significant.
- d) The proposed project site is underlain by soil with a low potential for soil expansivity. The Columbia Soil Series is a silt loam; expansive soils (expansive clays) are generally plastic clays. There would be no impact due to this project.

- e) The proposed project does not involve the installation of a septic system or leach field. Therefore, there would be no impact to onsite soils from this project.
- f) No known unique paleontological or geological resources exist within the project site. Therefore, there is no impact

VII. HAZARDS AND HAZARDOUS MATERIALS

Environmental Setting

The proposed immediate public use project for the Gaines parcel includes the installation of recreational facilities. The parcel is currently an irrigated walnut orchard situated along the western bank of the Sacramento River. In order to implement the proposed project, it is important to identify possible hazards, or facilities that could be jeopardized by these potential hazards, to provide measures that avoid or minimize their impacts.

Hazardous Materials

There has been no known industrial use or construction of buildings in the project area that could have been a source of hazardous materials. The nearest cleanup site listed by the California Department of Toxic Substance Control is located in Willows (approximately 12 miles away) (CDTSC 2008).

The application of pesticide products could have periodically occurred while the parcel was utilized as an orchard.

Airports

Glenn County operates two Public General Aviation Airports: Orland Haigh (approximately 22 to the north northwest) and Willows Glenn (approximately 12 miles to the west northwest). There are also two private airstrips the Gunnersfield Ranch (10 miles southwest) and Richvale (12 miles east) (GAN 2008).

Schools

The closest school to the Gaines parcel is located four miles south of the project site in Princeton, Colusa County (Google Maps 2008). However, children living in the vicinity of the Gaines parcel would attend the nearest schools within Glenn County located in Willows (approximately 12 miles away).

Fire Hazards

The California Department of Forestry and Fire Protection (Cal Fire) lists the fire hazard severity for the parcel as unzoned (Cal Fire 2007). The parcel is designated as a Local Responsibility Area surrounded by Federal Responsibility lands (Cal Fire 2007). Fire protection in Glenn County is provided by twelve individual fire districts (Glenn County 1993). In the event of a fire, the Princeton Fire Department, four miles south, would act as the first responder to the Gaines parcel. The Willows Fire Department, approximately twelve miles from the parcel, would also be available to assist in the event of a fire hazard (City of Willows 2008).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, create a significant hazard to the public or environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Be 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? If so, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be located in the vicinity of a private airstrip? If so, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Hazards and Hazardous Materials is based on criteria VII a-h, described in the environmental checklist above.

DISCUSSION

- a) Construction activities associated with the proposed Immediate Public Use project could require the use of certain hazardous materials, such as fuels, oils, or other fluids associated with the operation and maintenance of vehicles and equipment. These materials would generally be contained within vessels engineered for safe storage. Large quantities of these materials would not be stored at or transported to the construction site. Although,

spills, upsets, or other construction-related accidents could cause an inadvertent release of fuel or other hazardous substances, this impact is considered less than significant provided that **Minimization Measure Hazmat-1** along with **Minimization Measure Hydro-1** are implemented during construction activities.

Minimization Measure Hazmat 1
<ul style="list-style-type: none">• Prior to the start of construction, the contractor will clean all equipment before entering the project site. Equipment will be cleaned and repaired (other than emergency repairs) outside the project site boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.• All heavy equipment parking, refueling, and service will be conducted within specific areas outside of the 100-year floodplain to avoid water course contamination.• Prior to the start of construction, the contractor will inspect all equipment for leaks and regularly inspect thereafter until equipment is removed from the project site.• Prior to the start of construction, DPR will prepare a Spill Prevention and Response Plan (SPRP) as part of the Storm Water Pollution Prevention Plan (SWPPP) to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan will include (but not be limited to):<ul style="list-style-type: none">▪ a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment will occur▪ a list of items required in a spill kit on-site that will be maintained throughout the life of the project▪ procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the restoration process▪ identification of lawfully permitted or authorized disposal destinations outside of the project site

- b) There is a potential for hazardous substances to be released to the environment during the project from vehicle or equipment fluid spills or leaks. Implementation of the **Minimization Measure Hazmat-1** and **Minimization Measure Hydro-1** would reduce any risk to on-site workers, the public, or the environment to less than significant.
- c) As noted in the Environmental Setting, there are no schools within one-quarter mile of the project site; therefore, there are no hazards or hazardous substance impacts expected to schools as a result of this project.
- d) No part of the Park is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. No area within the project site is currently restricted or known to have hazardous materials present. Therefore, no impact would occur within the project area.
- e,f) The project site is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private air strip. Therefore, no impact is expected to occur as a result of this project.

- g) All construction activities associated with the proposed project would occur at the project site and would not restrict access to, cause delays, or block any public roads outside the immediate construction area. The traffic around the project site may be impacted only for short periods of time for delivery of construction materials or construction equipment. The project would not conflict with the emergency response plans for Glenn County. Therefore, the impact of this project would be less than significant.
- h) The proposed project site includes patches of annual grasses that will be flammable during the dry season (June – October). Heavy equipment that can get very hot with extended use would sometimes be in close proximity to flammable vegetation. Improperly outfitted exhaust systems or friction between metal parts and/or rocks could generate sparks, resulting in a fire. The following **Hazmat Condition-2** would reduce the potential for adverse impacts from wildfire to a less than significant level.

<p>Minimization Measure Hazmat 2: Fire Safety</p> <ul style="list-style-type: none"> ▪ Prior to the start of construction, the Project Contractor will develop a DPR-approved Fire Safety Plan. The plan will include the emergency calling procedures for both the Princeton Fire Department and the Willows Fire Department. ▪ Spark arrestors or turbo chargers (which eliminate sparks in exhaust) and fire extinguishers will be required for all heavy equipment. ▪ Construction crews will be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment will be parked over mineral soil, asphalt, or concrete to reduce the chance of fire.

VIII. HYDROLOGY AND WATER QUALITY

Environmental Setting

Surface Water

The Gaines parcel is bounded on the east side by the Sacramento River. The Sacramento River Basin is the largest in California collecting runoff from the Sierra Nevada Mountains to the east, the Cascade and Trinity Mountains to the north, and the Coast Ranges to the west before flowing by the project site. Despite the number of dams along the Sacramento River (permanent dams – Shasta Dam and Keswick Dam; seasonal dams – Anderson-Cottonwood Irrigation District Dam and Red Bluff Diversion Dam), flow does fluctuate throughout the year having seasonally high flow during the winter and spring months.

Flooding

Flooding issues could occur on the Gaines parcel because it is located within the Federal Emergency Management Agency (FEMA)-designated 100-year floodplain (FEMA 2008). The designation is defined as an area with a 1% chance of being inundated annually. With the proximity of the Sacramento River and the presence of a slough approximately ¼ mile north of the parcel, inundation in this area could be more frequent than noted by FEMA. The California Department of Water Resources (DWR) has projected estimates of the flood frequency interval for the project area as every 1 to 2 years (USFWS 2008); however, the site is located above the ordinary high water mark, as defined by the Army Corps of Engineers (Teague, 2008).

Ground Water

The Gaines parcel is located within the Colusa groundwater sub-basin, part of the larger Sacramento Valley Groundwater Basin (DWR 2004). This sub-basin is composed of water-bearing deposits from the late Tertiary to Quaternary age. The different deposits include unconsolidated gravel, silt, sand, and clay from erosion and/or stream and river flood events (DWR 2004). From the City of Willows to the Sacramento River, geologic units include Holocene alluvial deposits, Pleistocene deposits of Riverbank and Modesto formations, and Pliocene deposits of Tehama and Tuscan formations (DWR 2004). The groundwater level does not show increasing or decreasing trends from water consumption (DWR 2004). The predominant water types within the sub-basin are calcium-magnesium bicarbonate and magnesium-calcium bicarbonate (DWR 2004). Wells into the sub-basin for municipal/irrigation reach a depth between 20 to 1340 feet (DWR 2004).

Water Quality

The Sacramento River Basin, where the project area is located, falls within the Central Valley Regional Water Quality Control Board (CVRWQCB) jurisdiction. The CVRWQCB provides water quality standards and management criteria as required by the Clean Water Act and regulates the water quality within the region. The standards and criteria are outlined within the Water Quality Control Plan (Basin Plan). The Basin Plan identifies existing beneficial uses for surface water within the Sacramento River along the Gaines parcel to include: agricultural supply – irrigation and stock watering; contact and non-contact water recreation; warm and cold freshwater habitat; cold water migration of aquatic organisms; warm water spawning, reproduction and/or early development for fish; and wildlife habitat (CVRWQCB 2007).

Water Supply

Implementation of this project includes the installation of a well for irrigation, municipal, and potable use. The closest domestic water supplier would be the Butte City Community Services District approximately ½ mile from the project site on the east side of the Sacramento River (Glenn County 1993). Glenn County also contains irrigation districts that supply the water for irrigation (Glenn County 1993). Neither the Butte City Community Services District nor the irrigation district supplies water to the project site.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through 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 on- or off-site flooding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place structures that would impede or redirect flood flows within a 100-year flood hazard area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Hydrology and Water Quality is based on criteria VIII a-j, described in the environmental checklist above.

DISCUSSION

- a) During any grading, excavation, or other ground disturbing activities for the planned immediate public access project, a release of sediment to surface waters could occur. Other impacts to water quality could result from releases of fuels, oils, or other fluids from vehicles and construction equipment during project implementation. If work is allowed during the rainy season (October 15 - April 15), soil or construction materials could be mobilized by rainfall events. These potential, accidental releases could result in a violation of water quality standards; however the implementation of **Minimization Measure Hydro-1** and **Minimization Measure Hazmat-1** would result in a less than significant impact.

<p>Minimization Measure Hydro-1: Erosion Control BMPs</p> <ul style="list-style-type: none"> • Prior to the start of construction, Contractor will prepare a Storm Water Pollution Prevention Plan (SWPPP) for DPR approval that identifies the Best Management Practices (BMPs) to be used in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, and repaving. • If construction activities extend into the rainy season (October 15 to April 15) or if an un-seasonal storm is anticipated, the contractor will properly winterize the site by covering (tarping) any stockpiled materials or soils and by constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and graded areas.

After project completion, the installed vault toilets would generate wastewater collected in holding tanks. During flooding events there is the potential for wastewater to enter the Sacramento River. The implementation of the following measure would reduce this to a less than significant level.

<p>Minimization Measure Hydro 2: Preventing Waste Discharge Entering the Watercourse</p> <ul style="list-style-type: none"> • DPR or its Contractor will install watertight concrete vaults or septic tanks servicing the toilet facilities with the capability of being sealed closed prior to and during periods of potential flooding.

- b) The stability of the groundwater sub-basin indicates that the water demands as a result of this project would not substantially deplete supplies. Groundwater recharge would not be

impacted because the impermeable facilities proposed would shed or sheet flow any rain water to permeable surfaces. To prevent accidental releases of fuels, oils, or other fluids from becoming part of groundwater, the **Minimization Measures Hydro-1** and **Minimization Measure Hazmat-1** would be implemented to reduce the impact to a less than significant level.

- c) No existing drainages (creeks or streams) would be altered by this project.
- d) The existing drainage patterns from the parcel would not be altered in a manner that would significantly increase the rate or amount of surface water that would result in on- or off-site flooding. Therefore, there would be no impact as a result of this project.
- e) This project would not create or contribute surface runoff that would exceed the capacity of existing or planned stormwater drainage systems. Nor would it provide substantial additional sources of polluted run off with the implementation of **Minimization Measures Hydro-1** and **Minimization Measure Hazmat-1** reducing impacts to a less than significant level.
- f) This project would not substantially degrade water quality as a result of soil erosion and runoff or release of vehicle or equipment fluids if BMPs are implemented, as specified in **Minimization Measure Hydro-1** and **Minimization Measure Hazmat-1**; therefore, impacts would be less than significant.
- g) The entire project area is located within the FEMA-designated 100-year floodplain for the Sacramento River. However, the project does not include any housing structures. No impact.
- h) This project would place two restroom facilities within the Gaines parcel that may impede or redirect flood flows within the FEMA-designated 100-year floodplain. However, the degree of impedance or redirection of flood flows should be less than significant.
- i) The project would not expose structures to an increased risk from flooding, including flooding resulting from the failure of a levee or dam. The majority of the project site is located within the FEMA-designated 100-year floodplain on the river side of the levee; if the area is opened for immediate public access there is a potential safety risk for people visiting the parcel during seasonally high flow periods. To reduce the impacts to a less than significant level, DPR would implement the following **Hydrology Condition-3**.

Minimization Measure Hydro 3: Parcel closure during flood events
<ul style="list-style-type: none"> • DPR staff will close the Gaines Parcel when the Sacramento River rises out of the channel and onto the parcel. The parcel will remain closed during inundated periods. DPR staff will re-open the parcel when there are no safety risks to visitors.

- j) This project is not located in an area that would be inundated by either a seiche or a tsunami. Along the banks of the Sacramento River landslides or mudflows may be possible; however, the topology of the project site is relatively flat preventing flow conditions. No impact.

IX. LAND USE AND PLANNING

Environmental Setting

The proposed project is located in the middle of 1,000 acres of U.S. Fish and Wildlife property, on the west side of the Sacramento River in Glenn County. The Department of Parks and Recreation acquired this 37-acre parcel (Gaines Parcel) from River Partners in 2007. (River Partners, 2008). The current project addresses 6.5 acres.

Both the preferred alternative and the new cities alternative under the draft General Plan Land Use Maps zone this area as ‘Public Facilities & Open Space’; previously, this area was zoned ‘Agricultural & Resource Lands’. Title 15 of the Glenn County defines ‘Open Space’ as those areas suitable for common recreational use or which provide visual relief to developed areas.

The proposed project would install temporary facilities for the immediate use of the general public for recreational use.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Land Use Planning is based on criteria **IX** a-c, described in the environmental checklist above.

DISCUSSION

- a) The proposed project is located completely within the boundaries of the Gaines Parcel, in a rural area of Glenn County; the project would add no barriers or elements that would divide or interfere with an established surrounding community. No impact.
- b) As noted in the Environmental Settings, the proposed project is located adjacent to 1000 acres of U.S. Fish and Wildlife lands, an area zoned agricultural and resource lands by Glenn County. No project elements are in conflict with the zoning, regulatory policies, land use plans, or regulations. Work proposed for this project is in compliance with PRC §5002.2(c), and, with certification of this Mitigated Negative Declaration, would be in compliance with CEQA. No impact.
- c) There are no applicable habitat conservation plans or natural community conservation plans for the project area. No impact.

X. MINERAL RESOURCES

Environmental Setting

The California Surface Mining and Reclamation Act of 1975 requires the State Geologist to classify land into Mineral Resource Zones according to the known or inferred mineral potential of that land without regard to land use or land ownership. This has not occurred for Glenn County, so areas of known mineral resources are limited to existing mining areas (Glenn County, 1997).

The project site is located along the Sacramento River near the town of Butte City in Glenn County. Historically, the primary mineral resource in Glenn County and in the surrounding area has been the extraction of construction-grade aggregate material. The two principle areas in the county for this type of gravel extraction were along the Sacramento River and Stony Creek, with scattered pockets in other areas (Glenn County, 1993). Currently, however, there are no permitted mining operations along the Sacramento River in Glenn County or in nearby Butte County (Glenn County, 1997). Aggregate production in Glenn County occurs predominately in the northeast portion of the county. No aggregate extraction occurs within the vicinity of the project site (Kohler, 2006).

There are several gas fields in Glenn County that contribute to the production of natural gas. The Malton-Black Butte Field is located near the border with Tehama County in eastern Glenn County. The Willows-Beehive Bend Field is located in southeastern Glenn County. These two fields have contributed to 80 percent of the total gas production in Glenn County. Neither of the fields is in close proximity to the project site. No oil or geothermal sources have been discovered in Glenn County (Glenn County, 1993).

Although gravel may occur in the vicinity of the project area as a result of the site's proximity to the Sacramento River, no significant gravel deposits or other known mineral resources have been identified within the boundaries of the project area. In addition, commercial exploitation of resources within units of the State Parks system is prohibited under Public Resources Code §5001.65.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Result in the loss of availability of a known mineral resource that is or would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Minerals is based on criteria X a,b, described in the environmental checklist above.

DISCUSSION

a,b) As stated in the Environmental Setting above, no significant mineral resources have been identified within the project boundaries. Therefore, the project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact.

XI. NOISE

Environmental Setting

The Gains parcel is located in a rural, sparsely populated area located along the west side of the Sacramento River at the Butte City State Route 162 Bridge in Glenn County, California. The Sacramento River National Wildlife Refuge (SRNWR) surrounds the north, west, and southern boundaries of the property.

Vehicle traffic and miscellaneous farming operations are the primary sources of noise for this State Park property. The primary source of vehicle traffic noise is State Route 162, a two-lane State Highway that crosses the Sacramento River just east of Butte City.

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain activities. Noise is commonly described in "Ldn," which expresses average sound level over a 24-hour period in decibels (dB), the standard measure of pressure exerted by sound. Ldn includes a 10 dB penalty for sounds between 10 P.M. and 7 A.M., when background noise is lower and people are most sensitive to noise. Because decibels are logarithmic units of measure, a change of 3 decibels is hardly noticeable, while a change of 5 decibels is quite noticeable and an increase of 10 decibels is perceived as a doubling of the noise level. A change from 50dB to 60dB increases the percentage of the population that is highly annoyed at the noise source by about 7 percent, while an increase from 50 dB to 70 dB increases the annoyed population by about 25 percent. Sounds as faint as 10 decibels are barely audible, while noise over 120 decibels can be painful or damaging to hearing.

Construction Equipment Noise at 50 Feet	
Equipment	Noise Level at 50 Feet
Earthmoving	
	dB
Front Loaders	75-79
Backhoes	75-85
Dozers	75-80
Tractors	75-80
Graders	75-85
Pavers	80-89
Trucks	75-82
Material handling	
Concrete Mixers	75-85
Crane	75-83
Concrete Crushers	75-85
Stationary	
Pumps	75-76
Generator	75-78
Compressors	75-81
Other	
Saws	75-78
Vibrators	75-76

Source: U.S. EPA 1971

Farming operations are common throughout the rural areas of Glen County. Typical types of farm equipment include Diesel Wheel Tractors (with Disc or with Furrow attachments), Weed Sprayers, and Seed Sprayers. An active farm within the Cordora Unit of the SRNWR is located adjacent to the southeastern portion of the project site. Although farming operations may generate noise levels in the 75-85 dB range, they generally do not last more that a few hours at a given location (Glen County General Plan website).

According to the 2006 Traffic Volumes on California State Highways, the annual average daily traffic along State Route 162 for this location is 2,400 vehicles. Traffic noise from State Route 162 is noticeable, but not generally intrusive (California Business, Transportation and Housing

Agency 2006).

Other noises heard at the proposed project site include birds, wind in the trees, motorized watercraft, and noises associated with nearby recreational activities (hunting, fishing, wildlife observation, photography, interpretation, and environmental education) on the adjacent SRNWR lands.

There are two Public General Aviation Airports located within Glenn County, Orland Haigh Field Airport and Willows Glenn County Airport. Both airports are more than 10 miles from the project site (Google Maps website).

The Glenn County General Plan provides standards for exterior noise levels. For non-transportation noise sources, such as this project, the daytime (7 a.m. to 10 p.m.) noise level standard is 50dB with an exemption for: "Noise sources associated with construction, provided such activities do not take place before seven a.m. or after seven p.m. on any day except Saturday or Sunday, or before eight a.m. or after seven p.m. on Saturday or Sunday." The nighttime standard is 45dB.

Project construction is anticipated to use equipment with noise levels similar to those listed in the above Table.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Be 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? If so, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Noise is

based on criteria VI a-f, described in the environmental checklist above.

DISCUSSION

- a) As noted in the Environmental Setting section above, for non-transportation noise sources, such as this project, the County daytime (7 a.m. to 10 p.m.) noise level standard is 50dB with an exemption for: “Noise sources associated with construction, provided such activities do not take place before seven a.m. or after seven p.m. on any day except Saturday or Sunday, or before eight a.m. or after seven p.m. on Saturday or Sunday.” Integration of Noise Measure 1 below into construction plans would reduce temporary increased noise impact to a less than significant level.

MINIMIZATION MEASURE NOISE 1
<ul style="list-style-type: none">▪ Construction activities will generally be limited to the daylight hours Monday – Friday from 7:00 a.m. to 7:00 p.m.; however, weekend work could be implemented to accelerate construction or address emergency or unforeseen circumstances. If weekend work is necessary, no work will occur on Saturday or Sunday before 8:00 a.m. or after 7:00 p.m.▪ Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction will utilize the best available noise control techniques (e.g. engine enclosures, acoustically-attenuating shields, or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

- b) Construction activity would not involve the use of explosives, pile driving, or other intensive construction techniques that could generate significant ground vibration or noise. Minor vibration immediately adjacent to backhoes and heavy equipment would only be generated on a short-term basis. Therefore, ground-borne vibration or noise generated by the project would have a less than significant impact.
- c) Once the proposed project is completed, all related construction noise would disappear. Nothing within the scope of the proposed project would result in a substantial permanent increase in ambient noise levels. Slight increases in ambient noise could result from increased visitation, but these are not anticipated to be substantial. Therefore, less than significant impact.
- d) See Discussion a) and c) above. Less than significant impact.
- e, f) This project is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private air strip. No impact.

XII. POPULATION AND HOUSING

Environmental Setting

The immediate public use parcel is located within the floodplain on the west side of the Sacramento River in Glenn County. Currently, the Gaines parcel contains an existing walnut orchard, no building structures and easy access from State Route 162. The surrounding land is owned by the U.S. Fish and Wildlife Service (USFWS) with varied uses including hunting (August through May), fishing, wildlife observation, photography, interpretation, and environmental education (USFWS 2004). The closest incorporated cities are Willows (12.5 miles), Colusa (17.5 miles), and Chico (21 miles) (Google Pedometer 2008). The closest unincorporated towns are Butte City (0.5 miles), Codora (1 mile), and Princeton (4 miles) (Google Pedometer 2008).

The population for Glenn County was predicted to reach 30,400 people by 2005 in the Glenn County Profile 1991 (Glenn County 1992). The future annual average population increase was predicted as 1.35% (Glenn County 1993). If that is projected to 2010, the population would reach 38,963 people. As a rural county, the population is not centered around cities; instead it is distributed throughout unincorporated areas (Glenn County 1993). The closest unincorporated area is Butte City.

There is no housing within the boundaries of this parcel nor are there plans to build residential housing within the 6.5 acre plot. The public access parcel would become a recreational resource utilized by both local residents and out-of-town visitors. No business or residential opportunities are offered within the boundaries.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Population and Housing is based on criteria **XII** a-c, described in the environmental checklist above.

DISCUSSION

a-c) The proposed project would convert an existing orchard to a recreational facility for visitor use. No substantial population growth is expected within the area since the project would not have a housing component and all road extensions and trenching for electrical and water would take place within the confines of the parcel boundary. Since there are no existing structures on the parcel, work would neither modify nor displace any existing housing or residents, either temporarily or permanently. Because of its small scale, any population growth that may be attributed to this project would be considered insignificant. No impact.

XIII. PUBLIC SERVICES

Environmental Setting

The recently acquired Gaines parcel is located along the west side of the Sacramento River at the Butte City State Route 162 Bridge in Glenn County, California. The Sacramento River National Wildlife Refuge (SRNWR) surrounds the north, west, and southern boundaries of the property.

The Willows Fire District, located in the City of Willows, provides dispatching for the Willows rural area including the Butte City area. The California Department of Forestry and Fire also provides seasonal protection in the rural areas of Glen County (Glen County General Plan website).

The Glen County Sheriff located at 543 West Oak Street in Willows, is responsible for the law enforcement services in the unincorporated areas of the county. The Sheriff administers the County Jail and patrols waterways to protect residents and property. The California Highway Patrol polices State Route 162 and all unincorporated county roadways (Glen County Sheriff website). In addition, State Park Rangers are POST certified Law Enforcement Officers and are responsible for providing security at the park.

Glenn County operates two Public General Aviation Airports, Orland Haigh Field Airport and Willows Glenn County Airport. Both airports are more than 10 miles from the project site.

The closest school to the project site is Princeton Elementary School, located at 428 Norman Road, in Princeton, approximately 4-5 miles away (Google Maps).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Public Services is based on criteria **XIII a**, described in the environmental checklist above.

DISCUSSION

- a) The proposed project would provide temporary immediate public access facilities to the Gaines Parcel. The public already has access to the property from the adjacent SRNWR. There may be increased visitation to the property as a result of the new day-use facilities, leading to a slight increase in the need for public safety services.

Fire Protection: Use of construction equipment around flammable annual vegetation presents an increased fire risk that could result in additional demands on CDF and local fire response teams. Any impact on services would be temporary. The Parcel currently experiences a small visitor use from adjacent lands; with the installation of public facilities, visitation is expected to increase. However, the increase is expected to be slight and all visitors would be required to adhere to all regulations in respect to fire use and timed prohibition. Less than significant.

Police Protection: Since State Park Rangers would patrol the property, the proposed project is not expected to result in any need for increased police services. No impact.

Parks and Other Public Facilities: There would be no impacts to schools, other parks, or other public facilities, as recreational users typically live locally or spend a limited amount of time visiting the area. No impact.

XIV. RECREATION

Environmental Setting

The recently acquired Gaines Parcel is located along the west side of the Sacramento River at the Butte City State Route 162 Bridge in Glenn County, California. The Sacramento River National Wildlife Refuge (SRNWR) surrounds the north, west, and southern boundaries of the property. California State Parks acquired the property to increase public access opportunities to the Sacramento River for bank fishing and picnicking, and to restore and enhance riparian habitat by replacing four acres of orchard crops along the river with native vegetation.

The Sacramento River and adjoining public lands provides for a variety of recreational opportunities. The adjacent Sul Norte unit of the SRNWR is presently open to hunting (Aug-May), fishing, wildlife observation, photography, interpretation and environmental education. Camping is also allowed on the gravel bars. The SRNWR Comprehensive Conservation Plan (2005) proposes to also open the adjacent Codora unit (currently closed to all public use) to fishing, wildlife observation, photography, interpretation, and environmental education. The proposed recreation improvements will provide for parking, restrooms, and picnic sites adjacent to the river.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to recreation is based on criteria **XIV** a-b, described in the environmental checklist above.

DISCUSSION

a) This project would complement existing and future recreational use by providing river access and additional recreational opportunities along the Sacramento River. The proposed project would provide minimal recreational facilities, therefore it would not increase the use of other existing recreation facilities to a level that would result in physical degradation of those facilities, nor would it necessitate the construction of new facilities outside the Park.

However, hunting, an existing allowed use at adjacent property, could impose a safety risk to Gaines Parcel users at specific times of year; implementation of the following minimization measure will reduce this risk to a less than significant level.

Minimization Measure Recreation 1 – Informational Signs
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Prior to project completion, DPR or its contractor will install informational signs informing the public that hunting occurs on adjacent lands including the time of year hunting is allowed.

- b) The proposed project involves the construction of temporary recreation facilities, including picnic sites, parking, and restrooms as well as the removal of an existing walnut orchard and replanting with native plants, which would improve habitat for wildlife. The new facilities would be sited and designed in a manner that would not result in permanent adverse physical effects on the environment. No impact.

XV. TRANSPORTATION/TRAFFIC

Environmental Setting

The proposed Immediate Public Use project for the Gaines parcel occurs along the west side of the Sacramento River in the southeastern portion of Glenn County, California. To reach the Gaines parcel project site, travel east from Willows along State Route 162 approximately 14 miles to the junction of abandoned County Road 61, turn north onto abandoned County Road 61, and travel approximately $\frac{3}{4}$ mile (Google Pedometer 2008). At the point where the road bears to the left, a gravel entry road (heading east) would be installed as part of the proposed project. The road would lead into a visitor parking area that would also be constructed as part of the proposed project.

Roads

State Route 162 serves as the southern boundary of the Gaines parcel. The road originally began at U.S. Route 101 and traversed Mendocino and Glenn Counties to Foreman Creek Road at Brush Creek; however now there is a 70 mile gap (34 miles in Mendocino County and 36 miles in Glenn County) that is considered a seasonal road owned and maintained by the two counties (Glenn County 1993). From the eastern city limit of Willows to the Butte County line, traffic ranges from 1650 to 2850 vehicles per day, with 12 percent as truck traffic (Glenn County 1993). California Department of Transportation (Caltrans) lists the section of State Route 162 that borders the Gaines parcel as part of the California Legal Truck Network permitting passage to tractor-trailer trucks 65 feet long and double tractor-trailer trucks 75 feet long (Caltrans 2007). State Route 162 is classified as an "A" or "B" Level of Service (LOS) within the vicinity of the Gaines Parcel (Glenn County 1993). The level of service thresholds within Glenn County are "A" – 0-2300 daily vehicles and "B" – 2300-4600 daily vehicles (Glenn County 1993).

County roads within Glenn County serve rural transportation needs including: logging, recreation, residential, and farm-to-market trips (Glenn County 1993). Within Glenn County east-west roads are assigned a number between 1 and 100, the county road that provides access to the Gaines parcel is number 61. County roads are classified by the number of vehicles that utilize them on a daily basis: Local Roads (0-300 vehicles daily); Minor Collectors (300-800 vehicles daily); and Major Collectors (800 or more vehicles daily) (Glenn County 1993). Although there are no daily use records, the county road that serves the Gaines parcel would probably be classified as a local road.

Air Facilities

There are two airports and numerous private landing strips within Glenn County (GAN 2008). The Gaines parcel is ten miles away from any of the air facilities operating within the County (GAN 2008).

Other Facilities

Currently, there are no County Public Transit Services available for the movement of persons from one place to another. There are also no specific bicycle lanes in the county, forcing cyclists to ride in the automobile lanes on County roads (Glenn County 1993).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Transportation and Traffic is based on criteria **XV** a-g, described in the environmental checklist above.

DISCUSSION

a,b) The Department of Parks and Recreation proposes to rehabilitate the Gaines parcel for immediate public use. During construction, delivery of construction materials and equipment could potentially create temporary delays along State Route 162. The addition of an estimated 6-8 vehicles (crew pick-ups, delivery trucks, and equipment haulers) making 2-3 trips during daylight hours would not cause a substantial increase in traffic volume or result in additional congestion. In addition, construction equipment would remain on-site for the duration of the project. This construction impact would be less than significant.

The immediate public use of the parcel for visitors would increase the traffic volume, in relation to the existing traffic and congestion at the intersection of State Route 162 and County Road 61. The Level of Service designation for this section of State Route 162 is "B" permitting up to 4600 vehicles daily. The current use is 2850 vehicles daily permitting

over another 1500 vehicles daily along the route. There is no data for the level of use of the County Road 61; however, it is unlikely that daily use would exceed 300 vehicles daily as there would only be 24 parking spaces. Opening the Gaines parcel for recreational use would not exceed, individually or cumulatively, the LOS standards for these roadways; therefore there would be a less than significant impact.

- c) The airports and private landing strips within Glenn County are at least ten miles from the project site. Therefore, the project site is not located in an airport use plan, within two miles of a public airport, in the vicinity of a private air strip, and does not serve as a normal reporting point for air traffic in the area. No part of the proposed project would affect or change existing air traffic patterns. No impact.
- d) No aspect of this project contains design features or incompatible uses that would substantially increase hazards to authorized users. No impact.
- e) All construction activities associated with the proposed project would occur within the Gaines parcel; work would not restrict access to, or block any road outside, the immediate construction area. During construction, access requirements for emergency vehicles and access to the parcel would be maintained at all times. No impact.
- f) Currently, this parcel is not open for public use and there is no parking; however, with the implementation of this project, the parcel would become open for public use and a parking area would be installed to meet public demand. No impact.
- g) There are no policies, plans, or programs supporting alternative transportation that apply to this project. No Impact.

XVI. UTILITIES AND SERVICE SYSTEMS

Environmental Setting

The Gaines Parcel project site is located along the west side of the Sacramento River in eastern Glenn County. It is about 11 miles southeast of the town of Willows and accessible from State Route 162.

Potable water for the proposed facilities would be supplied by a well constructed near the entrance to the project site. Wastewater generated at the two proposed portable toilets would be collected in watertight concrete vault holding tanks and disposed of at approved offsite locations or concrete septic tanks connected to leach systems. Solid waste generated by park visitors would be hauled away and disposed of at an approved offsite location.

Electric service to the project area is provided by Pacific Gas and Electric. A new power pole located near the entrance to the project site would provide the power to operate the well pump via the installation of an electric line connecting to the well site.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Would the construction of these facilities cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Would the construction of these facilities cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations as they relate to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Utilities and Service Systems is based on criteria **XVI** a-d, described in the environmental checklist above.

DISCUSSION

- a, b) Wastewater generated at the proposed potable toilets would be collected in holding tanks and disposed of at offsite locations or concrete septic tanks connected to leach systems. A small chlorinator with an injector and 5-10 gallon holding tank would be installed to treat the water produced by the new well. This structure would have a minimal footprint on the landscape; therefore, a less than significant impact.
- c) The project would not require the construction or expansion of storm water drainage facilities. No impact.
- d) The capacity of the proposed well for potable water produced would exceed any future demands; therefore, a less than significant impact (Teague 2008).
- e) There are no wastewater treatment components to the project. Wastewater generated at the proposed portable toilets would be collected in holding tanks and transported for disposal at approved offsite locations. No impact.
- f) The proposed facilities are anticipated to increase visitation to the project area and the need for solid waste disposal. However, because of the limited amount of facilities to be provided, this increase would be comparatively minor; therefore a less than significant impact.
- g) The project would comply with all applicable statutes and regulations relating to solid waste. No impact.

Chapter 4 Mandatory Findings of Significance

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 effects of past projects, other current projects, and probably future projects?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) The proposed project was evaluated for potential significant adverse impacts to the natural environment and its plant and animal communities. The proposed project site could support certain special status plants and animals. DPR determined that the proposed project could have the potential to disturb Valley Elderberry Longhorn Beetle habitat; Swainson’s hawk, osprey, and other nesting raptors; bank swallows; migratory bird species; American badger; sensitive bat species; and Ferris’ milk vetch. However, full integration of the minimization and mitigation measures incorporated into this project would reduce impacts, both individually and cumulatively, to a less than significant level.
- b) The proposed project was evaluated for the potential significant adverse impacts to the cultural resources present at the Gaines Parcel and the immediate area. DPR has determined that activities associated with the proposed project could have the potential to significantly disturb historic or archaeological resources. The proposed immediate public use project would involve project-related activity in the immediate vicinity of a potential cultural resource. However, full integration of the minimization and mitigation measures included in this project would reduce those impacts, bit individually and cumulatively, to a less than significant level.

- c) DPR often has smaller maintenance programs and rehabilitation projects planned for a park unit. However, no other projects, other than maintenance, are planned for the proposed project area in the foreseeable future. Additionally, impacts for other environmental issues addressed in this evaluation do not overlap in a manner to result in cumulative impacts that are greater than the sum of the parts. Less than significant.
- d) Most project-related environmental affects have been determined to pose a less than significant impact on humans. Although the project site is located in a rural area of Glenn County, possible impacts from construction emissions (Air Quality); construction accidents, seismic events, and fire (Hazards and hazardous Materials); recreation, and noise, though temporary in nature, have the potential to result in significant adverse effects on humans. These potentially significant adverse impacts would be reduced to a less than significant level if all minimization measures are fully integrated into the project and construction documents.

Chapter 5

Summary of Minimization and Mitigation Measures

The following minimization and mitigation measures would be implemented by DPR as part of the Immediate Public Use project on the Gaines Parcel.

Air Quality

Minimization Measure Air 1

- All construction areas (dirt/gravel roads and surrounding dirt/gravel area) will be watered at least twice daily during dry, dusty conditions.
- All trucks hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard.
- All construction-related equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.
- Earth or other material that has been transported onto paved roadways by trucks, construction equipment, erosion, or other project-related activity will be promptly removed.

Biological Resources

Mitigation Measure Bio 1 – Valley Elderberry Longhorn Beetle Avoidance

- No work will occur between March 15 and June 30 to avoid the adult valley elderberry longhorn beetle flight period.
- No elderberry plants will be cut, pruned, pulled back, removed, or damaged in any way.
- Prior to construction, a DPR-qualified Environmental Scientist will fence and flag all elderberry plants for avoidance to ensure construction crews avoid these plants.
- Best Management Practices to avoid creation of dust will be employed during all construction activities.

Mitigation Measure Bio 2 - Swainson's Hawk, Osprey, and Other Nesting Raptors Avoidance

- No work will occur between March 15 and June 30 to avoid the core potential nesting season.
- If work is required during the beginning or end of the nesting season (February 1 to March 14, or July 1 to August 31), a DPR-qualified environmental scientist will conduct a focused survey for raptor nests to identify active nests within 500 feet of the project area. The survey will be conducted no more than 30 days prior to the beginning of construction.
- If nesting raptors are found within 500 feet of the project area, no construction will occur during the active nesting season of February 1 to August 31, or until the young have fledged as determined by a DPR-qualified environmental scientist.

Mitigation Measure Bio 3 – Bank Swallow Avoidance

- No work will occur between March 15 and June 30 to avoid the core of the potential nesting season.

- If construction-related activities are scheduled to begin during the nesting season between July 1 and August 31, a DPR-qualified environmental scientist will conduct nesting bird species surveys. The survey will be conducted no more than 30 days prior to the beginning of construction to identify active nests within 250 feet of the project area.
- No active nesting colony will be disturbed until all eggs have hatched and young birds have fledged. If active nests are found, no construction will occur within 250 feet of the nests during the active nesting season of February 1 to August 31, or until the young have fledged as determined by a DPR-qualified Environmental Scientist.

Mitigation Measure Bio 4 – Migratory Bird Species Avoidance

- No work will occur between March 15 and June 30 to avoid the core of the potential nesting season.
- If construction-related activities are scheduled to begin between July 1 and August 1, a DPR-qualified Environmental Scientist will conduct a survey for nesting bird species within three days prior to commencement of construction at each site to ensure that no nesting birds will be impacted by the project. The survey area will include the project site and a 100-foot zone.
- If active nests are located, a 100-foot buffer will be placed around each active nest. No construction-related activities will occur within this buffer area until young have fledged and there is no evidence of a second attempt at nesting (as determined by a DPR-qualified Environmental Scientist).
- An exclusion zone will be established around the swallow nest colony location under the State Route 162 causeway bridge so that no permanent developments are placed in close proximity to this location.

Mitigation Measure Bio 5 – American Badger Avoidance

- A DPR-qualified environmental Scientist will conduct pre-construction survey for American badger burrows.
- If badger burrows are present, they will be mapped and protected from project-related impacts during the nesting season of June 1 through October 15.

Mitigation Measure Bio 6 – Sensitive Bat Species Avoidance

- No work will occur between March 15 and June 30 to avoid the core bat breeding period.
- To the extent possible, all tree removal will occur between October 1 and January 31 when tree roosting bats are not expected to occur in the project area.
- If tree removal is required between February and March 14 or between July 1 and September 31, a DPR-qualified Environmental Scientist will survey the trees immediately prior to removal.
- If bats are located, tree removal will not occur until the bats vacate the tree of their own accord.
- An exclusion zone will be established around the bat roosting location under the State Route 162 causeway bridge so that no permanent developments are placed in close proximity to this sensitive location.

Mitigation Measure Bio 7 – Ferris’ Milk Vetch Avoidance

- A DPR-qualified Environmental Scientist will conduct a focused survey for Ferris’ milk-vetch throughout the project impact area. The survey will be conducted prior to project implementation and when the plants are in a phonological stage conducive to positive identification, usually during the blooming period.
- If Ferris’ milk vetch is found within the project area during surveys, the populations will be fenced off during construction and completely avoided, if at all possible. If complete avoidance of sensitive plant species is not possible, DPR will notify the Department of Fish and Game prior to the start of construction regarding appropriate mitigation for the impacts.

Cultural Resources

Minimization Measure Historic 1 – Site Protection

- Prior to the start of construction, a DPR-qualified Cultural Resource Specialist will consult with the contractor and project manager to identify all resources that must be protected.
- Prior to the start of construction, a DPR-qualified Cultural Resource Specialist will delineate The Butte City Ferry Road Bridge with protective orange construction fencing.
- Prior to any earthmoving activities, a DPR-qualified archaeologist will approve all subsurface work, including the operation of heavy equipment within ten feet of the ESA.

Minimization Measure Archaeology 1 – Previously Undocumented Resources

- Prior to the start of construction, a locally knowledgeable geo-archaeologist or geomorphologist will review any ground disturbing activities that disturb soil to a depth of > 60 cm (24”).
- If the specialist determines that buried archaeological deposits could be present, prior to the start of construction, a DPR-qualified Cultural Resource Specialist will prepare a research design, including appropriate trenching and/or pre-construction excavations (if necessary).
- In the event that previously undocumented cultural resources (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash) are encountered during project construction by anyone, the state representative will temporarily halt at that specific location and direct contractors to other project-related tasks. A DPR-qualified archaeologist will record and evaluate the find and work with state representative to implement avoidance, preservation, or recovery measures as appropriate prior to any work resuming at that specific location.
- If the DPR-qualified archaeologist determines that the find(s) are significant, a qualified historian, archaeologist, and/or Native American representative (if appropriate) will monitor all subsurface work including trenching, grading, and excavations in that area.

Minimization Measure Archaeology 2 – Human Remains

- In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized representative) will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative). If a Native American monitor is on-site at the time of the discovery, the monitor will be responsible for notifying the appropriate Native American authorities.
- The local County Coroner will make the determination of whether the human bone is of Native American origin.
- If the Coroner determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the site prior to determination.
- If it is determined the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives will occur as necessary to define additional site mitigation or future restrictions.

Geology and Soils

See Hydrology Minimization Measure 1 – Erosion Control

Hazards and Hazardous Materials

Minimization Measure Hazmat 1

- Prior to the start of construction, the contractor will clean all equipment before entering the project site. Equipment will be cleaned and repaired (other than emergency repairs) outside the project site boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.
- Prior to the start of construction, the contractor will inspect all equipment for leaks and regularly inspect thereafter until equipment is removed from the project site.
- Prior to the start the start of construction, DPR will prepare a Spill Prevention and Response Plan (SPRP) as part of the Storm Water Pollution Prevention Plan (SWPPP) to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan will include (but not be limited to):
 - a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment will occur

- a list of items required in a spill kit on-site that will be maintained throughout the life of the project
- procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the restoration process
- identification of lawfully permitted or authorized disposal destinations outside of the project site

Minimization Measure Hazmat 2 – Fire Safety

- Prior to the start of construction, the Project Contractor will develop a DPR-approved Fire Safety Plan. The plan will include the emergency calling procedures for both the Princeton Fire Department and the Willows Fire Department.
- Spark arrestors or turbo chargers (which eliminate sparks in exhaust) and fire extinguishers will be required for all heavy equipment.
- Construction crews will be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment will be parked over mineral soil, asphalt, or concrete to reduce the chance of fire.

Hydrology and Water Quality

Minimization Measure Hydro 1 – Erosion Control BMPs

- Prior to the start of construction, Contractor will prepare a Storm Water Pollution Prevention Plan (SWPPP) for DPR approval that identifies the Best Management Practices (BMPs) to be used in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, and repaving.
- If construction activities extend into the rainy season (October 15 to April 15) or if an un-seasonal storm is anticipated, the contractor will properly winterize the site by covering (tarping) any stockpiled materials or soils and by constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and graded areas.

Minimization Measure Hydro 2 – Preventing Waste Discharge Entering the Watercourse

- DPR or its contractor will install watertight concrete vaults or septic tanks servicing the toilet facilities with the capability of being sealed closed prior to and during periods of potential flooding.

Minimization Measure Hydro 3 – Parcel Closure During Flood Events

- DPR staff will close the Gaines Parcel when the Sacramento River rises out of the channel and onto the parcel. The parcel will remain closed during inundated periods. DPR staff will re-open the parcel when there are no safety risks to visitors

Noise

Minimization Measure Noise 1

- Construction activities will generally be limited to the daylight hours Monday – Friday from 7:00 a.m. to 7:00 p.m.; however, weekend work could be implemented to

accelerate construction or address emergency or unforeseen circumstances. If weekend work is necessary, no work will occur on Saturday or Sunday before 8:00 a.m. or after 7:00 p.m.

- Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction will utilize the best available noise control techniques (e.g. engine enclosures, acoustically-attenuating shields, or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

Recreation

Minimization Measure Recreation 1 – Informational Signs

- Prior to project completion, DPR or its contractor will install informational signs informing the public that hunting occurs on adjacent lands including the time of year hunting is allowed.

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APPENDIX A
MAPS

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APPENDIX B
ACRONYMS

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Appendix B Acronyms

AB – Assembly Bill
AD – After Death
ADA - Americans with Disabilities Act
APCD – Air Pollution Control District
APE - Area of Potential Effect
APEFZ - Alquist-Priolo Earthquake Fault Zoning
ARB/CARB - California Air Resources Board
AQMD – Air Quality Management District
BMP - Best Management Practices
BP – Before Present
CA - California
Cal Trans - California Department of Transportation
CARB – California Air Resources Board
CBC/UBC - California Uniform Building Code
CCR - California Code of Regulations
CDF - California Department of Forestry and Fire
CDFG - California Department of Fish and Game
CDTSC – California Department of Toxic Substance Control
CEQA - California Environmental Quality Act
CGS - California Geological Survey
cm - centimeter
cmbs – centimeters below surface
CNDDDB - California Natural Diversity Database (Calif. Dept. of Fish and Game)
CNPS - California Native Plant Society
CRHP - California Register of Historic Places
CSQA – California Stormwater Quality Association
CVRWQCB – Central Valley Regional Water Quality Control board
dB – decibels
DOF – California Department of Finance
DPR - California Department of Parks and Recreation
DWR – Department of Water Resources
EIR - Environmental Impact Report
ES - Environmental Setting
ESA – Environmentally Sensitive Area
FEMA - Federal Emergency Management Agency
FMMP - Farmland Mapping and Monitoring Program
GHG – greenhouse gas
GP - General Plan
GVGP – Great Valley Geomorphic Province
IS/MND - Initial Study / Mitigated Negative Declaration
Ldn - day-night average levels
LOS - level of service
MSL - mean sea level

MND - Mitigated Negative Declaration
mph - miles per hour
MRZ – Mineral resources Zone
NAHC - Native American Heritage Commission
NOx - nitrogen oxide
NPDES - National Pollutant Discharge Elimination System
NRHP - National Register of Historic Places
NSC - Northern Service Center
NSVAB – Northern Sacramento Valley Air Basin
PM₁₀ - particulate matter (particles with an aerodynamic diameter of 10 Microns or less)
PM_{2.5} - particulate matter (particles with an aerodynamic diameter of 2.5 Microns or less)
PRC - Public Resources Code
RWQCB - Regional Water Quality Control Board
ROG - reactive organic gases
SAFZ - San Andreas Fault Zone
SMP - Storm Water Management Plan
SPRP – Spill Prevention Response Plan
SRNWR – Sacramento River National Wildlife Refuge
SWPPP - Storm Water Pollution Prevention Plan
SWRCB - State Water Resource Control Board
U.S. - United States
USACOE - United States Army Corps of Engineers
USDA – NRCS – United States Department of Agriculture – Natural Resource Conservation Service
USDA – SCS – United States Department of Agriculture – Soil Conservation Service
USEPA - United States Environmental Protection Agency
USFWS - United States Fish and Wildlife Service
USGS - United States Geological Service
VRP – Visibility Reducing Particle