Addendum and Final
(with edits incorporated)

INITIAL STUDY
NEGATIVE DECLARATION

Bidwell-Sacramento River State Park
Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration Project

Photo by Roy W. Martin

February 2010

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

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☐ County Clerk

County of: _____

Address: _____

From:

Public Agency: Department of Parks and Recreation

Address: One Capitol Mall, Suite 410, Sacramento, 95814

Contact: Stephanie Coleman

Phone: 916-445-8779

Lead Agency (if different from above):

Address: _____

Contact: _____

Phone: _____

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2009102054

Project Title: Sacramento River Acess at Pine Creek Facilities Development and Habitat Restoration Project

Project Location (include county): Bidwell Sacramento State Park , Butte County

Project Description:

Provide day-use facilities adjacent to the Sacramento River at the confluence of Pine Creek in Bidwell-Sacramento River State Park. Brief summary: Construct approxy 7,100 feet of trail around the park; • Create a 2-acre "play meadow"; • Create picnic sites with tables and barbeques; restore native habitat; enhance existing raparian habitat;• Construct a restroom, a new potable well and septic waste water system or vault toilet; install fencing, signage, interpretive panels, recycle and trash containers.

This is to advise that the Department of Parks and Recreation ☒ Lead Agency or ☐ Responsible Agency has approved the above described project on Februray 2, 2010 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☐ were ☒ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☐ was ☒ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: California Department of Parks and Recreation, located at One Capitol Mall, Suite 410, Sacramento CA 95814

Signature (Public Agency) [signature] Title DIST. SUPT.

Date 2/2/2010 Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

RECEIVED
FEB - 3 2010
STATE CLEARING HOUSE

Revised 2005

Negative Declaration

Project: Facilities Development and Habitat Restoration Project

Lead Agency: California Department of Parks and Recreation (DPR)

Availability of Documents:
The initial Study for this Negative Declaration was made available throughout the 30-day public review period at the reference desk of the Chico Branch library. It was also available at the public information desks of the DPR's Northern Service Center and the Northern Buttes District Headquarters offices. The Final Negative Declaration and all supporting materials will be available, by request, at DPR's Northern Service Center and the Northern Buttes District Headquarters office.

Project Description:
The Department of Parks and Recreation proposes to provide day-use facilities adjacent to the Sacramento River on a 41-acre parcel known as the Brayton parcel at the confluence of Pine Creek in Bidwell-Sacramento River State Park. The following is a summary of the proposed work:

- Construct approximately 6,500 feet of Americans with Disabilities Act (ADA) compliant trail to provide access from the parking area to the picnic sites and around the park;
- Create a two acre "play meadow" planted with irrigated native grasses and sedges;
- Create two Americans with Disabilities Act (ADA) compliant group picnic sites;
- Create seven family picnic sites four of which will be ADA compliant, each to include a concrete pad, one picnic table and one barbecue;
- Create two ADA compliant group picnic sites including a large concrete pad, four picnic tables and one large barbecue;
- Construct a two unit ADA compliant restroom with associated flush utilities and drinking fountain connected to a new potable well and septic waste water system or vault toilet;
- Place two picnic tables along the trail in the southwestern portion of the restoration area;
- Install a gravel parking area designed for 50 cars with 2 ADA compliant concrete parking stalls;
- Install approximately 600 feet of 6 foot wide concrete walking path for ADA connection from parking and restroom facilities to recreation areas;
- Create an approximately 1.3 acre overflow parking area planted with native grasses and trees;
- Install two concrete benches along the trails;
- Restore approximately 25 acres of walnut orchard to native habitat;
- Enhance approximately 7 acres of existing riparian habitat;
- Install approximately 2,800 feet of boundary fencing, signage, interpretive panels, and recycle and trash containers; and,
- Create a Park Host site near the restroom including utility connections.

Findings:
An Initial Study has been prepared to assess the proposed project's potential impacts on the environment and the significance of those impacts and is incorporated in the Draft ND. Based on this initial Study, it has been determined that the proposed project would not have any significant impacts on the environment, once all proposed project requirement have been implemented. The conclusion is supported by the following findings:

- There is no potential for adverse impacts on Agricultural Resources, Land Use and Planning, Mineral Resources and Population and Housing associated with the proposed project.
- Potential adverse impacts resulting from the proposed project were found to be less than significant in the following areas, Aesthetics, Air Quality and Climate Change, Biological Resources, Cultural Resources, Geology and Soils, hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Recreation, Transportation, and Utilities and Service systems.

Summary of Project Requirements
The following Project Requirements would be implemented by DPR as part of the Facilities Development and Habitat Restoration Project at Bidwell-Sacramento River State Park.

Air Quality

Standard Project Requirement Air 1 – Dust Control

- 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 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

Project Specific Requirement Bio 1 Valley Elderberry Longhorn Beetle Avoidance
- No elderberry plants will be cut, pruned, pulled back, removed, or damaged in any way.
- Prior to construction activities, a DPR-approved biologist will fence and flag all elderberry plants to ensure construction crews avoid these plants.

Project Specific Requirement Bio 2 - Swainson's Hawk, Osprey, and Other Nesting Raptors Avoidance

- If working between April 1 to July 1 surveys will be conducted for nesting raptors within 500 feet of the project area. If an active nesting colony is observed within this area, a buffer zone will be installed around the colony in which only DPR-approved biologist construction activities will occur until all eggs have hatched and the young birds have fledged, as determined by a DPR-approved biologist.

Project Specific Requirement Bio 3 - Migratory Bird Species Avoidance

- If working between May 15 to July 7 of any year surveys will be conducted for non-special-status nesting migratory birds within 100 feet of the project area. If an active nest is observed within this area, a buffer zone will be installed around the colony in which only DPR – Approved Biologist construction activities will occur until all eggs have hatched, young birds have fledged, and there is no evidence of a second attempt at nesting, as determined by a DPR-approved biologist.

Project Specific Requirement Bio 4 - Sensitive Bat Species Avoidance

- No work will occur between March 15 and June 30 to avoid the core bat-breeding period unless approved by a DPR-Approved Biologist to avoid impacts.

- All tree removal will occur between July 1 and March 15 when tree roosting bats are not expected to occur in the project area.

Cultural Resources

Project Specific Requirement Arch 1 Environmentally Sensitive Areas

- All project activities within areas determined to be culturally sensitive will require consultation with a DPR qualified archaeologist.

Standard Project Requirement Arch 2 Cultural Resources

- In the event that previously undocumented cultural resources (including but not limited to dark soil containing shellfish, bone, flaked stone, ground stone, or deposits of historic trash) are encountered during project construction by anyone, the state representative will temporarily halt work 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.
- In the event that significant cultural resources are found in the project location, a qualified historian and/or archaeologist will monitor all subsurface work including trenching, grading, and excavations in that area from that point forward to ensure avoidance of significant cultural resources.
- In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager 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 DRP 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.

Standard Project Requirement Arch 3 – Continued Native American Consultation

- Project design and activities will be discussed with the Mechoopda. These activities include but are not limited to revegetation, trail design, vegetation for traditional plant collection, gathering areas for special events, and site monitoring.

Geology and Soils

Standard Project Requirement Geo-1 - Erosion Control

- Prior to the start of construction, the Contractor will prepare a Storm water Pollution Prevention Plan (SWPPP). The SWPPP identifies 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 excavation, grading, stockpile management, and any other ground disturbing activities.

- Permanent BMPs for erosion control will consist of properly compacting disturbed areas and re-vegetation of appropriate disturbed soil areas with native species using seed collected locally, where possible or a sterile grass mixture. If local seed is not available, a weed-free native mixture shall be used. Final design plans will include permanent BMP measures to be incorporated into the project.

Hazards and Hazardous Materials

Standard Project Requirement Haz 1 – Spill Prevention

- Prior to the start of construction, the Contractor will inspect all equipment for leaks and inspect equipment daily thereafter until it is removed from the project site.

- Prior to the start of construction, the contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) for materials management, fueling, repair, and maintenance of vehicles and equipment, and spill prevention and control. The Contractor will maintain a spill kit on-site throughout the life of the project. The SWPPP will include a map that delineates construction staging areas and where refueling, lubrication, and maintenance of equipment may occur. Areas designated for refueling, lubrication, and maintenance of equipment shall be at least 50 feet from the Sacramento River or any tributaries. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of the Park during construction, the contractor would immediately notify the appropriate DPR staff (e.g., project manager, supervisor, or State Representative).

- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized destination.

Standard Project Requirement Haz- 2 Hazardous Substances Health and Safety Documents

- DPR will include, in any contract documents or in internal work plan documents, health and safety specifications on how to manage any potential hazardous incidents. The specifications will include methods for safe handling, collection, and proper disposal of any contaminated soil and refuse uncovered during the excavation and grading procedures. The specifications will discuss the proper personal protection during construction, the use of an exclusion zone if necessary to prevent exposure to the public, and the proper disposal procedures for any hazardous substances encountered.

Project Specific Requirement Haz 3 - Construction Fire Management

- A fire safety plan will be developed by the contractor and/or DPR and approved by DPR prior to the start of construction. This plan will include the emergency calling procedures.

- Spark arrestors or turbo-charging (which eliminates 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. The contractor will also be required to have fire extinguishers on site

Standard Project Requirement Haz 4- Fire Management

- The use of campfires and other potentially flammable objects or materials will be restricted. Park visitors will be provided with information on Park rules regarding fire safety.

Hydrology and Water Quality
Standard Project Requirement Hydro-1 – Water Quality Protection

- Implementation of **Geo-1** will provide Best Management Practices to control erosion and runoff during the project construction and for post-construction erosion control. The project will comply with all applicable water quality standards as specified in the CVRWQCB Basin Plan.

- Implementation of **Haz-1** will also prevent or reduce impacts to water quality from possible non-sediment pollutants, such as fuels and other vehicle fluids and construction materials that could be released during construction.

- The new septic system and leach field will be designed according to the requirements from Butte County Environmental Health. Restrooms will be designed to be shut down with waste fixtures and inlets sealed prior to flood events.
- Any new water supply well will be located at least 200 feet from the leach field and surface waters of the Sacramento River.

Standard Project Requirement Hydro-2 – Storm water Runoff Control

- Storm water runoff from the new entrance road, parking lot areas and building would be minimal due to the use of predominately gravel surfaces instead of impermeable pavement. To prevent any on or off site erosion and/or flooding the surface water runoff will be allowed to sheet flow or be directed into an engineered storm drain system that flow into a natural drainage course with necessary erosion control devices.

- Erosion and storm water runoff controls will be required during construction and permanent erosion controls and methods will be part of the project plan. Implementation of Project Requirement Hydro-1 will reduce impacts from siltation and from vehicle and equipment fluid spills, and construction materials.

Project Specific Requirement Hydro-3 – Flood Protection

- The planned facilities will be designed to minimize potential damage from flood events, to the extent feasible. This project including a completed Hydraulic Analysis report will be reviewed for approval by the Central Valley Flood Protection Board.

- The Park would be closed to the public during any anticipated flood event.

- The Park would also be evacuated in the event of a failure of the Shasta Dam.

Noise
Project Specific Requirement Noise 1

- Construction activities will generally be limited to the daylight hours Monday – Friday from 7:00 a.m. to 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
Standard Project Requirement Recreation 1 – Informational Signs

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

Minor punctuation, spelling and grammatical corrections that contribute to ease of understanding, but have no significant impact on the content, have not been noted. The following additions have been made to the Sacramento River Access at Pine Creek – Facilities Development and Habitat Restoration Project. Additions are underlined.

Chapter 3, Hazardous and Hazardous Materials, discussion Section, Bullet h), page 55 edited to read:

In addition, in parks where wildfire is a major concern, preventive management techniques are employed to reduce the threat of wildfire. These techniques include increased patrols, brush clearance, and closure of certain park areas during extreme fire conditions. During high fire risk conditions, no fires are allowed, during medium and low fire risk conditions; barbeques with charcoal briquettes are allowed, but must be contained in the grills. Park Staff and camphosts strictly enforce these rules. Weeds and brush are maintained in day use areas to greatly reduce the possibility of ignition. Staff at Pine Creek would employ similar management operations.

In the unlikely event that fire was to escape the grills in a developed day use area, it would very quickly be detected by other visitors, camphosts or park staff, reported and extinguished before it became a wildfire event. The day use area at Sacramento River Access at Pine Creek in Bidwell-Sacramento State Park is immediately adjacent to a County road allowing firefighting equipment access and is not directly adjacent to homes.

Vegetation thinning and controlled burns are also used as fire management techniques in appropriate locations or conditions. Controlled burns are guided by a burn plan that provides information on how and when controlled burns can proceed.

Moreover, state park visitors are not a likely source of wildfire. According to California Department of Forestry and Fire Protection data for statewide wildfires between 2000 and 2005, only 3% of wildfires were started by campfires, including illegal fires. 27% were started by equipment use, 10% by debris burning, 14% were undetermined, 13% were classified as miscellaneous, 14% were started by vehicles, 7% were started by arson, 5% by lightning, 2% each by smoking and playing with fire, and 3% each by powerline and campfire. Illegal campfires started the Altadena fire, the Griffith Park fire, and the 2007 fire at Lake Tahoe. A lost hunter hoping to signal for help started the state's most destructive fire, the Cedar Fire. Several other major fires, including the Witch Creek and Harris fires of October 2007 were started by downed power lines. Please also note that during public testimony at the February 29, 2008 State Park and Recreation Commission Hearing, National Park Service indicated that their studies for the Santa Monica Mountains showed that a wildfire had never been started in a public campground.

CDPR does not anticipate an increase in wildland fire due to this project and with the inclusion of Project Requirements Hazard 4-Fire Management there is a less then significant impact.

Chapter 3, Hydrology and Water Quality, Bullet a) and bullet f), page 60 and 61 edit to read:

As discussed in Utilities and Services Systems on page 79 of the Initial Study/Negative Study, wastewater would be treated onsite using a system designed to include devices that can be controlled to prevent the overflow or inundation of floodwater to the septic system, which includes an underground sealed concrete septic tank and rock. However, based on comments received the use of a vault toilet system could also be used. Use of either system, shall be designed to prevent the overflow or inundation of floodwater. This would be a less than significant impact to water quality.

DPR will follow all State water quality standards and waste discharge requirements during the construction of this project and will work with Butte County, the California Central Valley Flood Protection Board, and the California Regional Water Quality Control Board on the permits needed for this project. With these conditions, there will be a less than significant impact to water quality.

Chapter 3, Utilities and Service Systems, Discussion Section, Bullet a), Bullet b), and Bullet e), page 80 and 81 edit to read:

a) The proposed project would install a new restroom and septic system/leach field or vault toilet system. The project site is not served by a wastewater treatment facility; wastewater would be treated on-site using the new septic system. Bidwell-Sacramento River State Park is within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB) and is subject to the requirements of the General Construction Storm Water Permit (Order No. 99-08-DWQ) (CCRWQCB 2006). The permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared prior to construction activities. The SWPPP will incorporate BMP's to ensure the protection of storm water runoff from erosion and sedimentation. All aspects of the project would be in compliance with CCRWQCB regulations and standards. No Impact.

b) As noted in the Environmental Setting there are two wells on the parcel. One is an agricultural well and the other is a well that has been used for potable water. Drinking water for the restroom facility will be provided from a new potable well that will be installed near the restroom, but outside a 200 foot radius of the leach system and outside any environmentally sensitive locations. The existing potable well will be sealed and or abandoned pre current Butte County Environmental Health procedures. The existing agricultural well will remain and be used to irrigate the restoration plantings throughout the property during the establishment period of approximately 3 years. When no longer needed, the agricultural well casing will be capped and sealed and will remain for future use as per Butte County Environmental Health standards.

   A new wastewater/leach field treatment facility or a vault toilet system would be constructed in accordance with Butte County Environmental Health Department requirements (See Project Requirement Hydro-1). Less than significant impact.

Appendix D – Restoration Plan was added.

This document along with the Draft Initial Study/Negative Declaration (SCH#2009102054), additional information as noted above, Comments and Response to Comments; and Notice of Determination constitute the Final Negative Declaration for the Sacramento River Access at Pine Creek – Facilities Development and Habitat Restoration Project.

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 Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR.

Stephanie Coleman
Environmental Coordinator
Northern Service Center

2/2/2010
Date

Robert Foster
District Superintendent
Northern Buttes District

2/2/2010
Date

Negative Declaration

Project: **Facilities Development and Habitat Restoration Project**

Lead Agency: California Department of Parks and Recreation

AVAILABILITY OF DOCUMENTS: The Initial Study for this 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 95966-9222

- Chico Branch Library
  1108 Sherman Avenue
  Chico, CA 95926

- California Department of Parks and Recreation Internet Website
  http://www.parks.ca.gov/?page_id=980

The Department of Parks and Recreation proposes to provide day-use facilities adjacent to the Sacramento River on a 41-acre parcel at the confluence of Pine Creek in Bidwell-Sacramento River State Park. This parcel was formerly known as the Brayton orchard. The following is a brief summary of the proposed work:

- Construct approximately 7,100 feet of trail around the park;
- Create a two-acre “play meadow”;
- Create picnic sites with concrete pads, tables and barbeques;
- Construct a restroom, a new potable well and septic waste water system;
- Install a gravel parking area;
- Restore approximately 25 acres of walnut orchard to native habitat;
- Enhance approximately 7 acres of existing riparian habitat;
- Install boundary-fencing, signage, interpretive panels, and recycle and trash containers.

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

Stephanie Coleman – Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall - Suite 410
Sacramento, CA 95814
E Mail Address: CEQANSC@Parks.ca.gov
Include "Bidwell-Sacramento River SP" on the subject line.
Phone 916-445-8779
Fax: 916-445-8883

Submissions must be in writing and postmarked, or received by fax or e-mail, no later than November 17, 2009. 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 Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. Department of Parks and Recreation, as lead agency, also confirms that the project requirements detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

Stephanie Coleman
Environmental Coordinator
Northern Service Center

10/7/09
Date

Robert Foster
District Superintendent
Northern Buttes District

10/7/2009
Date

TABLE of CONTENTS

Chapter/Section **Page**

1 INTRODUCTION…….. 2

2 PROJECT DESCRIPTION…….. 5

3 ENVIRONMENTAL CHECKLIST……..... 16

I. Aesthetics…… 19
II. Agricultural Resources…… 21
III. Air Quality……... 24
IV. Biological Resources…… 30
V. Cultural Resources…… 40
VI. Geology and Soils…… 49
VII. Hazards and Hazardous Materials…… 54
VIII. Hydrology and Water Quality…….. 58
IX. Land Use and Planning…… 64
X. Mineral Resources…… 66
XI. Noise…… 67
XII. Population and Housing…… 70
XIII. Public Services…… 72
XIV. Recreation…… 75
XV. Transportation/Traffic……... 78
XVI. Utilities and Service Systems…… 81

4 MANDATORY FINDINGS OF SIGNIFICANCE..... 84

5 SUMMARY OF PROJECT REQUIREMENTS …….. 86

6 REFERENCES…….. 91

7 REPORT PREPARATION..... 101

Appendices

A MAPS
B HYDROLOGY REPORT
C ACRONYMS
D RESTORATION PLAN
E COMMENTS LETTERS AND RESPONSES

Chapter 1
Introduction

1.1 Introduction and Regulatory Guidance

The Initial Study/Negative Declaration (IS/ND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Facilities Development and Habitat Restoration Project at Bidwell-Sacramento River State Park, Butte 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 Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. Additionally, if there is no substantial evidence that the project as revised may have a significant effect on the environment a Negative Declaration may be prepared [CEQA Guidelines §15070(a)]. 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/ND 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
Fax: 530-538-2244
Lwestr@parks.ca.gov

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

Stephanie Coleman – Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall, Suite 410
Sacramento, California 95814

E-Mail Address: CEQANSC@Parks.ca.gov
Include "Bidwell-Sacramento River SP" 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 November 17, 2009. 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 Facilities Development and Habitat Restoration Project at Bidwell-Sacramento River State Park. Project Requirements have also 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, project objectives and project requirements.

- Chapter 3 - Environmental Setting and Project Impacts Analysis
  The chapter describes the environmental setting of the project area and evaluates the significance of potential project impacts identified in the CEQA Environmental (Initial Study) Checklist.

- 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 Project Requirements
  This chapter summarizes the project requirements 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/ND. It also provides a list of those involved in the preparation of this document.

- Chapter 7 - Report Preparation
  This chapter provides a list of those involved in the preparation of this document.

- Chapter 8 – Comments letter and Responses

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 Facilities Development and Habitat Restoration 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 Negative Declaration shall be prepared if the proposed project will not have a significant effect on the environment. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that the proposed project would have a significant effect on the environment. It is proposed that a Negative Declaration be adopted in accordance with the CEQA Guidelines.

Chapter 2
Project Description

2.1 Introduction

This Initial Study/Negative Declaration (IS/ND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Facilities Development and Habitat Restoration Project at Bidwell-Sacramento River State Park, located in Butte County, California. The proposed project would restore native habitat, provide recreational opportunities, and provide access to the Sacramento River.

2.2 Project Location

Bidwell-Sacramento River State Park is located on the banks of the Sacramento River near the City of Chico, approximately 90 miles north of Sacramento. This project is located on a 41-acre parcel of land at the mouth of Pine Creek along River Road in Butte County.

2.3 Background and Need for the Project

In the *"Great Central Valley Vision, 2005"* DPR identified a deficit of recreation opportunities in the Central Valley, as well as the need for native habitat restoration. In response to these issues, the document outlines goals to provide additional recreation opportunities along Central Valley rivers and restoring additional native habitat. The *Bidwell-Sacramento State Park General Plan* reinforces these goals with the following approved guidelines:

- "Provide appropriate amenities at new or expanded day-use facilities…"
- "Acquire properties form willing sellers as opportunities arise in order to achieve Park-wide goals."
- "Restore natural processes and functions to parcels acquired for habitat values based on a comprehensive Natural Resource Management Plan"

This proposed project would restore native habitat; create trails, develop parking, restrooms, picnic areas, informal play areas, interpretive displays, and provide river access for bank fishing, beach, and water based recreational activities. Bidwell-Sacramento River State Park provides one of the few access points to the Sacramento River between Colusa and Woodson Bridge.

Without this project, DPR would be unable to offer increased recreationnal opportunities at the site and this portion of the Central valley would continue to maintain a recreational opportunity deficit and river access in this area would remain limited.

In addition, the walnut orchard currently located on the parcel provides poor wildlife habitat and few recreational opportunities. Without this project, as the walnut orchard ages and agricultural activities cease, invasive non-native plant species would become

established, the orchard would become a source of agricultural pests (such as coddling moth) and wildlife habitat would further deteriorate.

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. This is also stated in the *California's Recreation Policy* adopted by the California State Park and Recreation Commission on September 23, 2005.

Department of Parks and Recreation is focused on correcting a deficit of recreation opportunities in the Central Valley as identified in DPR's publication: *"Great Central Valley Vision, 2005."* In addition to identifying recreation deficits , the document outlines goals to provide more recreation and protecting wildlife habitat along Central Valley rivers. The intent of the Facilities Development and Habitat Restoration project is to decrease the aforementioned deficit by providing ADA-compliant day-use facilities and restore
riparian habitat along the Sacramento River. The recommended work is expected to:

- Create recreational opportunities
- Benefit wildlife species
- Benefit native plant species

The proposed project would allow the Department to meet its mission to provide high-quality recreational opportunities to its visitors while restoring valuable habitat and protecting natural resources.

2.5 Project Description

The Department of Parks and Recreation proposes to provide day-use facilities adjacent to the Sacramento River on a 41-acre parcel known as the Brayton parcel at the confluence of Pine Creek in Bidwell-Sacramento River State Park. The following is a summary of the proposed work:

- Construct approximately 6,500 feet of Americans with Disabilities Act (ADA) compliant trail to provide access from the parking area to the picnic sites and around the park;
- Create a two acre "play meadow" planted with irrigated native grasses and sedges;
- Create two Americans with Disabilities Act (ADA) compliant group picnic sites;
- Create seven family picnic sites four of which will be ADA compliant, each to include a concrete pad, one picnic table and one barbecue;
- Create two ADA compliant group picnic sites including a large concrete pad, four picnic tables and one large barbecue;
- Construct a two unit ADA compliant restroom with associated flush utilities and drinking fountain connected to a new potable well and septic waste water system

- Place two picnic tables along the trail in the southwestern portion of the restoration area;
- Install a gravel parking area designed for 50 cars with 2 ADA compliant concrete parking stalls;
- Install approximately 600 feet of 6 foot wide concrete walking path for ADA connection from parking and restroom facilities to recreation areas;
- Create an approximately 1.3 acre overflow parking area planted with native grasses and trees;
- Install two concrete benches along the trails;
- Restore approximately 25 acres of walnut orchard to native habitat;
- Enhance approximately 7 acres of existing riparian habitat;
- Install approximately 2,800 feet of boundary fencing, signage, interpretive panels, and recycle and trash containers; and,
- Create a Park Host site near the restroom including utility connections.

2.6 Project Implementation

Construction of facilities would occur in spring 2010, 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, bobcat, compactor, 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 of equipment would be confined to existing disturbed areas.

Best Management Practices (BMPs) would be incorporated into this project design to ensure that any 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; 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 Project Requirements

Under CEQA, the Department of Parks and Recreation has the distinction of being considered a lead agency, a public agency that has the primary responsibility for carrying out or approving a project and for implementing CEQA. A responsible agency is a public agency other than the lead agency that has responsibility for carrying out or approving a project and for complying with CEQA. A trustee agency is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. With this distinction comes the responsibility to ensure that actions that protect both cultural and natural resources are always taken on all projects. Therefore, DPR maintains a list of Project Requirements that are included in project design to reduce impacts to resources.

DPR has developed a list of Standard Project Requirements that are actions that have been standardized statewide for the use of avoiding significant project-related impacts to the environment. From this list, standard project requirements are assigned, as appropriate to all projects. For example, projects that include ground-disturbing activities, such as trenching; would always include standard project requirements addressing the inadvertent discovery of archaeological artifacts. However, for a project that replaces a roof on an historic structure, ground disturbance would not be necessary; therefore standard project requirements for ground disturbance would not be applicable and would not be assigned to the project.

DPR also makes use of specific project requirements. These are project requirements that are developed to address project impacts for projects that have unique issues; they would not typically be standardized for projects statewide.

	Project Requirements
Air Quality	**Air Standard Project Requirement 1 – Dust Control**
	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 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	**Project Specific Requirement Bio-1 - Valley Elderberry Longhorn Beetle Avoidance**
	No elderberry plants will be cut, pruned, pulled back, removed, or damaged in any way.
	Prior to construction activities, a DPR-approved biologist will fence and flag all elderberry plants to ensure construction crews avoid these plants.
	Project Specific Requirement Bio 2 - Swainson's Hawk, Osprey, and Other Nesting Raptors Avoidance
	If working between April 1 to July 1 surveys will be conducted for nesting raptors within 500 feet of the project area. If an active nesting colony is observed within this area, a buffer zone will be installed around the colony in which only DPR-approved biologist construction activities will occur until all eggs have hatched and the young birds have fledged, as determined by a DPR-approved biologist
	Project Specific Requirement Bio 3 - Migratory Bird Species Avoidance
	If working between May 15 to July 7 of any year, surveys will be conducted for nesting migratory birds within 100 feet of the project area. If an active nest is observed within this area, a appropriately sized buffer zone will be installed around the colony in which no construction activities will occur until all eggs have hatched, young birds have fledged, and there is no evidence of a second attempt at nesting, as determined by a DPR-approved biologist
	Project Specific Requirement Bio 4 - Sensitive Bat Species Avoidance
	No work will occur between March 15 and June 30 to avoid the core bat-breeding period to avoid impacts unless approved by a DPR-Approved Biologist.
	All tree removal will occur between July 1 through March 15 when tree roosting bats are not expected to occur in the project area.

Cultural Resources	**Project Specific Requirement Arch 1 - Environmentally Sensitive Areas**
	All project activities within areas determined to be culturally sensitive will require consultation with a DPR qualified archaeologist.
	Standard Project Requirement Arch 2 - Cultural Resources
	In the event that previously undocumented cultural resources (including but not limited to dark soil containing shellfish, bone, flaked stone, ground stone, or deposits of historic trash) are encountered during project construction by anyone, the state representative will temporarily halt work 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.
	In the event that significant cultural resources are found in the project location, a qualified historian and/or archaeologist will monitor all subsurface work including trenching, grading, and excavations in that area from that point forward to ensure avoidance of significant cultural resources.
	In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager 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 DRP 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.
	Standard Project Requirement Arch 3 - Continued Native American Consultation
	Project design and activities will be discussed with the Mechoopda. These activities include but are not limited to revegetation, trail design, vegetation for traditional plant collection, gathering areas for special events, and site monitoring.

Geology and Soils	**Standard Project Requirement Geo-1 - Erosion Control**
	Prior to the start of construction, the Contractor will prepare a Storm water Pollution Prevention Plan (SWPPP). The SWPPP identifies 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 excavation, grading, stockpile management, and any other ground disturbing activities.
	Permanent BMPs for erosion control will consist of properly compacting disturbed areas and re-vegetation of appropriate disturbed soil areas with native species using seed collected locally, where possible or a sterile grass mixture. If local seed is not available, a weed-free native mixture shall be used. Final design plans will include permanent BMP measures to be incorporated into the project.
Hazards and Hazardous Materials	**Standard Project Requirement Haz 1 - Spill Prevention**
	Prior to the start of construction, the Contractor will inspect all equipment for leaks and inspect equipment daily thereafter until it is removed from the project site.
	Prior to the start of construction, the contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) for materials management, fueling, repair, and maintenance of vehicles and equipment, and spill prevention and control. The Contractor will maintain a spill kit on-site throughout the life of the project. The SWPPP will include a map that delineates construction staging areas and where refueling, lubrication, and maintenance of equipment may occur. Areas designated for refueling, lubrication, and maintenance of equipment shall be at least 50 feet from the Sacramento River or any tributaries. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of the Park during construction, the contractor would immediately notify the appropriate DPR staff (e.g., project manager, supervisor, or State Representative).
	Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized destination.

	Standard Project Requirement Haz- 2 - Hazardous Substances Health and Safety Documents
	DPR will include, in any contract documents or in internal work plan documents, health and safety specifications on how to manage any potential hazardous incidents. The specifications will include methods for safe handling, collection, and proper disposal of any contaminated soil and refuse uncovered during the excavation and grading procedures. The specifications will discuss the proper personal protection during construction, the use of an exclusion zone if necessary to prevent exposure to the public, and the proper disposal procedures for any hazardous substances encountered.
	Standard Project Requirement Haz 3 - Construction Fire Management
	A fire safety plan will be developed by the contractor and/or DPR and approved by DPR prior to the start of construction. This plan will include the emergency calling procedures.
	Spark arrestors or turbo-charging (which eliminates 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. The contractor will also be required to have fire extinguishers on site
	Standard Project Requirement Haz 4 - Fire Management
	The use of campfires and other potentially flammable objects or materials will be restricted. Park visitors will be provided with information on Park rules regarding fire safety.
Hydrology and Water Quality	**Standard Project Requirement Hydro-1 - Water Quality Protection**
	Implementation of **Geo-1** will provide Best Management Practices to control erosion and runoff during the project construction and for post-construction erosion control. The project will comply with all applicable water quality standards as specified in the CVRWQCB Basin Plan.
	Implementation of **Haz-1** will also prevent or reduce impacts to water quality from possible non-sediment pollutants, such as fuels and other vehicle fluids and construction materials that could be released during construction.

	The new septic system and leach field will be designed according to the requirements from Butte County Environmental Health. Restrooms will be designed to be shut down with waste fixtures and inlets sealed prior to flood events.
	Any new water supply well will be located at least 200 feet from the leach field and surface waters of the Sacramento River.
	Project Specific Requirement Hydro-2 - Storm water Runoff Control
	Storm water runoff from the new entrance road, parking lot areas and building would be minimal due to the use of predominately gravel surfaces instead of impermeable pavement. To prevent any on or off site erosion and/or flooding the surface water runoff will be allowed to sheet flow or be directed into an engineered storm drain system that flow into a natural drainage course with necessary erosion control devices.
	Erosion and storm water runoff controls will be required during construction and permanent erosion controls and methods will be part of the project plan. Implementation of Project Requirement Hydro-1 will reduce impacts from siltation and from vehicle and equipment fluid spills, and construction materials.
	Project Specific Requirement Hydro-3 - Flood Protection
	The planned facilities will be designed to minimize potential damage from flood events, to the extent feasible. This project including a completed Hydraulic Analysis report will be reviewed for approval by the Central Valley Flood Protection Board.
	The Park would be closed to the public during any anticipated flood event.
	The Park would also be evacuated in the event of a failure of the Shasta Dam.
Noise	**Project Specific Requirement Noise 1**
	Generally construction activities would be limited to the daylight hours Monday – Friday from 7:00 a.m. to 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	Standard Project Requirement Recreation 1 – Informational Signs
	Prior to project completion, DPR or its contractor will install informational signs telling the public that hunting occurs on adjacent lands including the time of year hunting is allowed.

2.8 Visitation to Bidwell-Sacramento River State Park

The following table demonstrates attendance at Bidwell-Sacramento River State Park facilities. The proposed project would occur on a new acquisition to the Park, the parcel. Due to river access in proximity to the City of Chico, DPR expects attendance at this location to increase.

2000	2001	2002	2003	2004	2005	2006	2007	2008
107,830	147,406	115,819	144,037	135,087	93,297	55,436	73,981	71,416

2.9 Consistency with Local Plans and Policies

The proposed project to provide day-use facilities adjacent to the Sacramento River is consistent with Local Plans and Policies. The Bidwell-Sacramento River State Park General Plan was adopted in March 2006 and calls this area the "Indian Fishery expansion area" DPR 2006. This project is consistent with other local plans including the Butte County General Plan.

This project is consistent with the Department's mission, the California Recreation Policy of 2005, the State Park System Plan 2002, the Department's Statewide Trails Policy and the Department's management directives aimed at creating opportunities for high-quality outdoor recreation.

2.10 Discretionary Approvals

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

- Butte County Environmental Health Department
- 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 implementation of project components requiring regulatory review.

2.11 Related Projects

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

- Restoration of a riparian area approximately two miles away on the Singh property addition.

CHAPTER 3
ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration 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
Phone: 530-538-2213
Fax: 530-538-2244
Lwestr@parks.ca.gov

4. Project Location: Bidwell-Sacramento River State Park

5. Project Sponsor Name & Address: California Department of Parks and Recreation
Northern Buttes District
400 Glen Drive
Oroville, California 95966-9222

6. General Plan Designation: Agricultural – Orchard and Field Crops
7. Zoning: Unclassified

8 Description of Project: The Department of Parks and Recreation proposes to provide day-use facilities adjacent to the Sacramento River on the 41-acre parcel in Bidwell-Sacramento River State Park. The following is a brief summary of the proposed work:

- Construct approximately 7,100 feet of trail around the park;
- Create a two-acre "play meadow";
- Create picnic sites with concrete pads, tables and barbeques,
- Construct a restroom, a new potable well and septic waste water system;
- Install a gravel parking area;
- Restore approximately 25 acres of walnut orchard to native habitat;
- Enhance approximately 7 acres of existing riparian habitat;
- Install boundary-fencing, signage, interpretive displays, and recycle and trash containers.

9. Surrounding Land Uses & Setting: Refer to Chapter 3 of this document (Section IX, Land Use Planning)

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.

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

DETERMINATION

On the basis of this initial evaluation:

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

I find that, although the 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 **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 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 , pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or to a less-than-significant level and no further action is required. ☐

_____ _____

Stephanie Coleman
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 project site consists of 41-acres bordered on the east by the River Road, on the west by the Sacramento River, on the north by private property and on the south by the California Department of Fish and Game's (CDFG) Pine Creek Unit of the Sacramento River Wildlife Area.

Approximately 29 acres of the parcel are planted with English walnut trees (CDPR 2006).

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 undisrupted 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 Butte County (California Department of Transportation 2009).

The expansion of recreational facilities along the Sacramento River corridor, such as this proposed project, is consistent with the State Parks Central Valley Vision project (DPR 2006), the California Recreation Policy of 2005, and the Department's Statewide Trails Policy.

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

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) Existing views of the parcel will change from agricultural tree rows to native plant stands including riparian and Valley Oak Forest habitats. Day use facilities and the new parking lot will be temporarily visible from River Road during construction and for a few years after as the vegetation develops. Views would improve overtime blending into the native landscapes to the north and south of the project location. In addition, the facilities would improve access to scenic views such as the Sacramento River. With the temporary impacts during and after construction, this will be a Less than Significant Impact.

b) None of the roadways in Butte County are designated State Scenic Highways. No Impact.

c) See a) discussion for above. Less than significant impact.

d) The proposed restroom will have security lighting. This lighting would be directed towards the ground and would not create a glare. The park would be closed at sunset so no nighttime views would be adverse affected. In addition, all construction work shall take place during daylight hours. Less than significant impact.

II. AGRICULTURAL RESOURCES

Environmental Setting

The project site consists of 41 acres bordered on the east by the River Road, on the west by the Sacramento River, on the north by private property and on the south by the California Department of Fish and Game's (CDFG) Pine Creek Unit of the Sacramento River Wildlife Area.

Agriculture accounts for 20% of Butte County's work force and is the County's principal economic base (Butte County 1995). It is the largest land use in the county as measured in areal extent. In 1993 agriculture contributed approximately $276 million directly to the local economy and indirectly an estimated $1billion indirectly. In 2006 the estimated gross value of agricultural production in Butte County was $454,212,000 (Butte County 2007).

According to the 2008 Butte County Agricultural Crop Report 467,404 acres were in agricultural production in the county, with English walnuts accounting for 30,055 acres or 6.4% of this total (Butte County 2008). In 2008 the walnut crop ranked as the third most valuable crop behind rice and almonds with a gross value of $75,629,000.

Butte County classifies agricultural land into the two following based on soil characteristics (Butte County 1995):

- **Orchard and Field Crops** – highly productive soils that are suitable for cultivation of field crops, seed crops, vegetable crops, tree and vine crops, nursery stock, and apiary and aquaculture products.
- **Grazing and Open Lands** – soil characteristics that are best suited for grazing, animal husbandry, and aquaculture products.

The proposed project site is classified by Butte County as Orchard and Field Crops in the General Plan (Butte County 2000). However, as identified in the Butte County General Plan Technical Update (Butte County 2005) appropriate secondary uses can include "water-related recreation facilities…environmental preservation activities, public and quasi-public uses…" Secondary uses are considered compatible with the primary uses described above.

Federal Farmland Protection Policy

Loss of farmland is a nationwide concern that has precipitated the development of federal, state, and local policies that call for the protection of Prime, Unique or Statewide Important Farmland (CDPR 2008). Under the Federal Farmland Protection Policy Act (FPPA) projects are subject to FPPA requirements if they may irreversibly convert farmland, either directly or indirectly, to non-agricultural use and are completed by, or with the assistance of, a federal agency. This project would not be regarded as irreversibly converting farmland to a non-agricultural use and the FPPA views outdoor recreation that would occur within the parcel as a non-urban use and compatible with agriculture (CDPR 2008).

California Department of Conservation: Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation produce maps and statistical data used for analyzing impacts on California's agricultural resources. Important Farmland Maps show the relationship between the quality of soils for agricultural production and the land's use for agricultural, urban, or other

purposes. Agricultural land is rated according to soil quality and irrigation status; eight farmland map categories have been established.

- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Grazing Land
- Urban and Built-up Land
- Other Land
- Water

The best quality land is called Prime Farmland and 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."

As stated in Section IV, Geology and Soils, the project area is located within an area mapped by the USDA Natural Resources Conservation Service as Horst silt loam, 0-2% slopes. This soil type is not identified by the FMMP as a Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance for Butte County; the parcel is mapped as Other Land.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as 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 Butte County, lands under a Williamson Act contract must be a minimum of 20 acres for orchards, including nut crops. The project site is not under a Williamson Act contract.

WOULD THE PROJECT*:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment	☐	☐	☐	☒

which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

* In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California 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 location is not designated by the Department of Conservation's Farmland Mapping and Monitoring Program as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Proposed riparian habitat restoration and day use facility installation does not constitute a loss of agricultural land because the Federal Farmland Protection Policy Act (FPPA) and CEQA Guidelines do not regard this project as irreversibly converting farmland to a non-agricultural use. The FPPA views outdoor recreation that would occur within the parcel as a non-urban use protective of and compatible with agriculture. No impact.

b) Although the proposed project is classified by Butte County as Orchard and Field Crops, secondary uses such as water-related recreation facilities, environmental preservation activities, and public uses are considered compatible with the primary uses of agriculture and related industries. The project site is not under a Williamson Act contract. No Impact.

c) The proposed project site is bordered by the Sacramento River to the west; CDFG's Pine Creek Unit of the Sacramento River Wildlife Area to the south; private property consisting of a small trailer park and restaurant/tube rental business to the north; and an actively producing walnut orchard on the east side of River Road. 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 Butte County Air Quality Management District (BCAQMD) and under the jurisdiction of the United States Environmental Protection Agency Region IX (USEPA). The NSVAB is comprised of the following counties: Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba. Butte County is located within the east central portion of the Sacramento Valley Air Basin. The proposed project is located adjacent to the Sacramento River near the City of Chico in Butte 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. Annual precipitation, generally in the form of rain, ranges from 18 inches along the Sacramento River to 80 inches in areas of high elevation. Snowfalls occur regularly at higher elevation. East-west winds are common above 3000 feet in elevation. Average wind speeds are less that 8 miles per hour, and prolonged calm periods are common (Butte County 2000).

Prevailing winds are from the southwest during half of the year and from the northwest the other half, generally. Southerly winds are normally associated with approaching winter storms and is usually moisture bearing due to their origin over the Pacific Ocean. Northerly winds are usually associated with the winter and spring high-pressure ridging and occasional summer daytime breezes. North winds tend to be dry (Butte County 2000).

Air quality is relatively good in the valley, and excellent in mountain areas. The county has been classified as a non-attainment area because carbon monoxide, suspended particulate, and photochemical oxidant standards are occasionally exceeded. Because the Sacramento Valley Air Basin is a natural cul-de-sac acting in synergism with natural light-wind movement and high atmospheric stability, air quality may undergo a rapid degradation at any time of the year due to temperature inversions (Butte County 2000).

Air Quality Designations

The California Air Resources Board (ARB) has established health-based State ambient air quality standards to identify outdoor pollutant levels considered safe for the public. After State standards are established, State law required ARB to designate each area as attainment, nonattainment, nonattainment-transitional, or unclassified for each State standard. The area designations, which are based on the most recent available data, indicate the healthfulness of the air quality throughout the State (CARB 2009).

ARB 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 (PM_{10}), 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, PM_{10} and $PM_{2.5}$ are designated as non-attainment; Hydrogen sulfide and visibility reducing particles are designated unclassified; and nitrogen dioxide, sulfur dioxide, sulfates carbon Monoxide 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 is designated non-attainment; carbon monoxide, $PM_{2.5}$, and nitrogen dioxide are designated unclassified/attainment; PM_{10} 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 based on 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	Non-Attainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
PM_{10}	Non-Attainment	Unclassified
$PM_{2.5}$	Non-Attainment	Unclassified/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 February 2009.
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 36.7 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 2009).

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). Butte County experiences pollution from smoke, dust, internal combustion engines and wind patterns that transport Ozone from the broader Sacramento Area. Agricultural activities such as burning rice generate large quantities of particulates, also known as PM_{10} (Butte County 2005).

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). Four monitoring stations are located in Butte County: These stations monitor ozone, carbon dioxide, nitrogen dioxide, sulfur dioxide, PM_{10}, $PM_{2.5}$, Lead, and Toxics (CARB 2009).

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 near the proposed project area are limited to recreational users (boaters, trail-users, etc.).

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

* 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 plans for the Butte County Air Management 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 emissions of dust and involve the use of equipment and materials that would emit ozone precursors. Increased emission of dust (particulate matter) and ozone precursors could contribute to existing non-attainment conditions, which could interfere with achieving the projected attainment standards. Integration of Project Requirement Air 1 (see Chapter 2 Project Description) in project design would reduce impacts to Less than significant.

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 the areas that would be upwind or protected from blowing dust or other emissions. Integration of Project Requirement Air 1 (see Chapter 2 Project Description) in project design would prevent impacts. Less than significant impact.

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 the 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 be 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 public access to recreation facilities (picnic sites, trails, restrooms, water-based recreation, and parking) on the parcel adjacent to the Sacramento River in a rural agricultural area of Butte 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 facilities development and habitat restoration project and the associated 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 41-acre parcel is a roughly rectangular shaped piece of land partially bisected by a 12-acre swale. Currently it is covered with approximately 29 acres of English walnut (*Juglans regia*) orchards (See Section II, Agricultural Resources) and 12 acres of remnant riparian habitat. Most of the eastern half of the parcel has been planted with walnuts, extending from the northern to southern property boundaries. A smaller walnut orchard located in the southwest portion of the parcel is separated from the larger orchard by a relatively narrow strip of riparian vegetation along a small floodway that merges with more extensive riparian vegetation bordering the Sacramento River, which forms the western boundary of the parcel. The riparian swale consisting of riparian vegetation that varies in width from 75 feet to more than 300 feet.

The parcel's riparian habitat is composed of three native vegetation types based on the classification system defined in the *Manual of California Vegetation* (Sawyer-Keeler-Wolf 1995) and revised by the California Department of Fish and Game's California Natural Diversity Data Base (CNDDB 2007). The current system conforms to the National Vegetation Classification System developed by the United States Geological Survey/National Park Service Vegetation Mapping Program (USGS 2008). The three native vegetation types are Fremont Cottonwood Alliance, Box Elder Alliance, and Arroyo Willow Alliance.

The Fremont Cottonwood Alliance is a multi-layer vegetation type dominated by Fremont cottonwood (*Populus fremontii*) in the upper tree canopy with a smaller component of western sycamore (*Platanus racemosa*) and hybrid northern California black walnut (*Juglans* californica hybrids). A few mature valley oak (*Quercus lobata*) are scattered throughout the upper canopy. Lower canopy trees include box elder (*Acer negundo* var. *californicum*) and Oregon ash (*Fraxinus latifolia*). Arroyo willow (*Salix lasiolepis*) and Goodding's willow (*Salix gooddingii*) inhabit the edges of this vegetation immediately adjacent to the Sacramento River.

The shrub and ground layers are composed of blue elderberry (*Sambucus mexicana*), California man-root (*Marah fabaceus*), California wild grape (*Vitis californica*), goose grass (*Galium aparine*), and non-natives such as Himalayan blackberry (*Rubus discolor,* synonym *R. armeniacus*), ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), and German ivy (*Delairea odorata*). The latter species is a rapidly spreading invasive that is altering the native habitat (Martin 2008).

Box elder and to a lesser extent northern California black walnut and Oregon ash dominate the canopy of the Box Elder Alliance, which is lower in height than the Fremont Cottonwood Alliance type. The composition of shrub and ground layers is comparable to the Fremont Cottonwood Alliance. The Box Elder Alliance is mostly restricted to the central portion of the parcel along a floodway separating the surrounding orchards, which are situated at higher elevations. It intergrades with the Fremont Cottonwood Alliance in the northern half of the parcel.

At the extreme northern end of the parcel is a small stand of Arroyo Willow Alliance occurring on a sandy flat located at the confluence of the Sacramento River and Pine Creek Slough. This small tree-dominated vegetation is subject to annual flooding. The mostly open canopy

is dominated by arroyo willow (*Salix lasiolepis*), with a smaller component of Goodding's black willow (*Salix gooddingii*) and box elder. The sparse ground and shrub layers mostly consist of mugwort (*Artemisia douglasiana*), curly dock (*Rumex crispus*), and various forbs and grasses such as Bermuda grass (*Cynodon dactylon*).

The Fremont Cottonwood Alliance, Box Elder Alliance, and Arroyo Willow Alliance, also known as Great Valley Cottonwood Riparian Forest, Great Valley Mixed Riparian Forest, and Great Valley Willow Scrub, respectively (Holland 1986), are considered of high inventory priority due to their rarity by the California Department of Fish and Game (CDFG), as noted in the California Natural Diversity Database (CNDDB 2007). In addition, all of these vegetation types are considered sensitive by CDFG because of the value of riparian plant communities to native wildlife.

Special-Status Species[1]

Queries of the CDFG's California Natural Diversity Database (CNDDB 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 Ord Ferry 7.5-minute USGS quadrangle map.

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, 15 special-status wildlife species, and five sensitive plant communities are listed in the CNDDB as occurring within the Ord Ferry USGS quadrangle map.

No additional special-status plant species are listed in the CNPS[2] on-line inventory as potentially occurring in the Ord Ferry quadrangle map. In addition to the CNDDB and CNPS, the U.S. Fish and Wildlife Service's Sacramento Office website (USFWS 2008) generates a list of species with federal listing status that occur in or may be affected by projects within the Ord Ferry quadrangle. The USFWS list adds another nine fish and wildlife species with the potential to be affected by the proposed project. However, only species that have a potential to occur on the project site based on the presence of suitable habitat or proximity to known sightings are addressed in this document.

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[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).

[2] California Native Plant Society (CNPS) Lists: List 1A = presumed extinct in California; List 1B = rare or endangered in California and elsewhere; List 2 = rare or endangered in California, more common elsewhere; List 3 = need more information; List 4 = plants of limited distribution.

Special-Status Species that are known to Occur, or Could Potentially occur within the Project Area

PLANTS

Columbian watermeal (*Wolffia brasiliensis*) – This is a CNPS List 2 perennial herb that occurs in freshwater swamps and marshes and blooms from April to December. This species grows in colonies on the surface of shallow waters in freshwater marshes. The closest reported location for Columbian watermeal is more than 5 miles from the project site at a location between Ordbend and the Sacramento River at a slough crossing along the Ord Ferry Road (CNDDB 2008). Based upon the absence of suitable habitat, the species has no potential to occur in the project area.

Fox sedge (*Carex vulpinoidea*) – Fox sedge is a CNPS List 2 perennial herb that occurs in riparian woodlands and in freshwater swamps and marshes. It blooms from May through June. There is a reported occurrence of fox sedge within the Ord Ferry quadrangle at a location on the east side of the Sacramento River just north of Golden State Island (CNDDB 2008). This location is approximately 4-5 miles south of the project site. Based upon the presence of marginally suitable habitat, the species has a slight potential to occur in the project area.

Rose-mallow (*Hibiscus lasiocarpus*) – This is a CNPS List 2 perennial herb that occurs in freshwater swamps and marshes and blooms from June to September. Rose-mallow is known to occur more than 3 miles south of the project area in an oxbow north of Golden State Island and east of the Sacramento River (CNDDB 2008). Based upon the absence of suitable habitat, the species has no potential to occur in the project area.

INVERTEBRATES

Valley elderberry longhorn beetle (*Desmocerus californicus*) – This species is listed as Federal Threatened and is restricted to its host plant, the blue elderberry, for reproduction and survival. During a cursory survey on April 14, 2008 no exit holes typical of the valley elderberry longhorn beetle (VELB) were detected on blue elderberry plants found within the project site. However, VELB may occur within the area.

REPTILES

Giant garter snake (*Thamnophis gigas*) – This species is listed as California Threatened and Federal Threatened. It occurs in a variety of aquatic habitats such as freshwater marsh, low-gradient streams, ponds, drainage canals, and irrigation ditches. It also requires suitable adjacent open upland habitat for basking and burrows for refuge from flood waters during the snake's dormant season in the winter. The nearest known occurrence of the species is at the Chico Sanitation Ponds a few miles southeast of the project area (CNDDB 2008). Although suitable breeding habitat exists in the project vicinity at Pine Creek Slough, there is a lack of suitable upland habitat within the project area.

Northwestern pond turtle (Emys [=Clemmys] marmorata) – This species is a California Species of Concern that occurs in streams, ponds, freshwater marshes, and lakes where there is slow-moving water with partially submerged woody debris, rocks, or similar

substrates for basking. Northwestern pond turtles require an upland site adjacent to the aquatic site for nesting, which is accomplished in dry burrows (Jennings and Hayes 1994). Although suitable habitat for this species may exist in the Pine Creek drainage north of the parcel, there is no suitable habitat for the species in the project area.

FISH

Delta smelt (*Hypomesus transpacificus*) – This species is listed as Federal Threatened and is found only from the Suisun Bay upstream through the Sacramento/San Joaquin River Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties (USFWS 2007). Their historic range is thought to have extended from Suisun Bay upstream to at least the city of Sacramento on the Sacramento River. The Sacramento River is known to periodically flood the project area during extreme events (50-100 year flood intervals). However, terrain of the site is flat or gently sloping which would not hold water in ponds that would capture delta smelt. Therefore, given the outlying range and lack of suitable habitat, the site is not likely to have delta smelt at any time.

Sacramento splittail (*Pogonichthys macrolepidotus*) – This is a California Species of Concern species that occurs predominantly in the Sacramento-San Joaquin estuary, especially the western Delta and Suisun Marsh, although they can be found occasionally upstream on the Sacramento River as far north as the Feather River confluence (CNDDB 2008). The Sacramento River is known to periodically flood the project area during extreme events (50-100 year flood intervals). However, terrain of the site is flat or gently sloping which would not hold water in ponds that would capture delta smelt. Therefore, given the outlying range and lack of suitable habitat, the site is not likely to have splittail at any time.

Green sturgeon (*Acipenser medirostris*) – This species is listed as Federal Threatened and a California Species of Special Concern. It lives in the Sacramento River, which is known to periodically flood the project area during extreme events (50-100 year flood intervals). However, terrain of the site is flat or gently sloping which would not hold water in ponds that would capture delta smelt. Therefore, given the outlying range and lack of suitable habitat, the site is not likely to have sturgeon at any time.

Central Valley steelhead (*Oncorhynchus mykiss*) – This species is listed as Federal Threatened and is known to migrate in the Sacramento River adjacent to the project area. The Sacramento River periodically floods the project area during extreme events (50-100 year flood intervals). However, terrain of the site is flat or gently sloping which would not hold water in ponds that would capture delta smelt. Therefore, given the outlying range and lack of suitable habitat, the site is not likely to have steelhead at any time.

Chinook salmon – Central Valley winter run (*Oncorhynchus tshawytscha*) – This salmon run is listed as California Endangered and Federal Endangered and is known to migrate through the Sacramento River to upstream spawning grounds. These fish spawn in streams where females deposit eggs in depressions in gravel spawning beds. The Sacramento River and its tributaries were designated by the Federal government as critical habitat for the species in 1993. The Sacramento River periodically floods the project area during extreme events (50-100 year flood intervals). However, terrain of the site is flat or gently sloping which would not hold water in ponds that would capture delta smelt. Therefore, given the outlying range and lack of suitable habitat, the site is not likely to have salmon smelt at any

time.

Chinook salmon – Central Valley spring run (*Oncorhynchus tshawytscha*) – This run is listed as California Threatened and Federal Threatened and is also known to migrate through the Sacramento River to upstream spawning grounds. The Sacramento River periodically floods the project area during extreme events (50-100 year flood intervals). However, terrain of the site is flat or gently sloping which would not hold water in ponds that would capture delta smelt. Therefore, given the outlying range and lack of suitable habitat, the site is not likely to have salmon at any time.

Chinook salmon – Central Valley fall/late fall run (*Oncorhynchus tshawytscha*) – This run is listed as a California Species of Concern and is a Federal Candidate for listing and is known to migrate through the Sacramento River to upstream spawning grounds. The Sacramento River periodically floods the project area during extreme events (50-100 year flood intervals). However, terrain of the site is flat or gently sloping which would not hold water in ponds that would capture delta smelt. Therefore, given the outlying range and lack of suitable habitat, the site is not likely to have salmon at any time.

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. Bank swallow colonies have been reported downstream from the parcel (CNDDB 2009); however, no colonies were located within the project area during surveys conducted in 2009 by an interagency survey team (Henderson 2009).

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 within the project area and adjacent riparian lands. Ospreys are known to be active in the project area and a few ospreys were observed flying in the area during a field visit on April 14, 2008.

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 CNDDB (2008) lists several past occurrences of nesting Swainson's hawks within the Ord Ferry quadrangle. The closest reported nesting occurrence to the project area is more than two miles downstream on Big Chico Creek near its confluence with the Sacramento River.

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. CNDDB (2008) lists past observations of this species within approximately a mile of the project area. The Brayton Parcel provides potential habitat for western yellow-billed cuckoo, with higher quality habitat occurring on adjoining land to the south, where reported occurrences are identified in the CNDDB (2008).

Other bird species – Nesting raptors and other bird species are protected under provisions

of the federal Migratory Bird Treaty Act (16 U.S.C. 703-712), and by the state Department of Fish and Game Code (Sections 3503, 3503.5, and 3513). Under these laws, all raptors and migratory birds and their nests are protected. A wide variety of migratory birds and several raptor species potentially occur in or adjacent to the project area (CDPR 2007), such as Cooper's hawk (*Accipter cooperi*), sharp-shinned hawk (*Accipter striatus*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), little willow flycatcher (*Empidonax trailii brewsteri*), yellow warbler (*Dendroica petechia*), yellow-breasted chat (*Icteria virens*), and loggerhead shrike (*Lanius ludovicianus*).

MAMMALS

Ringtail (*Bassariscus astutus)* – Ringtail is a California Fully Protected species that inhabits mixed riparian and other forest and shrubby habitats that are in close association with permanent water and rocky areas (Zeiner et al. 1990, CDPR 2007). They nest in rock crevices, hollow trees, logs, snags, abandoned burrows, or woodrat nests. The young are typically born in May and June. There is no suitable habitat for this species within the project area.

American badger (*Taxidea taxus*) – This species is a California Species of Special Concern that occurs in dry, open stages of most shrub, forest, and herbaceous habitats with friable soils (Zeiner et al., 1990, CDFG 2008). The young are born in burrows that are dug in relatively dry, usually sandy soil in areas with sparse overstory cover. There are no CNDDB reported occurrences of American badger in the general project area and suitable habitat does not occur within the project area.

Western red bat (*Lasiurus blossevillii*) – This is a California Species of Special 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 Indian Fishery Day Use Area of Bidwell-Sacramento River State Park (CNDDB 2008).

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 Indian Fishery Day Use Area of Bidwell-Sacramento River State Park (CNDDB 2008).

Western mastiff bat (*Eumops perotis californicus*) – This is a California Species of Special Concern that appears to favor rugged, rocky areas where suitable crevices are available for day-roosts (Zeiner et al. 1990). Characteristically, day-roosts are located in large cracks in exfoliating slabs of granite or sandstone. Although western mastiff bats have been detected within the Indian Fishery Day Use Area of Bidwell-Sacramento River State Park (CNDDB 2008), there is no suitable roosting habitat in the project area.

Silver-haired bat (*Lasionycteris noctivagans)* – This species has no state or federal list status, although some factors exist to cause some concern such as narrow habitat or continuing threats. Silver-haired bats roost in hollow trees, snags, buildings, rock crevices, caves, and under bark (Zeiner et al. 1990). Females may form nursery colonies or occur as

solitary individuals in dense foliage or hollow trees. It has been detected within the Indian Fishery Day Use Area of Bidwell-Sacramento River State Park (CNDDB 2008).

Long-legged myotis bat (*Myotis volans*), **Small-footed myotis bat** (*Myotis ciliolabrum*) and **Yuma myotis bat** (*Myotis yumanensis*) – These bat species are Federal Species of Concern that are known to roost under tree bark and in hollow trees and snags and may occur in the proposed project area.

Townsend's big-eared bat (*Corynorhinus townsendii*) – This bat species is a Federal Species of Concern and California Species of Concern that is known to roost in large hollow oak trees. However, suitable habitat for this species is extremely limited on the parcel.

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 CNDDB record search produced a list of five sensitive vegetation types for the Ord Ferry 7.5 minute USGS quadrangle map. As described earlier in this section, three of these sensitive vegetation types occur within the proposed project area. They are Fremont Cottonwood Alliance, Box Elder Alliance, and Arroyo Willow Alliance, also known as Great Valley Cottonwood Riparian Forest, Great Valley Mixed Riparian Forest, and Great Valley Willow Scrub, respectively.

Wetlands and Waters of the United States

The federal Clean Water Act (CWA) defines wetlands as lands that are inundated or saturated by surface or ground water 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. The U.S. Army Corps of Engineers (USACOE) has jurisdictional authority of wetlands under provisions found in Section 404 of the CWA. Typically, USACOE jurisdictional wetlands meet three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology.

Waters of the U.S. (Other Waters) are regulated by the USACOE under Sections 401 and 404 of the CWA. They 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 the USACOE jurisdiction.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Have a substantial adverse effect, either directly or through habitat 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

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. Special-status plant species – Based on the presence of suitable habitat only, a single plant species with special-status has a potential to occur within the project area. Fox sedge, a CNPS List 2 species, has a slight potential to occur in moist riparian areas. No project work is proposed for those locations capable of supporting this species; therefore, no impact.

Special-Status Wildlife Species – This project proposes to restore approximately 25 acres of walnut orchards into high quality, self-sustaining riparian habitat and enhance approximately 7 acres of existing riparian habitat through limited plantings of appropriate native species and the eradication of invasive exotic plant species such as Cape ivy.

These proposals will benefit the species described below, as well as provide habitat for other sensitive species not currently known from the area, such as least Bell's vireo (*Vireo bellii*).

Valley elderberry longhorn beetle – the valley elderberry longhorn beetle may occur within the project area because its host plant, the blue elderberry, and critical habitat for the species, are present. Integration of project requirement Bio 1 (see Chapter 2, Project Description) is designed to reduce project-related impacts to valley elderberry longhorn beetle to a less than significant level.

Bank swallow – Although a known occurrence for this species has been reported downstream from the Brayton Parcel project area, there is no suitable nesting habitat within the project area. Integration Project Requirement Bio 2 (see Chapter 2, Project Description) is designed to prevent the disturbance or loss of active nests and reduce project-related impacts to bank swallows to a less than significant level.

Swainson's hawk, osprey, and other nesting raptors – The CNDDB (2008) lists several past occurrences of nesting Swainson's hawks within the Ord Ferry quadrangle; the closest reported nesting occurrence to the project area is more than two miles downstream on Big Chico Creek near its confluence with the Sacramento River. Suitable nesting habitat for osprey and other raptor species occurs within the project area and adjacent riparian lands. Ospreys are known to be active in the project area. Raptors and their nests are protected under Fish and Game Code §3503.5. Integration Project Requirement Bio 4 (see Chapter 2, Project Description) is designed to prevent the disturbance or loss of active nests and reduce project-related impacts to nesting raptors to a less than significant level.

Western yellow-billed cuckoo and other nesting bird species under Migratory Bird Treaty Act – Nests of migratory bird species could occur within the proposed project area. The Brayton Parcel provides potential habitat for western yellow-billed cuckoo, with higher quality habitat occurring on adjoining land to the south, where reported occurrences are identified in the CNDDB (2008). A wide variety of migratory birds could potentially occur in or adjacent to the project area (CDPR 2007), such as little willow flycatcher (*Empidonax trailii brewsteri*), yellow warbler (*Dendroica petechia*), yellow-breasted chat (*Icteria virens*), and loggerhead shrike (*Lanius ludovicianus*). Integration Project Requirement Bio 4 (see Chapter 2, Project Description) is designed to reduce project-related impacts to nesting migratory bird species to a less than significant level.

Ringtail –While not known to occur in the project area, potential habitat exists for this species. Integration Project Requirement Bio 5 (see Chapter 2, Project Description) is designed to reduce project-related impacts to ringtail, if present, to a less than significant level.

Western red bat, hoary bat, silver-haired bat, and other sensitive bat species - Sensitive bat species are known to occur near the project area within the Indian Fishery Day Use Area of Bidwell-Sacramento River State Park (CNDDB 2008). There is suitable native riparian habitat in portions of the Brayton Parcel not proposed for development. However, some of these species will roost and establish maternity colonies in less desirable habitat,

such as orchards proposed for removal as part of this project. The integration of Project Requirement Bio 6 (see chapter 2, Project Description) is designed to reduce project-related impacts to sensitive bat species to a less than significant level.

b. Although riparian habitat and three sensitive vegetation types occur within the proposed project area they will not be negatively affected by project implementation. The project will enhance existing riparian habitat through plantings and exotic species removal and restore approximately 25 acres of walnut orchards to former riparian habitat. No impact.

c. A DPR Biologist conducted a preliminary site investigation for the presence of USACOE-jurisdictional wetlands and Waters of the U.S. within the project area on April 14, 2008. No USACOE-jurisdictional wetlands were identified within project boundaries. No work is planned below the ordinary high water mark of the Sacramento River (i.e. the sandy beach/flat in the northwest section of the parcel).

   No construction will occur nor will the site be open during periods of flooding. In addition, all activities (fishing) occurring as a result of proximity to the river will be in compliance with all applicable state and federal regulations. No impact.

d. The proposed project will be constructed on land and will not occur during periods of flooding nor will the use of the proposed facilities affect fish during flooding. The project will not substantially interfere with the movement of any native wildlife species or substantially impede the use of native wildlife nursery sites. No impact.

e. This project would not conflict with any local ordinances or policies protecting biological resources or tree protection policies. No impact.

f. The proposed project is located outside the boundaries of the approved Sacramento River National Wildlife Refuge Comprehensive Conservation Plan DFG Comprehensive Management Plan and Compliant with General Plan of 2007. No impact.

CULTURAL RESOURCES

Environmental Setting

The 41-cre parcel is in Butte County approximately five miles west of Chico on the east side of the Sacramento River along River Road. Several different local roadways provide access to the park, including River Road, State Route 32 and West Sacramento Avenue. The project area is located on the relatively flat floodplain of the Sacramento River. Dissecting the parcel on a northwest, southeast alignment is a swale which represents a relict riverine feature.

The parcel is part of the Indian Fisheries subunit of the Bidwell-Sacramento River State Park. The name for the unit, Indian Fisheries, comes from the area's name on the USGS Ord Ferry topographic quadrangle. This name reflects the Mechoopda fishing weirs that were noted along the river by early non-Indian settlers. The walnut orchard currently on the parcel was planted in the 1970s.

The park provides various ways of enjoying the river and surrounding riparian habitats. Access to the river allows for tubing, kayaking, canoeing, water-skiing, swimming, and fishing. Nature trails along the banks of the river offer hiking, biking and educational opportunities for bird and wildlife watching. Day use facilities such as parking, restroom and picnic tables are also available.

Cultural History:
Archaeological studies in the mountain ranges to the west and east of the project area document early period human use from about 14,000 years Before Present (BP); he 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 in the vicinity of the project area along the Sacramento River 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 macro-botanical remains acquired from flotation sampling studies revealed significant amounts of charred acorn, nuts, and other seeds. This data coupled with the presence of fish bone and baked clay, are not typical signatures of highly mobile cultures focused on hunting, but indicative of a more sedentary population (White 2003b).

In the project area, to the east of the Sacramento River, in Butte County, a number of local cultural chronologies have been presented. Recent data obtained from excavations near the

project area comes from Kowta's 1988 *The Archaeology and Prehistory of Plumas and Butte Counties, California. An Introduction and Interpretive Model.* The majority of these excavations occurred as a result of the damming of the Feather River to form Lake Oroville and United States Forest Service compliance archaeology. The information from these foothill/mountain studies is included here with the knowledge that the foothill/mountain chronologies are perhaps related to but certainly not identical to the riverine Sacramento Valley. Furthermore the foothill/mountain chronologies are consistently oriented to established Great Basin chronologies. Therefore, information from the foothill/mountain excavations and the riverine environment is included.

In the project vicinity the earliest identified dart projectile points are referred to as Parman Points and have been found in the mountainous area of Bucks Lake (CA-PLU-115). These points are considered local variants of a Great Basin Wide Stemmed Point and are tentatively dated from 11,500-7,500 BP in the Black Rock Desert area in northwestern Nevada, or as late as 6,000 BP in the Bucks Lake area. Traditionally these points are attributed to nomadic big game hunters (Kowta 1988:53).

Between 6,000 and 3,000 BP, there is scant archaeological evidence in the area to the east. Dart points traditionally associated with this time period are the Bucks Lake Wide Stemmed, a local variant of the Northern Side-Notched and Pinto projectile points. Aside from lithic debitage, shallow basin metates are the only additional tools that have been recovered in similar contexts representing this period (Kowta 1988:53). The earliest prehistoric land use at near the Colusa area along the river is represented by the Cha'dene Phase dating between 4,385-3,460 BP. This phase is defined from a buried stratum located between 200-250 centimeters below surface (cmbs), containing a limited inventory of tools dominated by dart projectile points, a *Haliotis* square bead, a plummet, and a handstone (White 2003b:143-148).

From about 3,000 to 150 BP, the archaeological record is well documented as a result of the Lake Oroville studies by researchers Olson and Riddlle (1963) and Ritter (1970).

Two identified variants of the Martis Complex; the Mesilla Complex and the younger Bidwell Complex represent 3,000-2,000 BP, and 2,000-1,200 BP respectively. The tool inventories include manos and metates, bowl mortars, shaped cylindrical pestles, large stemmed and side notched basalt and chert dart points, large saucer shaped *Olivella* beads, and oval *Haliotis* ornaments. The artifacts are representative of a highly mobile population focused on hard seed gathering. The younger variant is represented by large corner notched, leaf shaped, and stemmed points. Grinding equipment is still dominated by the mano and metate but mortars and pestles are present with stone and possibly wooden bowls. Soapstone vessels are common, as well as grooved and notched sinkers which imply fishing. The cultural assemblage of the Bidwell Complex indicates these populations may have been more sedentary than their predecessors (White 2003b:16).

In the Colusa area, this same time period is represented by 2 phases of the Si'dehe Phase. The Si'dehe Phase 1 from the Middle Archaic Period is dated between 3,222-2,750 BP and Si'dehe 2 from the Upper Archaic Period is dated between 2,750-2,200 BP. The Si'dehe 1

assemblage contains both Martis and Mendocino Period (from the Coast Range) dart points, shell ornaments and beads, baked clay objects, and grinding/mulling tools. The Si'dehe 2 tool inventory contains 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 2003b:143-148).

After 1,200 BP, many middle period technologies were replaced by late period manifestations present at contact. This shift in technology reflects the spread of the Penutian speaking Konkow Maidu into the area. In the Oroville area, this time range is called the Sweetwater Complex (1,200-400 BP), and is characterized by broader inventory of tools and residential debris, partially due to the preservation of organic material. Faunal remains indicate use of many upland mammalian species, fish, and fresh water shellfish. Bone tools include pins, fish gorges, awls, decorated bone tubes, and flaking tools. Shell artifacts are more abundant and include split-punched and rectangular *Olivella* beads, *Haliotis* banjos ornaments, and spoons made from fresh water clams (*Margaritifera*). Arrow size projectile points consist of small corner-notched and a large leaf shape forms. Additional stone artifacts include drills, soapstone pipes with a congruent decrease in soapstone vessels, sickles, actinolite pins, and large well made knives. A preference for mortar and pestle technology indicates a reliance on acorns as opposed to an earlier hard seed preference. A forager strategy with fixed villages is inferred from numerous well defined housefloors. This artifact inventory is indicative of a cultural area known as Central California; thus the spread of the Penutian speakers into the area is thought to come from the south or down river (Kowta 1988:149-150). In the Colusa area the emergent ethnographic culture is represented archaeologically by the Wi'ter-ry Phase 1,200 – 850 BP. Cultural material recovered from the Wi'ter-ry Phase includes arrow points, bone awls, soapstone bowls, j - shaped fish hooks, and *Olivella* shell beads. The presence of well made housefloors signifies residential permanence (White 2003b:143-148).

At contact, the parcel was within the territory of the Mechoopda, a riverine Konkow group. Archaeologists posit that the Mechoopda arrived in the area sometime about 800-600 BP. Although the Mechoopda occupied a relatively small area, their population density is reflected in the naming of over 20 ethnographic villages each with its own headman and ceremonial roundhouse. Approximately 10,000 Konkow individuals occupied the river and valley bottomlands before the contact period (Cook 1955). Kroeber (1932) and Heizer and Hester (1970) list several named villages along the Sacramento River near the parcel, including the villages of Se-dow-we and Sook soo'- ko (east side of the river two miles northwest of the parcel), Tsen-no or Chan-no, (west side of the river 4.5 miles downstream from the Chico Creek confluence), Pah'-kem, (east side of the river near the confluence of Mud Creek and Big Chico Creek, 2.0 miles southeast of the parcel), and O'tah-ke, (east side of the river two miles north of the mouth of Chico Creek, somewhere in the vicinity of the parcel). Powers (1874, reprinted 1975), who visited Chico in the late 1860s and early 1870s, recorded the Konkow name for Chico Creek as Chú lam shu. Kroeber (1925) plots the Konkow villages of Yaukü and Otaki along Big Chico Creek in the general vicinity of the project area (Kroeber 1925:Plate 37). However, the precise location of these settlements and their potential correlations with the archaeological record are unknown (White 2009).

The Konkow built large fishing dams that spanned the river. Wilkes described one of the

dams his exploratory party observed above Colusa in 1841:

> On the 31st, they again proceeded, and passed several Indian villages. Before noon, they arrived at a substantially-built fish-weir, of which the Indians began to take a part down, but Lieutenant-Commandant Ringgold deeming that this was the termination of his exploration, motioned to them to desist. This fish-weir was constructed with a great deal of art: stakes, pointing down the stream had been driven into its bed, having three openings, which led into square pens above; over each of the entrances into the pens was a platform, on which the natives stand to take the fish; on these also there were heaps of ashes, indicating that the natives make use of fire to attract the fish [Wilkes 1841, reprinted 1958:77-78].

Later, passing downriver, the party observed smaller features built much like the weir but representing individual fishing platforms (Wilkes 1841, reprinted 1958:80). Bidwell also describes a fish weir across the Sacramento River, which in 1845 was large enough for a mounted party to cross like a bridge (Bidwell reminiscences, in Rogers 1891). W.B. Ide's 1847 diseno for the Hyacinth Rancho, located on the west side of the river immediately west and south of Indian Fisheries Unit, depicts two fish dams adjacent to Indian settlements (probably Baht-che and Yoot'-dok-kah) in Konkow territory (White 2009).

A Mechoopda village with no known ethnographic name, called the Patrick site, was excavated in the Durham area in the 1960s. The site is an extensive residential area covering more that six acres, with archaeological deposits reaching depths up to five feet (1.6 meters), these deposits contained the remnants of 42 housepits and a ceremonial roundhouse. The excavation of this site resulted in describing the Chico Complex. The archaeological assemblage associated with the Chico Complex, dates between 600-200 BP, and contained remains of three different types of structures which were often superimposed upon one another. Prepared housefloors with central ash hearths, block mortars and post molds were present. Numerous faunal remains included food remnants dominated by deer, but also containing rabbits, elk, bear, salmon, and other fish and fresh water shellfish. Faunal artifacts include beads dominated by small clam shell disc and *Olivella* beads, bone awls, pendants, needles, decorated tubes, and antler wedges and flakers. Stone tools included arrow points made from chert and obsidian including the styles of Desert Side-Notched, corner notched, and Gunther Barbed or Stemmed, and numerous flake and core tools. Grinding tools include the mano and milling stone, as well as pestles, mortars, hopper mortars, and block mortars. Compared to the earlier foothill complex, the Sweetwater, or the contemporaneous Oroville Complex, this valley floor site demonstrates a more diversified subsistence pattern with more trade and ceremonial objects (Kowta 1988:171-175).

Another site associated with the Mechoopda ethnographic period, the Finch site or CA-BUT-12, was also excavated in the 1960s. It is within two miles of the parcel. It is a three acre large mound that stands about five meters above the floodplain. No detailed analysis of the site has been accomplished; however some of the assemblage contained projectile points including Gunther Stemmed, Desert Side-Notched, and Cottonwood Triangular varieties. Also recovered were a variety of shell beads, bone awls, gorge hooks, and composite fish hooks (Kowta 1988). The Coru Phase (post-contact) is described from excavations at Coru, the River Patwin ethnographic village at the present town of Colusa, about 35 miles south of the project area. Cultural material from the limited excavation of the very disturbed deposit includes Napa Valley

obsidian arrow points and a core, decorated baked clay objects, and *Olivella* and clam shell disk beads (White 2003b).

The ancestral Mechoopda at the southern edge of their territory near Ord Bend may have encountered the early Arguello expedition of 1821. Captain Luis Antonio Arguello, Commandant of the Presidio de San Francisco and his chaplain the Reverend Father Fray Blas de Ordaz conducted reconnaissance 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. Arguello's expedition encountered many villages as they traveled up the west side of the Sacramento River indicating a high density population situated within the rich riverine environment.

In 1844, three large land grants were issued, leading to the establishment of several prominent ranchos. Rancho Arroyo Chico, awarded to William Dickey encompassed portions of the present day Bidwell-Sacramento-River State Park located on the eastern banks of the Sacramento River (Hood and McGuire 1981:16). Dickey did not hold onto his rancho property for long; in 1849 John Bidwell purchased Rancho Arroyo Chico from Dickey (Hood and McGuire 1981:18). By 1855 Bidwell's rancho became an agricultural center with the California State Agricultural Society stating, "this farm is undoubtedly among the best and most productive in the state" (Hood and McGuire 1981:23). Bidwell routinely employed Native Americans, especially Mechoopda, in his various enterprises from mining and growing wheat to shipping.

Wheat was the primary crop for those pursuing agriculture. The river played a major role in the transport of goods from the rancho to market. Bidwell's Ferry and Ferry House, in the parcel area at the confluence of Pine Creek and the Sacramento River, are depicted on the 1858 Rancho Capay plat (Hood and McGuire 1980: Figure 2). While the ferry and ferry house do not show up on later historic maps, the ferry must have been in use in the 1850s during the gold rush.

Prior to recent subsurface exploration of the parcel, research was completed by Greg White of Pacific Legacy Incorporated. Dr. White accessed John Bidwell's diary to make the following observations about the project area. The reader is directed to: *Subsurface Archaeological Inventory of the California Department of Parks and Recreation's Brayton Orchard Acquisition, Indian Fisheries Unit, Northern Buttes District, Butte County, California* (White 2009). For further information, portions of the report are provided below:

> In 1852, Bidwell built his original landing and ferry at the terminus of a road leading directly east from his ranch headquarters, adobe, mill, and store on Tehama Road. The exact alignment of this original 6.0 mile-long road is not known, although it is interesting to note that the route and bed of Chico Creek is unchanged since at least 1860 (Harbaugh 2006:37), and a direct line drawn due east from the Mansion grounds avoids the various Chico Creek meanders and ultimately intersects the river precisely on the south border of the Brayton Acquisition. Bidwell Landing not only served to transport the diverse products and needs of Bidwell's holdings and the growing City of Chico, but also accommodated cross-river stage traffic between the (east side) Tehama Road and (west side) Shasta Road, and was the termination of overland traffic

on two important late 19th-century commercial arteries, the Humboldt Road and the Chico-Idaho Stage Road (Gillis and Magliari 2003:193–195). Bidwell's diaries from 1869—1871 note the comings and goings of numerous steam ships carrying materials, produce, and passengers to and from Bidwell Landing, including numerous luminaries like John Muir, who in October 1877, anchored at the landing during his visit to Rancho Chico (J. Bidwell in Bidwell Mansion Association 2001).

Bidwell's diaries indicate that in February 1869, he assigned workers to survey the road to the landing (J. Bidwell in Bidwell Mansion Association 2001; entry for February 1st, 1869), although it is not clear if any improvements were made at this time. By spring, 1871, Bidwell's diary refers to the "Old Landing" as a picnic spot (e.g., J. Bidwell in Bidwell Mansion Association 2001; entry for May 9th, 1871), implying a new landing was built by this time. The new landing site, located approximately 1.5 miles south of the Brayton Acquisition, went by the name "Chico Landing."

Before and after John Bidwell's death, Annie Bidwell's diaries note regular excursions to the Old Landing for rides and picnics. Her entries on these excursions also bring out useful details on features and land use in the Indian Fisheries Unit. For example, in several places her diary notes that she observed "Indians fishing" at the Old Landing (e.g., A. Bidwell in Bidwell Mansion Association 2001; entries for June 5th, 1899 and May 5th 1900), and offers comments on people fishing for American shad with hand nets (e.g., A. Bidwell in Bidwell Mansion Association 2001; entries for July 8th, 1899 and July 14th 1902); the latter indicating the quick establishment and rise of American shad populations introduced into the river in 1871 with fingerlings derived from New York State waters (Dill and Cordone 1997). Elsewhere, Annie Bidwell recounts being caught in a "brisk shower" while picnicking at the Old Landing, and the party taking refuge in "a cabin by the river" (e.g., A. Bidwell in Bidwell Mansion Association 2001; entries for April 28th, 1899).

The land that makes up Bidwell-Sacramento River State Park came largely from the Bidwell family who deeded land to the State Forestry Service to protect the trees on the wooded riparian banks of the Sacramento River in 1908. Prior to this, eleven acres of land had been deeded to Butte County in order to establish road access to the river. In 1950, to clear up discrepancies due to overlapping deed and land titles, the state conveyed its land holdings to Butte County which leased portions of the land to the Chico Area Recreation and Park District. By the 1960s, usage and boundary disputes led to the investigation of the feasibility of alternative methods to preserve the area that had become known as "Bidwell River Park". In 1977 a state bill authorized the purchase of the lands and on August 1, 1979 the land was transferred into the State Park System. In 1990, the park was officially named and classified as Bidwell-Sacramento River State Park (EDAW 2003:1-3).

It is not known when this parcel was sold from the Bidwell estate, but by the 1970s, Mr. Robert Brayton had purchased the land and planted the current English walnut orchard and in 2004, he sold the parcel to the state for inclusion in the park. Mr. Brayton, reported that at some time in the past, a Mexican family lived on a house built on stilts that was on the mound. This structure may be the structure depicted on the 1949 USGS Ord Ferry topographic quadrangle.

Current Investigations: The Area of Potential Effects (APE) for this project is the entire parcel, a recent (Fall 2004) addition to Bidwell-Sacramento State Park. The majority of the 41 acres, located between the east bank of the Sacramento River and River Road, is an

English walnut orchard. At the time of purchase a one-story residence, two accessory buildings, and other remnants of the area's farming past (irrigation lines, agricultural water well, etc.) were located on the property. Early Butte County Assessor's office records estimated the one-story residence's original date of construction as 1952, and the Butte Co. Building Department noted an addition to the residence in 1964. The construction dates for the accessory buildings are unknown.

The California Department of Parks and Recreation (DPR) evaluated the residence and outbuildings for both the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR). Under the theme of agricultural development in Butte County the parcel was evaluated as a small, single family ranch during the time period of 1950 to the present. Following research into the history of the property, the agricultural development of walnut orchard farming in Butte County, and the evaluation of the buildings for architectural significance, it was determined that the parcel and its associated residence and outbuildings were not eligible for either the National register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR). These findings were concurred by the California Office of Historic Preservation (OHP) in December 2005. Subsequently, all of the buildings on the property were demolished in 2006 (DPR 2005; Brooke 2005).

The parcel has been subjected to intensive pedestrian survey by DPR Associate State Archaeologists, Jeff Brooke and Leslie Steidl, within the past 3 years. Additionally, both of these researchers contacted the Native American Heritage Commission to conduct a sacred land files search of the property. The Most Likely Descendants for the parcel are the Mechoopda Indian Tribe. Consultation with the Mechoopda has resulted in a subsurface studies Memorandum of Understanding, and discussions concerning the revegetation efforts at the parcel, interpretative signage, trails, areas for traditional plant collecting, and periodic monitoring of the parcel.

A systematic backhoe trenching program was undertaken on April 21 and 22, 2008 by Dr. Greg White. The purpose of the trenching program was to conduct a subsurface investigation prior to planned ground disturbing activities, which include; stump removal, toilet and septic infrastructure construction, parking lot development, and trail construction. A total of 48 trenches were placed across the 40 acre parcel at approximately 50' intervals. Trenches were approximately 12' long and averaged 5' in depth to accommodate for the deepest planned ground disturbance during construction. This investigation focused on identifying buried soils that might have prehistoric archaeological deposits (White 2009).

Trenching on the west side of the swale revealed very young river sediments. In the portion of the parcel east of the swale, a small buried soil surface was found at 2-3' below ground surface. This buried deposit appears to be thicker and more dominant to the east. No cultural materials were found on this buried surface. The proximity of this parcel to the Sacramento River, the pattern of prehistoric settlement along the river and the rich history of the area indicate the parcel is an environmentally sensitive area.

LESS THAN

	POTENTIALLY SIGNIFICANT IMPACT	SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

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) A residential structure and five ancillary buildings and features located on the parcel were formally determined not eligible for the NRHP or the CRHR in 2005. This finding was only for the residence and buildings identified as having a construction date of 1953-1964.

The background research has also identified a historic cabin on or near the property that belonged or was managed by the Bidwell family. The cabin is mentioned in Bidwell's diary as a place used for picnics and as shelter during fishing expeditions. There is a possibility that historic resources related to the early history of the area remain intact within the project parcel. Adherence to Project Requirement Arch 1 Environmentally Sensitive Areas and SPR Arch 2 Cultural Resources (See Chapter 2) will reduce the impacts to historic resources to a less than significant level.

b) As stated in the Environmental Setting above, the location of this parcel near the Sacramento River makes it an Environmentally Sensitive Area. Construction and rehabilitation activities related to this project, including but not limited to earth movement, plant removal, equipment staging, or operation of equipment could significantly impact unrecorded archaeological deposits located within the proposed project area.

Subsurface trenching has revealed young sediments (<200 years old) to the west of the swale and the potential for buried soil horizons to the east of the swale. Given the inherent nature of project planning and development, design plans and project descriptions often change after mitigations/Project Requirements for the protection of cultural resources have been developed for CEQA compliance. In an effort to reduce the risks to cultural resources from unexpected design changes after CEQA has been completed and during construction Project Requirement Arch 1 Environmentally Sensitive Areas (see Chapter 2), will be implemented to prevent impacts. Less than significant impact.

c) There is always a potential of unanticipated discoveries of human bone. If any human remains or burial artifacts are identified, implementation of Specific Project Requirement Arch 2 Cultural Resources (See Chapter 2) will reduce impacts to this resource to a less than significant level.

The Mechoopda Indian Tribe has indicated their interest in project activities. To ensure their participation during the CEQA process and project activities for this parcel, Project Requirement Arch 3 – Continued Native American Consultation (see Chapter 2) will be implemented.

V. GEOLOGY AND SOILS

Environmental Setting

The 41-acre parcel project site (Project Site) is a relatively new acquisition to the Bidwell-Sacramento River State Park (Park), located between the Pine Creek Landing and the Indian Fishery subunits. The Project Site is approximately 5 miles west of Chico, 1.5 miles south of Highway 32, and is located between Sutter Avenue (Sutter Avenue becomes River Road) to the east and the Sacramento River to the west, in Butte County.

Topography

Located in the northern Sacramento Valley, the elevation at the Park is fairly low, ranging between 108 and 150 feet above mean sea level (msl). Topography varies by subunit, ranging from relatively flat land areas and gravel bars to steep, heavily vegetated river banks. Elevation tends to decrease with increasing distance from the riverbank (levee), creating low floodplain areas. The topography at the Project Site is relatively flat, with a linear depression (probable old river channel) bisecting the area (see Appendix A for a contour map of the site). The elevations range from approximately 130 feet mean sea level (msl) and below up to 135 feet msl at the riverbank and bordering the old drainage channel.

Geology

The Park and Project Site are located within the center of the Great Valley Geomorphic Province (GVGP), a northwest-trending, relatively flat, alluvial plain extending from the Klamath Mountains in the north to the Tehachapi Mountains in the south, the Sierra Nevada to the east, and the Coast Ranges to the west. The GVGP is an elongate structural trough that has been filled with a sequence of marine and non-marine sediments, mostly derived from the erosion of the Sierra Nevada, and some input from the Coast Ranges to the west. The trough is an asymmetric geosyncline with a short western flank and a long, stable eastern shelf supported at depth by the granitic rocks of the Sierra Nevada. The sediments are a mixture of gravel, sand, silt, and clay, up to thousands of feet thick, deposited over time when the Sacramento Valley was an inland sea. These sediments, which form the surface of the Sacramento Valley, were deposited by rivers originating in the mountains (DPR 2003). Southwest of the old channel, the Project Site is underlain by Quaternary (Holocene) stream channel deposits (Qsc) associated with active stream and river systems. To the northeast of the old channel, the deposits are mapped as Pleistocene-age older alluvium (terrace deposits) of the Upper Modesto Formation (Qmu), consisting of unconsolidated and unweathered gravel, sand, silt and clay (Helley & Harwood 1985).

Soils

Generally, soil in the region is a deep alluvial loam, deposited over thousands of years due to river and creek meandering. Soils within the Park consist primarily of silt loams or sandy loams that are composed of river deposits (DPR 2003). The soil type at the Project Site is mapped as Horst silt loam, located on 0-2% slopes. Horst silt loam is a well-drained, very deep floodplain soil formed on alluvial deposits of the Sacramento River, subject to occasional flooding (DPR 2003). Other characteristics include slow runoff and moderate

permeability (USDA 2003).

Seismicity

There are no known active surface faults within the Park or 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 area is the Cleveland Hills Fault, which runs in a north-south direction, roughly 30 miles to the southeast of the Park. This fault, part of the Foothills Fault System, resulted in the most recent significant earthquake recorded in Butte County, which occurred at Oroville in 1975 and measured 5.7 on the Richter Scale, with two aftershocks of 5.2 and 5.1 (DPR 2003).

Several other major active fault systems outside Butte County are capable of producing earthquakes that 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 IV-1: Active Faults

Fault Name	Distance & Direction from Project Site	Maximum Moment Magnitude Earthquake	Age of Last Rupture	Comments
Cleveland Hill	30 miles southeast	6.5-6.7	Holocene	Source of the 1975 Oroville Earthquake
Battle Creek	45 miles north	6.5	Quaternary	
Bartlett Springs	60 miles west	7.1	Holocene	
Dunnigan Hills	60 miles south-southwest	6.5	Holocene	
Midland-Sweitzer	70 miles southwest	7.0	Quaternary –Pre-Quaternary	Possible source of 1892 Winters earthquakes of magnitude 6-6.9.
Maacama	80 miles west	7.1	Holocene to Historic	
San Andreas	115 miles west-southwest	7.6	Holocene to Historic	One of the most active faults in California
Green Valley	110 miles south-southwest	6.9	Holocene to Historic	
Hayward	125 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, and the Cohasset Ridge Fault.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable, as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	☐	☐	☐	☒
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?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☐	☒

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 in the Environmental Setting section above. The Project Site may be susceptible to liquefaction, but the probability of seismic-induced landslides is low.

i) The project site is not located within an Alquist-Priolo Earthquake Fault Zone (APEFZ) as designated by the CGS. Therefore, there is no expected impact from surface rupture due to this project.

ii) The CGS has determined that the closest faults (Cleveland Hill and Battle Creek faults) are both capable of generating a Maximum Credible Earthquake of magnitude 6.5 (Petersen 1996). Other faults listed in Table IV-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 (California Geological Survey 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 Big Chico Creek and the Sacramento River. The Project Site is rated as moderate for liquefaction potential. Areas parallel to the Sacramento River that contain subsurface layers of clean, loose, saturated sand layers have high liquefaction potential (Butte County 2005). Damage could occur to the parking lot area, the restroom facility, and roads, but the risk 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 terrace and floodplain with slopes usually less than 2%. Therefore, there would be no impact from a seismically triggered landslide.

b) A temporary increase in erosion could occur during the phases of this project during grading for the access road, parking lot, boat ramp, and any other ground-disturbing activities. Integration of Project Requirement GEO-1 (see Chapter 2, Project Description) will reduce erosion or loss of topsoil by the proposed project to a less than significant level.

c) The 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 to high potential for instability due to liquefaction or lateral spreading during an earthquake. The area is also rated as a potential subsidence area due to groundwater or gas withdrawal (Butte County 2005). There are no known problems due to liquefaction or subsidence to date at the Project Site or in the Park. Therefore, the impact from these hazards is less than significant.

d) The Project Site is underlain by soils with a low potential for soil expansivity (Butte County 2005). The Horst soil is a silt loam; expansive soils (expansive clays) are generally plastic clays. There would be no impact due to this project.

e) The project includes the installation of a septic system with associated leach field. The silty loam soils present at the Project Site are most likely suitable to support a leach field. Nearby areas, such as Pine Creek, have acceptable soils (EDAW 2008). A septic system permit from Butte County will be required, which will likely include a soil profile and percolation test. If permitted a leach field will be install.

   Since the area is periodically inundated, special considerations for the septic system design and operation will be required. The draft EIR for the Habitat Restoration and Outdoor Recreation Facilities Development Project (EDAW 2008) provides some guidelines for construction and maintenance of restroom facilities and septic systems in areas that flood. Some of these guidelines include placing buildings on raised pads, sealing restrooms prior to a flood event and pumping septic tanks prior and/or after flood events. With the inclusions of the permit and guidelines stated above there will be a Less than significant impact.

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 Project Site is located between the Pine Creek and Indian Fishery subunits. The riparian areas along the Sacramento River and its tributaries were first utilized by Native Americans. In the mid-1800s, with European occupation, areas near the Sacramento River were used for growing wheat and then converted to orchard are row crops. Currently the majority of the Project Site is planted with walnut trees and had a farmhouse that has since been removed.

Hazardous Materials

There has been no known industrial use or construction of buildings on the parcel that could have been a source of hazardous materials. The California Department of General Services conducted a Phase I Environmental Assessment and found no evidence of toxic materials (DPR 2006). However, the past agricultural use may or may not be a source of hazardous materials associated with various agricultural practices, as well as uncontrolled dumping of household waste.

Airports

The nearest airport is Ranchaero Airport, which is approximately 5 miles to the southeast. It is a privately owned general aviation facility. The project site does not fall within the Airport Zone (Butte County 2005) or any of the Compatibility Zones for Ranchaero Airport. The Chico Municipal Airport and the Paradise Airports are located approximately 7 miles and 18 miles away, respectively.

Schools

There are no schools located within one-quarter mile of the project location. The closest school, Hamilton Elementary School, is located approximately 4 miles to the northwest at 277 Capay Avenue in the city of Hamilton. Emma Wilson Elementary School, 1530 West 8th Avenue in Chico is located approximately 5 miles to the east (Yahoo 2008).

Fire

The Project Site is a mixture of riparian vegetation, with oaks, residual orchard trees, blackberries, and grasses/forbs inland from the riparian zone. The areas with grasses can become dry during the summer and fall and could be a potential fire hazard.

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

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 will require the use of certain potentially hazardous materials, such as fuels, oils, or other fluids associated with the operation and maintenance of vehicles and equipment. These materials are generally contained within vessels engineered for safe storage. Large quantities of these materials will not be stored at or transported to the

construction site. Spills, upsets, or other construction-related accidents could result in a release of fuel or other hazardous substances into the environment. Spill prevention protocols described in Project Requirement Hazard 1 (see chapter 2, Project Description) will reduce the potential for adverse impacts from these incidents to a less than significant level.

b) No known hazardous materials are present at the Project Site, but due to past agricultural use, certain hazardous materials (hydrocarbon products, pesticides, other chemicals) could be present. Another potential hazard is the possibility of illegal dumping of household refuse or other debris due to the rural location. Implementation of Project Requirement Hazard 2 (see Chapter 2, Project Description) will 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 in the general vicinity of the project or within one-quarter mile of the proposed project site. Therefore, there will be no impact from 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. There would be no impact as a result of this project.

e, f) The Park 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. The Ranchaero Airport, a private airstrip, is approximately 5 miles to the southeast. Therefore, no impact would occur as a result of this project.

g) All construction activities associated with the proposed project would occur within the boundaries of the Park and work would not restrict access to, cause delays, or block any public road outside the immediate construction area. The traffic on River Road 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 of Butte County. Therefore, the impact of this project would be less than significant.

h) The project work location is in or adjacent to the riparian area associated with the Sacramento River. Some work areas are located away from the riparian zone in either walnut orchards or areas with grasses that may become flammable during the dry season (June-October) and could pose a fire hazard. Heavy equipment can get very hot with extended use; this equipment would sometimes be in close proximity to this vegetation. Improperly outfitted exhaust systems or friction between metal parts and/or rocks could generate sparks, resulting in a fire. Implementation of Project Requirement Hazard 3 (see Chapter 2, Project Description) will reduce the potential for adverse construction impacts from this project to a less than significant level.

In addition, in parks where wildfire is a major concern, preventive management techniques are employed to reduce the threat of wildfire. These techniques include increased patrols, brush clearance, and closure of certain park areas during extreme

fire conditions. During high fire risk conditions, no fires are allowed, during medium and low fire risk conditions; barbeques with charcoal briquettes are allowed, but must be contained in the grills. Park Staff and Camphosts strictly enforce these rules. Weeds and brush are maintained in the day use area to greatly reduce the possibility of ignition. Staff at Pine Creek would employ similar management operations.

In the unlikely event that fire were to escape the grills in a developed day use area, it would very quickly be detected by other visitors, camphosts or park staff, reported and extinguished before it became a wildfire event. The day use area at Sacramento River Access at Pine Creek in Bidwell-Sacramento State Park is immediately adjacent to a County road allowing firefighting equipment access and is not directly adjacent to homes.

Vegetation thinning and controlled burns are also used as fire management techniques in appropriate locations or conditions. Controlled burns are guided by a burn plan that provides information on how and when controlled burns can proceed.

Moreover, state park visitors are not a likely source of wildfire. According to CDF data for statewide wildfires between 2000 and 2005, only 3% of wildfires were started by campfires, including illegal fires. 27% were started by equipment use, 10% by debris burning, 14% were undetermined, 13% were classified as miscellaneous, 14% were started by vehicles, 7% were started by arson, 5% by lightning, 2% each by smoking and playing with fire, and 3% each by powerline and campfire. Illegal campfires started the Altadena fire, the Griffith Park fire, and the 2007 fire at Lake Tahoe. A lost hunter hoping to signal for help started the state's most destructive fire, the Cedar Fire. Several other major fires, including the Witch Creek and Harris fires of October 2007 were started by downed power lines. Please also note that during public testimony at the February 29, 2008 State Park and Recreation Commission Hearing, National Park Service indicated that their studies for the Santa Monica Mountains showed that a wildfire had never been started in a public campground.

DPR does not anticipate an increase in wildland fire due to this project and with the inclusion of Project Requirements Hazard 4-Fire Management there is a less then significant impact.

VIII. HYDROLOGY AND WATER QUALITY

Environmental Setting

Watershed

Bidwell-Sacramento River State Park (Park) is located within the Sacramento River Basin, as designated by the Central Valley Regional Water Quality Control Board (CVRWQCB). The Sacramento River is a large, dynamic alluvial river that drains the northern portion of the Central Valley (Department of Parks and Recreation (DPR) 2003). The Project Site is within Reach 2 (Red Bluff to Chico Landing) of the Sacramento River Conservation Area, as designated by the Sacramento River Conservation Area Forum (SRCAF). The Project Area is located between river mile 194 (Bidwell River Park) and river mile 196 (mouth of Pine Creek). The presence of meander scars and oxbow lakes, such as Jenny Lind Bend to the southwest and Indian Fishery to the southeast, indicates active channel movement and shifts (SRACF 2003). Reach 2 is further divided into subreaches A-H. The Project is located in subreach H, designated as having high bank erosion potential, a meandering channel shape, and a high sinuosity of 1.5 (measure of tightness of meander loops).

In this area, the inner river zone is within a Conservation Area, where interested landowners may participate in voluntary riparian habitat conservation and restoration programs (SRAC 2003). DPR has applied for a Proposition 50 grant to restore 25 acres of orchard to riparian habitat as part of this development project.

Flooding

Flooding is a major concern at the Project Site, located within the designated 100-year floodplain of the Sacramento River. The site is located within the 1 (one) to 5 (five) year floodplains), therefore, all of the Project Site is subject to inundation. Flooding poses significant concerns related to the availability of existing facilities, new facility development, and visitor safety (DPR 2003). The Central Valley Flood Protection Board is responsible for maintaining safe floodways within the Sacramento River watershed. (SRCAF 2003). Development at the Project Site will be subject to consultation with and a permit from the Central Valley Flood Protection Board (CVFPB).

Groundwater

The water table in the Park is assumed to be shallow, based on the relatively flat topography and the proximity to the Sacramento River. During the wet season, the water table at the Project Site is estimated to be within 10 feet of the ground surface (DPR 2003) or less. There are two wells on the property, one utilized for irrigation and one that was used for potable water at a former residence (Martin 2008). A new potable domestic well and pump system is proposed to be installed near the restroom facility. Due to unknown conditions and lack of original well logs, the existing potable well will most likely be sealed and abandoned per current Butte County Environmental Health procedures.

Water Quality

The CVRWQCB regulates water quality in the region and provides water quality standards and management criteria as required by the Clean Water Act. These standards and

criteria are presented in the Water Quality Control Plan (Basin Plan) for the Central Valley Region (CVRWQCB 1998). The Basin Plan identifies the beneficial uses and water quality objectives for the Central Valley region. Beneficial uses for the Sacramento River within this reach are listed below:

- Municipal Supply (MUN) – municipal and domestic
- Agricultural Supply (AGR) – irrigation & stock watering
- Industrial Supply (IND) – service supply and power generation
- Water Contact Recreation (REC-1) – swimming, canoeing and rafting
- Non-Contact Water Recreation (REC-2) – other non-contact
- Warm Fresh Water Habitat (WARM)
- Cold Fresh Water Habitat (COLD)
- Migration of Aquatic Organisms (MGR) –cold and warm water
- Spawning, Reproduction and/or Early Development for Fish (SPWN) – warm and cold water
- Wildlife Habitat (WILD)
- Navigation (NAV)

Groundwater quality in the Sacramento River Hydrologic unit is generally excellent. Human-induced impairments are generally associated with individual septic systems in shallow unconfined portions of aquifers where insufficient soil depths are available to properly leach effluent (DWR 2003). Past agricultural use can also contribute pesticide contamination. No known impairments to groundwater quality exist at the Project Site. An existing potable water supply well and an irrigation well are present on property, but no water quality data was available.

Water Supply

Currently, there is a potable water supply well located on the property, which was used for a former residence. There is also an irrigation well used to water the walnut orchards. Potable water will be needed for the planned restroom and any drinking fountains or hose bibs. A new potable domestic well and pump system is proposed to be installed near the restroom facility. Due to unknown conditions and lack of original well logs, the existing potable well will most likely be sealed and abandoned per current Butte County Environmental Health procedures.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby	☐	☐	☒	☐

	wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?				
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place structures that would impede or redirect flood flows within a 100-year flood hazard area?	☐	☐	☒	☐
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?	☐	☐	☒	☐
j)	Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

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 operations associated with the entrance road, parking lots, restroom facilities, trails, and any other ground-disturbing activities, a release of sediment to the Sacramento River could occur. Other impacts to water quality could result from releases of fuels or other fluids from vehicles and equipment during the construction process and from construction materials (such as concrete or asphalt).

As discussed in Utilities and Services Systems on page 79 of the Initial Study/Negative Study, wastewater would be treated onsite using a system designed to include devices that can be controlled to prevent the overflow or inundation of floodwater to the septic

system, which includes an underground sealed concrete septic tank and rock. However, based on comments received the use of a vault toilet system could also be used. Use of either system, shall be designed to prevent the overflow or inundation of floodwater. This would be a less than significant impact to water quality.

DPR will follow all State water quality standards and waste discharge requirements during the construction of this project and will work with Butte County, the California Central Valley Flood Protection Board, and the California Regional Water Quality Control Board on the permits needed for this project. With these conditions, there will be a less than significant impact to water quality.

Integration of Project Requirement Hydro-1 (see Chapter 2, Project Description) and standard best management practices will control releases of pollutants in storm (or other) water runoff and have a less then significant effect.

b) The Project Site currently has one potable water well and one irrigation well (Martin 2008). This project will provide a potable water supply for the restroom facility and any drinking water fountains or hose bibs. The change from groundwater withdrawals predominately for irrigation purposes to withdrawals for public use and some continued temporary irrigation will result in an overall decrease in groundwater usage. The irrigation well will be used initially to water the new riparian vegetation (drip system) for approximately three years. After that time, it will be capped and sealed and will remain for future use (Teague 2008).

   A new potable domestic well and pump system is proposed to be installed near the restroom facility. Due to unknown conditions and lack of original well logs, the existing potable well will most likely be sealed and abandoned per current Butte County environmental Health procedures. Therefore, the project will have a less than significant impact on groundwater quality or supply in the area.

c) No existing drainages will be significantly altered by this project. Any siltation impacts from this project will be less than significant, provided stormwater runoff is directed in a manner that does not cause erosion. Post-construction BMPs to reduce sediment-laden runoff are specified in Project Requirement Geo-1 and Hydro-1 (see Chapter 2, Project Description).

b) The drainage pattern will not be altered in a manner that would significantly increase the rate or amount of surface runoff or that would result in on- or off-site flooding. The majority of the proposed parking area will be a partially permeable gravel surface. Impermeable surfaces will include the entrance road, handicapped parking spaces, restroom facility and any sidewalks. Implementation of Project Requirement Hydro-2 (see Chapter 2, Project Description) would reduce any impacts to less than significant.

e) This project will not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems, provided the new entrance road, parking lot and other semi-permeable and impermeable areas are designed to handle any increased surface water runoff. No substantial additional sources of polluted runoff are

expected from this project, provided Best Management Practices (BMPs) for control of sediment and other pollutants are followed. Implementation of Project Requirement Hydro-2 (see Chapter 2, Project Description) will reduce this impact to less than significant.

f) This project will not substantially degrade water quality due to soil erosion and runoff or release of vehicle or equipment fluids if BMPs are implemented, as specified in Project Requirements **Geo-1, Hydro-1, and Hazard-1** (see Chapter 2, Project Description)**.**

As discussed in Utilities and Services Systems on page 79 of the Initial Study/Negative Study, wastewater would be treated onsite using a system designed to include devices that can be controlled to prevent the overflow or inundation of floodwater to the septic system, which includes an underground sealed concrete septic tank and rock. However, based on comments received the use of a vault toilet system could also be used. Use of either system, shall be designed to prevent the overflow or inundation of floodwater. This would be a less than significant impact to water quality.

DPR will follow all State water quality standards and waste discharge requirements during the construction of this project and will work with Butte County, the California Central Valley Flood Protection Board, and the California Regional Water Quality Control Board on the permits needed for this project. With these conditions, there will be a less than significant impact to water quality.

g) The entire Project Site is located within the FEMA-designated 100-year floodplain. However, since this project does not place housing in the 100-year floodplain, there is no impact from this project.

h) This project will place structures within the FEMA-designated 100-year floodplain (actually within the 1-5 year floodplain) of the Sacramento River. However, most facilities will be set back from the main river channel and any flood flows reaching those areas should not be impacted due to any structures. A hydraulic analysis completed in January 2009 show that there would not be a significant change in the flow path or the river of over the floodplains. (Ayres 2009). In addition, replacement of the 25 acres of walnut trees with native riparian vegetation should create more natural flood flow behavior. Therefore, there is a less than significant impact from this project.

i) The project will place a new structure within the 100-year floodplain of the Sacramento River. All new facilities will be designed to withstand seasonal flooding and the Park will not be open during flood events. In addition, failure of Shasta Dam would affect the Sacramento River as far south as Knights Landing (Sacramento County 1993). There may be a slight increased risk of loss, injury, or death due to flooding to the public as more visitor use can be expected. See Appendix B for Hydrology Report. Implementation of Project Requirement Hydro-3 (see Chapter 2, Project Description) below would reduce this risk to less than significant.

j) The Project Site topography is relatively flat and not prone to landslides or mudflows. The project is not located in an area that would be inundated by either a seiche or a tsunami. Therefore, there is no impact due to this project.

IX. LAND USE AND PLANNING

Environmental Setting

The current Butte County General Plan, the City of Chico General Plan, and the Setting and Trends for the Butte County General Plan 2030 all list the land use of the Brayton parcel as Agricultural – Orchard and Field Crops (Butte County 2000, Butte County 2007, & City of Chico 1999). Bidwell-Sacramento River State Park is comprised of various subunits that also fall under this land use designation. A "greenline", adopted by the City of Chico and Butte County in 1982, runs along the western edge of Chico to prevent urban encroachment into agricultural areas that exist between the city and the county line (City of Chico 1999).

Approximately 3¾ miles to the west of the parcel is Hamilton City, Glenn County (Google Pedometer 2008). This established community is on the west side of the Sacramento River. The Sacramento River will prevent the expansion of Hamilton City toward the project location.

The proposed project would install day use facilities and restore riparian habitat. According to the Federal Farmland Protection Policy Act (FPPA), the proposed project would not irreversibly convert the acreage from the Agricultural designation (USDA 2008). The FPPA views outdoor recreation that would occur within the parcel as a non-urban use protective of, and compatible with, agriculture (DPR 2005).

USFWS and CDFG developed a management plan for the Sacramento River Wildlife Refuge; however, this plan does not apply to State Park property (DPR 2003).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with 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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Criteria for Determining Significance

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

DISCUSSION

a) The proposed project is located completely within the boundaries of the parcel of Bidwell-Sacramento River State Park, in a rural area of Butte 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 on the edge of the Sacramento River Wildlife Refuge, an area designated Agricultural – Orchard and Field Crops by Butte County. The proposed riparian habitat restoration and day use facility installation does not constitute a loss of agricultural land because the FPPA and CEQA Guidelines do not regard this project as irreversibly converting farmland to a non-agricultural urban use (DPR 2007). Therefore the land use designation would not 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 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. This does comply with the DPR General Plan of 2005. No impact.

X. MINERAL RESOURCES

Environmental Setting

The only identifiable mineral resources within or adjacent to the Park are the gravel bars created by the meanders of the Sacramento River. There are no known mineral deposits located within the study area of sufficient grade to be of commercial value. (DPR 2003) Mineral resource extraction is not permitted under the Resource Management Policy of the Department of Parks and Recreation (DPR 2004).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Criteria for Determining Significance

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

DISCUSSION

a) The project would not result in the loss of availability of a known mineral resource because no known mineral resources exist within the project boundary.

b) The project would not result in the loss of availability of a locally important mineral resource because no known mineral resources exist within the project boundary.

XI. NOISE

Environmental Setting

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

Bidwell-Sacramento River State Park is located in a rural setting and is known for its serene and generally quiet nature. Typical noises heard at the Park include vehicular traffic along River Road, miscellaneous farming operations, and intermittent noises associated with recreation activities (DPR 2003). Potential noise-sensitive receptors adjacent to the project area include Scotty's Landing trailer park and restaurant complex. This residential and business complex is located more than 50 feet from the proposed parking and restroom facilities. The proposed facilities would be available for day use only and would close at sunset.

There are four public airports within Butte County, Chico Municipal Airport, Oroville Municipal Airport, Paradise Skypark Airport, and Ranchaero Airport (Butte County General Plan 2005). Ranchaero Airport, the closest airport to the project site, is approximately 4-5 miles from the project site (Google Maps).

The Butte County General Plan Policy Document (Final Draft 2005) 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 55 dB, which is higher than relaxed conversation at 45dB (EPA 1971). The nighttime standard is 45 dB.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?	☐	☐	☒	☐
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	☐	☐	☒	☐
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Noise is based on criteria **X** 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's daytime (7 a.m. to 10 p.m.) noise level standard is 55 dB.

The proposed project would result in temporary construction noise. Construction and restorations activities would include site grading, paving, tree removal, and planting of native species. Project construction is anticipated to use equipment with noise levels similar to those listed in the above Table. Construction noise levels will fluctuate, depending on the type and number of construction equipment operating at a time, and would exceed ambient noise levels in the immediate vicinity of the work site for brief periods of time. Integration of Noise Measure 1 (see Chapter 2, Project Description) into construction plans would reduce temporary increased noise impacts to a less than

significant level.

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. Based on the proposed facility development, there would likely be an increase in visitation to the parcel that could result in increases in ambient noise, primarily from vehicle access to and from the site. However, nothing within the scope of the proposed project would result in a substantial permanent increase in ambient noise levels. One potential sensitive receptor would be the small residential and business complex adjacent to the northern boundary of the parcel. However, as noted in the Environmental Setting, the residential and business complex is more than 50 feet from the proposed parking and restroom facilities. In addition, the proposed facilities would be available for day use only and would close at sunset. Therefore, visitor use is not expected to generate noise levels that exceed either daytime or nighttime County standards. 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 airstrip. No impact.

XII. POPULATION AND HOUSING

Environmental Setting

The parcel, a recent DPR acquisition containing a walnut orchard, is located within the floodplain on the east side of the Sacramento River in Butte County. The surrounding lands are owned by the California Department of Fish and Game, DPR (other subunits of Bidwell-Sacramento River State Park), and private agricultural owners (DFG 2008).

The closest city to the project area is Hamilton City in Glenn County, approximately 3¾ miles from the parcel (Google Pedometer 2008). As mentioned in the Land Use and Planning section of this document, Hamilton City is located on the west side of the Sacramento River. The Sacramento River will prevent any substantial urban growth from Hamilton City toward the project area. The City of Chico within Butte County is also close to the project site (5½ miles) (Google Pedometer 2008). The City of Chico contains a "greenline" on the west side of the city to define the limits of urban development. This greenline limits the amount of urban development between Chico and the parcel (City of Chico 1999). The entire Bidwell-Sacramento River State Park has the ability to provide recreational services to visitors from Butte, Glenn, Tehama, and Colusa Counties (DPR 2003a).

The existing population characteristics for the four counties are supplied by the California Department of Finance in the table below. The 2009 population estimate for Chico is 87,713; unfortunately there were no population estimates for Hamilton City in Glenn County (DOF 2007b).

County	Population 2008	Percent change	Projected Estimates			
			2010	2020	2030	2040
Butte	220,748	0.6%	230,116	281,442	334,842	387,743
Colusa	21,997	0.90%	23,787	29,588	34,488	38,131
Glenn	28,239	0.60%	30,880	37,959	45,181	54,000
Tehama	62,886	1.10%	65,593	79,484	93,477	108,345

Source: California Department of Finance 2008b & c.

The additional recreational facilities provided through the implementation of this project could result in a need for additional maintenance and operations (DPR 2003b). These possible positions could be filled by residents from Butte and Glenn Counties where the 2006 unemployment rate was 6.2% in Butte County and 8.0% in Glenn County (DOF 2007a).

There is no housing within the boundaries of this parcel and there are no plans to build residential housing within the 41-acre site. The parcel would become a recreational resource used by local residents, out-of-town visitors and students at Chico State University. No business or residential opportunities will be offered within the property boundaries.

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

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Population and Housing is based on criteria **XI** 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. No impact.

XIII. PUBLIC SERVICES

Environmental Setting

This section describes the existing public services that are available including fire and police protection, schools, parks and other public facilities. Since the parcel is approximately six miles west of the City of Chico, Butte County, it will benefit from existing services that are already available. However, it is important to evaluate the ability of those existing services to adequately provide service both during and after implementation of the proposed restoration and recreation project.

Fire Protection

Butte County Fire Department (BCFD), with support from the California Department of Forestry and Fire Protection (Cal Fire), provides service throughout the county for unincorporated residents (BCFD 2005). The BCFD has created automatic aid and mutual aid agreements with other fire agencies within the County and Hamilton City, Glenn County (Butte County 2007). This allows the closest fire-fighting agency to respond to an emergency regardless of the jurisdiction. The closest fire protection service to the parcel is the Hamilton City Fire Protection District (HCFPD) approximately 3¾ miles away (Google Maps 2008). In Butte County the closest agency is the City of Chico Fire Department (CFD) made up of six fire stations located throughout the city (City of Chico 2007). The closet CFD station to the project area is Station Six approximately 4½ miles to the east (Google Maps 2008). Either the HCFPD or the CFD could provide the first response to a possible emergency.

Police Protection

DPR Rangers assigned to Bidwell-Sacramento River State Park are Peace Officer Standards and Training (POST) certified Law Enforcement Officers. Currently, these Rangers are stationed less than a mile from the proposed project and patrol this area on a regular basis. In Butte County, the elected Sheriff is ultimately responsible for the safety of the people residing in, or visiting, the County (Butte County 2007). Similar to the fire protection services above, the Butte County Sheriff's Office (BCSO) has established mutual aid agreements with the California Highway Patrol (CHP) and municipal police departments, including the Chico Police Department (CPD) (Butte County 2007). If the State Park Rangers require assistance at the project site, Butte County Sheriff and CHP will assist State Park Rangers.

Schools

The project area is within the Chico Unified School District with Emma Wilson Elementary School (approximately 4 miles east), Chico Junior High School (approximately 5¾ miles east), and Chico High School (approximately 5 miles east) (Butte County 2007 & Google Maps 2008). The project site is also in close proximity to Hamilton Union High School District in Hamilton City, Glenn County approximately 3¾ miles to the northwest (Google Maps 2008). This restoration and recreation project will not provide residential housing therefore there will not be an increase in the number of students within the Chico Unified School District.

Parks and Other Public Facilities

The parcel will become an additional subunit of Bidwell-Sacramento River State Park. During the implementation of this project, all of the existing subunits of Bidwell-Sacramento River State Park will remain open for visitor use. There could be temporary restrictions along River Road while equipment and construction materials are brought to and from the project site. Currently, the parcel offers no public facilities; however after project implementation the parcel will offer recreational facilities including picnic sites, restrooms, and trails. Due to the location of the parcel, there are no other public facilities nearby that could be impacted.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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:	☐	☐	☒	☐
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☐	☒

Criteria for Determining Significance

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

DISCUSSION

a) This proposed project will install day use facilities, construct trails, and restore riparian habitat. As mentioned above, this area is currently closed to the public.

Fire Protection:

Use of construction equipment around flammable annual vegetation presents an increased fire risk that could result in additional demands on the Butte County Fire District. Any impact on these services will be temporary and nothing in the project scope will contribute to the need for an increase in the level of public service. Implementation of Project Requirement HAZARD 3 (see Chapter 2, Project Description), combined with the support of DPR Rangers and the availability of on-site fire suppression equipment, will reduce the potential impact to Fire Protection Services to a less than significant level.

Police Protection:
As noted in the Environmental Settings above, DPR Rangers assigned to Bidwell-Sacramento River State Park already conduct patrols in camping and day use areas; therefore this project will not place additional demands on County or City law enforcement.

Schools: No schools exist within or adjacent to the project area. This restoration and recreation project will not contribute to an increase in student enrollment to local schools therefore; no additional schools or personnel will be required. Schools would not cause an increase in use of the site because no educational enrichment opportunities would be provided. No impact.

Parks or Other Public Facilities: Work related to this project could cause minor delays and inconveniences along River Road; however these impacts would be temporary and less than significant. Other access sites to the Bidwell-Sacramento River State Park are available to the public. No other public facilities would be impacted by the implementation of this project.

Under the current conditions, this project will have a less than significant impact on public services.

XIV. RECREATION

Environmental Setting

The 41-acre parcel is located in westernmost Butte County along the Sacramento River at its confluence with Pine Creek. It is bordered by River Road to the east; Scotty's Landing trailer park, tube rental business, and restaurant complex to the north; the California Department of Fish and Game's (CDFG) Pine Creek Unit of the Sacramento River Wildlife Area to the south; and the Sacramento River to the west.

California State Parks acquired the property to provide day-use facilities and access to the Sacramento River, restore 25 acres of walnut orchards to riparian habitat, and enhance 7 acres of remnant riparian habitat. Public access and facility development proposed for this project complements other park units within Bidwell Sacramento River State Park including parking, trails, picnic areas, restrooms, and educational and interpretive features (CDPR 2007).

Most of the facility development on the parcel will be limited to four acres of existing walnut orchards.

The parcel will contain interpretive panels highlighting the natural and cultural features of the area. They will be placed in locations conducive to the visitor education and will not impede the view shed. Their purposes will be multi-themed, with messages on presentation and stewardship woven into the text.

Other subunits of Bidwell Sacramento State Park currently provide recreational facilities and opportunities that will complement those proposed for the parcel. These include picnicking, motorized, and non-motorized boat launch facilities, camping, trails, nature viewing, interpretation, and bank fishing. A summary of these facilities is presented in the table below.

Table XIV-1 Bidwell-Sacramento River State Park Park-Wide Recreational Facilities and Activities		
Subunit	**Approx. Size (acres)**	**Existing Recreational Facilities & Activities**
Irvine Finch River Access	25.2 (20 acres add in 2008)	• Developed recreation (boat launch that facilitates motor-boating, kayaking, canoeing, tubing, and fishing; picnicking; and en-route camping)
Pine Creek Day Use Area (Boat Launch)	4.8	• Developed recreation (boat launch that facilitates motor-boating, kayaking, canoeing and fishing, nature trail and picnicking); • Dispersed recreation (nature viewing); • Interpretation (interpretive panel)
Indian Fishery	100.9	• Developed recreation (picnicking); • Dispersed recreation (trail use, nature viewing, hiking, and bank fishing); • Interpretation and Education (trail with interpretive/educational panels, local school group visits)
Big Chico Creek Access	96.7	• Dispersed recreation (bank fishing, trail use, nature viewing, sunbathing, and car-top ramp); • Conservation/restoration • Three interpretive panels

Source: California Department of Parks and Recreation (CDPR) 2003 and 2009

Adjoining public lands managed by other government agencies provide for a variety of recreational opportunities. Activities available on CDFG's adjacent Pine Creek East Unit of the Sacramento River Wildlife Area include fishing, hunting, nature observation, and hiking (Sacramento River Conservation Area Forum 2008). There are planned links to this unit to the new recreation area. Activities available on the Pine Creek Unit of the US Fish and Wildlife Service's Sacramento River National Wildlife Refuge across the river from this project area include hunting (Aug-May), fishing, wildlife observation, photography, interpretation, and environmental education (USFWS 2008).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical	☐	☐	☒	☐

effect on the environment?

Criteria for Determining Significance

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

DISCUSSION

a) This project will 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 additional new facilities outside this parcel. It will complement existing and future recreational use by providing river access and additional recreational opportunities along the Sacramento River; therefore no impact.

b) However, hunting, an existing allowed use at adjacent CDFG and USFWS property could impose a safety risk to users at specific times of year; implementation of the Project Requirement Recreation1 (see Chapter 2, Project Description) will reduce this risk to a less than significant level.

The proposed project involves the restoration of native riparian habitat and the construction of recreation facilities, including parking, picnic sites, a restroom, and a small play field consisting of native grasses and sedges. The improvements are designed to accommodate the expected levels of use and will be sited on approximately four acres of existing walnut orchards. Approximately 25 acres of walnut orchards will be restored to high quality, self-sustaining riparian habitat and another twelve acres of existing riparian habitat will be enhanced through plantings of native species and the eradication of invasive exotic plant species; therefore project implementation will not result in permanent adverse physical effects on the environment.

XV. TRANSPORATION/TRAFFIC

Environmental Setting

The parcel is located on the eastern banks of the Sacramento River in the northwestern region of Butte County, California. To reach the project site from Interstate 5, travel east from Orland along State Route 32 approximately 12 miles to the junction of River Road, turn south onto River Road, and travel approximately 1¾ miles to the parcel entrance on the west side of the road (Google Pedometer 2008). A short graveled access road leading into a graveled visitor parking area would be constructed as part of the proposed project.

Roads

State Route 32 serves as the east-west access road that connects to River Road and the project site. This Route is primarily a two-lane roadway connecting Interstate 5 at Orland, Glenn County to State Route 36 between Chester and Mill Creek, Tehama County (Caltrans 2007b). In the past, State Route 32 was primarily used to serve rural needs; however today due to commercial and residential needs, the section between Interstate 5 and State Route 99 experiences high traffic volumes (Caltrans 2007b). From the western county line between Glenn and Butte Counties to the junction of River Road, the 2006 average annual daily trip (AADT) volume was 22,700 vehicles, with 5½ percent as truck traffic (Caltrans 2007a). California Department of Transportation (Caltrans) lists the east-west State Route 32 through Butte County as part of the California Legal Truck Network (Caltrans 2007c). The roadway is classified as a Terminal Access route permitting passage to tractor-trailer trucks 65 feet long and double tractor-trailer trucks 75 feet long (Caltrans 2007c). State Route 32 is classified as providing “D” Level of Service (LOS) between the Glenn/Butte County line and River Road (Caltrans 2007b). Level “D” is described as a roadway with high-density, but stable flow; temporary restrictions during roadwork could also cause temporary delays (Butte County 2007a). The forecasted LOS is expected to decline to level “E” by the year 2015 (Caltrans 2007b).

River Road and West Sacramento Avenue are classified as minor local roadways in the existing transportation system for Butte County (Butte County 2007a). These local roads are also listed as regionally significant because they connect population centers to recreational opportunities (BCAG 2004a).

Running along the eastern shore the Sacramento River, River Road is a north-south access road that provides direct access to the parcel. The segment from Ord Ferry Road to State Route 32 is the regionally significant section, providing access to the Sacramento River and Bidwell-Sacramento River State Park (BCAG 2004a).

West Sacramento Avenue provides east-west access between River Road and Chico, linking the population of Chico to the same recreational opportunities mentioned above. The 2025 estimate LOS for this Avenue is level “D” (BCAG 2004a).

Air Facilities

In Butte County there are two municipal airports, Chico Municipal Airport and Oroville

Municipal Airport; two privately owned public use airports, Ranchaero Airport and Paradise Skypark Airport; and numerous privately owned airports and/or landing strips (BCAG 2004b). The closest air facilities to the project site are Chico Municipal Airport (6½ miles away), Ranchaero Airport (4¼ miles away), and Johnsen Airport, privately owned (5½ miles away) (GAN 2008 & Google Pedometer 2008).

Other Facilities

Currently, the B-line regional public transit service for the county does not offer service within the vicinity of the proposed project site (BCAG 2004c). According to the Countywide Bikeway Master Plan prepared by the Butte County Association of Governments (BCAG), there are identified segments of roadway where bike lanes will be installed (BCAG 1998). Those roadways include West Sacramento Avenue from the City of Chico to the Sacramento River; River Road from Chico River Road up to State Route 32; and State Route 32 from River Road to the Glenn County line (BCAG 1998). The planned facilities will be Class II Bike Lanes, exclusive to semi-exclusive lanes on either side of the existing roadways (Butte County 2007a). Currently, many of these biking facilities cannot be incorporated until the shoulders of these roadways are improved (Butte County 2007b). The BCAG provides a list of Butte County bike routes through the Chico Velo Cycling Club that includes a "Sacramento/Chico River Roads Loop" that travels close the project location (BCAG 2004c & CCVC 2008).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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)?	☐	☐	☒	☐
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Criteria for Determining Significance

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

DISCUSSION

a,b) The Department of Parks and Recreation proposes to install day use facilities, construct trails, and restore riparian habitat on the Brayton parcel. During construction, delivery of construction materials and equipment could potentially create temporary delays along River Road. 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 parcel will become a subunit of Bidwell-Sacramento River State Park (BSRSP). The roadways discussed in the Environmental Settings section are currently used to access the BSRSP. When the area is opened for public use, the number of visitors visiting the entire Park would not significantly increase. If the number of visitors would not significantly increase; then the number of vehicles on State Route 32, River Road, and/or West Sacramento Avenue would not significantly increase. The opening of the parcel for visitor use would have a less than significant impact.

c) The airports and private landing strips within Butte County are at least four 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 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 the average summer daily visitor demand. For special occasions a over flow area has been designed to meet demand. No impact.

g) There are no policies, plans, or programs supporting alternative transportation that would conflict with this project. No Impact.

XVI. UTILITIES AND SERVICE SYSTEMS

Environmental Setting

There are presently no restrooms or sewage treatment facilities in the project site. The Department of Parks and Recreation (DPR) proposes to construct and maintain an accessible public restroom with sewage treatment system. Wastewater would be treated onsite using the septic system which includes an underground sealed concrete septic tank and rock. The system design includes flood prevention devices that can be controlled to prevent the overflow or inundation of flood water to the septic system.

There are two existing wells on the parcel. One is an agricultural well and the other is a well that has been used for potable water. Drinking water for the restroom facility would be provided from a new potable well installed near the restroom, but outside a 200 foot radius of the leach system. The existing potable well will be sealed and or abandoned per current Butte County Environmental Health procedures. The existing agricultural well will remain and be used to irrigate the restoration plantings throughout the property for approximately three years. When no longer needed, the agricultural well casing will be capped and sealed and will remain in place for future use as per Butte County Environmental Health standards.

Overhead electrical lines are located at the project area adjacent to River Road (CRPGP 2006). There are Pacific Gas and Electric service poles with a meter at each well. The lines leading to the existing agricultural well would also provide electrical service to the restroom and parking area. Electricity will be extended underground from the existing agricultural well overhead service pole to the restroom facility. The existing service at the former residence site is currently not in use. Removal of this overhead service will be considered if determined that there is no future need.

Refuse collection and disposal is performed by park staff and disposed of at an approved offsite location. There are no telephone services at the proposed project site.

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO
WOULD THE PROJECT:				
a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities?	☒ Yes	☐ No		
Would the construction of these facilities cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	☒ Yes	☐ No		

	Would the construction of these facilities cause significant environmental effects?	☐	☐	☒	☐
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	☐	☐	☒	☐
e)	Result in a determination, by the wastewater treatment provider 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?	☐	☐	☐	☒
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations as they relate to solid waste?	☐	☐	☐	☒

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 **XV** a-g, described in the environmental checklist above.

DISCUSSION

a) The proposed project would install a new restroom and septic system/leach field *or vault toilet system*. The project site is not served by a wastewater treatment facility; wastewater would be treated on-site using the new septic system. Bidwell-Sacramento River State Park is within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB) and is subject to the requirements of the General Construction Storm Water Permit (Order No. 99-08-DWQ) (CCRWQCB 2006). The permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared prior to construction activities. The SWPPP will incorporate BMP's to ensure the protection of storm water runoff from erosion and sedimentation. All aspects of the project would be in compliance with CCRWQCB regulations and standards. No Impact.

b) As noted in the Environmental Setting there are two wells on the parcel. One is an agricultural well and the other is a well that has been used for potable water. Drinking water for the restroom facility will be provided from a new potable well that will be installed near the restroom, but outside a 200 foot radius of the leach system and outside any environmentally sensitive locations. The existing potable well will be sealed and or abandoned pre current Butte County Environmental Health procedures. The existing agricultural well will remain and be used to irrigate the restoration plantings throughout the property during the establishment period of approximately 3 years. When no longer needed, the agricultural well casing will be capped and sealed and will remain for future use as per Butte County Environmental Health standards.

   A new wastewater/leach field treatment facility *or a vault toilet system* would be constructed in accordance with Butte County Environmental Health Department requirements (See Project Requirement Hydro-1). Less than significant impact.

c) Some alterations of existing drainage patterns would occur as part of this project to improve natural drainage patterns and decrease storm water erosion. The project proposes to install a drainage crossing with appropriate erosion control at one location where the maintenance road and trail crosses an existing swale that bisects the property. However, alterations to overall drainage patterns would be minimal, with little or no changes in total storm water runoff. As noted in item a) above, a SWPPP would be prepared for this project per CCRWQCB requirements. The project would not result in a significant expansion of existing storm water facilities, therefore less than significant impact.

d) See XVI(a) Discussion above. Less than significant impact.

e) Wastewater treatment services (leachfields) *or a vault toilet system* would be provided by DPR personnel with DPR owned and maintained facilities. No impact.

f) The proposed facilities are anticipated to increase visitation to the project area and the need for solid waste disposal at a local landfill. However, this increase would be comparatively minor. Less than significant impact.

g) The project will comply with all applicable statutes and regulations relating to solid waste. No impact.

Chapter 4
Mandatory Findings of Significance

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO
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?	☐	☐	☒	☐
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
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?)	☐	☐	☒	☐
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	☐	☐	☒	☐

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; Northwestern Pond Turtle habitat, Swainson's hawk, osprey, and other nesting raptors; bank swallows; migratory bird species; Ringtail; and sensitive bat species. However, full integration of the project requirement (see Chapter 2, Project Description) into this project would reduce and/or prevent 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 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 Project Requirements (see Chapter 2, Project Description) included in this project would reduce or prevent those impacts, both individually and cumulatively, to a less than significant level.

c) Department of Parks and Recreation often has smaller maintenance programs and rehabilitation projects planned for a park unit. Additional work/project are being considered to add additional facilities (see Chapter 2, Additional projects). However, they will not be funded or constructed 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 Butte 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 Project Requirements are fully integrated into the project and construction documents.

Chapter 5
Summary of Project Requirements

The following Project Requirements would be implemented by DPR as part of the Facilities Development and Habitat Restoration Project at Bidwell-Sacramento River State Park.

Air Quality

Standard Project Requirement Air 1 – Dust Control

- 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 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

Project Specific Requirement Bio 1 Valley Elderberry Longhorn Beetle Avoidance

- No elderberry plants will be cut, pruned, pulled back, removed, or damaged in any way.
- Prior to construction activities, a DPR-approved biologist will fence and flag all elderberry plants to ensure construction crews avoid these plants.

Project Specific Requirement Bio 2 - Swainson's Hawk, Osprey, and Other Nesting Raptors Avoidance

- If working between April 1 to July 1 surveys will be conducted for nesting raptors within 500 feet of the project area. If an active nesting colony is observed within this area, a buffer zone will be installed around the colony in which only DPR-approved biologist construction activities will occur until all eggs have hatched and the young birds have fledged, as determined by a DPR-approved biologist.

Project Specific Requirement Bio 3 - Migratory Bird Species Avoidance

- If working between May 15 to July 7 of any year surveys will be conducted for non-special-status nesting migratory birds within 100 feet of the project area. If an active nest is observed within this area, a buffer zone will be installed around the colony in which only DPR – Approved Biologist construction activities will occur until all eggs have hatched, young birds have fledged, and there is no evidence of a second attempt at nesting, as determined by a DPR-approved biologist.

Project Specific Requirement Bio 4 - Sensitive Bat Species Avoidance

- No work will occur between March 15 and June 30 to avoid the core bat-breeding period unless approved by a DPR-Approved Biologist to avoid impacts.

- All tree removal will occur between July 1 and March 15 when tree roosting bats are not expected to occur in the project area.

Cultural Resources

Project Specific Requirement Arch 1 Environmentally Sensitive Areas

- All project activities within areas determined to be culturally sensitive will require consultation with a DPR qualified archaeologist.

Standard Project Requirement Arch 2 Cultural Resources

- In the event that previously undocumented cultural resources (including but not limited to dark soil containing shellfish, bone, flaked stone, ground stone, or deposits of historic trash) are encountered during project construction by anyone, the state representative will temporarily halt work 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.
- In the event that significant cultural resources are found in the project location, a qualified historian and/or archaeologist will monitor all subsurface work including trenching, grading, and excavations in that area from that point forward to ensure avoidance of significant cultural resources.
- In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager 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 DRP 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.

Standard Project Requirement Arch 3 – Continued Native American Consultation

- Project design and activities will be discussed with the Mechoopda. These activities include but are not limited to revegetation, trail design, vegetation for traditional plant collection, gathering areas for special events, and site monitoring.

Geology and Soils
Standard Project Requirement Geo-1 - Erosion Control

- Prior to the start of construction, the Contractor will prepare a Storm water Pollution Prevention Plan (SWPPP). The SWPPP identifies 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 excavation, grading, stockpile management, and any other ground disturbing activities.

- Permanent BMPs for erosion control will consist of properly compacting disturbed areas and re-vegetation of appropriate disturbed soil areas with native species using seed collected locally, where possible or a sterile grass mixture. If local seed is not available, a weed-free native mixture shall be used. Final design plans will include permanent BMP measures to be incorporated into the project.

Hazards and Hazardous Materials
Standard Project Requirement Haz 1 – Spill Prevention

- Prior to the start of construction, the Contractor will inspect all equipment for leaks and inspect equipment daily thereafter until it is removed from the project site.

- Prior to the start of construction, the contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) for materials management, fueling, repair, and maintenance of vehicles and equipment, and spill prevention and control. The Contractor will maintain a spill kit on-site throughout the life of the project. The SWPPP will include a map that delineates construction staging areas and where refueling, lubrication, and maintenance of equipment may occur. Areas designated for refueling, lubrication, and maintenance of equipment shall be at least 50 feet from the Sacramento River or any tributaries. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of the Park during construction, the contractor would immediately notify the appropriate DPR staff (e.g., project manager, supervisor, or State Representative).

- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized destination.

Standard Project Requirement Haz- 2 Hazardous Substances Health and Safety Documents

- DPR will include, in any contract documents or in internal work plan documents, health and safety specifications on how to manage any potential hazardous incidents. The specifications will include methods for safe handling, collection, and proper disposal of any contaminated soil and refuse uncovered during the excavation and grading procedures. The specifications will discuss the proper personal protection during construction, the use of an exclusion zone if necessary to prevent exposure to the public, and the proper disposal procedures for any hazardous substances encountered.

Project Specific Requirement Haz 3 - Construction Fire Management

- A fire safety plan will be developed by the contractor and/or DPR and approved by DPR prior to the start of construction. This plan will include the emergency calling procedures.

- Spark arrestors or turbo-charging (which eliminates 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. The contractor will also be required to have fire extinguishers on site

Standard Project Requirement Haz 4- Fire Management

- The use of campfires and other potentially flammable objects or materials will be restricted. Park visitors will be provided with information on Park rules regarding fire safety.

Hydrology and Water Quality
Standard Project Requirement Hydro-1 – Water Quality Protection

- Implementation of **Geo-1** will provide Best Management Practices to control erosion and runoff during the project construction and for post-construction erosion control. The project will comply with all applicable water quality standards as specified in the CVRWQCB Basin Plan.

- Implementation of **Haz-1** will also prevent or reduce impacts to water quality from possible non-sediment pollutants, such as fuels and other vehicle fluids and construction materials that could be released during construction.

- The new septic system and leach field will be designed according to the requirements from Butte County Environmental Health. Restrooms will be designed to be shut down with waste fixtures and inlets sealed prior to flood events.
- Any new water supply well will be located at least 200 feet from the leach field and surface waters of the Sacramento River.

Standard Project Requirement Hydro-2 – Storm water Runoff Control

- Storm water runoff from the new entrance road, parking lot areas and building would be minimal due to the use of predominately gravel surfaces instead of impermeable pavement. To prevent any on or off site erosion and/or flooding the surface water runoff will be allowed to sheet flow or be directed into an engineered storm drain system that flow into a natural drainage course with necessary erosion control devices.

- Erosion and storm water runoff controls will be required during construction and permanent erosion controls and methods will be part of the project plan. Implementation of Project Requirement Hydro-1 will reduce impacts from siltation and from vehicle and equipment fluid spills, and construction materials.

Project Specific Requirement Hydro-3 – Flood Protection

- The planned facilities will be designed to minimize potential damage from flood events, to the extent feasible. This project including a completed Hydraulic Analysis report will be reviewed for approval by the Central Valley Flood Protection Board.

- The Park would be closed to the public during any anticipated flood event.

- The Park would also be evacuated in the event of a failure of the Shasta Dam.

Noise
Project Specific Requirement Noise 1

- Construction activities will generally be limited to the daylight hours Monday – Friday from 7:00 a.m. to 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
Standard Project Requirement Recreation 1 – Informational Signs

- Prior to project completion, DPR or its contractor would install informational signs

informing the public that hunting occurs on adjacent lands including the time of year hunting is allowed.

Chapter 6
References

Chapter 1

California Department of Parks and Recreation. 2005 Recreation Policy website
http://www.parks.ca.gov/pages/795/files/recpolicy.pdf

California Department of Parks and Recreation. 2005 Trail Policy website
http://www.parks.ca.gov/pages/1324/files/2005-06_trails_policy.pdf

California Department of Parks and Recreation 2005. Central Valley Vision Website:
http://www.parks.ca.gov

Chapter 2

Aesthetics

California Department of Parks and Recreation. 2008. Bidwell Sacramento River State Park Habitat Restoration and Outdoor Recreation Facilities Development Project, Draft Environmental Impact Report. Prepared by EDAW, Sacramento, CA

California Department of Transportation. 2009. Scenic Highway Routes. website
http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm accessed March 23, 2009

Agricultural Resources

Butte County. 1995. Butte County General Plan, Agricultural Element. Butte Comprehensive Plan Exhibit A, adopted May 9, 1995

Butte County. 2005. Butte County General Plan Technical Update Policy Document Recodification, Public Review Draft, March 29, 2005.
www.buttecounty.net/dds/Planning/new_general_plan/Butte_County_GPTU_Policy_Document_Recodification_(PR_Draft).pdf

Butte County. 2009. Butte County Agricultural Crop Report 2008. Butte County Offices of Agricultural Commissioner Weights and Measures, Oroville, CA

Department of Conservation. Williamson Act. 2006

California Department of Parks and Recreation (DPR). 2005. Bidwell-Sacramento River State Park: Recirculated Draft Environmental Impact Report for the Preliminary General Plan (Agricultural Resources)

California Department of Parks and Recreation. 2006. Grant application for California Parkways Grant Program, Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, Proposition 50

California Department of Parks and Recreation. 2008. Bidwell Sacramento River State Park - Habitat Restoration and Outdoor Recreation Facilities Development Project, Draft Environmental Impact Report. Prepared by EDAW, Sacramento, CA

Air Quality and Climate Change

California Air Resources Board

State Area Designation, Website: http://www.arb.ca.gov/desig/desig.htm (Accessed September 1, 2009)

Air Monitoring Sites, Website: http://www.arb.ca.gov/qaweb/siteformap.php?s_arb_code=11676 (Accessed April 10, 2009)

Air Designation Maps/ State and National, Website: http://www.arb.ca.gov/desig/adm/adm.htm (Accessed April 10, 2009)

The Know Zone, Website: http://www.arb.ca.gov/knowzone/basin/basin.swf (Accessed April 10, 2009)

Butte County. 2000. Butte County General Plan, revised January 25, 2000. Land Use Element Website: http://www.buttegeneralplan.net/gp/Land_Use_Element.pdf (Accessed April 8, 2009)

Jones & Stokes, Addressing Climate Change in NEPA and CEQA Documents, August 2007

Northern Sacramento Valley Air Basin, 2003 Air Quality Attainment Plan

United States Environmental Protection Agency, Six Common Air Pollutants. Website: http://www.epa.gov/air/urbanair/6poll.html (accessed March 20, 2008)

Biological Resources

California Department of Fish and Game. 2005. California Wildlife Habitat Relationships System

California Department of Fish and Game. 2008. American badger life history. CDFG, Bay-Delta Region. http://www.delta.dfg.ca.gov/gallery/badger.asp

California Department of Parks and Recreation (DPR). 2007. Environmental Impact Report: Bidwell-Sacramento River State Park Habitat Restoration and Outdoor Recreation Facilities and Development Project

That California Natural Diversity Data Base. 2007 and 2008. Vegetation Classification and Mapping Program, List of California Terrestrial Natural Communities. California Department of Fish and Game, Biogeographic Data Branch, Sacramento. CA

California Natural Diversity Data Base. 2009. Rare Find: California Department of Fish and Game Natural Diversity Database, Version 3.1.0, September 15, 2009

Jennings, M. R. and M. P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Calif. Dept. of Fish and Game Special Publication

Henderson, Adam. 2009. Personal communication with Adam Henderson, Environmental Services Section, California Department of Water Resources, Red Bluff, CA

Holland, Robert F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Nongame Heritage Program, California Department of Fish and Game, Sacramento, CA. 156 pp.

Martin, Roy W. 2008. Personal observation from field visit conducted on 4-14-08 by Roy W. Martin, Environmental Scientist, Northern Service Center, California Department of Parks and Recreation, Sacramento, CA

Sawyer, J. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society. 471 pp.

U.S. Fish and Wildlife Service. 2007. Species account, Delta smelt. Sacramento Fish and Wildlife Office. http://www.fws.gov/sacramento/es/animal_spp_acct/delta_smelt.pdf

U.S. Fish and Wildlife Service. 2008. Endangered Species Lists. Sacramento Fish and Wildlife Service Office, Endangered Species Program. http://www.fws.gov/sacramento

U.S. Geological Survey. 2008. USGS-NPS Vegetation Mapping Program, Standardized National Vegetation Classification System. URL: http://biology.usgs.gov/npsveg/classification/toc.html

Zeiner, David C., William F. Laudenslayer, Jr., Kenneth E. Mayer, and Marshall White. 1990. California's Wildlife Volume III, Mammals. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game System, Sacramento, California. 407 pp.

Cultural Resources

Brooke, Jeff and Dan Osanna 2005 PRC 5024 for the Brayton Parcel Demolition. On file at DPR Northern Service Center, Sacramento, CA

California Department of Parks and Recreation (DPR) 2003. Land Agents File, "Brayton Property." on file, California Department of Parks and Recreation, Acquisition and Real Property Services Division, Sacramento, CA

2005 Concurrence letter regarding Brayton Property. Copies on file, California Department of Parks and Recreation, Sacramento, CA.

EDAW Bidwell-Sacramento River State Park General Plan and EIR. Copies on file, California Department of Parks and Recreation, Sacramento, CA

Hetherington, Lisa
1980 Letter to Mr. Cliff Wade. Report on file at Northeast Information Center, Chico, CA.

Johnson, Keith
1978 Archaeological Site Survey Record for CA-BUT-717. Report on file at Northeast Information Center, Chico, CA

Hood, Joe and Pamela McGuire
1981 Bidwell River Park Project (Chico Landing), A Partial Inventory of Cultural Features. Cultural Heritage Planning Section, California State Department of Parks and Recreation

Kowta, Makoto
1988 The Archaeology and Prehistory of Plumas and Butte Counties, California. An Introduction and Interpretive Model. California Archaeological Site Inventory, Northeast Information Center. California State University, Chico, California. On file at Northeast Information Center, Chico, CA

White, Greg
2003a Cultural Resource and Management Plan. Sacramento River Conservation Area, Tehama, Butte, Glenn and Colusa Counties, California. California State University, Chico Archaeological Research Program Reports, No. 50. On file at California State University, Chico

2003b Population Ecology of the Prehistoric Colusa Reach. Dissertation. On file at the University of California Davis Library

2009 Subsurface Archaeological Inventory of the California Department of Parks and Recreation's Brayton Orchard Acquisition, Indian Fisheries Unit, Northern Buttes District, Butte County, California. On file Department of Parks and Recreation

Geology and Soils

Butte County. 2005. Butte County General Plan Technical Update (GPTU) Background Report, Public Review Draft, prepared by J. Laurence Mintier and Associates, website: www.buttecounty.net/portals/0/gptu_background_report_all_chapters(draft).pdf (Accessed 7-20-2005)

California Geological Survey. 2003. Seismic Shaking Hazards in California, Interactive Maps, website:http://www.consrv.ca.gov/cgs/rghm/pshamap/pshamain.html (Accessed 7-20-2005)

DPR. 2003. Bidwell-Sacramento River State Park Preliminary General Plan and EIR, prepared by EDAW for the Department of Parks and Recreation.

EDAW. 2008. draft Environmental Impact Report, Bidwell-Sacramento River State Park

Habitat Restoration and Outdoor Recreation Facilities Development Project, prepared for the California Department of Parks and Recreation and The Nature Conservancy. Website: http://www.parks.ca.gov/?page_id=24873 (accessed 4-11-2008)

Helley, Edward J., and Harwood, David S. 1985. Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California, US Geological Survey Miscellaneous Field Studies Map MF-1790, Sheet 3

Jennings, Charles W. et al. 1994. Fault Activity Map of California and Adjacent Areas, California Geologic Data Map Series, Map No. 6, Division of Mines and Geology (now the California Geological Survey)

Petersen, M. D., Bryant, W. A., Cramer, C. H., Cao, T., Reichle, M.S., Frankel, A. D., Lienkaemper, J. J., McCrory, P. A., and Schwartz, D. P. 1996. Probabilistic Seismic Hazard Assessment for the State of California, Division of Mines and Geology Open File Report 96-08; fault parameters on-line at: http://www.consrv.ca.gov/cgs/rghm/psha/ofr9608/

USDA. (United States Department of Agriculture). 2003. Soil Series website at: http://ortho.ftw.nrcs.usda.gov/cgi-bin/osd/osdnamequery.cgi. Accessed 4-11-2008

Hazards and Hazardous Materials

Butte County. 2005, Butte County General Plan Technical Update (GPTU) Background Report, Public Review Draft. Prepared by J. Laurence Mintier and Associates, website: www.buttecounty.net/portals/0/gptu_background_report_all_chapters_(draft).pdf (Accessed 4-14-2008)

DPR. 2006. Project Summary and Evaluation Questions from River Parkway Grant Program Application, prepared by the Northern Buttes District

Yahoo 2008, website: http://www.yahoo.com (accessed 4-14-2008)

Hydrology and Water Quality

Central Valley Regional Water Quality Control Board (CVRWQCB). 1998. The Water Quality Control Plan (Basin Plan) for the Regional Water Quality Control Board Central Valley Basin, Fourth Edition - 1998, the Sacramento River Basin and the San Joaquin River Basin.

Department of Parks and Recreation (DPR). 2003. Bidwell-Sacramento River State Park Preliminary General Plan and EIR, prepared by EDAW for the Department of Parks and Recreation

2006. Project Summary and Evaluation Questions from River Parkway Grant Program Application, prepared by the Northern Buttes District

Department of Water Resources (DWR). 2003. California's Groundwater, Bulletin 118, Update 2003, website: http://www.groundwater.water.ca.gov/bulletin118/index.cfm

Martin, Roy W. 2008. Personnel Communication. Information obtained from a site visit with District staff

Sacramento County, 1993, County of Sacramento General Plan, Safety Element, website: http://www.saccounty.net/general-plan/gp-home.html

Sacramento River Advisory Council (SRAC). 2003. Sacramento River Conservation Area Forum Handbook, prepared for The Resources Agency. (Accessed and downloaded August 3, 2005)

Teague, Matthew. 2008. April 17, 2008 e-mail response to questions concerning the Bidwell Sacramento SP – Brayton Parcel MND

Land Use Planning

Butte County. 2007. Butte County General Plan 2030: Settings and Trends Report – Public Draft: Chapter 1: Land Use. Website: http://www.buttegeneralplan.net/products/SettingandTrends/01_LandUse.pdf (accessed April 7, 2008)

Butte County. 2000. Butte County General Plan: Land Use Element. Website: http://www.buttecounty.net/dds/Planning/Current_General_Plan_Elements/Land_Use_Element.pdf (accessed April 7, 2008)

California Department of Fish and Game (DFG). (2008). Sacramento River Wildlife Area – Butte, Glenn, Colusa Counties: Pine Creek Unit. Website: http://www.dfg.ca.gov/lands/wa/region2/docs/SacR._PineCrk.pdf (accessed April 7, 2008)

California Department of Parks and Recreation (DPR) 2005. Central Valley Vision Website: http://parks.ca.gov

California Department of Parks and Recreation. 2005 Recreation Policy website http://www.parks.ca.gov/pages/795/files/recpolicy.pdf

California Department of Parks and Recreation (DPR). 2007. Environmental Impact Report: Bidwell-Sacramento River State Park Habitat Restoration and Outdoor Recreation Facilities and Development Project

California Department of Parks and Recreation (DPR). 2005. Bidwell-Sacramento River State Park: Recirculated Draft Environmental Impact Report for the Preliminary General Plan (Agricultural Resources)

California Department of Parks and Recreation (DPR). 2003. Bidwell-Sacramento River State Park: Preliminary General Plan and Draft Environmental Impact Report: Chapter 4: Environmental Analysis. Website: http://www.parks.ca.gov/pages/21299/files/4%20Environmental%20Analysis.pdf (accessed April 7, 2008)

City of Chico. 1999. City of Chico General Plan: Chapter 3: Land Use Element. Website: http://www.chico.ca.us/_mod_resource/content/General_City_Documents/3_Land_Use.pdf (accessed April 7, 2008)

Google Pedometer. 2008. Used to determine distances of incorporated cities from the project site. Website: http://www.gmap-pedometer.com/ (accessed April 8, 2008)

U. S. Department of Agriculture (USDA). 2008. Natural Resources Conservation Service: Farmland Protection Policy Act. Website: http://www.nrcs.usda.gov/programs/fppa/ (accessed April 23, 2008)

Mineral Resources

DPR. 2003. Bidwell-Sacramento River State Park Preliminary General Plan and EIR, prepared by EDAW for the Department of Parks and Recreation

DPR. 2004. DPR Operation Manual, Natural Resources, Section 0317.2.5 Mineral Exploration

Noise

U.S. EPA (U.S. Environmental Protection Agency). 1971 *Noise From Construction Equipment and Operations, Building Equipment and home Appliances.* NTID 300-1. Prepared under contract by Bolt, et al., Bolt, Beranek, & Newman.

Butte County General Plan Policy Document. Final Draft. August 8, 2005. http://www.buttecounty.net/Default.aspx?tabid=126 Accessed April 9, 2008.

Google Maps. Airports. Website: http://maps.google.com/ Accessed April 9, 2008.

Department of Parks and Recreation (DPR). 2003. Bidwell-Sacramento River State Park Preliminary General Plan and Draft EIR

Population and Housing

California Department of Finance (DOF). 2007a. California County Profiles: Butte and Glenn Counties. Website: http://www.dof.ca.gov/HTML/FS_DATA/profiles/pf_home.php (accessed April 8, 2008).

State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark. Sacramento, California, May 2009

California Department of Finance (DOF). 2007b. City/County Population estimates with Annual percent Change – January 1, 2006 and 2007. Website: http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E1/E-1text.php (accessed April 8, 2008)

California Department of Finance (DOF). 2007c. Population Projections by Race / Ethnicity for California and Its Counties 2000-2050. Website: http://www.dof.ca.gov/html/DEMOGRAP/ReportsPapers/Projections/P1/P1.php (accessed April 8, 2008)

California Department of Fish and Game (DFG). (2008). Sacramento River Wildlife Area – Butte, Glenn, Colusa Counties: Pine Creek Unit. Website: http://www.dfg.ca.gov/lands/wa/region2/docs/SacR._PineCrk.pdf (accessed April 7, 2008)

California Department of Parks and Recreation (DPR). 2003a. Bidwell-Sacramento River State Park: Preliminary General Plan and Draft Environmental Impact Report: Chapter 2: Existing Conditions. Website: http://www.parks.ca.gov/pages/21299/files/2%20Existing%20Conditions%20and%20Issues.pdf (accessed April 7, 2008)

California Department of Parks and Recreation (DPR). 2003b. Bidwell-Sacramento River State Park: Preliminary General Plan and Draft Environmental Impact Report: Chapter 4: Environmental Analysis. Website: http://www.parks.ca.gov/pages/21299/files/4%20Environmental%20Analysis.pdf (accessed April 7, 2008)

City of Chico. 1999. City of Chico General Plan: Chapter 3: Land Use Element. Website: http://www.chico.ca.us/_mod_resource/content/General_City_Documents/3_Land_Use.pdf (accessed April 7, 2008)

Google Pedometer. 2008. Used to determine distances of incorporated cities from the project site. Website: http://www.gmap-pedometer.com/ (accessed April 8, 2008)

Public Services

Butte County. 2007. Butte County General Plan 2030: Settings and Trends Report – Public Draft: Chapter 7: Public Services. Website: http://www.buttegeneralplan.net/products/SettingandTrends/07_PublicServices.pdf (accessed April 7, 2008)

Butte County Fire Department (BCFD). 2005. Butte County Fire Rescue: Who We Serve. Website: http://buttefire.org/ (accessed April 21, 2008)

City of Chico. 2007. City of Chico Fire Department: Our Department: Now. Website: http://www.chico.ca.us/Fire/About_Us.asp (accessed April 21, 2008)

Google Maps. 2008. Search for fire, police, and school services closest to the parcel. Website: http://maps.google.com (accessed April 21, 2008)

Recreation

California Department of Parks and Recreation (DPR), 2003. Bidwell-Sacramento River State Park Preliminary General Plan and Draft Environmental Impact Report.

California Department of Parks and Recreation (CDPR). 2007. Environmental Impact Report: Bidwell-Sacramento River State Park Habitat Restoration and Outdoor Recreation Facilities and Development Project

California Department of Parks and Recreation 2008. California Outdoor Recreation Plann – An Element of the California Outdoor Recreation Planning Program Approved 2009

Sacramento River Conservation Area Forum. 2008. Sacramento River: A guide to recreation and public access. Website: http://www.sacramentoriver.org/index.php Accessed April 28, 2008

U.S. Fish and Wildlife Service. 2008. Sacramento National Wildlife Complex. Website: http://www.fws.gov/sacramentovalleyrefuges Accessed April 28, 2008

Transportation and Traffic

Butte County. 2007a. Butte County General Plan 2030: Settings and Trends Report – Public Draft: Chapter 5: Transportation and Circulation. Website: http://www.buttegeneralplan.net/products/SettingandTrends/05_TransportationCirculation.pdf (accessed April 7, 2008)

Butte County. 2007b. Butte County General Plan 2030: Briefing Book – Regional Transportation. Website: http://www.buttegeneralplan.net/ebinder/2007/2007-04-02_BriefingBook_revised.pdf (accessed April 23, 2008)

Butte County Association of Governments (BCAG). 2004a. Planning: 2004 Regional Transportation Plan: Chapter 3 – Action Element Analysis. Website: http://www.bcag.org/__planning/documents/2004_RTP/3Analysis.pdf (accessed April 25, 2008)

Butte County Association of Governments (BCAG). 2004a. Planning: 2004 Regional Transportation Plan: Chapter 9 – Aviation. Website: http://www.bcag.org/__planning/documents/2004_RTP/9Aviation.pdf (accessed April 23, 2008)

Butte County Association of Governments (BCAG). 2004c. Transit: used to review Regional Transit and Bike Routes. Website: http://www.bcag.org/__transit/index.html (accessed April 23, 2008)

Butte County Association of Governments (BCAG). 1998. Countywide Bikeway Master Plan. Website: http://www.buttecounty.net/publicworks/assets/pdf/BCAG%20Countywide%20Bikeway%20Master%20Plan.pdf (accessed April 23, 2008)

California Department of Transportation (Caltrans). 2007a. Traffic Data Branch: Truck traffic: 2006 Annual Average daily Truck Traffic on the California State Highway System. Website: http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/truck2006final.pdf (accessed April 25, 2008)

California Department of Transportation (Caltrans). 2007b. Transportation Concept Report State Route 32 (Approved 5/8/07). Website: http://www.dot.ca.gov/dist3/departments/planning/tcr/tcr32.pdf (accessed April 25, 2008)

California Department of Transportation (Caltrans). 2007c. Truck Networks Map. Website: http://www.dot.ca.gov/hq/traffops/trucks/truckmap/truckmap-d03.pdf (accessed April 25,2008)

Chico Velo Cycling Club (CVCC). 2008. Chico Area Bike Rides: Sacramento/Chico River Roads Loop. Website: http://www.chicovelo.org/riverrdnew.html (accessed April 23, 2008)

Global Aviation Navigator, Inc (GAN). 2008. Airport Resource Center: Chico Airport Search. Website: http://www.globalair.com/airport/airportsearch.aspx (accessed April 23, 2008)

Google Pedometer. 2008. Used to determine name and distances of road alignments to the project site and distances from Airport facilities. Website: http://www.gmap-pedometer.com/ (accessed April 23, 2008)

Utilities and Service Systems

Department of Parks and Recreation (DPR). 2003. Bidwell-Sacramento River State Park Preliminary General Plan and Draft EIR

California River Parkways Grant Program (CRPGP). 2006. Proposition 50 Grant Application for Sacramento River Access and Restoration

California Regional Water Quality Control Board. Central Valley Region (CCRWQCB). 2006. Comment letter to the Review of Bidwell-Sacramento River State Park Preliminary General Plan Recirculated Draft Environmental Impact Report

EDAW. 2008. Bidwell-Sacramento River State Park habitat Restoration and Outdoor Recreation Facilities Development Project. Draft Environmental Impact Report prepared for California Department of Parks and Recreation and The Nature

Conservancy

Report Preparation

California Department of Parks and Recreation

Diona Roja, Environmental Scientist
Northern Service Center

Ellen Clark, Regional Interpretive Specialist
Northern Buttes District

Emily Ferguson, Environmental Scientist
Northern Service Center

Kathleen Considine, Physical Geologist
Northern Service Center

Laura Westrup, District Services Manager
Northern Buttes District

Leslie Steidl, Associate Archaeologist
Northern Buttes District

Matt Teague, Civil Engineer
Northern Buttes District

Patricia DuMont, Environmental Coordinator
Northern Service Center

Roy Martin, Environmental Scientist
Northern Service Center

Stephanie Coleman, Environmental Coordinator
Northern Service Center

Steve Hilton, Associate Archaeologist
Northern Service Center

Warren Wulzen, Associate Archaeologist
Northern Service Center

Woody Elliott, Environmental Scientist
Northern Buttes District

APPENDIX A
MAPS

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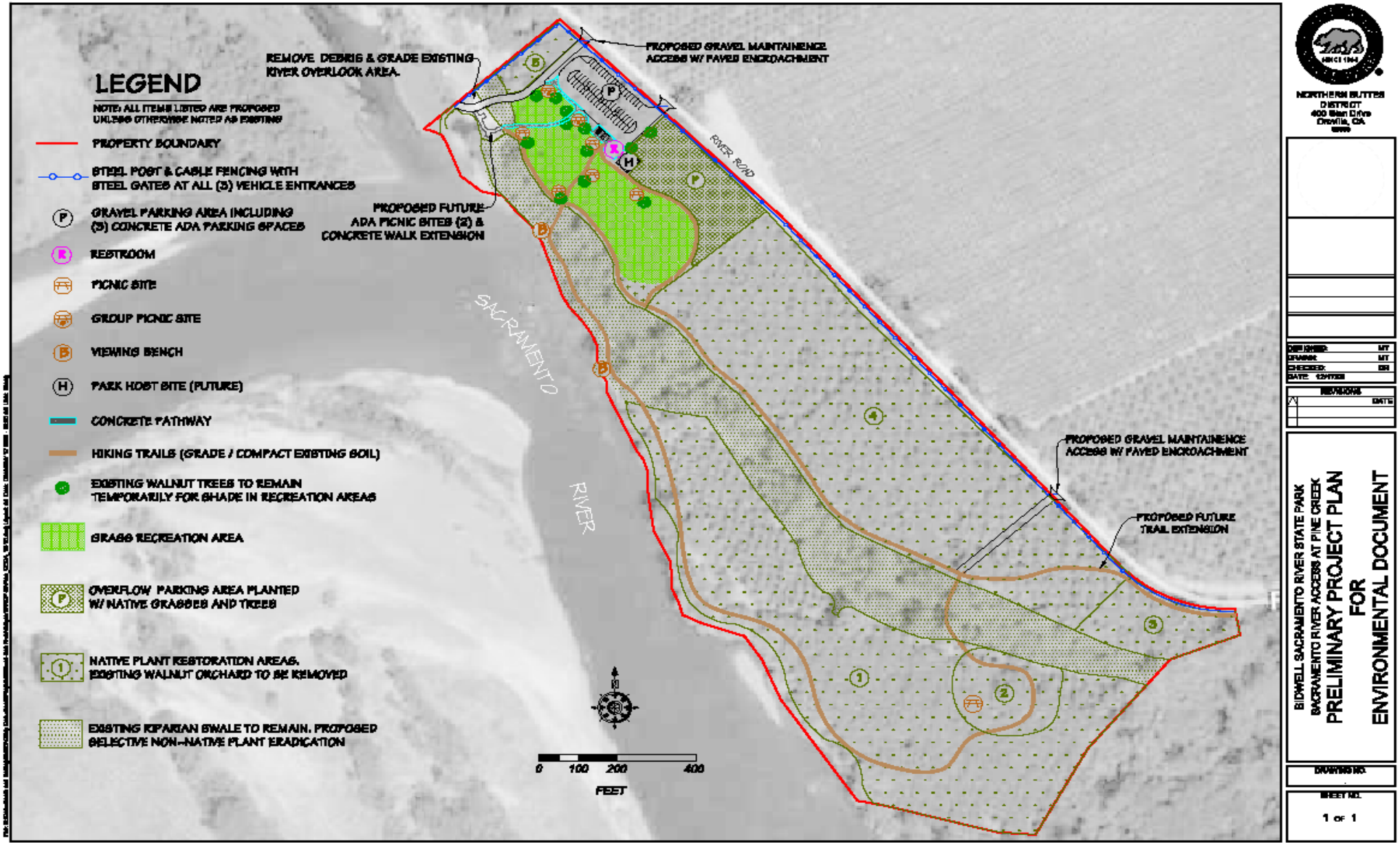
Bidwell-Sacramento River State Park
Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration Project



Bidwell-Sacramento River State Park
Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration Project

APPENDIX B

HYDROLOGY REPORT

Bidwell-Sacramento River State Park
Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration Project

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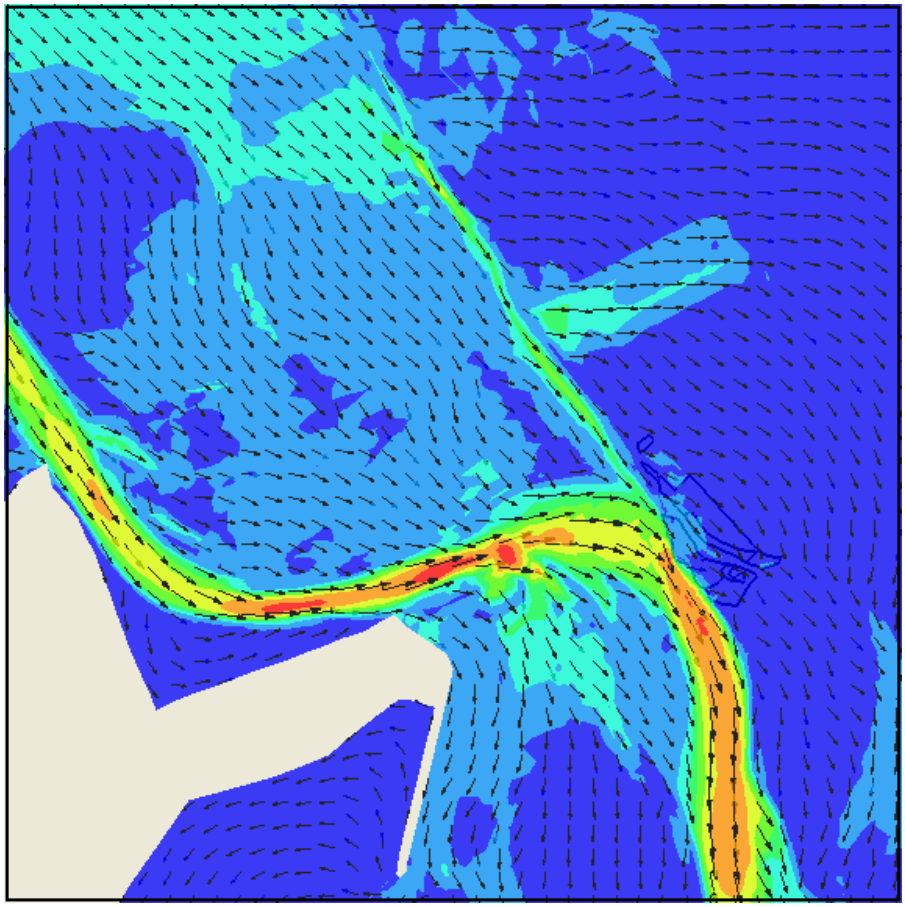
HYDRAULIC ANALYSIS FOR FLOOD NEUTRALITY ON THE BIDWELL - SACRAMENTO RIVER STATE PARK

SACRAMENTO RIVER, BUTTE COUNTY, CALIFORNIA

January 6, 2009



Prepared For:

AYRES ASSOCIATES

HYDRAULIC ANALYSIS FOR FLOOD NEUTRALITY ON THE BIDWELL - SACRAMENTO RIVER STATE PARK

SACRAMENTO RIVER

January 6, 2009

Prepared For:

Northern Buttes District
525 The Esplanade
Chico, California 95926

Prepared By:

2150 River Plaza Drive, Suite 330
Sacramento, CA 95833
(916) 563-7700

Ayres Associates Project Number: 33-0582.00

Table of Contents

1.0 INTRODUCTION ……1
1.1 General ……1
1.2 Purpose and Scope ...……..1
1.3 Acknowledgements ..……1
2.0 TWO-DIMENSIONAL HYDRAULIC MODEL RUNS...……2
2.1 Existing Conditions……2
2.2 With-Project Conditions……2
3.0 HYDRAULIC MODELING……..5
3.1 General……5
3.2 Model Development……5
3.3 Material Roughness……5
3.4 Boundary Conditions……..6
3.5 Calibration...……6
4.0 HYDRAULIC MODELING RESULTS……...7
5.0 CONCLUSIONS……...7
6.0 REFERRENCES……16

1.0 INTRODUCTION

1.1 General

This report summarizes the findings of a 2-dimensional (2D) hydraulic analysis on the Sacramento River from approximate river mile (RM) 191 to RM 199 (see **Figure 1**). This report was prepared to assist the California Department of Parks and Recreation (DPR) in analyzing the hydraulic effects of riparian restoration and facility development of the Bidwell-Sacramento River State Park.

To determine the hydraulic effects of these changes on the floodplain of the river, an existing 2D hydraulic model was modified and used. The previous 2D model was developed for The Nature Conservancy (TNC) to analyze riparian restoration and berm removal at RM 194 to 195 (Ayres Associates, 2007), and was used with permission from TNC.

The riparian restoration and state park development area is located on the left side of the Sacramento River floodplain at approximately RM 196 (looking downstream)**. Figure 2** shows the location of the project with the restoration and land use change areas outlined.

1.2 Purpose and Scope

The purpose of this project was to use an existing 2D hydraulic model of the reach of the Sacramento River to evaluate the effects of habitat restoration and facility development. The model was modified to refine the area of interest at RM 196. The model limits are shown in Figure 1. The project was accomplished as laid out in the scope items listed below.

- Utilize previously developed hydraulic models such as from the Hamilton City levee project and other areas in the Project vicinity to create a new mesh for the current model. Revise any land uses and topographic features for a new model to include the proposed project developments.

- Input the proposed restoration and facility development scenarios provided by DPR into the developed conditions hydraulic model. The 2D hydraulic model shall be run to simulate and compare the effects of flooding flows with and without the proposed restoration and facilities at the described site. This model may be run more than once to aid development of the restoration and facilities plans. Outputs shall be displayed to show flow velocities, flow vectors, water depths and differential change in velocity and depth of the base condition.

1.3 Acknowledgements

This analysis was authorized by the California Department of Parks and Recreation. The point of contact for DPR is Mr. Matt Teague in Chico, California. The hydraulic modeling was conducted by the Sacramento offices of Ayres Associates under the direction of Mr. Thomas W. Smith, PE, GE.

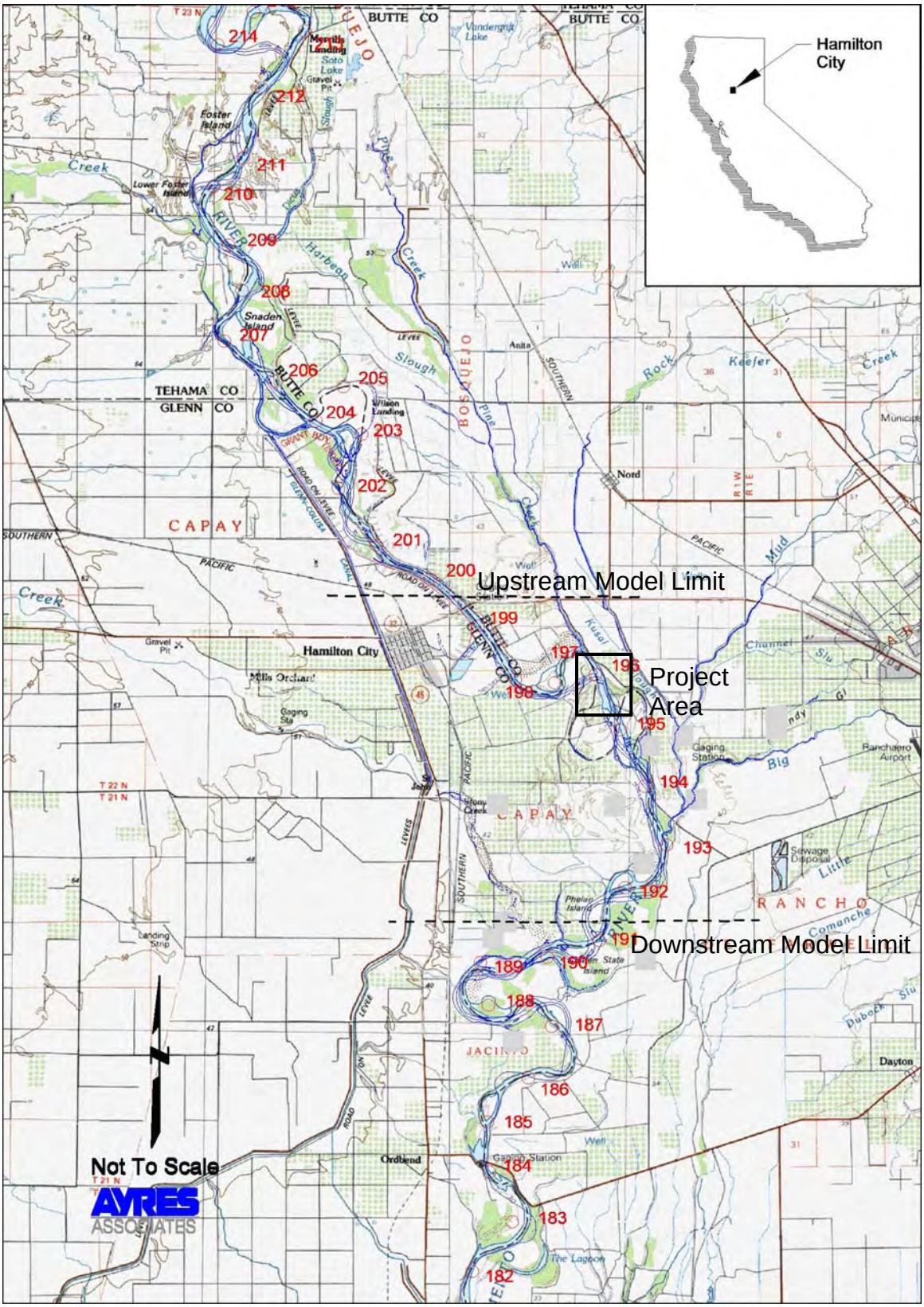


Figure 1. Location Map Showing Project Location

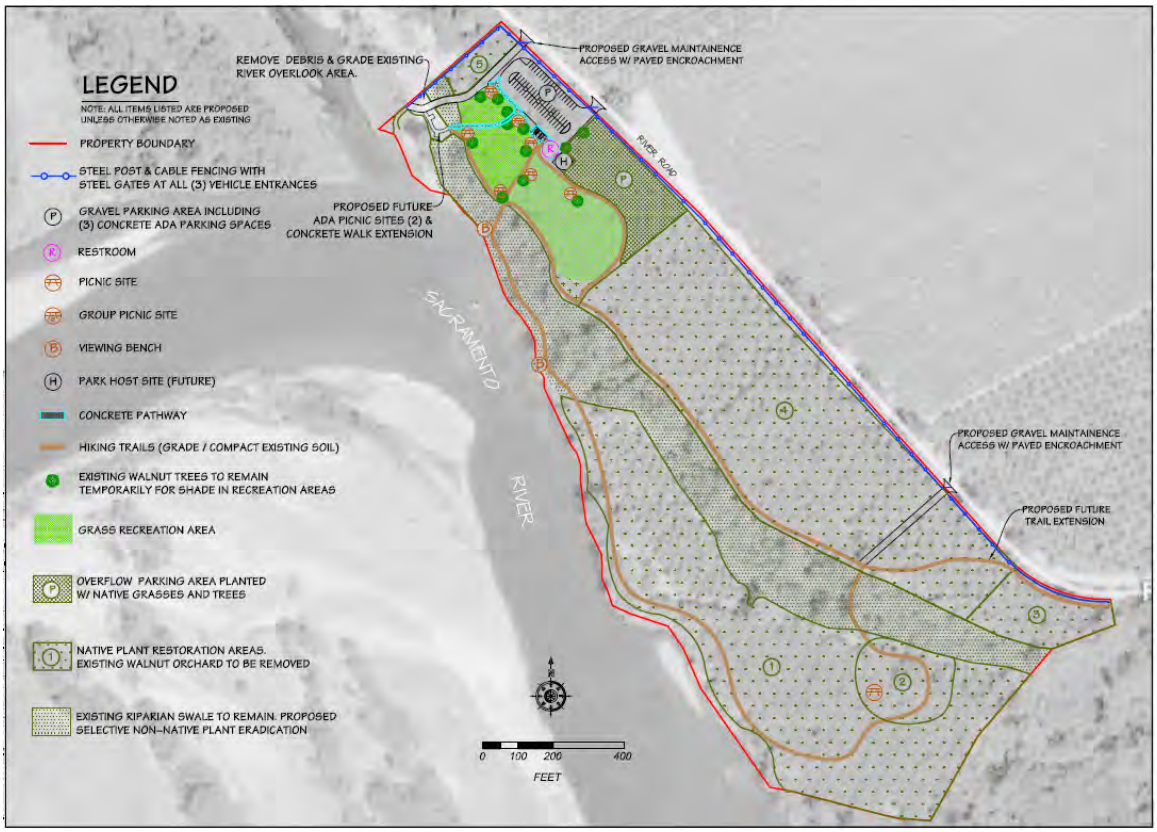


Figure 2. Project Area Showing Proposed Habitat Restoration and Facility Development

2.0 TWO-DIMENSIONAL HYDRAULIC MODEL RUNS

2.1 Existing Conditions

The existing conditions hydraulic model represents the land use in 2006 (based on aerials developed by the U.S. Department of Agriculture) and updated in the area of interest per land uses provided by DPR, and the river configuration that existed following the 1995 flood events. The existing conditions are made up of two areas consisting of walnut orchard and riparian swale. The land use in the project area is shown in **Figure 3**. The model uses the topographic mapping data developed for the U.S. Army Corps of Engineers (USACE) following the 1997 flood event. This run will serve as a baseline for comparison with the with-project conditions.

2.2 With-Project Condition

The with-project conditions incorporate land use changes for the Bidwell-Sacramento River State Park (see **Figure 4**). The existing walnut orchard will be converted into three different types of area: a recreational area consisting of grass meadows, sparse walnut trees, picnic tables, a restroom and a gravel parking lot; and five native plant restoration zones. The areas of existing riparian swale will have non-native plants removed, but will otherwise remain as is.

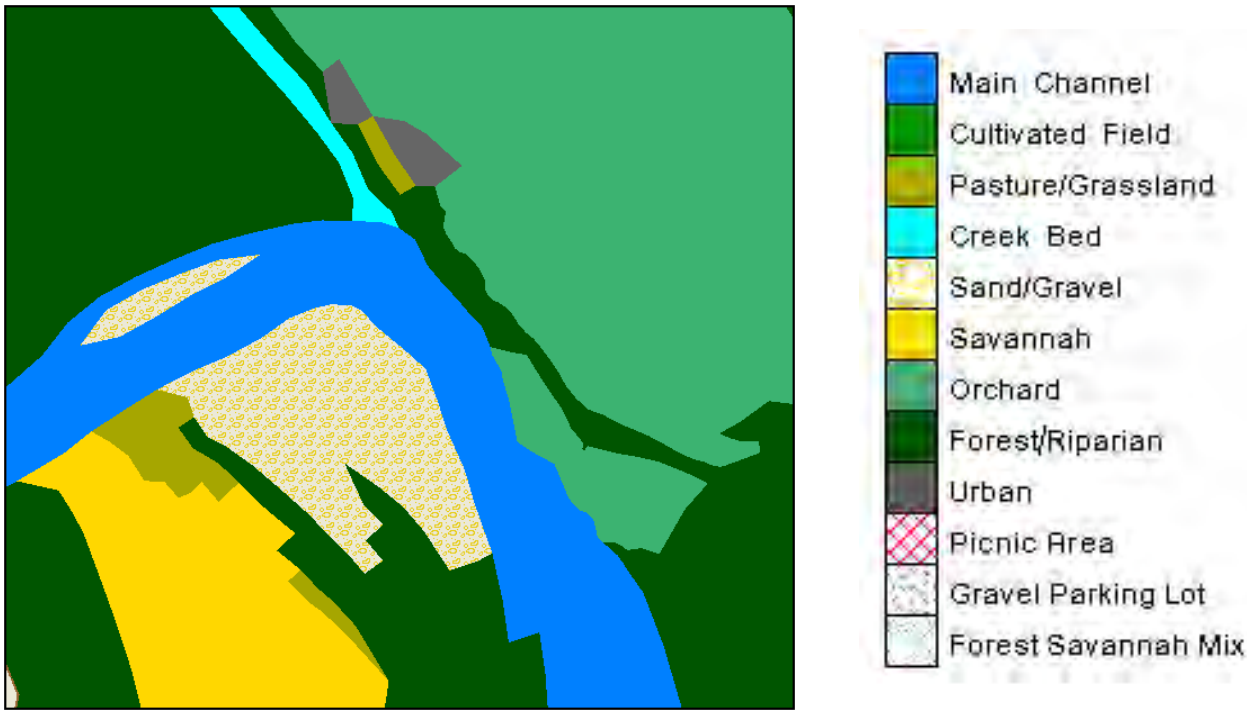


Figure 3. Existing Conditions Land Use

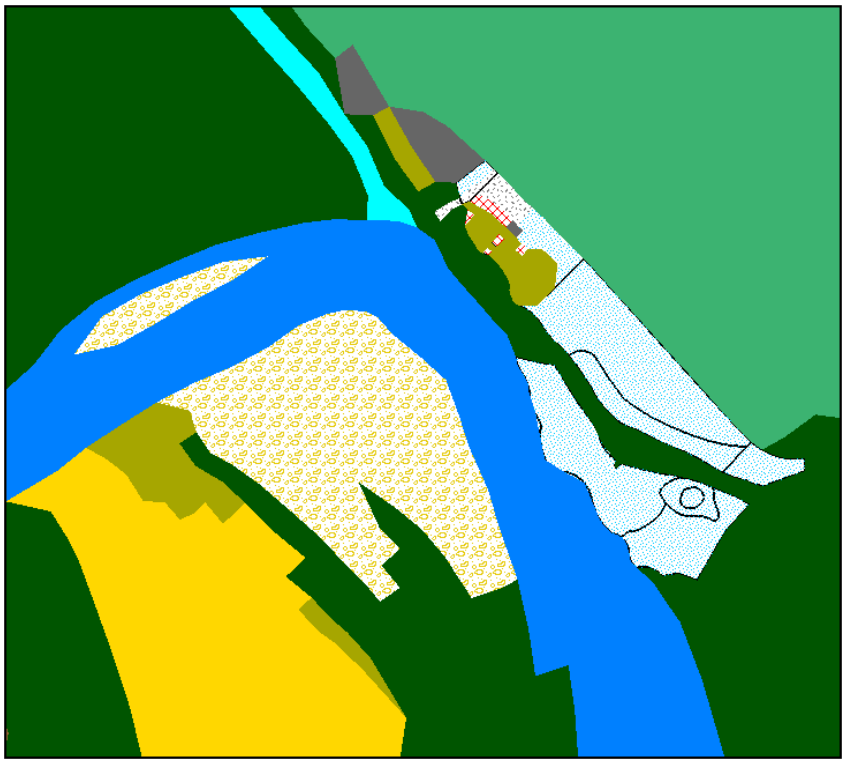


Figure 4. With-project Conditions Land Use

3.0 HYDRAULIC MODELING

3.1 General

The 2D hydraulic modeling tool used for this project was the RMA-2V program, maintained and distributed by the USACE and modified by Ayres Associates. The program has been used extensively for similar projects on the Sacramento River and has proven to be an effective model for representing river flow conditions. The Surface-Water Modeling System (SMS) version 10.0 was used to develop the model geometry file and to view model results.

3.2 Model Development

The geometric definition of the project reach is given in the form of a finite element network of triangular and quadrilateral elements, known as a mesh, as shown in **Figure 5**. The elements were sized and oriented to represent hydraulic features, breaklines, structures, and topographic changes. Each element contains corner and mid-side nodes, which represent points in space (X, Y, Z) and define the topography as a reference for element size and orientation. Elevation values were assigned to nodes using a digital terrain model of the river reach.

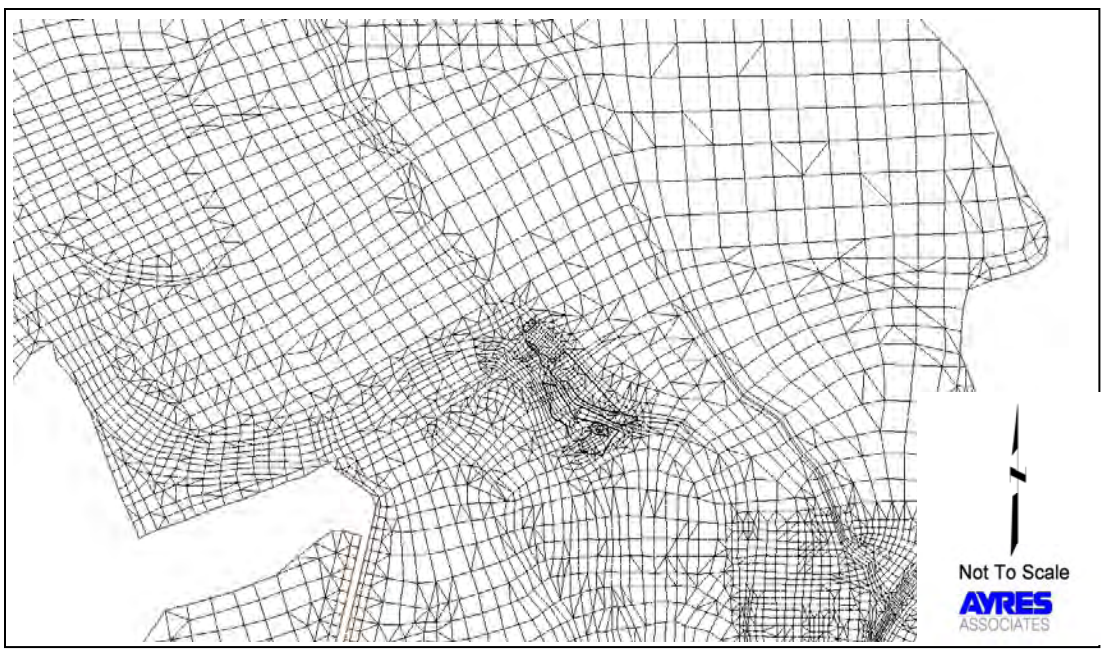


Figure 5. Plan view of the Finite Element Mesh

3.3 Material Roughness

Each element within the mesh was assigned a material type based on land use and roughness characteristics. The material types were assigned to each of the elements in the mesh using 2006 aerial photography and then associated with the appropriate

Manning's roughness coefficient value (n value). The n values were determined primarily from previous modeling efforts, and originally were derived using standard engineering protocols and references. Material types and corresponding n values used in this model are listed in **Table 1**.

Table 1. Manning's Roughness Coefficients

Landscape Description	Manning's Roughness Coefficient "n –value"
Levee/Road	0.025
Main Channel	0.035
Cultivated Field	0.035
Pasture/Grassland	0.035
Creek Bed	0.035
Pine Creek bed	0.035
Sand/Gravel	0.04
Stone Creek Bed	0.04
Savannah	0.05
Scrub	0.1
Orchard	0.15
Forest/Riparian	0.14
Buildings/Structures	0.2
Valley Oak Woodland	0.05
Valley Oak Elderberry Savannah	0.12
Valley Oak Riparian Forest	0.15
Cottonwood Riparian Forest	0.16
Picnic Area	0.11
Gravel Parking Lot	0.026
Forest Savannah Mix	0.12

3.4 Boundary Conditions

The hydraulic model for this study extends, approximately, from RM 199 down to RM 191. The RMA-2V program requires input parameters for the upstream and downstream ends of the model. The upstream flow data used for this model was the peak flow data from the 1995 flow event published by USGS. Three inflows enter the simulation field, 170,000 cubic feet per second (cfs) from the Sacramento River, 15,000 cfs from Mud Creek, and 7,000 cfs from Big Chico Creek.

For the downstream boundary condition, a water surface elevation was referenced from previous 2D modeling conducted for the Butte Basin reach of the Sacramento River. The water surface elevation (WSE) assigned to the downstream end of the model was 130.5 feet.

3.5 Calibration

The calibration for the existing conditions model was taken from the previously run TNC model referenced in Section 1.1. No recalibration was performed for this project.

4.0 HYDRAULIC MODELING RESULTS

The velocity contours for the existing conditions and the with-project conditions are shown in **Figure 6** and **7**, respectively. The velocity differential plot is shown in **Figure 8**. The velocity differential equals the existing conditions subtracted from the with-project condition values. The velocity contours show that the velocities are below 2.0 ft/s in the project areas for both the existing and the with-project conditions.

For the with-project condition, the land use change causes some velocity increases within the project area. The largest increase is 0.8 ft/s and is located in the picnic and grass recreational area of the park. The highest existing velocity in that area is roughly 0.75 ft/s. There is also a velocity increase in the native plant restoration zones of up to 0.3 ft/s (from 1.15 ft/s to 1.45 ft/s); this is due to a lower vegetation density. However, these increases in velocity are not expected to change the erosion/depositional patterns on this parcel. Velocity vector plots for existing and with-project conditions are shown in **Figures 9** and **10**, respectively. These do not show any significant change in the flow path of the river or over the floodplains.

The water depth plots for the existing and with-project conditions are shown in **Figures 11** and **12**, respectively. The water surface differential plot is shown in **Figure 13**. The water surface elevation differential shows no significant increase in water depth within the project area. The largest change in depth is approximately 0.06 ft and located in the picnic and grass recreational area of the park.

5.0 CONCLUSIONS

Based on the analysis performed and results presented in this report, we offer the following conclusions.

- The picnic, grass field, and parking lot area create an increase of 0.8 ft/s in velocity. However, given the low existing conditions velocity of up to 0.75 ft/s in those areas, the resultant velocities from the with-project condition will not create any harmful effects at this location.

- The with-project conditions model shows a slight increase in velocity in the southeast meadow area. These are considered less than significant and should cause no erosion problems.

- The hydraulic model shows very little change in water surface elevation. The largest change in water depth is approximately 0.06 ft located within the picnic and grass recreational area, as shown in Figure 13.

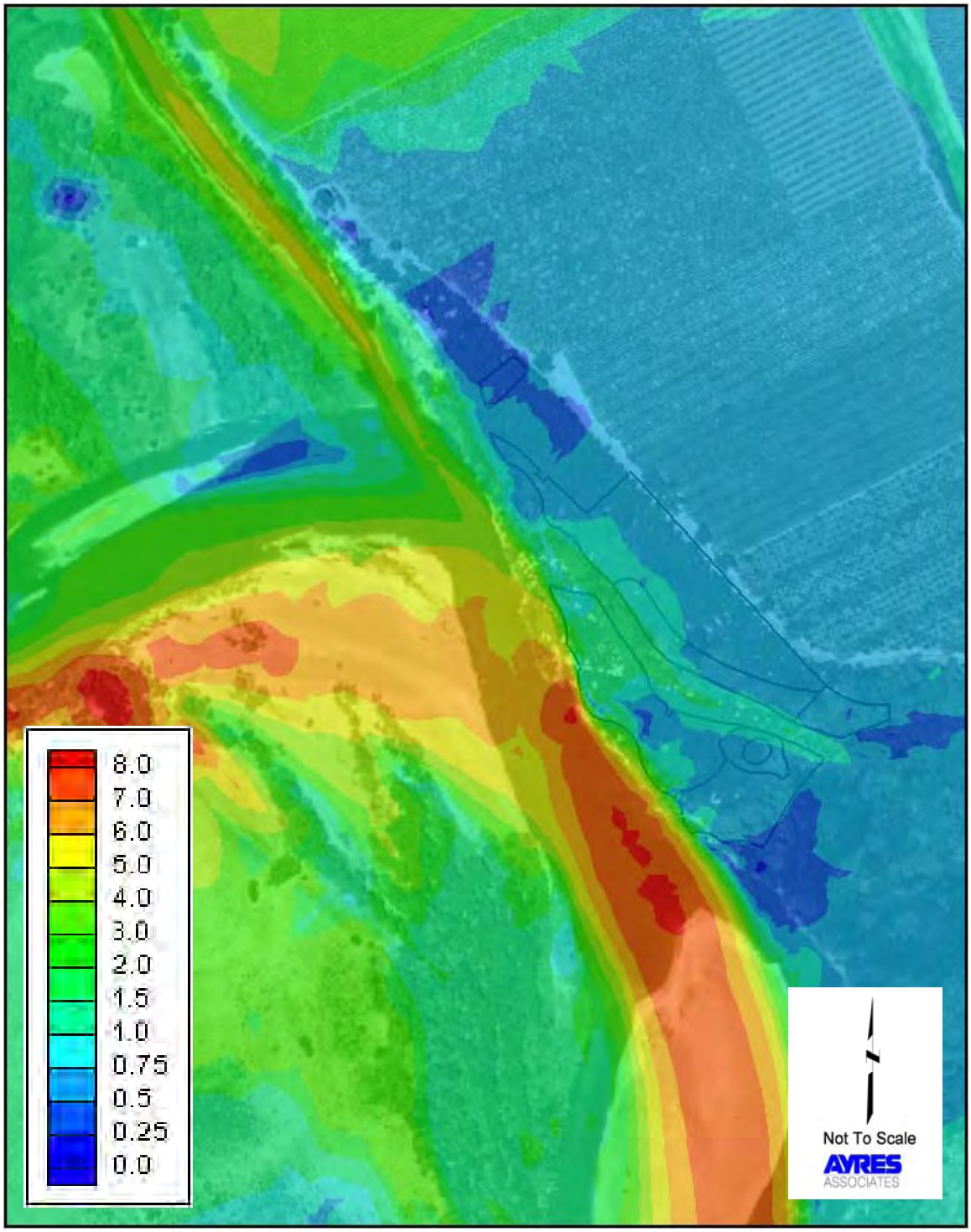


Figure 6. Existing Conditions Velocity

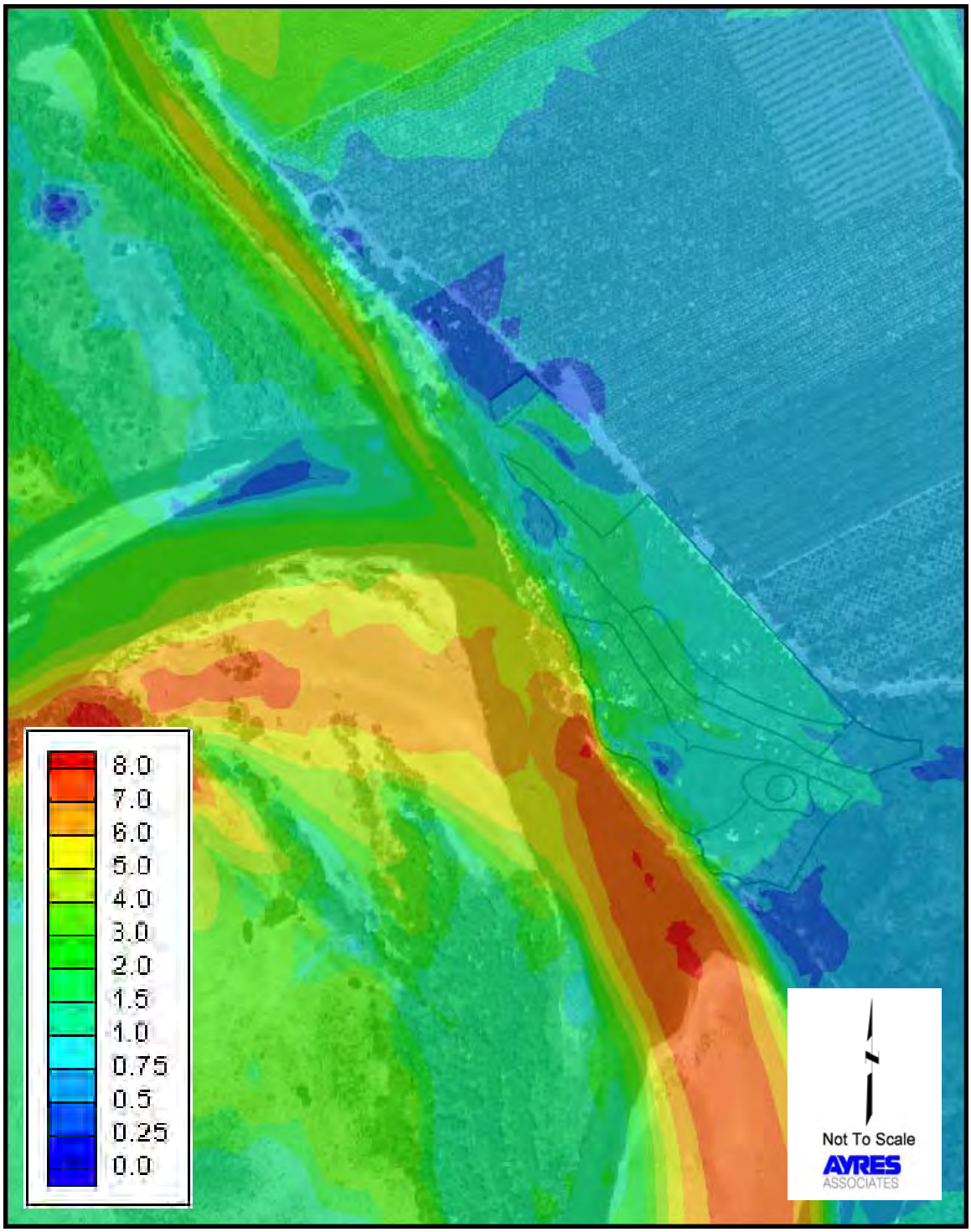


Figure 7. With-Project Conditions Velocity

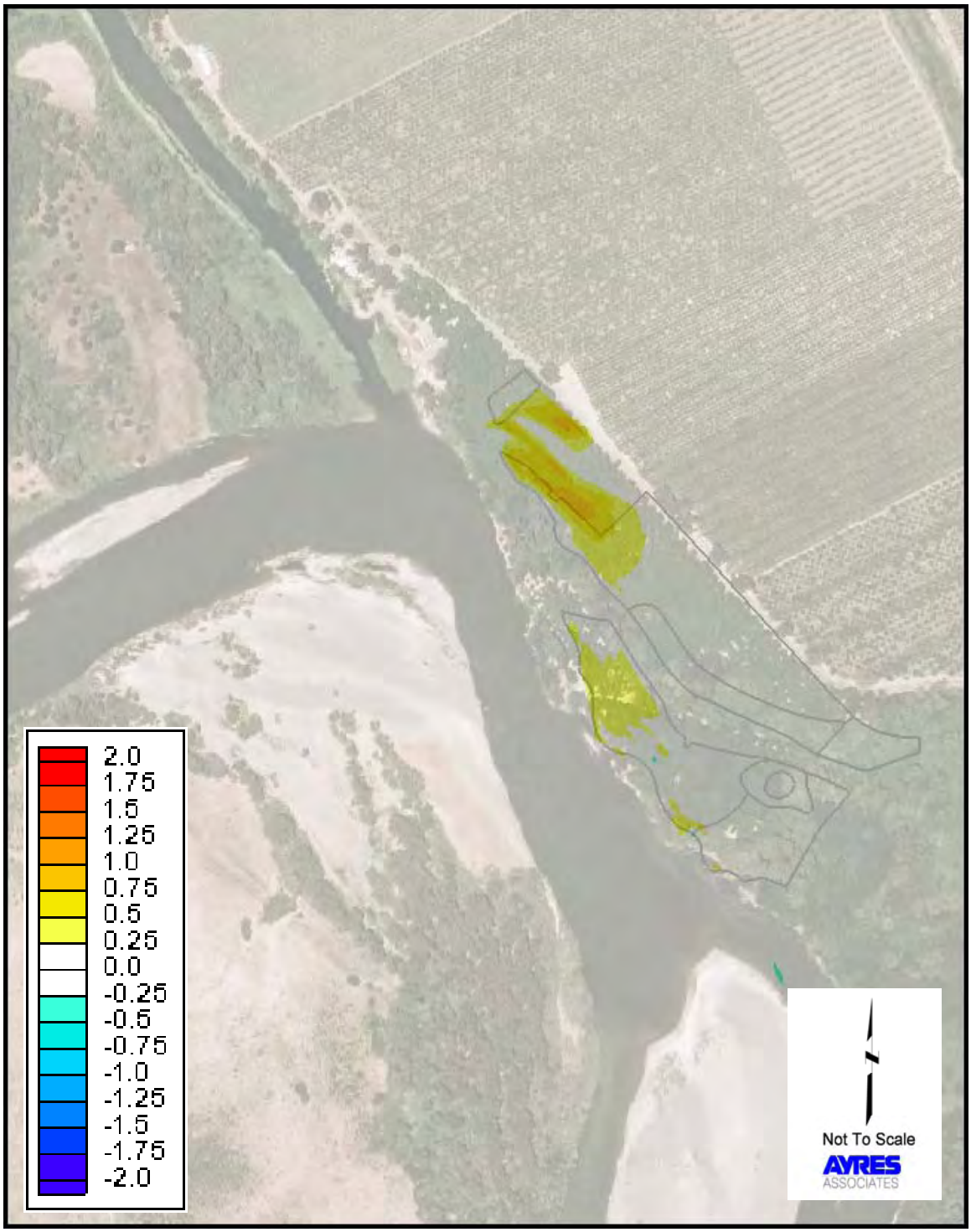


Figure 8. Velocity Differential – With-Project to Existing

Figure 9. Existing Velocity Vectors

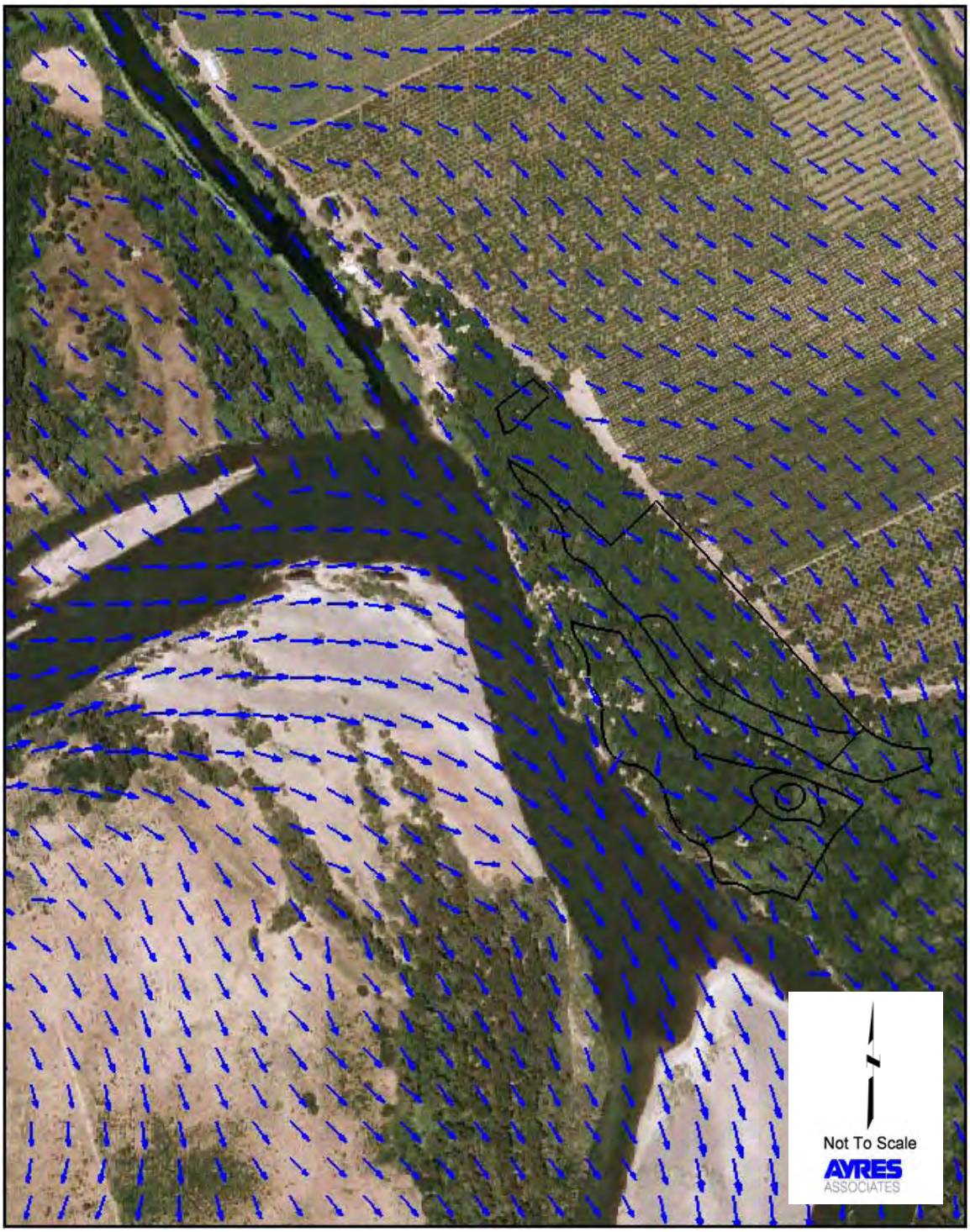


Figure 10. With-Project Velocity Vectors

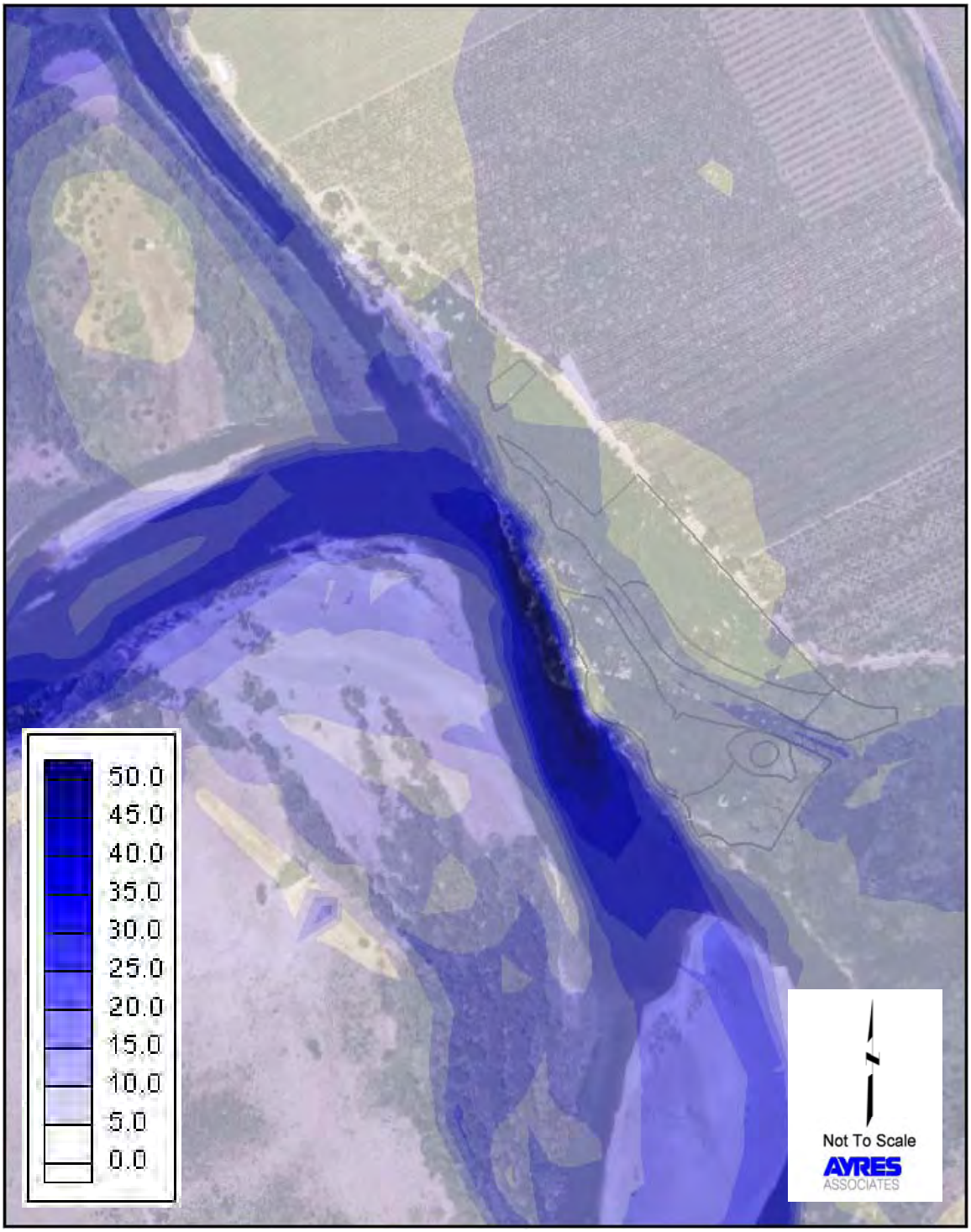


Figure 11. Existing Water Depths

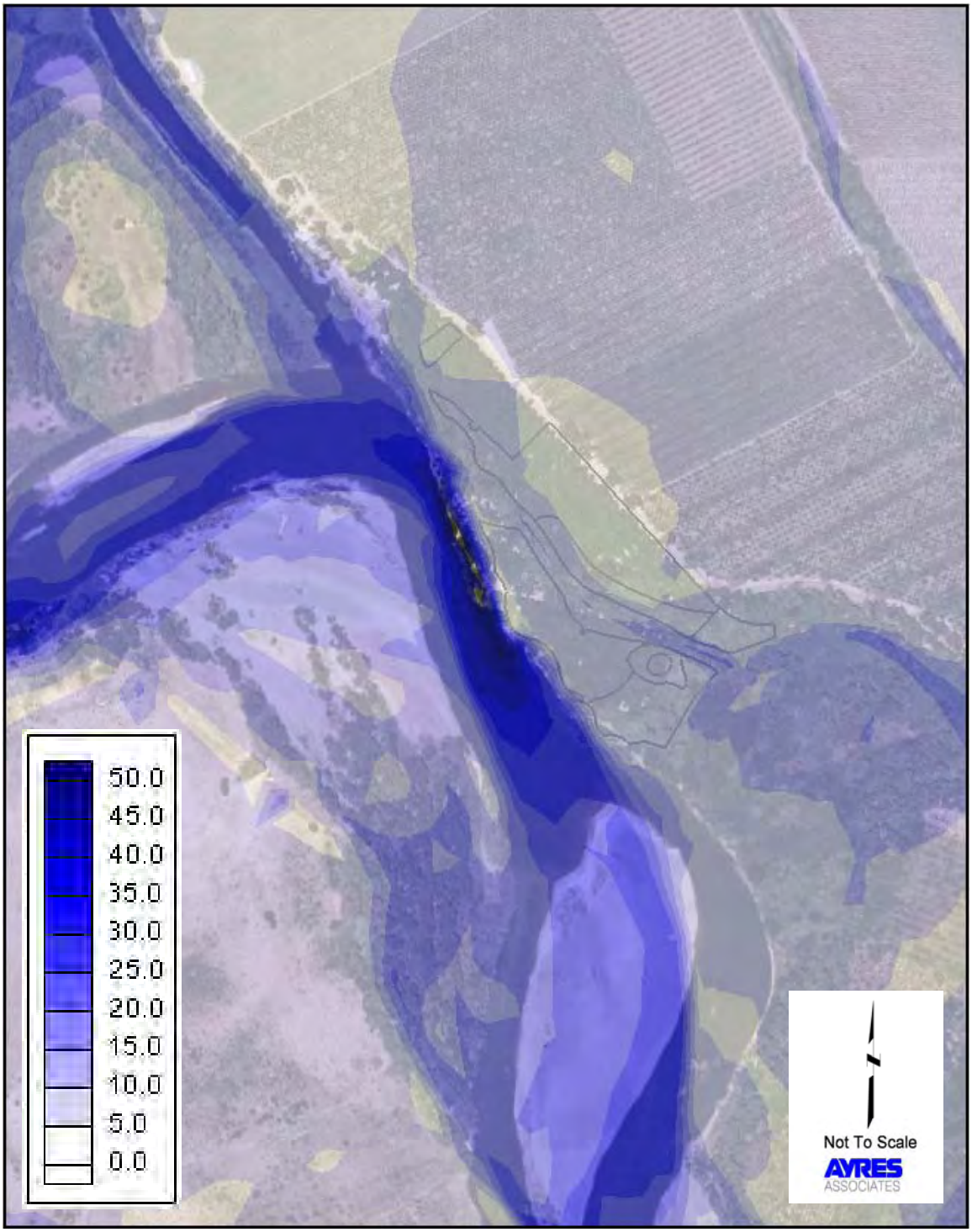


Figure 12. With-Project Water Depths

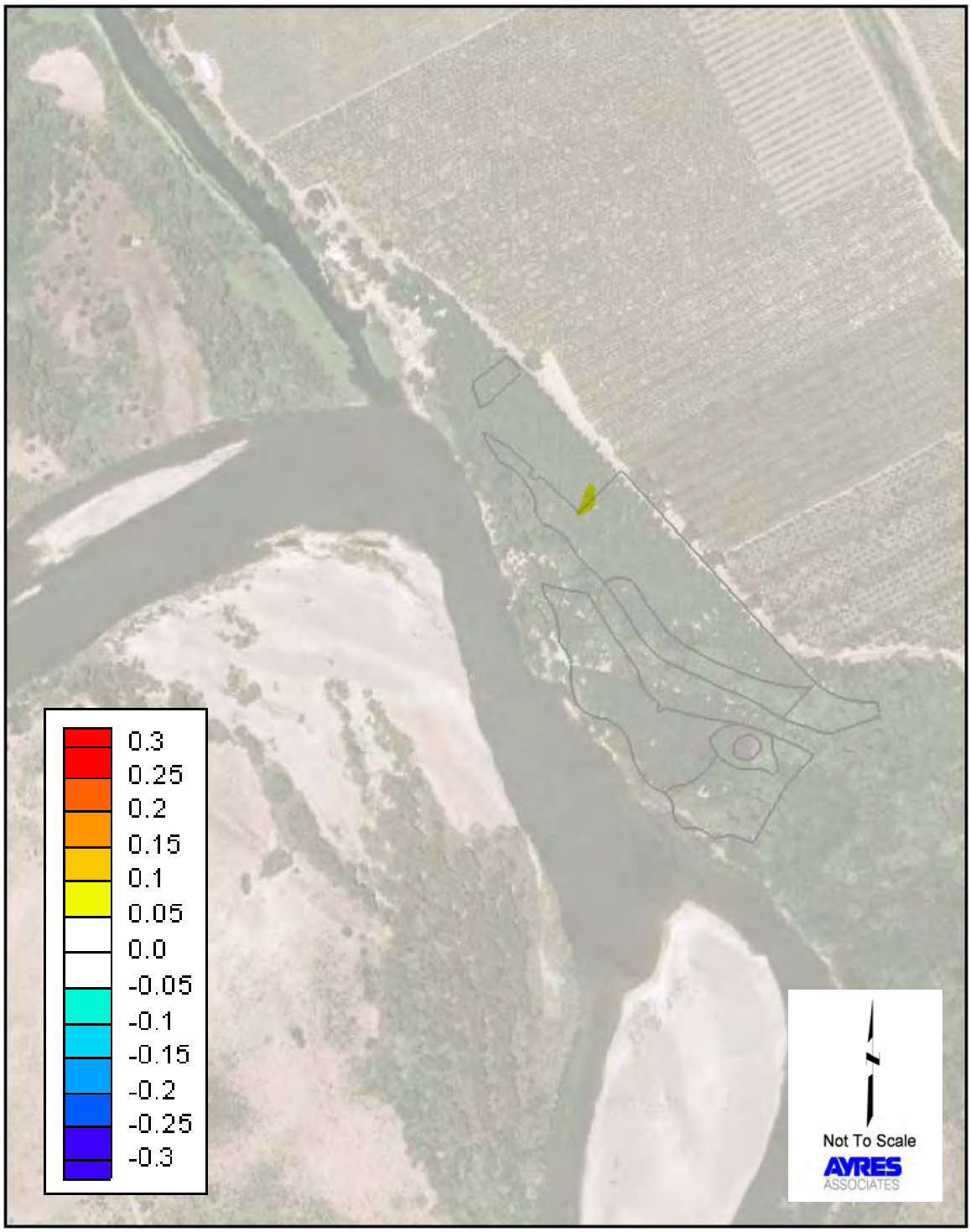


Figure 13. Water Surface Elevation Differential – With-Project to Existing

6.0 REFERENCES

U.S. Department of Agriculture, 2006, Sacramento River Aerial Imagery

Ayres Associates, 2007. Flood Neutral Hydraulic Analysis for the Nicolaus and Singh Properties. Sacramento River, River Mile 194 -195, Butte County, California, December 12, 2007, Prepared for The Nature Conservancy, Chico, CA.

APPENDIX C

ACRONYMS

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Appendix C
Acronyms

AB – Assembly Bill
AD – After Death
ADA - Americans with Disabilities Act
AADT – Average annual daily trip
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
BCAG – Butte County Association of Governments
BCAQMD – Butte County Air Quality Management District
BCFD – Butte county Fire Department
BMP - Best Management Practices
BCSO – Butte County Sheriff
BP – Before Present
BSRSP – Bidwell-Sacramento River State Park
CA - California
Caltrans - 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
CDPR – California Department of Parks and Recreation
CDTSC – California Department of Toxic Substance Control
CVFPB – Central Valley Flood Protection Board
CEQA - California Environmental Quality Act
CFD – City of Chico Fire Department
CGS - California Geological Survey
CHP – California Highway Patrol
CPD – Chico Police Department
cmbs – centimeters below surface
CNDDB - California Natural Diversity Database (Calif. Dept. of Fish and Game)
CNPS - California Native Plant Society
CRHR - California Register of Historic Resources
CRPGP – California River Parkways Grant Program
CSQA – California Stormwater Quality Association
CVRWQCB – Central Valley Regional Water Quality Control Board
CWA – Clean Water Act
dB – decibels
DOF – California Department of Finance
DPR - California Department of Parks and Recreation
DWR – Department of Water Resources

EIR - Environmental Impact Report

EPA – United States Environmental Protection Agency
FEMA - Federal Emergency Management Agency
FMMP - Farmland Mapping and Monitoring Program
FPPA – Federal Farmland Protection Policy Act
GAN – Global Aviation Navigator
GHG – greenhouse gas
GP - General Plan
GVGP – Great Valley Geomorphic Province
HCFPD – Hamilton City Fire Protection District
IS/ND - Initial Study / Negative Declaration
Ldn - day-night average levels
LOS - level of service
ND - Mitigated Negative Declaration
MSL - mean sea level
mph - miles per hour
NOx - nitrogen oxide
NP – National Park Service
NPDES - National Pollutant Discharge Elimination System
NRHP - National Register of Historic Places
NSC - Northern Service Center
NSVAB – Northern Sacramento Valley Air Basin
OHP – California Office of Historic Resources
PM_{10} - 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)
POST – Peace Officer Standards and Training
PRC - Public Resources Code
QMU – Pleistocene-age older alluvium of the Upper Modesto Formation
Qsc – Quaternary stream channel
SP – State Parks
SPR – Standard Project Requirements
SRCAF – Sacramento River Conservation Area Forum
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 – Untied 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
VELB – Valley Elderberry Longhorn Beetle
VRP – Visibility Reducing Particle

APPENDIX D

HABITAT RESTORATION PLAN

Bidwell-Sacramento River State Park
Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration Project

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Description of Proposed Work
Habitat Restoration and other Native Plantings
for the
Sacramento River Access at Pine Creek Project,
Bidwell-Sacramento River State Park, Butte County, CA

1. Introduction.

California State Parks will facilitate the wildlife habitat restoration and other native plantings for the Project on this 41 acre parcel, proposed to begin in early spring of 2010). Wildlife habitat restoration includes :

A. converting approximately 25 acres of walnut orchard to three types of native plant communities for habitat by removing orchard trees, preparing soil, planting, and then irrigation and weed control through three seasons of establishment;
B. enhancing approximately seven acres of existing riparian habitat through noxious weed eradication; and a portion of the recreation facility development will include these native plantings;
C. a three acre "play meadow" planted with native grasses and sedge; and
D. a 1.3 acre overflow parking area planted with native grasses and trees.

2. Location and setting.

The project area (Figure 1) is part of Bidwell-Sacramento River State Park and is located between the east bank of the Sacramento River (immediately south of the mouth of Pine Creek at River Mile 196) and River Road, five miles west of the City of Chico in Butte County, California. The project site currently consists of two English walnut orchards, nearing the end of their productive life, separated by a vegetated slough. The west walnut orchard occupies 11 acres, the east orchard 19 acres, and the remainder of the parcel, consisting of riverbank, beach, vegetated swale, and a large oak tree within the west orchard, occupies 11 acres (Figure 2).

A private mobile home park occupies the parcel to the north. and to the east opposite River Road are almond and walnut orchards. The Project area parcel connects with the existing Indian Fishery unit of Bidwell-Sacramento River State Park on the southeast corner, and to the south is the Department of Fish and Game, Pine Creek east unit. The Sacramento River is on the west boundary, with the mouth of Pine Creek at the northwest corner at River Mile 196.

3. Objectives for habitat restoration and other native planting areas (**A - D** as described in the Introduction above).

A. The objective for this area is to restore a total of 25 acres of Sacramento River riparian habitat, including all 11 acres of the west orchard and 13.4 acres of the east orchard area.

The west 11 acres will be planted in 6.5 acres of Valley Oak Riparian forest vegetation type, 3.6 acres of Mixed Riparian forest, and an existing heritage oak tree with a canopy of 0.25 acres will be surrounded by 0.9 acres of native grass and forbs extending also beneath the expansive oak canopy.

The east 13.4 acres will be planted in 9.5 acres of Valley Oak forest vegetation type, 2.6 acres of Valley Oak Riparian forest, and 1.3 acres of Mixed Riparian vegetation – this last mostly in whiteroot sedge (*Carex barbarae)*. A dense visual screen planting of California bay (*Umbellularia californica*) trees will be planted along the north boundary of the Project area, within the Valley Oak 0.5 ac area, as shown in Figure 4.

Table 1 is a detailed list of species composition and spacing for the 11 acres west of the swale. Planting rows will predominantly lay parallel to the direction of flood water flow (NW to SE) to maintain flood conveyance patterns across the site.. Table 2 similarly describes the 13.4 acres east of the swale.

Irrigation of new plantings will be done by adapting the existing orchard well pump to accommodate a drip system. Drip tubing will be installed on the surface, covered by discing, and made operational before spring planting, and will be used for three growing seasons. Then, any aboveground irrigation equipment will be removed and the well will be capped as indicated elsewhere in the planning documents.

B. The objective for this existing naturally vegetated swale area is to improve the habitat by treating invasive and any non-native plants using minimal intervention methods (mechanical removal, or as necessary herbicide). Invasives present include edible fig (*Ficus carica)*, black walnut (*Juglans hindsii x.)*, Virginia creeper (*Parthenocissus quinquefolia)*, English ivy (*Hedera helix*), tree of heaven (*Ailanthus altissima*), giant reed *(Arundo donax*), periwinkle (*Vinca major*), and miscellaneous garden residuals such as persimmon (*Diospyros virginiana*) and Wisteria.

As soon as permissable, all *Ailanthus, Arundo, Ficus,* and *Parthenocissus* are to be treated --as well as those *Hedera* that envelop several mature cottonwoods-- as these are the most vigorous invaders that pose the most immediate threat. As the orchard area restoration proceeds, all *Hedera* and *Vinca* will be treated, which will likely be a three to five year process for complete control. As restoration plantings begin to gain height after three years, *Juglans* will gradually be phased out, starting with stems under 6”dbh using cutstump treatments. Since *Juglans* currently dominates much of the skyline, larger trees will be killed selectively until the restoration plantings grow large enough to obscure any significant notice of dead trees. All large invasive trees will either be drill-injected or basal bark sprayed and left standing as dead wildlife snags as long as they do not pose a fall hazard to roads or use areas.

C. The recreational facilities of the Project include a ‘**play meadow’**, which is a low-impact use area of native cool-season grasses or sedge equipped with a sprinkler system to extend green foliage season into summer, and which can be left to grow without mowing for most of the year. A schematic of this naturalistic usable space is shown in Figure 4 with species mix at the time of seeding by area as indicated. Note that *Hordeum* and *Agrostis* are rapid establishing ‘nurse’ species, that fade as the permanent perennial sod species slowly emerge over three to five years. *Carex preagracilis* will be established in the area adjacent to the

paved walkway by planting one starter plug every square foot, in addition to seeding. The other areas with *C. praegracilis* will be seeded with another species. Seeding will be broadcast.

Between the play meadow and the adjacent **overflow parking area** is a vegetative divider consisting of tall deergrass (*Muhlenbergia rigens*) and California rose-mallow (*Hibiscus lasiocarpus*).

D. The overflow parking area (Figure 4) will be range drilled also in native grasses, but will not be irrigated. As a result, different species were selected (as shown in Figure 4), with the expectation that as summer heat arrives prior to Memorial Day, these grasses will be going dormant in time for a final mowing to use the area for the annual Memorial Day parking needs. Since this area is only expected to be needed as parking for the large events on Memorial Day and Labor Day, we expect the grasses to be able to withstand the traffic perennially.

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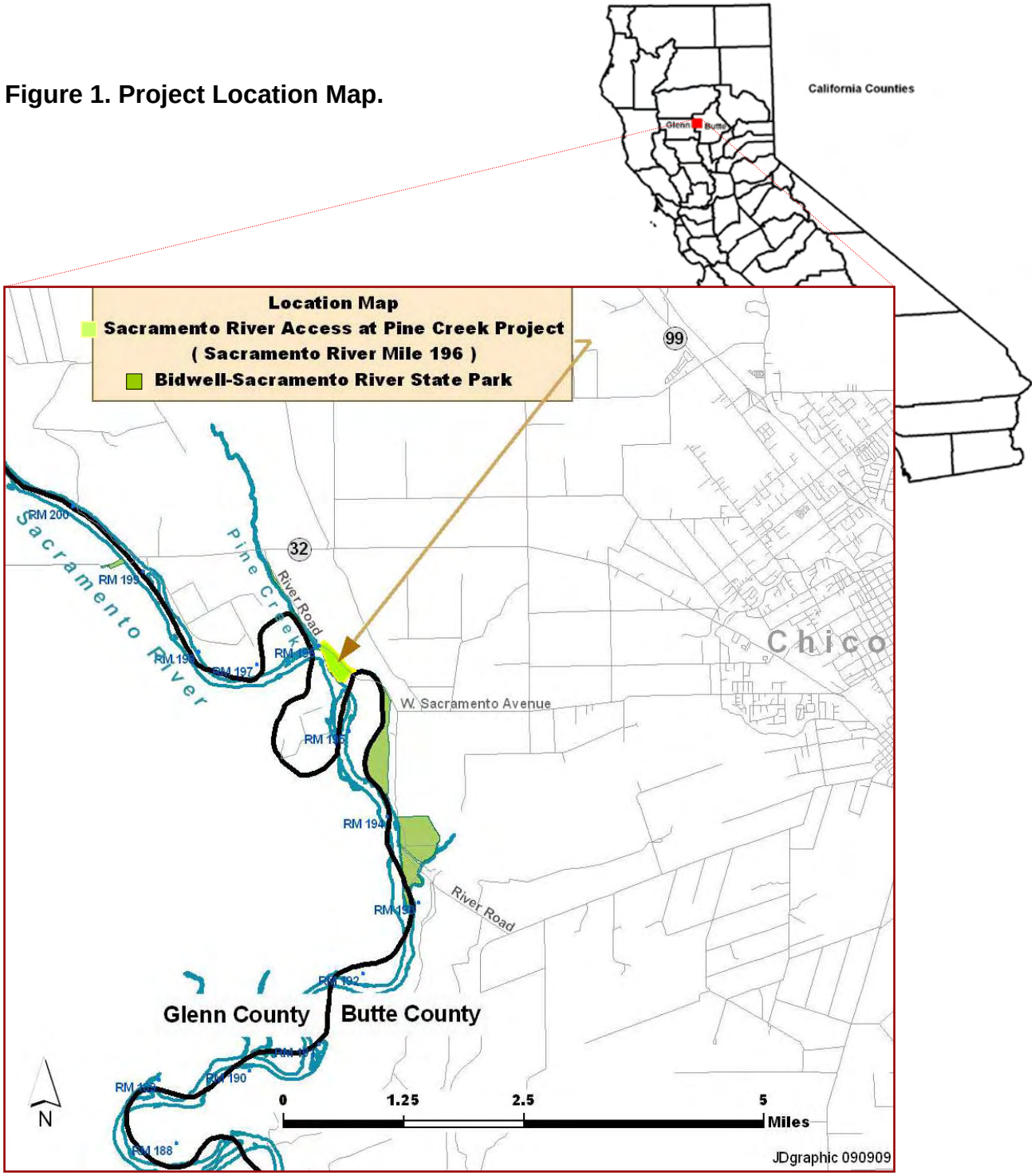
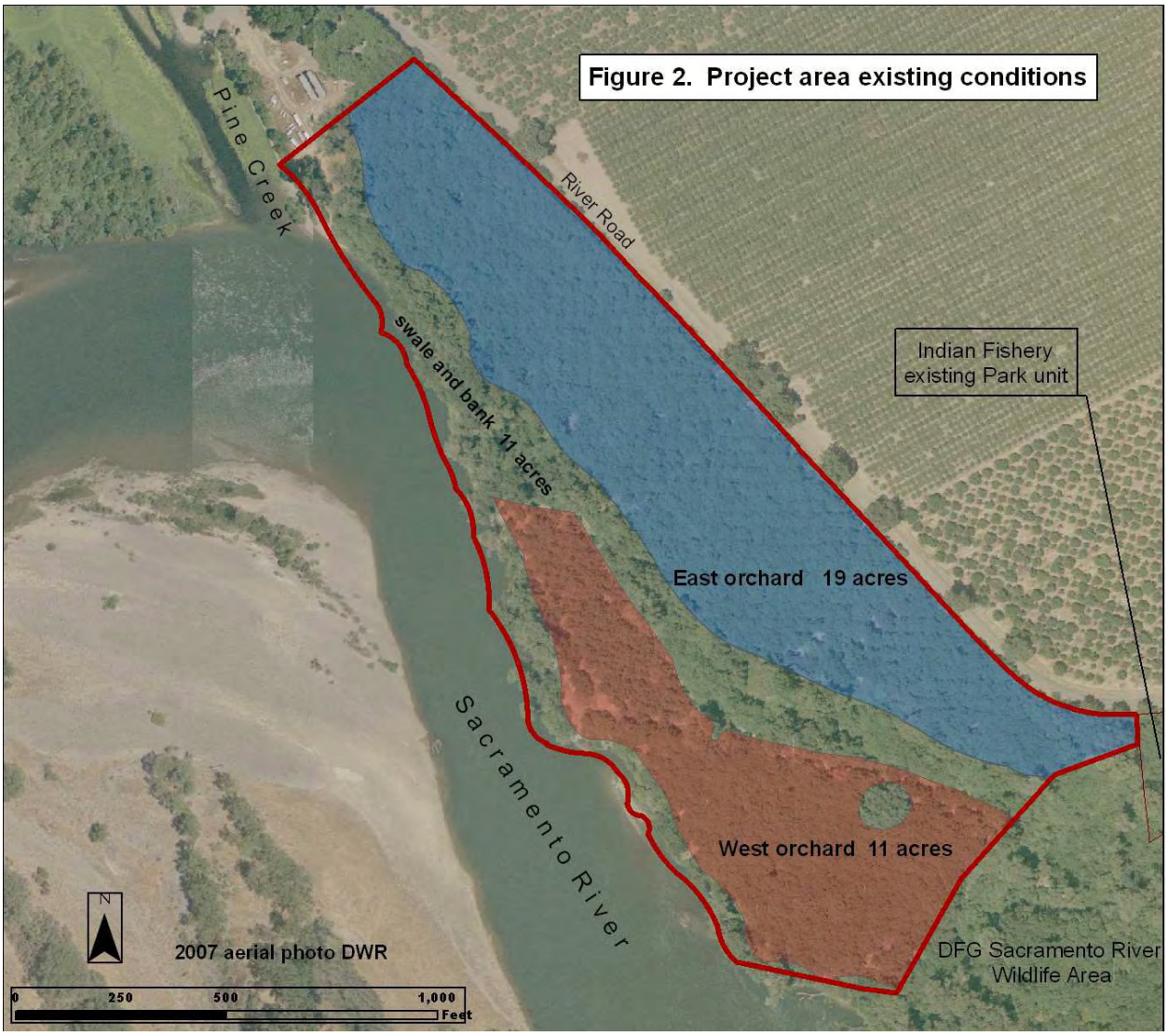
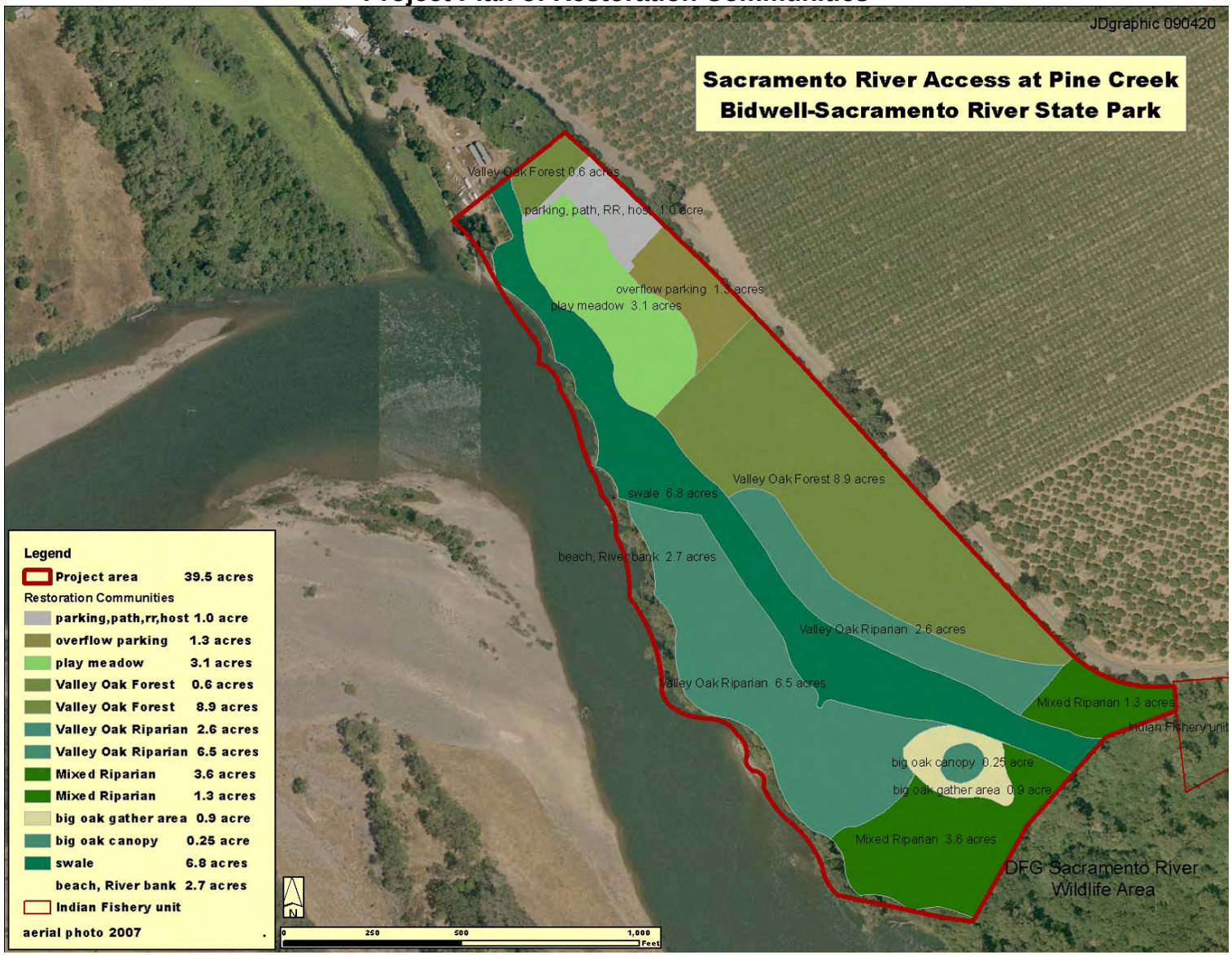
Figure 1. Project Location Map.





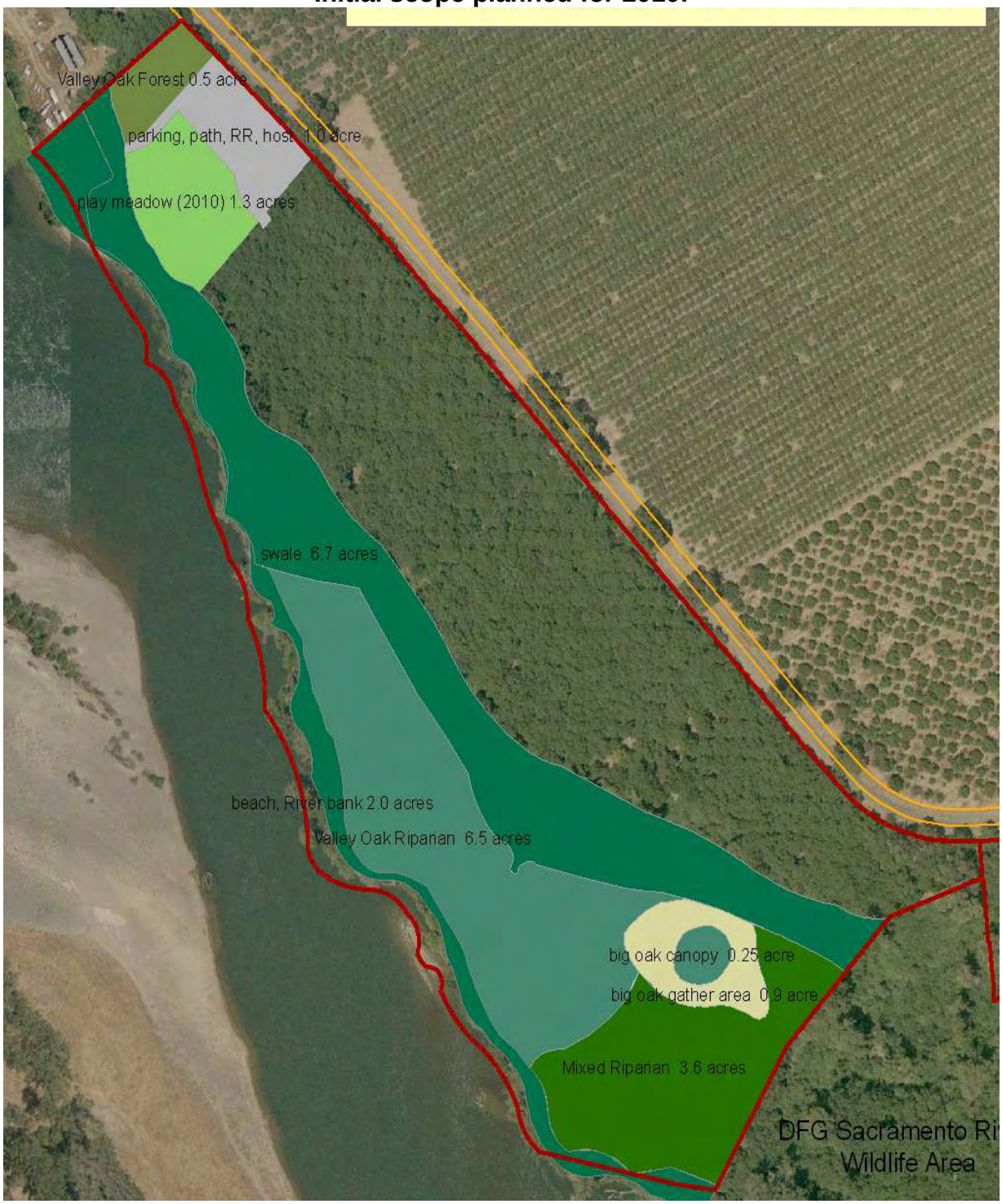
Examining soil with the archeologist in the East orchard March 5, 2008 :

Figure 3.
Project Plan of Restoration Communities



Bidwell-Sacramento River State Park
Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration Project

Initial scope planned for 2010:



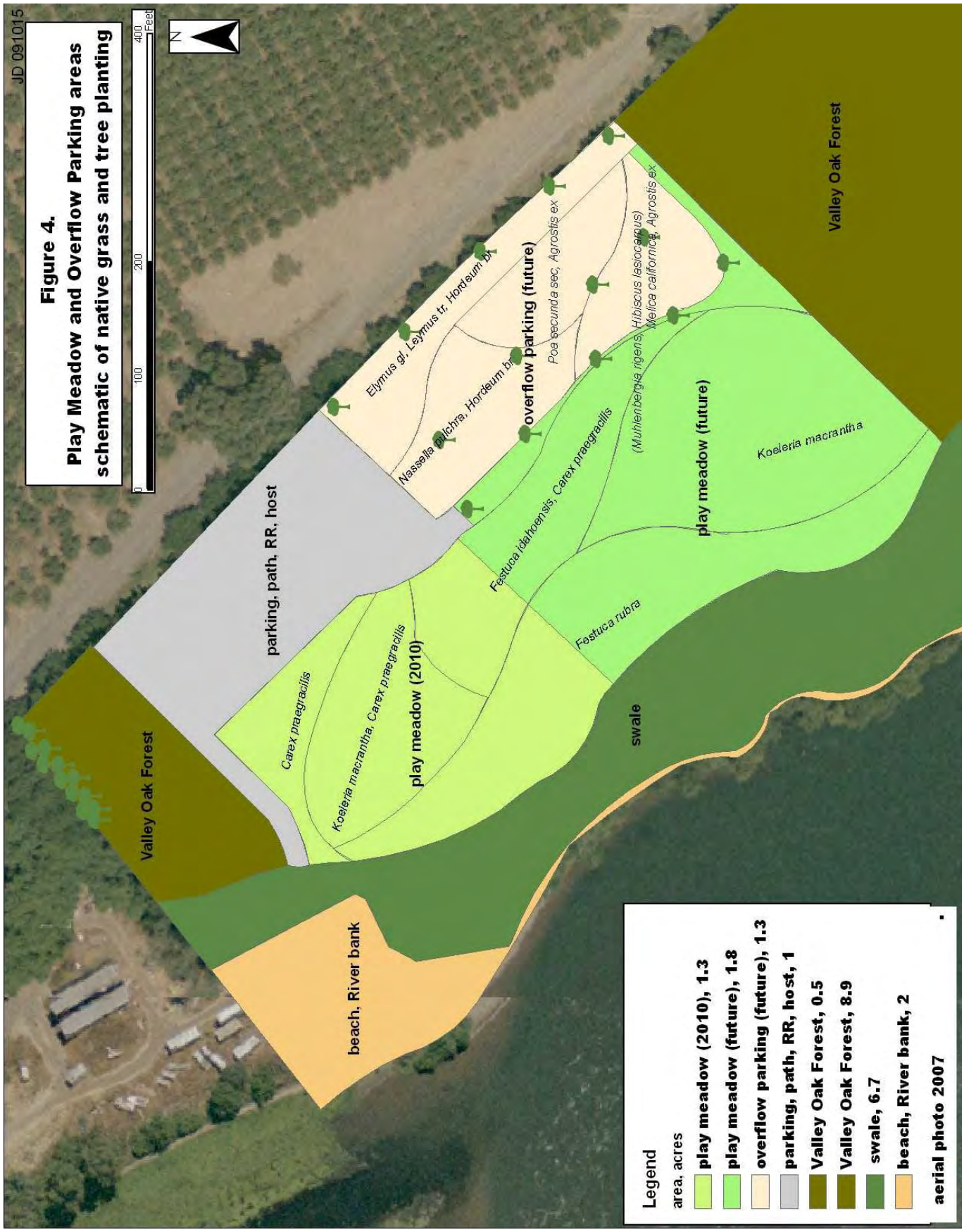

JD 091015
Figure 4.
Play Meadow and Overflow Parking areas
schematic of native grass and tree planting
0
100
200
400
Feet
N
Valley Oak Forest
beach, River bank
parking, path, RR, host
Carex praegracilis
Koeleria macrantha, Carex praegracilis
play meadow (2010)
swale
Festuca rubra
Festuca idahoensis, Carex praegracilis
Nassella pulchra, Hordeum br
Elymus gl, Leymus tr, Hordeum br
overflow parking (future)
Poa secunda sec, Agrostis ex
(Muhlenbergia rigens, Hibiscus lasiocarpus)
Melica californica, Agrostis ex
play meadow (future)
Koeleria macrantha
Valley Oak Forest
Legend
area, acres
play meadow (2010), 1.3
play meadow (future), 1.8
overflow parking (future), 1.3
parking, path, RR, host, 1
Valley Oak Forest, 0.5
Valley Oak Forest, 8.9
swale, 6.7
beach, River bank, 2
aerial photo 2007

Table 1. Plantings for restoration areas west of the swale.

			Valley Oak Riparian Forest-W		Mixed Riparian Forest-W		Big Oak Gather Area		West Restoration Area total	
			Density (plant by row)	11' x 20'	Density (plant by row)	11' x 20'	Groundcover only.		Density (plant by row)	11' x 20'
			Density	198	Density	198			Density	198
			Acres	6.5	Acres	3.6	Acres	1.1	Acres	11.2
			Target Planting Date	Spring	Target Planting Date	Spring	Target Sowing Date	*Nov-Dec	Target Planting Date	Spring
			Total Locations	1,287	Total Locations	713	Sow native grass 13-15#/acre with a range drill; sedge planted with plugs.		Total Locations	2,000
			Total Plants	2,574	Total Plants	1,426			Total Plants	4,000
			Frequency	Total	Frequency	Total				TOTAL
Overstory	*Platanus racemosa*	western sycamore	16%	206	22%	157				363
	Populus fremontii	Fremont cottonwood	4%	51	12%	86				137
	Quercus lobata	Valley oak	32%	412	15%	107				519
Midstory	*Acer negundo*	box elder	4%	51	5%	36				87
	Baccharis salicifolia	mule fat	3%	39	3%	21				60
	Fraxinus latifolia	Oregon ash	6%	77	12%	86				163
	Salix exigua	sandbar willow	2%	26	0%	0				26
	Salix gooddingii	Gooding's willow	0%	0	6%	43				43
	Salix lasiolepis	arroyo willow	0%	0	6%	43				43
	Salix laevigata	red willow	0%	0	2%	14				14
	Sambucus mexicanus	elderberry	0%	0	0%	0			not permitted	0
	Calycanthus	spicebush	1%	13	1%	7				20
Understory	*Baccharus pilularis*	coyote brush	7%	90	2%	14				104
	Rosa californica	California rose	11%	142	3%	21				163
	Rubus ursinus	California blackberry	8%	103	6%	43				146
	Toxicodendron diversilobum	poison oak	6%	77	5%	36				113
			100%	1,287	100%	713				2,000
Herbaceous	*Carex barbarae*	whiteroot sedge	45%	579	25%	178				757
	Muhlenbergia rigens	deergrass	10%	129	42%	299				428
Forbs	*Artemisia douglasiana*	mugwort	15%	193	5%	36				229
	Asclepias	milkweed	1%	13	1%	7				20
	Euthamia ocidentalis	California goldenrod	9%	116	7%	50				166
	Urtica dioecia	hoary nettle	1%	13	5%	36				49
	Oenothera hookeri	primrose	1%	13	3%	21				34
Vines	*Aristolochia californica*	California pipevine	13%	167	10%	71				239
	Clematis ligusticifolia	clematis	5%	64	2%	14				79
			100%	1,287	100%	713				2,000
Grasses*	(Sacramento River watershed ecotypes):									
Between rows	*Elymus glaucus*	blue wildrye	30%	16'/20' = 5.2 acres	30%	16'/20'= 2.9 acres	0%		*Grasses seeded Nov-Dec with a range drill at 13-15 #/acre	32#
	Leymus triticoides	creeping wildrye	35%		35%		0%			37#
	Hordeum brachyantherum	meadow barley	35%		35%		30%	0.9 acres		40#
Big Oak area	*Melica californica*	California oniongrass	0%		0%		20%			3#
	Nassella pulchra	purple needlegrass	0%		0%		50%			6#
	Carex praegracilis	clustered field sedge	0%		0%		monoculture	0.2 acres	sedge planted Fall	2000plugs

Table 2.
Plantings for restoration areas east of the swale.

			Valley Oak Forest		Valley Oak Riparian Forest-E		Mixed Riparian Vegetation-E		East Restoration Area total	
			Density (plant by row)	11' x 20'	Density (plant by row)	11' x 20'	Density (plant by row)	11' x 20'	Density (plant by row)	11' x 20'
			Density	198	Density	198	Density	198	Density	198
			Acres	9.5	Acres	2.6	Acres	1.3	Acres	13.4
			Target Planting Date*	Spring	Target Planting Date*	Spring	Target Planting Date*	Spring	Target Planting Date*	Spring
			Total Locations	1881	Total Locations	515	Total Locations	257	Total Locations	772
			Total Plants	3762	Total Plants	1,030	Total Plants	515	Total Plants	1,544
canopy	*species*		Frequency	Total	Frequency	Total	Frequency	Total		TOTAL
Overstory	*Platanus racemosa*	western sycamore	15%	282	16%	82	0%	0		365
	Populus fremontii	Fremont cottonwood	0%	0	4%	21	0%	0		21
	Quercus lobata	Valley oak	40%	752	32%	165	0%	0		917
	Umbellularia californica	California bay	1%	14	0%	0	0%	0	boundary view screen	14
Midstory	*Acer negundo*	box elder	5%	94	4%	21	0%	0		115
	Fraxinus latifolia	Oregon ash	0%	0	6%	31	0%	0		31
	Salix gooddingii	Gooding's willow	0%	0	2%	10	0%	0		10
	Sambucus mexicanus	elderberry	0%	0	0%	0	0%	0	not permitted	0
Understory	*Calycanthus*	spicebush	1%	19	1%	5	2%	5		29
	Baccharus pilularis	coyote brush	10%	188	7%	36	2%	5		229
	Baccharis salicifolia	mule fat	0%	0	3%	15	0%	0		15
	Rosa californica	California rose	11%	207	11%	57	11%	28		292
	Rubus ursinus	California blackberry	12%	226	8%	41	10%	26		293
	Toxicodendron diversilobum	poison oak	5%	94	6%	31	5%	13		138
			100%	1,881	100%	515	30%	77		2,473
Herbaceous	*Carex barbarae*	whiteroot sedge	15%	282	45%	232	138%	355		869
	Muhlenbergia rigens	deergrass	10%	188	10%	51	6%	15		255
Forbs	*Artemisia douglasiana*	mugwort	10%	188	15%	77	5%	13		278
	Asclepias	milkweed	2%	38	1%	5	1%	3		45
	Euthamia ocidentalis	western goldenrod	20%	376	9%	46	4%	10		433
	Urtica dioecia	hoary nettle	10%	188	1%	5	5%	13		206
	Oenothera hookeri	primrose	10%	188	1%	5	1%	3		196
Vines	*Aristolochia californica*	California pipevine	16%	301	13%	67	10%	26		394
	Clematis ligusticifolia	clematis	7%	132	5%	26	0%	0		157
			100%	1,881	100%	515	170%	438		2,833
Between rows*	Sacramento River watershed grass ecotypes:									
	Elymus glaucus	blue wildrye	20%	7.6 acres	20%	2.1 acres	30%	1.0 acres	*Grasses to be seeded Nov-Dec with a range drill at 13 #/acre	29#
	Leymus triticoides	creeping wildrye	20%		30%		45%			34#
	Hordeum brachyantherum	meadow barley	25%		25%		25%			35#
	Nassella pulchra	purple needlegrass	35%		25%		0%			41#

APPENDIX E

COMMENT LETTERS AND RESPONSES

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APPENDIX E

California Department of Parks and Recreation (DPR) received letters from several public agencies and one letter from a member of the public. Individual response letters were sent to the Butte County Department of Public Works, the Butte County Department of Administration, and to Mr. Paul R. Minasian. Those letters and DPR's responses are included in this appendix.

Letters received from the California Department of Public Health, the California Regional Water Quality Control Board, and the Central Valley Flood Protection Board state that permits will be required for the proposed project and what information is needed to issue the permits. No response is required for those statements. DPR will obtain all necessary permits required for this project. Copies of the letters are included in this appendix for reference.

MINASIAN, SPRUANCE,
MEITH, SOARES &
SEXTON, LLP

ATTORNEYS AT LAW
A Partnership Including Professional Corporations

1681 BIRD STREET
P.O. BOX 1679
OROVILLE, CALIFORNIA 95965-1679

writer's email: pminasian@minasianlaw.com

PAUL R. MINASIAN, INC.
JEFFREY A. MEITH
M. ANTHONY SOARES
DAVID J. STEFFENSON
DUSTIN C. COOPER

WILLIAM H. SPRUANCE,
Of Counsel

MICHAEL V. SEXTON,
Of Counsel

TELEPHONE:
(530) 533-2885

FACSIMILE:
(530) 533-0197

November 10, 2009

State of California
Department of Parks and Recreation
Post Office Box 942896
Sacramento, California 94296-0001

Re: Proposed Sacramento River Access at Pine Creek
Facilities Development and Habitat Restoration Project
Approximate 41 acre parcel at the confluence of Pine Creek known formally as the "Brayton Orchard"

Ladies and Gentlemen:

Pursuant to an agreement with the Central Valley Flood Protection Agency (formerly the Reclamation Board of the State of California) and Butte County, the Sacramento River Reclamation District is in charge of assuring that any changes in the floodplain by proposed improvements, grading or vegetative changes are in conformance floodplain requirements. The area of the proposed improvements to the Sacramento River Access is routinely flooded, and it is essential for the maintenance of agricultural activities that floodwaters not be impeded or redirected. In your Environmental Assessment, you indicate that a Permit will be obtained from the Central Valley Flood Protection Agency and that you will submit a hydrologic analysis of the changes you propose to make. We cannot understand why the Sacramento River Reclamation District, which is a responsible agency, has not already received your proposed plan and been asked to comment upon it. This omission is both counter to CEQA and to the requirements of our Floodplain Management Ordinance. 1.

An Environmental Assessment which does not include a specific description of how you propose to change the 41 acres in terms of obstruction of flood flows and redirection of flood flows is no environmental assessment at all. We would particularly call your attention to the alarming vagueness of stating that you are going to convert 25 acres of walnut orchard to native habitat and "enhance approximately 7 acres of existing riparian habitat". What does this mean? Walnut orchards do not obstruct and re-direct flood flows. They allow flood flows to safely reside upon the surface of the land and then drain onto and move off the property in accordance with natural drainage patterns. You obviously propose to make plantings. We have seen this in 2.

other areas of the Sacramento River Reclamation District, and it ignores the erosive effects and re-directing effects of floodwaters upon adjacent agricultural land. In essence, you are proposing a project which may have significant environmental impacts, but you do not in any way allow for analysis of those impacts by not fully describing the Project.

A few months ago, Governor Schwarzenegger announced the closure of a number of State parks and recreational areas because of funding difficulties. On page 15, paragraph 2.8, you admit the visitation to the Bidwell-Sacramento River State Park facility has declined from approximately 150,000 visitors per year in the early 2000s to approximately 70,000 in the last several years. The fact is, we in California have to work harder to keep up with your spending patterns. Why in the world would you be proposing to construct a major project on land that could be productive farmland and not even consider the alternative of returning the land to productive agricultural uses on the tax rolls of the County of Butte when it is proposed that substantial parks be closed, their hours restricted, and maintenance be deferred. Of course, the answer is that this Project will spend bond funds from Proposition 84, and therefore no analysis of the alternative of doing "no project" is made, and the idea of not spending the money is not even a consideration.

Further, the alternative of utilizing this money to maintain existing facilities was not even mentioned in the Environmental Assessment.

If you proceed to abuse CEQA as you do in this Environmental Assessment document, and proceed to abuse the economic realities of California as they presently exist, we can only determine that the Department of Parks and Recreation is not only a bad neighbor, refusing to communicate with local agencies who are fighting to maintain agricultural and open space uses, but that you are spendthrifts and abusing the public trust.

Very truly yours,

MINASIAN, SPRUANCE, MEITH,
SOARES & SEXTON, LLP

By: _____
PAUL R. MINASIAN

PRM:df
cc: Stephanie Coleman, California Department of Parks & Recreation, Northern Service Center
One Capitol Mall, Ste 410, Sacramento, California 95814
cc w/enclosure: Board of Trustees, Sacramento River Reclamation District
C:\SacRec-Dept of Parks & Rec re Sac River Access at Pine Creek.wpd

February 2, 2010

Paul R. Minasian
Minasian, Spruance, Meith, Soares & Sexton, LLP
1681 Bird Street
Oroville, CA 95965-1679

RE: Negative Declaration
Bidwell-Sacramento State Park
Sacramento River Access at Pine Creek, 2009

Mr. Minasian:

Thank you for your comments during the public review period for the Draft Negative Declaration (ND), Sacramento River Access at Pine Creek – Facilities Development and Habitat Restoration Project.

The following is a response for the November 10, 2009 letter you submitted to the California Department of Parks and Recreation (CDPR).

1. You commented that the Sacramento River Reclamation District did not "understand why as responsible agency has not already received the proposed plan and asked to comment upon it" before the Public Comment period as required by the Floodplain Management Ordinance:

   Comments are requested during the Public Review period from both public agencies and private individuals per Pub. Res. Code sec. 21091. In addition, as defined by the California Environmental Quality Act a Responsible agency is one that has responsibility for carrying out or approving the project Pub. Res. Code 21069. In this case, the Sacramento River Reclamation District is not a responsible agency for this project. State Parks submitted additional project information and materials to the Central Valley Flood Protection Board (CVFPB) for the following reasons:

   CVFPB's duties are mandated by the legislature in Water Code Sec. 8520 et. Seq. In particular, Water Code Sections 8533 and 8534, establish CVFPB's jurisdiction in regard to flood protection along the banks of the Sacramento River. As the state arm and trustee over floodways and the protection of the main river systems, the CVFPB has jurisdiction to receive, review, and approve those plans, which affect its territory.

   A Memorandum of Agreement (MOA) dated November 3, 1999, between Butte County and the State Reclamation Board (now CVFPB) delegated regulatory authority for flood control in the proposed project area to Butte County. However, the MOA states that Butte County cannot delegate its regulatory responsibility to

the Sacramento River Reclamation District without the approval of the CVFPB, which has not been granted (see MOA text, Section D and Section 15). Additionally, per Section 8 of the MOA, when Butte County learns of a proposed action within its boundaries but not within its regulatory jurisdiction, the County will notify the CVFPB. In that event, CVFPB may exercise its jurisdiction under Water Code Section 8710 to require an application for an encroachment permit. DPR has submitted a permit application to the CVFPB for this project.

State Parks, as a state agency, is not subject to local or county policies or regulations. As described above, the MOA recognizes this situation (i.e., the County does not have jurisdiction over a state agency).

No changes were made to the document in response to this comment.

2. You commented that the plan to convert 25 acres of walnut orchard to native habitat and enhance approximately 7 acres of existing riparian habitat was vague and questioned the meaning of "enhance approximately 7 acres of existing riparian habitat".

   The long-term goal of the Project is to improve the ecological health and long-term viability of at-risk species and riparian communities along the Sacramento River by restoring riparian habitat and improving water quality through active horticultural restoration.

   As stated in the Bidwell-Sacramento River State Park Facilities Development and Habitat Restoration Project Negative Declaration the proposed project would restore orchards to native habitat including grassland and forest habitats, enhance existing riparian habitat and develop recreation facilities. State Park Environmental Scientist, James Dempsey, developed the restoration plan for the Pine Creek Access unit based on the Habitat Restoration Plan developed for the Bidwell-Sacramento River State Park Habitat Restoration and Outdoor Recreation Facilities Development Project (BSRSPHRORRDP). That plan and its environmental analysis can be found in the BSRSPHRODP Final Environmental Impact Report September 2008.

   In response to your comments, the Restoration Plan has been added to Final Negative Declaration - Appendix D

   In addition, you are concerned with the restoration and if effects on erosion, re-direction of flood flows, and analysis of those impacts.

   All new recreation facilities would be designed and constructed as prescribed in Park Plan Goal AO-3.1 and Guideline AO-3.1-1 (Bidwell Sacramento General Plan, page 3-26). As stated in the Hydraulic Analysis for Flood Neutrality on the Bidwell-Sacramento River State Park, Butte Co., CA., January 6, 2009 in

Appendix B prepared by Ayres Associates Inc., a licensed Hydraulic Engineering firm, the hydraulic model shows very little change in water surface elevation with this project. The largest change in water depth is approximately 0.06 ft located within the picnic and grass recreation area. In addition, the picnic, grass field, and parking lot area create an increase of 0.8 ft/s in velocity. However, given the low existing conditions velocity of up to 0.75ft/s in those areas, the resultant velocities from the with-project condition will not create any harmful effects at this location. In addition, the with-project conditions model shows a slight increase in velocity in the southeast meadow area. These changes are considered less than significant and should cause no erosion problems.

No changes were made to the Negative Declaration in response to this comment.

All restoration activities will comply with State and Federal laws including obtaining permits necessary including the Central Valley Flood Protection Board as required prior to starting work within the Board's jurisdiction.

Thank you again for your comments

Sincerely,

Stephanie Coleman
Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center

BUTTE COUNTY ADMINISTRATION

25 COUNTY CENTER DRIVE
OROVILLE, CALIFORNIA 95965-3380
Telephone: (530) 538-7631 Fax: (530) 538-7120

GREGORY G. ITURRIA
Interim Chief Administrative Officer

MEMBERS OF THE BOARD

BILL CONNELLY
JANE DOLAN
MAUREEN KIRK
STEVE LAMBERT
KIM K. YAMAGUCHI

November 16, 2009

Stephanie Coleman
Environmental Coordinator
California Department of Parks and Recreation
Northern Services Center
One Capitol Mall – Suite 410
Sacramento, CA 95814

Via Email

RE: Intial Study/Negative Declaration – Bidwell-Sacramento River State Park

Dear Ms. Coleman,

Butte County continues to object the proposed Bidwell-Sacramento River State Park and expresses concerns, which include, but are not limited to:

1. Disregard for local land use policies
2. Development in a flood plain
3. Inundation of sewage disposal systems in flood events
4. Compatibility with agricultural operations
5. Additional requests for assistance/response from Sheriff and Fire personnel.

The County submitted these concerns to the California Department of Parks and Recreation after it reviewed the Draft Environmental Impact Study. Unfortunately, none of these concerns has been addressed in the Intial Study/Negative Declaration.

The comments below reflect the input from the Butte County Sheriff, and Fire/CalFire, and Public Health Departments on the *Intial Study/Negative Declaration for Bidwell-Sacramento River State Park, Sacramento River Access at Pine Creek, and Facilities Development and Habitat Restoration Project*. Additional comments from other County departments will be sent separately.

Page 55 of the Intial Study/Negative Declaration states:

Would the project:

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?

Comment:

This should be changed to "Potentially Negative Impact" from "Less than Negative Impact" due to potential weather events especially in high wind/heat days. 2A

Page 58 of the Initial Study/Negative Declaration states:

Would the project:

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

The impact designation for this item should be changed to "Potentially Significant Impact" from "Less than Significant Impact." The proposed placement of a septic system within the floodway of the Sacramento River, to serve the public restroom facility, violates Regional Water Quality Control Board guidelines that require septic systems to be placed at least 100' from the 10-year floodway. 2B

Page 59 of the Initial Study/Negative Declaration states:

Would the project:

f) Substantially degrade water quality?

The impact designation for this item should be changed to "Potentially Significant Impact" from "Less than Significant Impact" due to the potential discharge of untreated sewage directly into the Sacramento River during flood conditions. The Sacramento River is designated as waters of the State with beneficial uses, including as a source for municipal water supplies. 2C

Additionally, the project may discharge untreated sewage directly into groundwater below the site due to gravelly soils and high seasonal water table conditions.

Page 71 of the Intial Study/Negative Declaration States:

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:

Fire Protection?

Comment:
This should be changed to "Potentially Significant Impact" from "Less than Significant Impact" due to the increased calls for services. Over the past three years, approximately 45 calls for services were received in this area. With the construction of a state park, calls for service to the Butte County Fire Department will increase significantly.

2D

Police Protection?

Comment:
This should be changed to "Potentially Significant Impact" from "No Impact" due to the increased workload to the Butte County Sheriff's Department and the entire criminal justice system in the County.

Based upon the County's experience with other recreational areas, such as the Department of Water Resources' Lake Oroville Project and PG&E's DeSabla-Centerville Project, it is anticipated that this project will result in increased law enforcement calls for service due to the number of visitors that will be using the park. Based upon historic call types at other similar projects, the calls will most likely include thefts and vandalisms, assaults, river rescues, traffic related issues, and drug and alcohol offenses. Given the current level of staffing in the Sheriff's Department, response to these additional calls will reduce the Department's ability to handle its current call volume.

2E

Moreover, the County's experience shows that the Sheriff's Department will need to deal with local gang members who use the park for meetings and parties.

It should be noted that other criminal justice related impacts on the County are not discussed or addressed. The drain on County resources does not end once a call is responded to and an arrest made. The arrestees are then held in the County jail (at County cost), prosecuted by the County District Attorney (at County cost), defended by the County Public Defender (at County cost), and sentencing reports and follow-up for the State Court are provided by the County Probation Department (at County cost). These additional criminal justice costs are also incurred by the County if a law enforcement agency other than the County Sheriff makes an arrest, including State law enforcement.

Page 79 of the Initial Study/Negative Declaration states:

Would the project:

b) ...Would the construction of these facilities cause significant environmental effects?

The impact designation for this item should be changed to "Potentially Significant Impact" from "Less than Significant Impact." As noted above, the project has the potential to discharge untreated sewage directly into waters of the State with beneficial uses, including as a source for municipal water supplies. Additionally, the project may discharge untreated sewage directly into groundwater below the site due to gravelly soils and high seasonal water table conditions. 2F

Page 80 of the Initial Study/Negative Declaration states:

Discussion
b)...A new wastewater/leach field treatment facility would be constructed in accordance with Butte county Environmental health Department requirements (see Project Requirement Hydro-1). Less than significant impact.

The impact designation for this item should be changed to "Potentially Significant Impact" from "Less than Significant Impact." As noted above, the project has the potential to discharge untreated sewage directly into waters of the State with beneficial uses, including as a source for municipal water supplies. Additionally, the project may discharge untreated sewage directly into groundwater below the site due to gravelly soils and high seasonal water table conditions. 2G

In conclusion, the *Intial Study/Negative Declaration for Bidwell-Sacramento River State Park, Sacramento River Access at Pine Creek, and Facilities Development and Habitat Restoration Project* prepared by the California Department of Parks and Recreation is insufficient. There is substantial evidence that the project may have a significant effect on the environment. Therefore, in accordance with CEQA Guidelines 15071, an Environmental Impact Report must be prepared.

Sincerely,

Sang Kim
Deputy Administrative Officer
Butte County

cc: Butte County Board of Supervisors *via email*

State of California • The Resources Agency
Arnold Schwarzenegger, *Governor*
DEPARTMENT OF PARKS AND RECREATION • P.O. Box 942896 • Sacramento, CA 94296-0001
Ruth Coleman, *Director*

February 2, 2010

Sang Kim, Deputy Administrative Officer
Butte County Administration
25 County Center Drive
Oroville, CA 95965-3380

RE: Negative Declaration
Bidwell-Sacramento State Park -Sacramento River Access at Pine Creek

Ms. Kim

Thank you for your comments during the public review period for the Draft Negative Declaration (ND), Sacramento River Access at Pine Creek –Facilities Development and Habitat Restoration Project.

The following is a response for the November 16, 2009 letter submitted by e-mail to the California Department of Parks and Recreation (CDPR).

1. As stated in your letter "Item h on page 55 of the Initial Study/Negative Declaration (IS/ND) should be changed to "Potentially Negative *(sic)* Impact" due to the potential weather events especially in high wind/heat day"

   CDPR is very proactive in wildfire prevention and response. While CDPR is not a fire suppression agency, Park staff is trained to identify hazardous conditions and extinguish small fires. CDPR works closely with the Statewide Emergency Management (SEM) to response to emergency situations.

   In response to your comment, the following text will be added to the final negative declaration.

   <u>Chapter 3, Hazardous and Hazardous Materials, discussion Section, Bullet h), page 55</u>

   In addition, in parks where wildfire is a major concern, preventive management techniques are employed to reduce the threat of wildfire. These techniques include increased patrols, brush clearance, and closure of certain park areas during extreme fire conditions. During high fire risk conditions, no fires are allowed, during medium and low fire risk conditions; barbeques with charcoal briquettes are allowed, but must be contained in the grills. Park Staff and camphosts strictly enforce these rules. Weeds and brush are maintained in day use areas to greatly reduce the possibility of ignition. Staff at Pine Creek would employ similar management operations.

In the unlikely event that fire was to escape the grills in a developed day use area, it would very quickly be detected by other visitors, camphosts or park staff, reported and extinguished before it became a wildfire event. The day use area at Sacramento River Access at Pine Creek in Bidwell-Sacramento State Park is immediately adjacent to a County road allowing firefighting equipment access and is not directly adjacent to homes.

Vegetation thinning and controlled burns are also used as fire management techniques in appropriate locations or conditions. Controlled burns are guided by a burn plan that provides information on how and when controlled burns can proceed.

Moreover, state park visitors are not a likely source of wildfire. According to California Department of Forestry and Fire Protection data for statewide wildfires between 2000 and 2005, only 3% of wildfires were started by campfires, including illegal fires. 27% were started by equipment use, 10% by debris burning, 14% were undetermined, 13% were classified as miscellaneous, 14% were started by vehicles, 7% were started by arson, 5% by lightning, 2% each by smoking and playing with fire, and 3% each by powerline and campfire. Illegal campfires started the Altadena fire, the Griffith Park fire, and the 2007 fire at Lake Tahoe. A lost hunter hoping to signal for help started the state's most destructive fire, the Cedar Fire. Several other major fires, including the Witch Creek and Harris fires of October 2007 were started by downed power lines. Please also note that during public testimony at the February 29, 2008 State Park and Recreation Commission Hearing, National Park Service indicated that their studies for the Santa Monica Mountains showed that a wildfire had never been started in a public campground.

CDPR does not anticipate an increase in wildland fire due to this project and with the inclusion of Project Requirements Hazard 4-Fire Management there is a less then significant impact.

2, 3, 6, and 7 – *Each of these comments referred to sections of the Initial Study dealing with water quality including:*
Page 58 - a) violate any water quality standards or waste discharge requirements, Page 59- f) substantially degrade water quality,
Page 79 b) would the construction of these facilities cause significant environmental effects, and on page 80 item b) would the construction of a new wastewater/leach field treatment facility cause significant environmental effects."

You commented that the impacts should be changed to "Potentially Significant Impact" from "Less than Significant Impact" because the proposed septic system could violate water quality standards

In response to your comment, the following text has been added to the final negative declaration.

Chapter 3, Hydrology and Water Quality, Bullet a) and bullet f), page 60 and 62

As discussed in Utilities and Services Systems on page 79 of the Initial Study/Negative Study, wastewater would be treated onsite using a system designed to include devices that can be controlled to prevent the overflow or inundation of floodwater to the septic system, which includes an underground sealed concrete septic tank and rock. However, based on comments received the use of a vault toilet system could also be used. Use of either system, shall be designed to prevent the overflow or inundation of floodwater. This would be a less than significant impact to water quality.

DPR will follow all State water quality standards and waste discharge requirements during the construction of this project and will work with Butte County, the California Central Valley Flood Protection Board, and the California Regional Water Quality Control Board on the permits needed for this project. With these conditions, there will be a less than significant impact to water quality.

Chapter 3, Utilities and Service Systems, Discussion Section, Bullet a), Bullet b), and Bullet e), page 82 and 83

a) The proposed project would install a new restroom and septic system/leach field *or vault toilet system*. The project site is not served by a wastewater treatment facility; wastewater would be treated on-site using the new septic system. Bidwell-Sacramento River State Park is within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB) and is subject to the requirements of the General Construction Storm Water Permit (Order No. 99-08-DWQ) (CCRWQCB 2006). The permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared prior to construction activities. The SWPPP will incorporate BMP's to ensure the protection of storm water runoff from erosion and sedimentation. All aspects of the project would be in compliance with CCRWQCB regulations and standards. No Impact.

b) As noted in the Environmental Setting there are two wells on the parcel. One is an agricultural well and the other is a well that has been used for potable water. Drinking water for the restroom facility will be provided from a new potable well that will be installed near the restroom, but outside a 200 foot radius of the leach system and outside any environmentally sensitive locations. The existing potable well will be sealed and or abandoned pre current Butte County Environmental Health procedures. The existing agricultural well will remain and be used to irrigate the restoration plantings throughout the property during the establishment period of approximately 3

years. When no longer needed, the agricultural well casing will be capped and sealed and will remain for future use as per Butte County Environmental Health standards.

A new wastewater/leach field treatment facility *or a vault toilet system* would be constructed in accordance with Butte County Environmental Health Department requirements (See Project Requirement Hydro-1). Less than significant impact.

e) Wastewater treatment services (leachfields) or *a vault toilet system* would be provided by DPR personnel with DPR owned and maintained facilities. No impact.

4. You commented that page 71 "Item a) result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities… to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: including Fire Protection? should be changed to Potentially Significant Impact" from "Less than significant Impact" due to the increased calls for services. That over the past three years, approximately 45 calls for services were received in this area. With the construction of a state park, calls for service to the Butte County Fire Department will increase significantly."

   Without an explanation of where the 45 calls came from and the type of activity that generated these calls it is hard to evaluate this comment. CDPR does not anticipate an increase in the need for fire protection due to this project. With the inclusion of Project Requirements Hazard 3-Construction Fire Management and 4-Fire Management, with the support of the CDPR Law Enforcement personal and the availability of on-site fire suppression equipment will reduce the potential impact to Fire Protection Services to a less than significant level.

   No changes were made to the document in response to this comment.

5. "And Police Protection should be changed to "potentially Significant Impact" from "No Impact" due to increased work load to the Butte County Sheriff's Department and the entire criminal justice system in the County."

   DPR does not agree that additional criminal activity or affects to other Butte County resources will increase as a result of opening an expanded area for recreation since State Park Rangers would patrol this park unit. The writer cites the Department of Water Resources' Lake Oroville Project and PG&E's DeSabla-Centerville Project but no statistics where given as to what workload increase those projects caused. There is no evidence that State Parks result in any need for increased police services, and in fact, many local agencies have benefited from the presence of State Law Enforcement Personnel who assist at the local community level.

No changes were made to the document in response to this comment.

Thank you again for your comments

Sincerely,

Stephanie Coleman
Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center

Department of Public Works

County of Butte

J. Michael Crump, *Director*
Shawn H. O'Brien, *Assistant Director*

7 County Center Drive
Oroville, CA 95965-3397
(530) 538-7681
(FAX) 538-7171

November 13, 2009

Stephanie Coleman-Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall-Suite 410
Sacramento. CA 95814

Re: Comments on Initial Study/Negative Declaration for the proposed Sacramento River Access at Pine Creek-Facilities Development and Habitat Restoration Project

Dear Ms. Coleman:

We have the following comments with respect to the above referenced project.

1. The project description, contained on pages 6 and 7, includes construction of a restroom and park host site on the property. The Hydrology and water quality section starting on page 37 indicates the site is located within the 1 and 5 year flood plains (which also means the entire property is within the 10 and 100 year flood plains. The hydrologic analysis in Appendix B indicates flood depths up to 10 feet. Butte County Code Chapter 26, Article IV (available on line at http://library2.municode.com/11433/home.htm?infobase=16065&doc_action=whatsnew), requires the lowest floor of any new structure be elevated at least one foot above the base flood elevation, that all new wells be protected from infiltration of flood waters and that all sewage disposal systems be located a minimum of 100 feet from the 10 year flood plain. This draft does not propose elevation of any structures, protection of the new well, address placement of sewage disposal facilities within the 10 year flood plain or address potential water contamination from the sewage disposal facilities. 3A

2. Section2.8 on page 15 indicates current attendance at Bidwell-Sacramento River State Park facilities, for various years and anticipates attendance at this location to increase. The traffic section, starting on page 76, indicates that Highway 32 will decline to LOS E by 2015 and West Sacramento Avenue will decline to LOS D by 2025. There is no traffic analysis to support their assumption on page 78, Discussion a,b), "the number of visitors would not significantly increase. If the number of visitors would not significantly increase: then the number of vehicles on State Route 32, River Road, and/or West Sacramento Avenue would not significantly increase." If the traffic would not significantly increase and there is no public parking at the site now, why does the project propose building a 50 space parking lot with a 1.3 acre overflow parking area? 3B

3C

3. The project straddles the boundary between the 20-year floodway (Central Valley Flood Protection Board jurisdiction) and Special Permit Zone II (Butte County jurisdiction (BCC Chapter 26, Article V) with Central Valley Flood Protection Board oversight). A Butte County Permit is required prior to construction of this facility.

If you should have any questions concerning this matter, please contact this office Monday through Friday, 7:30 a.m. to 4:30 p.m. at (530) 538-7681.

Sincerely,

Mike Crump
Director of Public Works

cc: Supervisor Jane Dolan
Supervisor Steve Lambert
Sang Kim, Deputy Administrative Officer
File 142.2

State of California • The Resources Agency
Arnold Schwarzenegger, *Governor*
DEPARTMENT OF PARKS AND RECREATION • P.O. Box 942896 • Sacramento, CA 94296-0001
Ruth Coleman, *Director*

February 2, 2010

Mike Crump, Director of Public Works
Butte County Department of Public Works
7 County Center Drive
Oroville, CA 95965-3380

RE: Negative Declaration
Bidwell-Sacramento State Park
Sacramento River Access at Pine Creek

Mr. Crump:

Thank you for your comments during the public review period for the Draft Negative Declaration (ND), Sacramento River Access at Pine Creek – Facilities Development and Habitat Restoration Project.

The following is a response to the November 13, 2009 letter you submitted to the California Department of Parks and Recreation (CDPR).

1. You commented that the restroom and park host site would be located within the 1 and 5 year flood plains and you refer to Butte County Code Chapter 26, which requires the lowest floor of any new structure be elevated at least one foot above the base flood elevation, that all new wells be protected from infiltration of flood waters, and that all sewage disposal systems be located, a minimum of 100 feet from the 10 year flood plain.

   All new recreation facilities would be designed and constructed as prescribed in Park Plan Goal AO-3.1 and Guideline AO-3.1-1 (Bidwell Sacramento General Plan, page 3-26). DPR will work with the Regional Water Quality Control Board, the Central Valley Flood Protection Board, and Butte County about the placement of facilities within the project site and the permit requirements for this project.

   No changes were made to the document in response to this comment.

2. You questioned, "If the traffic would not significantly increase and there is no public parking at the site now, why does the project propose building a 50 space parking lot with a 1.3 acre overflow parking area?"

   The proposed parking areas are designed to accommodate daily and summer holiday visitors. Based on experience, Park staff estimates average daily visitor attendance at 10-15 cars per day. Again based on experience, visitor attendance is expected to increase on summer holidays like Memorial Day and Labor Day. Total parking can accommodate approximately 200 vehicles and has been designed to remove cars from the side of the road and out of the adjacent orchards where

visitors to the river are known to park on major holidays (i.e. Memorial Day and Labor Day).

No changes were made to the document in response to this comment.

3. You commented that "a Butte County Permit would be required prior to construction of the Pine Creek Facility."

   As the writer does not state the type of permit required, CDPR is unable to respond specifically to this comment. However, CDPR will obtain all permits necessary to complete this project as stated in chapter 2.

   No changes were made to the document in response to this comment.

Thank you again for your comments

Sincerely,

Stephanie Coleman
Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center

Linda S. Adams
Secretary for Environmental Protection

California Regional Water Quality Control Board
Central Valley Region
Karl E. Longley, ScD, P.E., Chair

415 Knollcrest Drive, Suite 100, Redding, California 96002
(530) 224-4845 • Fax (530) 224-4857
http://www.waterboards.ca.gov/centralvalley

Arnold Schwarzenegger
Governor

19 November 2009

(Via U.S. Mail and Email)
Stephanie Coleman
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall-Suite 410
Sacramento, CA 95814

NOTICE OF AVAILABILITY AND INTENT TO ADOPT AN INITIAL STUDY/NEGATIVE DECLARATION FOR THE PROPOSED SACRAMENTO RIVER ACCESS AT PINE CREEK-FACILITIES DEVELOPMENT AND HABITAT RESTORATION PROJECT, BUTTE COUNTY

We are in receipt of the subject document. We have several concerns regarding waste disposal from the project, including the following:

1. Our Guidelines for Waste Disposal From Land Development (Guidelines) prohibit the placement of a septic tank disposal field within 100 feet of the 10-year flood line of any stream. The Notice of Availability indicates that the septic system is in the one to five year flood plain;

2. There was no soil data supplied with the Notice of Availability. We will require soils data (percolation tests) on the soils at the proposed disposal site as well as soil profiles (test pits) to determine whether the soil is suitable for a leaching system (if the first criterion above can be satisfied);

3. The Guidelines also state that the minimum expected separation to groundwater beneath a disposal field must be at least five feet. If the Park area is flooded relatively frequently, it is unlikely that this condition can be met. We will require groundwater level monitoring data to determine if this condition can be met during times of flooding or at all times during normal usage periods;

4. We require design details of the disposal field system prior to making any comments on its suitability in regards to soil and groundwater conditions;

5. How will the restroom facilities and disposal field be protected during times of flood, including events up to a 100 year flood;

6. Because any proposed onsite wastewater treatment system will generate biosolids, you must provide a plan for the disposal of those biosolids.

Because of the above problems, you may want to consider water tight vault toilets at the facility. After we receive complete design information for the proposed facility, we may decide to issue waste discharge requirements.

Other Water Quality Concerns related to the Development

Wetlands and/or stream course alteration

You may also need to apply for a Clean Water Act §404 permit from the U.S. Army Corps of Engineers. The Federal Permit is required for activities involving a discharge (such as dredged material or fill) to waters of the United States. "Waters" include wetlands, riparian zones, streambeds, rivers, lakes and oceans. Projects that require a §404 permit also require a water quality certification (pursuant to §401 of the Clean Water Act) verifying that the project does not cause violation of State water quality standards. The Army Corps of Engineers Butte County contact is Mr. Brian Vierria, (916) 557-7728. Water quality certification is required for any project that impacts water of the State (such as streams and wetlands). Impacts include, but are not limited to: stream crossings, the modification of stream banks or stream courses, and the filling or modification of wetlands. The certification must be obtained prior to construction. Failure to obtain water quality certification, when required, may result in enforcement action.

Storm Water

A Construction Activities Storm Water Permit is required for storm water discharges associated with a construction activity where clearing, grading, and excavation results in a land disturbance of one or more acres. Storm water discharges from construction activity that results in a land disturbance of less than one acre, but which is part of a larger common plan development, also requires a permit. The Construction Activity Storm Water Permit must be obtained prior to construction. Failure to obtain a permit, when required, may result in enforcement action.

This office may be contacted to obtain the §401 water quality certification and construction storm water permit packages if deemed necessary. If you have any questions regarding water quality certification or storm water permits please contact Scott Zaitz at (530) 224-4784 or the letterhead address.

Construction Dewatering

If improvements such as sewer, or other utility installation require dewatering of any excavation with discharge of the wastewater to a surface water or surface water drainage course, a general NPDES dewatering permit must be obtained. This office may be contacted to obtain the forms for this permit if necessary.

Since the project could result in increased impacts on water quality, the project proponent must complete an Antidegradation Analysis in accordance with State Water Resources

Control Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California, whether or not an EIR is considered for the project. At a minimum, the Antidegradation Analysis must include information on the nature and extent of the discharge and its potential to affect receiving water quality. For any waste constituents that may cause or contribute to degradation, the analysis must demonstrate that the change in water quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in quality less than that described in the Regional Water Board's Plans and Policies. Resolution No. 68-16 requires that any discharge that could degrade waters of the State implement Best Practicable Treatment or Control of the discharge to assure that the highest water quality consistent with maximum benefit to the people of the State will be maintained. We recommend you or the project proponent contact Regional Water Board staff to discuss the components of a complete antidegradation Analysis.

If you have any questions regarding this letter, please contact me at (530) 224-4858, at the letterhead address, or at rdykstra@sbcglobal.net.

Ronald S. Dykstra
Senior Water Resource Control Engineer

RSD: sae

cc: Scott Zaitz, Regional Water Quality Control Board, Redding
Doug Fogel, Butte County Environmental Health Department, Oroville

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California Regional Water Quality Control Board
Central Valley Region
Karl E. Longley, ScD, P.E., Chair.

Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegg
Governor

415 Knollcrest Drive, Suite 100, Redding, California 96002
(530) 224-4845 • Fax (530) 224-4857
http://www.waterboards.ca.gov/centralvalley

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State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

BIDWELL-SACRAMENTO RIVER STATE PARK, FACILITIES DEVELOPMENT AND HABITAT RESTORATION PROJECT (SCH# 2009102054), NEGATIVE DECLARATION AND INITIAL STUDY

This letter is to inform California Department of Parks and Recreation (lead agency) that the following permits issued by the Central valley Regional Water Quality Control Board are required for the Bidwell-Sacramento River State Park, Facilities Development and Habitat Restoration Project at Pine Creek:

1. General Permit for Storm-water Discharges Associated with Construction Activity – Water Quality Order 99-88DWQ
2. Water Quality Certification – Clean Water Act Section 401

Information about these permits can be found at the following web sites:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/finalconstpermit.pdf
http://www.swrcb.ca.gov/centralvalley/water_issues/water_quality_certification/wqc_application.pdf

Please contact Guy Chetelat at (530) 224-4997 if you have any questions regarding permits issued by Central Valley Regional Water Board.

Guy Chetelat, P.G.
Non Point Source, Storm-water Regulatory Unit
530-224-4997
Fax: 530-224-4857

GFC: sae

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. LL40
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

November 9, 2009

Stephanie Coleman
California Department of Parks and Recreation
One Capitol Mall, Suite 410
Sacramento, CA 95814

Dear Ms. Coleman:

State Clearinghouse (SCH) Number: 2009102054
Sacramento River Access at Pine Creek Facilities Development and Habitat Restoration Project – Initial Study Negative Declaration

Staff for the Central Valley Flood Protection Board has reviewed the subject document and provides the following comments:

The proposed project is located within the jurisdiction of the Central Valley Flood Protection Board (Formerly known as The Reclamation Board). The Board is required to enforce standards for the construction, maintenance and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);

- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);

- A vegetation plan including, but not limited to the sites, vegetation type (i.e. common and scientific name), number, planting spacing and irrigation method that will be within each project area (CCR Section 131).

The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board's website at http://www.cvfpb.ca.gov/. Contact your local, federal and state agencies, as other permits may apply.

If you have any questions please contact me at (916) 574-0651 or by email jherota@water.ca.gov.

Sincerely,

James Herota
Staff Environmental Scientist
Floodway Protection Section

cc:

Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

State of California—Health and Human Services Agency
California Department of Public Health

MARK B HORTON, MD, MSPH
Director

ARNOLD SCHWARZENEGGER
Governor

November 10, 2009

Laura Westrup
California Department of
Parks and Recreation
400 Glen Drive
Oroville, California 95966-9222

Dear Ms. Westrup,

RE: Initial Study/Negative Declaration - Sacramento River Access at Pine Creek Facilities Development and Habitat Restoration Project

Thank you for the opportunity to review the above document. The California Department of Public Health (CDPH), Division of Drinking Water and Environmental Management is responsible for issuing water supply permits administered under the Safe Drinking Water Program. A new or amended Water Supply Permit, for the above referenced project, may need to be issued. A project triggers a permit if it includes a new water supply, an increase in water supply, storage, or treatment of drinking water. CDPH will be a "responsible agency" pursuant to the California Environmental Quality Act (CEQA) and considers the above referenced document adequate to meet the CDPH CEQA permit requirements.

For questions and information on the Water Supply Permit application process, please contact Richard Hinrichs at the CDPH Valley District office at (530) 224-4800.

Sincerely,

Bridget Binning
CDPH Environmental Review Unit

cc: Stephanie Coleman
California Department of
Parks and Recreation
One Capitol Mall Suite, 410
Sacramento, CA 95814

Richard Hinrichs
Division of Drinking Water
and Environmental Management
Department of Public Health
415 Knollcrest Drive, Suite 110
Redding, CA 96002

Ray Bruun
Division of Drinking Water
and Environmental Management
Department of Public Health
415 Knollcrest Drive, Suite 110
Redding, CA 96002

Project File

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☐ County Clerk

County of: _____

Address: _____

From:

Public Agency: Department of Parks and Recreation

Address: One Capitol Mall, Suite 410, Sacramento, 95814

Contact: Stephanie Coleman

Phone: 916-445-8779

Lead Agency (if different from above):

Address: _____

Contact: _____

Phone: _____

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2009102054

Project Title: Sacramento River Acess at Pine Creek Facilities Development and Habitat Restoration Project

Project Location (include county): Bidwell Sacramento State Park , Butte County

Project Description:

Provide day-use facilities adjacent to the Sacramento River at the confluence of Pine Creek in Bidwell-Sacramento River State Park. Brief summary: Construct approxy 7,100 feet of trail around the park; • Create a 2-acre "play meadow"; • Create picnic sites with tables and barbeques; restore native habitat; enhance existing raparian habitat;• Construct a restroom, a new potable well and septic waste water system or vault toilet; install fencing, signage, interpretive panels, recycle and trash containers.

This is to advise that the Department of Parks and Recreation ☒ Lead Agency or ☐ Responsible Agency has approved the above described project on Februray 2, 2010 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☐ were ☒ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☐ was ☒ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: California Department of Parks and Recreation, located at One Capitol Mall, Suite 410, Sacramento CA 95814

Signature (Public Agency) [signature] Title DIST. SUPT.

Date 2/2/2010 Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

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Revised 2005

Negative Declaration

Project: Facilities Development and Habitat Restoration Project

Lead Agency: California Department of Parks and Recreation (DPR)

Availability of Documents:
The initial Study for this Negative Declaration was made available throughout the 30-day public review period at the reference desk of the Chico Branch library. It was also available at the public information desks of the DPR's Northern Service Center and the Northern Buttes District Headquarters offices. The Final Negative Declaration and all supporting materials will be available, by request, at DPR's Northern Service Center and the Northern Buttes District Headquarters office.

Project Description:
The Department of Parks and Recreation proposes to provide day-use facilities adjacent to the Sacramento River on a 41-acre parcel known as the Brayton parcel at the confluence of Pine Creek in Bidwell-Sacramento River State Park. The following is a summary of the proposed work:

- Construct approximately 6,500 feet of Americans with Disabilities Act (ADA) compliant trail to provide access from the parking area to the picnic sites and around the park;
- Create a two acre "play meadow" planted with irrigated native grasses and sedges;
- Create two Americans with Disabilities Act (ADA) compliant group picnic sites;
- Create seven family picnic sites four of which will be ADA compliant, each to include a concrete pad, one picnic table and one barbecue;
- Create two ADA compliant group picnic sites including a large concrete pad, four picnic tables and one large barbecue;
- Construct a two unit ADA compliant restroom with associated flush utilities and drinking fountain connected to a new potable well and septic waste water system or vault toilet;
- Place two picnic tables along the trail in the southwestern portion of the restoration area;
- Install a gravel parking area designed for 50 cars with 2 ADA compliant concrete parking stalls;
- Install approximately 600 feet of 6 foot wide concrete walking path for ADA connection from parking and restroom facilities to recreation areas;
- Create an approximately 1.3 acre overflow parking area planted with native grasses and trees;
- Install two concrete benches along the trails;
- Restore approximately 25 acres of walnut orchard to native habitat;
- Enhance approximately 7 acres of existing riparian habitat;
- Install approximately 2,800 feet of boundary fencing, signage, interpretive panels, and recycle and trash containers; and,
- Create a Park Host site near the restroom including utility connections.

Findings:
An Initial Study has been prepared to assess the proposed project's potential impacts on the environment and the significance of those impacts and is incorporated in the Draft ND. Based on this initial Study, it has been determined that the proposed project would not have any significant impacts on the environment, once all proposed project requirement have been implemented. The conclusion is supported by the following findings:

- There is no potential for adverse impacts on Agricultural Resources, Land Use and Planning, Mineral Resources and Population and Housing associated with the proposed project.
- Potential adverse impacts resulting from the proposed project were found to be less than significant in the following areas, Aesthetics, Air Quality and Climate Change, Biological Resources, Cultural Resources, Geology and Soils, hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Recreation, Transportation, and Utilities and Service systems.

Summary of Project Requirements
The following Project Requirements would be implemented by DPR as part of the Facilities Development and Habitat Restoration Project at Bidwell-Sacramento River State Park.

Air Quality

Standard Project Requirement Air 1 – Dust Control

- 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 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

Project Specific Requirement Bio 1 Valley Elderberry Longhorn Beetle Avoidance
- No elderberry plants will be cut, pruned, pulled back, removed, or damaged in any way.
- Prior to construction activities, a DPR-approved biologist will fence and flag all elderberry plants to ensure construction crews avoid these plants.

Project Specific Requirement Bio 2 - Swainson's Hawk, Osprey, and Other Nesting Raptors Avoidance

- If working between April 1 to July 1 surveys will be conducted for nesting raptors within 500 feet of the project area. If an active nesting colony is observed within this area, a buffer zone will be installed around the colony in which only DPR-approved biologist construction activities will occur until all eggs have hatched and the young birds have fledged, as determined by a DPR-approved biologist.

Project Specific Requirement Bio 3 - Migratory Bird Species Avoidance

- If working between May 15 to July 7 of any year surveys will be conducted for non-special-status nesting migratory birds within 100 feet of the project area. If an active nest is observed within this area, a buffer zone will be installed around the colony in which only DPR – Approved Biologist construction activities will occur until all eggs have hatched, young birds have fledged, and there is no evidence of a second attempt at nesting, as determined by a DPR-approved biologist.

Project Specific Requirement Bio 4 - Sensitive Bat Species Avoidance

- No work will occur between March 15 and June 30 to avoid the core bat-breeding period unless approved by a DPR-Approved Biologist to avoid impacts.

- All tree removal will occur between July 1 and March 15 when tree roosting bats are not expected to occur in the project area.

Cultural Resources

Project Specific Requirement Arch 1 Environmentally Sensitive Areas

- All project activities within areas determined to be culturally sensitive will require consultation with a DPR qualified archaeologist.

Standard Project Requirement Arch 2 Cultural Resources

- In the event that previously undocumented cultural resources (including but not limited to dark soil containing shellfish, bone, flaked stone, ground stone, or deposits of historic trash) are encountered during project construction by anyone, the state representative will temporarily halt work 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.
- In the event that significant cultural resources are found in the project location, a qualified historian and/or archaeologist will monitor all subsurface work including trenching, grading, and excavations in that area from that point forward to ensure avoidance of significant cultural resources.
- In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager 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 DRP 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.

Standard Project Requirement Arch 3 – Continued Native American Consultation

- Project design and activities will be discussed with the Mechoopda. These activities include but are not limited to revegetation, trail design, vegetation for traditional plant collection, gathering areas for special events, and site monitoring.

Geology and Soils

Standard Project Requirement Geo-1 - Erosion Control

- Prior to the start of construction, the Contractor will prepare a Storm water Pollution Prevention Plan (SWPPP). The SWPPP identifies 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 excavation, grading, stockpile management, and any other ground disturbing activities.

- Permanent BMPs for erosion control will consist of properly compacting disturbed areas and re-vegetation of appropriate disturbed soil areas with native species using seed collected locally, where possible or a sterile grass mixture. If local seed is not available, a weed-free native mixture shall be used. Final design plans will include permanent BMP measures to be incorporated into the project.

Hazards and Hazardous Materials

Standard Project Requirement Haz 1 – Spill Prevention

- Prior to the start of construction, the Contractor will inspect all equipment for leaks and inspect equipment daily thereafter until it is removed from the project site.

- Prior to the start of construction, the contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) for materials management, fueling, repair, and maintenance of vehicles and equipment, and spill prevention and control. The Contractor will maintain a spill kit on-site throughout the life of the project. The SWPPP will include a map that delineates construction staging areas and where refueling, lubrication, and maintenance of equipment may occur. Areas designated for refueling, lubrication, and maintenance of equipment shall be at least 50 feet from the Sacramento River or any tributaries. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of the Park during construction, the contractor would immediately notify the appropriate DPR staff (e.g., project manager, supervisor, or State Representative).

- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized destination.

Standard Project Requirement Haz- 2 Hazardous Substances Health and Safety Documents

- DPR will include, in any contract documents or in internal work plan documents, health and safety specifications on how to manage any potential hazardous incidents. The specifications will include methods for safe handling, collection, and proper disposal of any contaminated soil and refuse uncovered during the excavation and grading procedures. The specifications will discuss the proper personal protection during construction, the use of an exclusion zone if necessary to prevent exposure to the public, and the proper disposal procedures for any hazardous substances encountered.

Project Specific Requirement Haz 3 - Construction Fire Management

- A fire safety plan will be developed by the contractor and/or DPR and approved by DPR prior to the start of construction. This plan will include the emergency calling procedures.

- Spark arrestors or turbo-charging (which eliminates 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. The contractor will also be required to have fire extinguishers on site

Standard Project Requirement Haz 4- Fire Management

- The use of campfires and other potentially flammable objects or materials will be restricted. Park visitors will be provided with information on Park rules regarding fire safety.

Hydrology and Water Quality
Standard Project Requirement Hydro-1 – Water Quality Protection

- Implementation of **Geo-1** will provide Best Management Practices to control erosion and runoff during the project construction and for post-construction erosion control. The project will comply with all applicable water quality standards as specified in the CVRWQCB Basin Plan.

- Implementation of **Haz-1** will also prevent or reduce impacts to water quality from possible non-sediment pollutants, such as fuels and other vehicle fluids and construction materials that could be released during construction.

- The new septic system and leach field will be designed according to the requirements from Butte County Environmental Health. Restrooms will be designed to be shut down with waste fixtures and inlets sealed prior to flood events.
- Any new water supply well will be located at least 200 feet from the leach field and surface waters of the Sacramento River.

Standard Project Requirement Hydro-2 – Storm water Runoff Control

- Storm water runoff from the new entrance road, parking lot areas and building would be minimal due to the use of predominately gravel surfaces instead of impermeable pavement. To prevent any on or off site erosion and/or flooding the surface water runoff will be allowed to sheet flow or be directed into an engineered storm drain system that flow into a natural drainage course with necessary erosion control devices.

- Erosion and storm water runoff controls will be required during construction and permanent erosion controls and methods will be part of the project plan. Implementation of Project Requirement Hydro-1 will reduce impacts from siltation and from vehicle and equipment fluid spills, and construction materials.

Project Specific Requirement Hydro-3 – Flood Protection

- The planned facilities will be designed to minimize potential damage from flood events, to the extent feasible. This project including a completed Hydraulic Analysis report will be reviewed for approval by the Central Valley Flood Protection Board.

- The Park would be closed to the public during any anticipated flood event.

- The Park would also be evacuated in the event of a failure of the Shasta Dam.

Noise
Project Specific Requirement Noise 1

- Construction activities will generally be limited to the daylight hours Monday – Friday from 7:00 a.m. to 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
Standard Project Requirement Recreation 1 – Informational Signs

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

Minor punctuation, spelling and grammatical corrections that contribute to ease of understanding, but have no significant impact on the content, have not been noted. The following additions have been made to the Sacramento River Access at Pine Creek – Facilities Development and Habitat Restoration Project. Additions are underlined.

Chapter 3, Hazardous and Hazardous Materials, discussion Section, Bullet h), page 55 edited to read:

In addition, in parks where wildfire is a major concern, preventive management techniques are employed to reduce the threat of wildfire. These techniques include increased patrols, brush clearance, and closure of certain park areas during extreme fire conditions. During high fire risk conditions, no fires are allowed, during medium and low fire risk conditions; barbeques with charcoal briquettes are allowed, but must be contained in the grills. Park Staff and camphosts strictly enforce these rules. Weeds and brush are maintained in day use areas to greatly reduce the possibility of ignition. Staff at Pine Creek would employ similar management operations.

In the unlikely event that fire was to escape the grills in a developed day use area, it would very quickly be detected by other visitors, camphosts or park staff, reported and extinguished before it became a wildfire event. The day use area at Sacramento River Access at Pine Creek in Bidwell-Sacramento State Park is immediately adjacent to a County road allowing firefighting equipment access and is not directly adjacent to homes.

Vegetation thinning and controlled burns are also used as fire management techniques in appropriate locations or conditions. Controlled burns are guided by a burn plan that provides information on how and when controlled burns can proceed.

Moreover, state park visitors are not a likely source of wildfire. According to California Department of Forestry and Fire Protection data for statewide wildfires between 2000 and 2005, only 3% of wildfires were started by campfires, including illegal fires. 27% were started by equipment use, 10% by debris burning, 14% were undetermined, 13% were classified as miscellaneous, 14% were started by vehicles, 7% were started by arson, 5% by lightning, 2% each by smoking and playing with fire, and 3% each by powerline and campfire. Illegal campfires started the Altadena fire, the Griffith Park fire, and the 2007 fire at Lake Tahoe. A lost hunter hoping to signal for help started the state's most destructive fire, the Cedar Fire. Several other major fires, including the Witch Creek and Harris fires of October 2007 were started by downed power lines. Please also note that during public testimony at the February 29, 2008 State Park and Recreation Commission Hearing, National Park Service indicated that their studies for the Santa Monica Mountains showed that a wildfire had never been started in a public campground.

CDPR does not anticipate an increase in wildland fire due to this project and with the inclusion of Project Requirements Hazard 4-Fire Management there is a less then significant impact.

Chapter 3, Hydrology and Water Quality, Bullet a) and bullet f), page 60 and 61 edit to read:

As discussed in Utilities and Services Systems on page 79 of the Initial Study/Negative Study, wastewater would be treated onsite using a system designed to include devices that can be controlled to prevent the overflow or inundation of floodwater to the septic system, which includes an underground sealed concrete septic tank and rock. However, based on comments received the use of a vault toilet system could also be used. Use of either system, shall be designed to prevent the overflow or inundation of floodwater. This would be a less than significant impact to water quality.

DPR will follow all State water quality standards and waste discharge requirements during the construction of this project and will work with Butte County, the California Central Valley Flood Protection Board, and the California Regional Water Quality Control Board on the permits needed for this project. With these conditions, there will be a less than significant impact to water quality.

Chapter 3, Utilities and Service Systems, Discussion Section, Bullet a), Bullet b), and Bullet e), page 80 and 81 edit to read:

a) The proposed project would install a new restroom and septic system/leach field or vault toilet system. The project site is not served by a wastewater treatment facility; wastewater would be treated on-site using the new septic system. Bidwell-Sacramento River State Park is within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB) and is subject to the requirements of the General Construction Storm Water Permit (Order No. 99-08-DWQ) (CCRWQCB 2006). The permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared prior to construction activities. The SWPPP will incorporate BMP's to ensure the protection of storm water runoff from erosion and sedimentation. All aspects of the project would be in compliance with CCRWQCB regulations and standards. No Impact.

b) As noted in the Environmental Setting there are two wells on the parcel. One is an agricultural well and the other is a well that has been used for potable water. Drinking water for the restroom facility will be provided from a new potable well that will be installed near the restroom, but outside a 200 foot radius of the leach system and outside any environmentally sensitive locations. The existing potable well will be sealed and or abandoned pre current Butte County Environmental Health procedures. The existing agricultural well will remain and be used to irrigate the restoration plantings throughout the property during the establishment period of approximately 3 years. When no longer needed, the agricultural well casing will be capped and sealed and will remain for future use as per Butte County Environmental Health standards.

   A new wastewater/leach field treatment facility or a vault toilet system would be constructed in accordance with Butte County Environmental Health Department requirements (See Project Requirement Hydro-1). Less than significant impact.

Appendix D – Restoration Plan was added.

This document along with the Draft Initial Study/Negative Declaration (SCH#2009102054), additional information as noted above, Comments and Response to Comments; and Notice of Determination constitute the Final Negative Declaration for the Sacramento River Access at Pine Creek – Facilities Development and Habitat Restoration Project.

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 Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR.

Stephanie Coleman
Environmental Coordinator
Northern Service Center

2/2/2010
Date

Robert Foster
District Superintendent
Northern Buttes District

2/2/2010
Date