

**FINAL
MITIGATED NEGATIVE DECLARATION**

**Big Tree Creek Ford
Alignment And Elevation Restoration Project**

Calaveras Big Trees State Park

September 2003



State of California
DEPARTMENT OF PARKS AND RECREATION
Central Valley District
22708 Broadway
Columbia, California 95310
MITIGATED NEGATIVE DECLARATION

**PROJECT: CALAVERAS BIG TREES STATE PARK
BIG TREE CREEK FORD ALIGNMENT AND ELEVATION RESTORATION**

LEAD AGENCY: California Department of Parks and Recreation (DPR)

AVAILABILITY OF DOCUMENTS:

The Initial Study for this Mitigated Negative Declaration was made available throughout the 30-day public review period at the reference desk of the Calaveras County Library. It was also available at the public information desks of DPR's Northern Service Center and Central Valley District Headquarters offices, and at the Ranger Station of Calaveras Big Trees State Park. The Final Mitigated Negative Declaration and all supporting materials will be available, by request, at DPR's Central Valley District Headquarters office.

PROJECT DESCRIPTION:

The Department of Parks and Recreation (Lead Agency) proposes to restore the hydrology of the North Grove Meadow and natural drainage/elevation patterns of Big Tree Creek (currently confined in an entrenched, severely-eroded, unnatural ditch), at Calaveras Big Trees State Park. The project will:

- Construct a ford for Big Tree Creek across the North Grove Campground roadway.
- Abandon existing four-foot CMP culvert under the road at the west end of the North Grove Campground.
- Elevate the thalweg (lowest points along the length of the creekbed) with clean compacted fill over about 275 feet of its length and stabilize with large woody debris, native vegetation, and/or log weirs.
- Remove one campsite (#32) from within the historic channel.
- Widen approximately 30 feet of historic channel to avoid impacts to the historic concrete/rock pump house.
- Preserve a portion of the abandoned, deeply-entrenched Big Tree Creek channel for historic interpretation; the remaining 50 feet of channel downstream from the ford's inlet will be filled with clean, compactible fill dirt and revegetated.

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 MND. 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 mitigation measures have been implemented. This conclusion is supported by the following findings:

- There was no potential for adverse impacts on Agricultural Resources, Land Use and Planning, Mineral Resources, Population and Housing, Recreation, or Utilities and Service Systems 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, Public Services, and Transportation/Traffic.
- Full implementation of the proposed mitigation measures included in this MND would

reduce potential project-related adverse impacts on Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, and Noise to a less than significant level.

MITIGATION MEASURES

The following mitigation measures have been incorporated into the scope of work for the proposed project and will be fully implemented by DPR to avoid or minimize adverse environmental impacts identified in this MND. These mitigation measures will be included in contract specifications and instructions to DPR personnel involved in implementing the project.

The following mitigation measures will be implemented by DPR as part of the Big Tree Creek Ford Alignment and Elevation Restoration Project:

AIR QUALITY

MITIGATION MEASURE AIR-1

- All trucks hauling fill dirt or soil, if dry, would be covered or required to maintain at least two feet of freeboard or travel at less than 35 miles per hour.
- All equipment engines would be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.

BIOLOGICAL RESOURCES

MITIGATION MEASURE BIO-1

- Prior to the start of construction, a survey of the proposed project area for amphibians will be conducted by an DPR-approved biologist/resource ecologist. Any vertebrates found in the project area or during the construction period will be relocated to the permanent section of Big Tree Creek, downstream from the project site. If mountain yellow-legged frog or California red-legged frog are found, work would be temporarily halted or diverted until the monitoring ecologist could consult with DFG and arrange for a permitted biologist to relocate these species to a suitable habitat nearby.

CULTURAL RESOURCES

MITIGATION MEASURES CULT-1

- Approximately 30 feet of the existing historic channel will be widened to prevent restored normal streamflow from impacting the historic pumphouse.
- The existing culvert under North Grove Campground Road will be abandoned as the primary channel, with continuing maintenance to preserve its historic appearance, usability for seasonal runoff and seepage, and stability of adjoining rock supports.
- The CCC-era camp furniture (stove and table) will be relocated from Campsite #32 to a nearby campsite, where similar CCC-era furniture was previously located. This will restore the historic appearance and use of that campsite and maintain the overall historic design and setting of the campground facilities.
- All ground-disturbing work will be monitored by a DPR-qualified archaeologist. If

potentially significant resources are unearthed (including, but not limited to deposits of historic trash, artifacts from Native American or historic eras), work in the immediate area of the find will be halted or diverted until identification and proper treatment are determined and implemented.

MITIGATION MEASURE CULT-2

- A DPR-qualified archaeologist will monitor all ground-disturbing activities. If potentially significant resources are unearthed (including, but not limited to dark soil containing bone, flaked stone, groundstone, or other midden materials), work within 100 feet of that location will be halted or diverted until identification and proper treatment are determined and implemented.

MITIGATION MEASURE CULT-3

- In the event that human remains are discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate DPR personnel. Any human remains and/or funerary objects would be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized State representative) would 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 would be responsible for notifying the appropriate Native American authorities.

If the coroner or tribal representative determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe would be consulted to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects would be cleaned, photographed, analyzed, or removed from the site prior to determination.

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

GEOLOGY AND SOILS

MITIGATION MEASURES GEO-1

- The filled ditch and elevated thalweg will be compacted in layers to prevent loose material from sloughing off, then smoothed and raked to provide uniform drainage and prevent concentration of flow. Bare ground will be mulched and thatched to minimize surface erosion, also using vegetation plugs removed during the work whenever possible.

MITIGATION MEASURES GEO-2

- Work will be conducted during the dry season when stream flow is non-existent. Other Best Management Practices (BMPs) prescribed by the California Department

of Fish and Game (1601 Agreement) and the Regional Water Quality Control Board (CWA 401 Certification or Waiver) will be implemented, where appropriate.

HAZARDS AND HAZARDOUS MATERIALS

MITIGATION MEASURES HAZMAT-1

- All equipment would be inspected for leaks before arrival at the project site, again immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from the project site.
- Equipment would be cleaned and repaired (other than emergency repairs) outside the project area at the Park's maintenance yard. All contaminated water, sludge, spill residue, or other hazardous compounds would be disposed of outside park boundaries, at a lawfully permitted or authorized destination.
- The contractor(s) or DPR personnel will prepare an emergency spill response plan prior to the start of construction and maintain a spill kit on-site throughout the life of the project. This plan would include a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form on or immediately adjacent to Calaveras Big Trees SP during construction; the contractor or project manager would immediately notify the appropriate DPR staff (e.g., State Representative or supervisor). The Emergency spill response plan will be immediately implemented with DPR supervision and approval.

NOISE

MITIGATION MEASURES NOISE-1

- Construction activities would be limited to the hours between 8 a.m. and 5 p.m.
- Internal combustion engines used for any purpose at the job site would be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction would utilize the best available noise control techniques (e.g., engine enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

No comments were received during the 30-day public review period for this project; thus, no responses were prepared.

No significant corrections, additions, and deletions have been made to the Big Tree Creek Ford Alignment and Elevation Restoration Project Draft MND. Minor typographical and grammatical corrections, and minor corrections to the description of resources at Calaveras Big Trees State Park that contribute to factual precision, but have no significant impact on the content or the scope of the project, have been made but not noted.

This document, along with the Draft Initial Study/Mitigated Negative Declaration (SCH# 2003072053), corrected as noted above; Mitigation Monitoring and Reporting Program; and the Notice of Determination constitute the Final Mitigated Negative Declaration for the Big Tree Creek Ford Alignment and Elevation Restoration Project at Calaveras Big Trees State Park.

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. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

Linda Dick-Bissonnette
Environmental Coordinator
Central Valley District

Date

James S. Wassmund, District Superintendent
Central Valley District

Date

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CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

The Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Big Tree Creek Ford Alignment and Elevation Restoration Project at Calaveras Big Trees State Park (CBTSP), Calaveras County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq.*

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

1.2 LEAD AGENCY

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

Douglas Rischbieter
Calaveras Big Trees State Park
P.O. Box 120
Arnold, California 95223-0120
(209) 795-3488

Information regarding the contents of or any comments related to this environmental document should be directed to:

Linda Dick-Bissonnette
California Department of Parks and Recreation
Central Valley District
22708 Broadway
Columbia, CA 95310

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed Big Tree Creek Ford Alignment and Elevation Restoration Project at Calaveras Big Trees State Park. Mitigation measures 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, and project objectives.
- Chapter 3 - Environmental Setting, Impacts, and Mitigation Measures
This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Mitigation measures are incorporated, where appropriate, to reduce potentially significant impacts to a less-than-significant level.
- Chapter 4 - Mandatory Findings of Significance
This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the Initial Study.
- Chapter 5 - Summary of Mitigation Measures
This chapter summarizes the mitigation measures incorporated into the project as a result of the Initial Study.

- Chapter 6 - References
This chapter identifies the references and sources used in the preparation of this IS/MND. 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.

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 Big Tree Creek Ford Alignment and Elevation 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 MND shall be prepared if the proposed project will not have a significant effect on the environment after the inclusion of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation of mitigation measures, the proposed project would have a significant effect on the environment. It is proposed that a Mitigated Negative Declaration be adopted in accordance with the CEQA Guidelines.

CHAPTER 2

PROJECT DESCRIPTION

2.1 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Big Tree Creek Ford: Alignment and Elevation Restoration Project at Calaveras Big Trees State Park (SP), located near the town of Arnold, Calaveras County, California. The proposed project would restore the hydrology of the North Grove Meadow, a sensitive but degraded 10-acre wetland feature, by reestablishing the historic thalweg elevation of Big Tree Creek. The entrenchment of this stream, which has occurred over several decades, has unnaturally reduced the amount of water available to vegetation in the Meadow. This project will restore wetland conditions. Following restoration, the Meadow will be included in the Wetland Reserve Program, administered by the U.S. Department of Agriculture, Natural Resource Conservation Service.

2.2 PROJECT LOCATION

Calaveras Big Trees SP is located on State Highway 4 in eastern Calaveras County, three miles east of the town of Arnold. The Park is foremost known for its two isolated groves of giant sequoia, but the 10-acre North Grove Meadow (Meadow) is the only feature and plant community of its kind in the 6,500-acre Park. The Meadow is adjacent to the North Calaveras Grove of the giant sequoias and is associated with a small seasonal stream that originates from the slopes and basin of the North Grove. The Meadow is also surrounded by the North Grove Campground. The project site is at the downstream (western) end of the Meadow, on either side of the North Grove Campground Road, near campsite #32. See Appendix A.

2.3 BACKGROUND AND NEED FOR THE PROJECT

The North Grove Meadow and Big Tree Creek have been subject to a series of disturbances since the Euroamerican discovery of the area in 1852. Such mid-elevation Sierra wet meadows are uncommon in this portion of the Central Sierra Nevada. Historical photos show Big Tree Creek in the middle of the Meadow, but at some time in the early Twentieth Century, it was confined to a ditch at the Meadow's northern edge. Reconstruction of the North Grove Campground in the 1930s further confined the creek and lowered its elevation; hydraulic elevation control was established at the downstream end of the Meadow by a 48-inch diameter corrugated metal pipe (CMP) culvert.

Progressive erosion and headcutting of the channelized creekbed over the next 50 years lowered the level of the water in Big Tree Creek, in relation to the surrounding land, and the overall level of the water table that supported Meadow vegetation. As wetland species died out, upland plants invaded the Meadow, greatly diminishing the wetland character and habitat.

In 1989, the Calaveras Big Trees SP General Plan identified the restoration of the North Grove Meadow as a high-priority. A major portion of the Meadow has already been restored; only the downstream end of the Meadow is still subject to a lower water table (the upper limit of soil underground that is saturated by water) and an eroded, misaligned creekbed. Restoration techniques similar to those proposed as part of this project were pioneered in earlier Meadow restoration efforts (SCH#96032104), and have proved successful at restoring wetland conditions in treated areas.

2.4 PROJECT OBJECTIVES

This Project proposes to restore the hydrology of the North Grove Meadow and natural drainage/elevation patterns of Big Tree Creek, which will:

- Stop headcutting and erosion of meadow soils.
- Raise the water table level within the Meadow.
- Permanently stabilize the natural wetland function of the Meadow hydrology.
- Restore a portion of the historic Big Tree Creek channel alignment.
- Provide conditions supportive of native wetland species and habitat.
- Enhance summer and fall flows downstream of the project site.
- Support continued access within and maintain the historic character of the North Grove Campground.
- Preserve the historic features and aspects of early Campground, culvert and associated stone bridge, and stream disturbance, manipulation, and restoration.

The project will also further the Department's mission by:

- Fulfilling the Park's General Plan mandate to restore the Meadow.
- Preserving and protecting significant cultural sites, features, and structures.
- Providing education, interpretation, and leadership to assist the public in understanding the significance and value of the state's natural and cultural resources.
- Improving the quality of life in California by increasing the diversity and availability of high quality recreational experiences and opportunities.

2.5 PROJECT DESCRIPTION

This project will construct a ford to allow Big Tree Creek to cross the North Grove Campground roadway. The existing 48-inch CMP culvert which currently carries the creek under the road at the west end of the Campground will be abandoned in place; the project will avoid any impacts to the associated CCC-era stone bridge into which the culvert is set. Clean, compacted fill will be placed in and along approximately 275 feet of the entrenched streambed, which in places is up to 5 feet deep, upstream from the ford. Large woody debris, native revegetation, and/or a few log weirs will be strategically placed along the streambed for surface grade stabilization. The ford will discharge into a historic, abandoned channel of Big Tree Creek which is still at natural grade; this formerly-natural channel will convey the creek for approximately 350 feet, until it rejoins the existing Big Tree Creek channel. One campsite (#32) will be removed

from within the historic channel; historic campsite amenities (table and stove) will be relocated to a nearby site to replace similar features that have been previously lost. Approximately 30 linear feet of the remnant historic natural-grade channel will be widened to protect a historic structure (abandoned 15' x 20' concrete/rock pump house). Most of the abandoned, deeply-entrenched Big Tree Creek channel will be preserved for historic interpretation, however about 50 feet of channel immediately downstream from the ford's inlet will be filled with clean, compactible fill dirt, stabilized with a log-and-cobble crib wall, and revegetated. See Appendix B for sketches of proposed project features.

2.6 PROJECT CONSTRUCTION

The construction window for this project would be from September 8, 2003 to November 15, 2003 and, if necessary, from September 6, 2004 to November 15, 2004. Work is scheduled for this season because campground use diminishes dramatically, and instream work would be done when the seasonal stream at the project site is dry.

All existing areas of the Park would remain open to the public during construction, except for two campsites adjacent to the project area that will be used for staging. However, during construction of the ford, vehicles will not be able to circumnavigate the North Grove Campground. Instead, access to campsites beyond site #32 will be through the Group Picnic Areas and into the back loop of the campground.

All work would occur between 8:00 a.m. and 5:00 p.m., Monday through Friday. Areas around the construction site would be barricaded off, as necessary, to deter unsafe access. Inconvenience to the public would be less than significant; temporary signs will be placed at the campground entrance to direct visitors to their campsite.

Work would be performed by a Conservation Crew of 14-16 people, equipped with hand tools, and 1-4 resource or construction monitors will also be on-site at any one time. Though most work would be performed with small power or hand tools, one backhoe-loader and a 10-yard dump truck will be used to deliver and distribute fill dirt. Occasionally, a flatbed truck will be used for delivery of construction materials and removal of debris. Staging areas for construction equipment and materials will be on existing dirt turnout areas, on both shoulders of the campground road, adjacent to the worksite. Staging will occur in campsite #32 (the site to be removed) and campsite #52, which will be closed for the season at the start of construction.

2.7 VISITATION TO CALAVERAS BIG TREES STATE PARK

Annual attendance at Calaveras Big Trees State Park averages about 200,000 to 250,000 visitors per year. Official paid attendance in 2002 was about 161,000 people. Campground use declines dramatically after Labor Day Weekend, hence the scheduling of the proposed work schedule after this date.

The proposed project is not expected to have any impact on total future Park attendance. However, after completion, the proposed project site may become more attractive as an interpretive opportunity, and additional day-use visitors may briefly enter the campground area to view wetland and historic features and other project benefits.

2.8 CONSISTENCY WITH LOCAL PLANS AND POLICIES

Restoration of the North Grove Meadow was identified and adopted as a high-priority objective of the Calaveras Big Trees SP General Plan. The proposed construction of the Big Tree Creek Ford Alignment and Elevation Restoration Project is consistent with that General Plan, and also with local plans and policies in effect.

2.9 DISCRETIONARY APPROVALS

DPR has approval authority for the proposed Big Tree Creek Ford Alignment and Elevation Restoration Project. Other agencies that are expected to exercise approval authority for elements of the project include the California Department of Fish and Game (Streambed Alteration Agreement under Section 1601 of the California Fish and Game Code) and the Central Valley Regional Water Quality Control Board (Water Quality Waiver or Certification to be issued under Section 401 of the federal Clean Water Act).

2.10 RELATED PROJECTS

DPR often has other smaller maintenance programs and rehabilitation projects planned for a park unit. On-going and recently completed work at Calaveras Big Trees State Park included maintenance of previous stream restoration projects on Big Tree Creek, removal of dead and other hazard trees in the North Grove Campground, and construction of a new Park entrance station. No additional work, other than regular maintenance, is currently in progress or planned for this unit.

CHAPTER 3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION	
1. Project Title:	Big Tree Creek Ford Alignment and Elevation Restoration
2. Lead Agency Name & Address:	California Department of Parks and Recreation
3. Contact Person & Phone Number:	Douglas Rischbieter, Associate State Park Resource Ecologist (209) 795-3488
4. Project Location:	Calaveras Big Trees State Park
5. Project Sponsor Name & Address:	California Department of Parks and Recreation Central Valley District 22708 Broadway Columbia, California 95310
6. General Plan Designation:	State Park
7. Zoning:	Recreation
8. Description of Project:	<p>The Department of Parks and Recreation (Lead Agency) proposes to restore the hydrology of the North Grove Meadow and natural drainage/elevation patterns of Big Tree Creek (currently confined in an entrenched, severely-eroded, unnatural ditch). The project will:</p> <ul style="list-style-type: none"> • Construct a ford for Big Tree Creek across the North Grove Campground roadway • Abandon existing four foot CMP culvert under the road at the west end of the Campground. • Elevate the thalweg (lowest points along the length of the creekbed) with clean compacted fill over about 275 feet of its length and stabilize with debris and/or log weirs. • Remove one campsite (#32) from within the historic channel. • Widen approximately 30 feet of historic channel to avoid impacts to the historic concrete/rock pump house. • Preserve a portion of the abandoned, deeply-entrenched Big Tree Creek channel for historic interpretation; the remaining 50 feet of channel downstream from the ford's inlet will be filled with clean, compactible fill dirt and revegetated.
9. Surrounding Land Uses & Setting:	Refer to Chapter 3 of this document (Section IX, Land Use Planning)
10. Approval Required from Other Public Agencies:	California Department of Fish and Game for compliance with Section 1601 of the California Fish and Game Code; Central Valley Regional Water Quality Control Board for compliance with Section 401 of the Clean Water Act.

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | <input checked="" type="checkbox"/> None |

DETERMINATION

On the basis of this initial evaluation:

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

I find that, although the original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

I find that the proposed project **MAY** have a significant effect on the environment and an **ENVIRONMENTAL IMPACT REPORT** or its functional equivalent will be prepared.

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

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

(Signature on file)

James S. Wassmund, District Superintendent
Central Valley District

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

Calaveras Big Trees SP is one of the most visited units of the California State Park System. Visitors are attracted not only by the Sierra redwood groves, but also by the surrounding forests, streams, and vistas. The 6,500-acre Park contains two groves of Sierra redwoods and extremely fine examples of the other coniferous species for this portion of the Sierra Nevada, most of which reach exceptional size and majesty. These trees are also notable for their coloration and effect produced by the play of light and shadows upon them at different times of day and in the various circumstances under which they grow.

A variety of exceptional visual effects may be experienced in many parts of the park. The deep forests, the ridge-tops with their extensive views, and the river canyon, which is traversed by the parkway, all contribute to the abundant esthetic resources of Calaveras Big Trees.

The North Grove Meadow is unique in the Park: it is the only formation of its kind. The aesthetics of the meadow are immeasurably enhanced by its interrelationship with Big Tree Creek and the immediately adjacent North Grove of Sierra redwoods. The Meadow affords scenic surprises in all seasons: verdant with spring wildflowers, misty on cold fall mornings, pristine expanses of snow in winter. The meadow-forest interface and moist conditions attract diverse wildlife and enhance the experiences of almost every visitor to the North Grove Campground.

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

DISCUSSION

- a) Project areas requiring construction are reasonably well-screened from State Scenic Highway 4 by existing vegetation. Construction activities will be short in duration and completed within a few days, thus scenic impacts are not expected to be significant. Restoring the creek channel to the natural conditions that existed prior to stream channelization will improve aesthetic values, so scenic resources would not be damaged by this project.
- b) Restoring the creek channel to the natural conditions that existed prior to stream channelization will improve aesthetic values, so scenic resources would not be damaged by this project. The project has been designed to avoid removal of or other impacts to a historic building. Some meadowside trees may be affected in the future by a higher water table in the meadow; the scenic impact is not expected to be significant as the meadow naturally reclaims areas where upland vegetation has encroached over decades of meadow disturbance. Restoration of natural conditions will not affect the view from State Scenic Highway 4.
- c) Restoring the creek channel to the natural conditions that existed prior to stream channelization will improve aesthetic values. Short-term effects to adjacent forest and meadow settings would occur as vegetation is disturbed for rehabilitation work. From past experience at adjacent worksites, meadow plants will reoccupy the disturbed area during the first growing season following construction. No significant adverse impact.
- d) Lighting is not an element of this project and no new light sources would be introduced into the landscape. All construction work would be limited to daylight hours, eliminating the need for work lights. This project would create no new source of light or glare and, therefore, would have no impact in this area.

II. AGRICULTURAL RESOURCES.

ENVIRONMENTAL SETTING

Calaveras Big Trees State Park is zoned "Recreation" and does not support any agricultural operations or farmland. The closest land adjoining the park zoned as agricultural land or used for agricultural purposes from the project site is several miles to the west. The adjoining land to the north, south, and east of the park is zoned either "Residential" or "Industrial Timber Land."

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

* In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

DISCUSSION

a-c) No land adjoining the project site in any direction is zoned as agricultural land or used for agricultural purposes, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California. Therefore, this project would have no effect on any category of California Farmland, conflict with any existing zoning for agricultural use or Williamson Act contract, or result in the conversion of Farmland to non-agricultural use. The project does not convert farmland to any other use. The project restores wetland and stream habitat. No impact.

III. AIR QUALITY.

ENVIRONMENTAL SETTING

Calaveras Big Trees State Park straddles either side of the boundary between Calaveras and Tuolumne Counties, which are part of the Mountain Counties Air Basin (Basin). The North Grove and the project site is in eastern Calaveras County. Moderately high precipitation, regular afternoon winds, generally very low levels of commuter traffic, and a small industrial base can result in relatively clean air throughout most of eastern Calaveras County. Because of these conditions, Calaveras County is currently in attainment or unclassified with California standards for carbon monoxide, hydrogen sulfide, lead, nitrogen dioxide, sulfur dioxide, and sulfides (CARB 2003). An area is designated in attainment if the state standard for the specified pollutant was not violated at any site during a three-year period.

However, the area is influenced by movements of air masses from the Central Valley; largely for this for this reason, the basin is in non-attainment with California standards for ozone and particulate matter ((PM10, or particles with an aerodynamic diameter of 10 microns or less)). An area is designated in non-attainment if there was at least one violation of a state standard for the specified pollutant within the area boundaries. The Basin is currently unclassified for visibility reducing particles (VRPs), but PM10 (which includes dust and smoke particles) is a VRP. With respect to federal standards, the Calaveras County is in an unclassified/attainment zone for both carbon monoxide and ozone and remains unclassified for particulate matter (CARB 2003).

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

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

DISCUSSION

- a) Work proposed in this project is not in conflict with or would not obstruct implementation of any applicable air quality plan for Calaveras County or the Mountain Counties Air Basin. No impact.
- b-c) The project area is relatively small, and most of the work will be done with hand tools. When heavy equipment is required, no more than one piece of heavy equipment will operate at the site at one time. The proposed project would not emit air contaminants at a level that, by themselves, would violate any local, state, or federal ambient air quality standard (AAQS), or contribute to a permanent or long-term increase in any air contaminant. However, project construction may generate short-term emissions of fugitive dust (PM10) and involve the use of equipment that would emit ozone precursors (i.e., reactive organic gasses [ROG] and nitrogen oxides, or NOx). Increased emissions of PM10, ROG, and NOx could contribute to existing non-attainment conditions and interfere with achieving the projected attainment standards. Consequently, construction emissions would be considered a potentially significant short-term adverse impact. Soil conditions at the worksite are perpetually moist, as generally is fill dirt from a local commercial source, so dust is not expected to be generated by this project. Implementation of the following mitigation measures would reduce potential impacts to a less than significant level.

MITIGATION MEASURE AIR-1
<ul style="list-style-type: none">• All trucks hauling fill dirt or soil, if dry, would be covered or required to maintain at least two feet of freeboard or travel at less than 35 miles per hour.• All equipment engines would be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.

- d) As noted in III (b,c) Discussion above, the project would only generate equipment exhaust emissions for the brief period of construction. No residences are located directly adjacent to areas impacted by the project, although there are campgrounds within visual range of the project. Work hours and the limited use of heavy equipment would reduce exposure to any occupants of these camping areas. Visitors may need to pass the construction site, but no delays are expected and detours would distance visitors from the majority of the equipment emissions. These conditions, in conjunction with Mitigation Measure AIR-1 above, would reduce the potential adverse impact to a less than significant level.
- e) The proposed work would not result in the long-term generation of odors. Construction-related emissions could result in a short-term generation of odors, including diesel exhaust and fuel or solvent vapors. These odors might be considered objectionable by some park visitors and employees; however, because construction activities would be short-term, odorous emissions would dissipate rapidly in the air, with increased distance from the source. The potential for impact would be considered less than significant.

IV. BIOLOGICAL RESOURCES.

ENVIRONMENTAL SETTING

Calaveras Big Trees SP lies within the Lower Montane Forest of the Sierran Floristic Province, a broad belt lying between 3,000 and 6,000 feet elevation at this latitude. The Park is situated in the midst of an extensive and thriving coniferous forest, the conifers forming a forest of very large trees, dominated by ponderosa pine (*Pinus ponderosa*). Associated tree species include incense-cedar (*Calocedrus decurrens*), sugar pine (*Pinus lambertiana*), and white fir (*Abies concolor*) among the conifers; and black oak (*Quercus kelloggii*), bigleaf maple (*Acer macrophyllum*), and Pacific dogwood (*Cornus nuttallii*) among the hardwoods. Shrub species associated with these trees include greenleaf manzanita (*Arctostaphylos patula*), whitethorn ceanothus (*Ceanothus cordulatus*), and deerbrush (*C. integerrimus*).

The above plant species associate themselves into communities broadly based upon aspect, with ponderosa pine dominating on the warmer, south- or west-facing slopes, and white fir dominating on the cooler east- and north-facing slopes. Ridgetops, which typically possess shallow, rocky soils, support ponderosa pine (often poorly developed), and some chaparral species in a few places.

Although no rare, threatened, or endangered plants are known to occur at Calaveras Big Trees SP, the Sierra redwood (*Sequoiadendron giganteum*, also frequently called giant sequoia) is an extremely significant species, at least with respect to public interest. Of the eight rather widely separated Sierra redwood groves occurring north of the Kings River, two are within Calaveras Big Trees State Park: the Calaveras North Grove and the Calaveras South Grove. The North Grove is the smaller of the two, with about 160 mature specimens. It is located adjacent to State Highway 4 and to the most developed portion of the park, and is thus easily accessible.

The Calaveras South Grove is in the basin formed by Big Trees Creek, in the southeast portion of the park, about 4 miles from the North Grove. It was designated as the Calaveras South Grove Natural Preserve in 1984. The South Grove itself is approximately 445 acres in size, and contains over 1,000 mature specimens of Sierra redwood. This makes it the largest of the eight groves north of the Kings River. This major grove, along with the enveloping forest of sugar pine, ponderosa pine, incense-cedar, and white fir, has remained essentially unmodified by humankind, except for the impact of fire suppression over the last several decades.

A small but significant grassland community is found in the mountain meadow located near the park headquarters. The meadow has been altered by artificial drainage, grazing, and the sowing of non-native annual grasses, all having taken place many decades ago. The borders of the meadow have been encroached upon by the surrounding forest, due to drying conditions brought about by the artificial drainage, and the exclusion of periodic natural fires.

The larger waterways in the park (North Fork Stanislaus River, Beaver Creek, and Big Trees Creek) support very narrow zones of riparian vegetation. Portions of Beaver Creek, however,

flow through broader floodplains, and the riparian zone is correspondingly wider. Western azalea (Rhododendron occidentale) is an important component of some of these riparian zones.

Oak woodlands may historically have been prominent within Calaveras Big Trees SP. Black oak woodland, now found only in small, localized pockets, may once have been very common and dominant on warm, well-exposed south-facing slopes. Canyon live oak, found on drier slopes of the Stanislaus River canyon, may also have been more extensive under natural fire regime. Because of fire exclusion and suppression,, these stands have largely been succeeded by coniferous species.

The dominance of the forest habitat in Calaveras Big Trees SP creates a terrestrial fauna that is rather low in diversity. Other vegetation types occur here as small, localized features; these include riparian (streamside), chaparral, oak woodland, and grassland communities. Because of their infrequency and small size, the effect of these communities on the overall character of the local animal life is small, both as habitats in themselves and as partners in ecotonal relationships, or areas of transition between habitats..

No rare, threatened, or endangered animals are known to occur at Calaveras Big Trees SP, however several species of special interest are present. The California spotted owl and the northern goshawk both nest in the area and, though uncommon, have been sighted in the park. Other animal species of special scientific, interpretive, educational, or management interest are the black bear, mule deer, mountain lion, pileated woodpecker, and various species of scolytid beetles.

Common or otherwise important mammals include coyote, raccoon, and the chickaree (or Douglas squirrel). Mule deer occur seasonally, in that the park is located along the migratory routes of two herds. Bird species also include the mountain chickadee and pygmy nuthatch.

The aquatic animal life is dominated by species associated with cool, swift-moving mountain streams. Rainbow trout is the most common species, with the introduced brown trout and the native California roach associated with it in some of the streams. Many orders of aquatic insects, including mayflies, stoneflies, and caddisflies, are found in these streams. Rainbow trout are present in the permanent portion of Big Tree Creek, which begins just a few feet below the project site.

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

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) No sensitive, special status, or candidate species are known to occur in the project site. The project may have the beneficial effect of enhancing habitat suitable for the California red-legged frog and the mountain yellow-legged frog; the Park is at the extreme edge of the commonly-established range limits for both species. No work will occur until surface water in the stream has dried for the season. Timing of construction, combined with implementation of Mitigation Measure Bio-1 below will reduce any potential impacts to a less than significant level.

MITIGATION MEASURE BIO-1
<ul style="list-style-type: none"> • Prior to the start of construction, a survey of the proposed project area for amphibians will be conducted by an DPR-approved biologist/resource ecologist. Any vertebrates found in the project area or during the construction period will be relocated to the permanent section of Big Tree Creek, downstream from the project site. If mountain yellow-legged frog or California red-legged frog are found, work would be temporarily halted or diverted until the monitoring ecologist could consult with DFG and arrange for a permitted biologist to relocate these species to a suitable habitat nearby.

- b) The project will not have a negative effect on any riparian or sensitive community. The restoration of natural hydrology and wetland conditions, a purpose of the project, will enhance these resources.
- c) A length of existing, man-made ditch within a wetland area will be filled. The loss of this degraded ditch is expected to be less than significant. Moreover, the replacement of the ditch with functional, high-value natural wetland conditions (a purpose of the project) at and adjacent to the project site is expected to significantly benefit this resource.
- d) Native resident rainbow trout are present in Big Tree Creek. The project area is in a seasonal reach of the stream, and will be completely dry at the time of construction. There will be no impact to permanent reaches of creek downstream. The project will not significantly alter the gradient of Big Tree Creek, and the ford is designed to provide the same access for upstream fish passage as the culvert that is being removed. No impact to fish or their migrations is anticipated.
- e) The project is consistent with the Calaveras Big Trees SP General Plan. No live mature trees will be removed within view of State Scenic Highway 4. No impact.
- f) This project would not conflict with the provisions of any Habitat Conservation Plan or Natural Community Conservation Plan. No impact.

V. CULTURAL RESOURCES.

ENVIRONMENTAL SETTING

Archaeological resources currently recorded for Calaveras Big Trees SP include 39 Native American sites and 14 historic sites, and a potential National Register district including 8 historic buildings, Big Stump, and the North Grove and the North Grove Campground. One of the Native American archaeological sites is surrounded by a historic trash scatter. Recorded Native American sites consist of 35 bedrock mortar features, six bedrock mortar sites with lithic scatters, and ten lithic scatters.

The 14 recorded historic archaeological areas in the park include the Calaveras Big Tree Cottage area, the Sperry and Perry Hotel site, two road alignments, Union Water Ditch segments and the P.G.& E. flume and ditch, three cabin sites, and four trash dumps. There are also several known, but as yet unrecorded, historic sites, including historic trails, the Pickering Railroad right of way in the South Grove area. . An estimated 99% of the park has been surveyed (5,994 out of 6,075 acres), and it is likely that subsequent surveys will reveal more Native American and historic archaeological resources.

Calaveras Big Trees SP has a total of ten standing structures that are associated either with the early hotel period, or with the Civilian Conservation Corps (CCC) period. The current park office building is the only remaining structure from the Big Trees Hotel complex, and is the oldest extant building in the park, having been built about 1860. Buildings from the CCC era include Big Trees Hall, the former CCC dispensary (currently a office building), a pump house, and four buildings in the park's maintenance yard. The park also has 12 Park Rustic style, post-War structures that are recommended eligible for the California Register of Historic Places and/or are architecturally compatible with a National Register historic recreational district.

Although not a structure, one of the most historic features in the park is the Big Stump, together with the adjacent "Chip" and butt log, the remains of what was the largest tree in the North Grove and the tree first seen by Augustus Dowd in 1852. This feature, as is the case with many living and dead Sierra redwoods in the park, exhibits historic markings and alterations, including carved dates and initials. The Big Stump is currently being reviewed by the Office of Historic Preservation for National Register eligibility.

The North Grove Campground contains many CCC-era features and the proposed project has been modified to avoid impacts to two of them at the project site. The concrete-and-stone pump house mentioned above occupies a portion of the historic Big Tree Creek channel. The culvert under the campground road, that will be abandoned as a primary stream channel part of this project, is set in rock retaining walls at both ends and has the appearance of a stone bridge.

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

DISCUSSION

a) There are a number of Civilian Conservation Corps (CCC)-era structures in the project area and a significant enough number and concentration of them in the park for a historic recreational district of Statewide and maybe even national importance. The pump house, the rockwork at the existing CCC vehicle bridge culvert, and a table and stone campstove in the campsite to be removed will be affected by the proposed project. The overall integrity of the historic district and the specific CCC-era features will be preserved. Excavation of a short length (30') of new stream channel around the north side of the pump house will avoid the need to remove this structure from the historic Big Tree Creek channel. The existing culvert and its rockwork will not be obstructed or damaged; it will continue to convey stormwater and other seasonal runoff and seepage, preserving most of the historic spatial relationships of the historic, designed campground. The stove and table in Campsite 32, which occupies a portion of the historically-natural Big Tree Creek channel, will be relocated to a nearby site for example to campsite #17, where some of the historic features are missing. These conditions, in addition to the following Mitigation Measures (CULT-1), will reduce potential impacts to a less than significant level.

MITIGATION MEASURES CULT-1
<ul style="list-style-type: none"> • Approximately 30 feet of the existing historic channel will be widened to prevent restored normal streamflow from impacting the historic pumphouse. • The existing culvert under North Grove Campground Road will be abandoned as the primary channel, with continuing maintenance to preserve its historic appearance, usability for seasonal runoff and seepage, and stability of adjoining rock supports. • The CCC-era camp furniture (stove and table) will be relocated from Campsite #32 to a nearby campsite, where similar CCC-era furniture was previously located. This will restore the historic appearance and use of that campsite and maintain the overall historic design and setting of the campground facilities.

MITIGATION MEASURES CULT-1 (CONT)

- All ground-disturbing work will be monitored by a DPR-qualified archaeologist. If potentially significant resources are unearthed (including, but not limited to deposits of historic trash, artifacts from Native American or historic eras), work in the immediate area of the find will be halted or diverted until identification and proper treatment are determined and implemented.

- b) There are four recorded bedrock mortar features near the area of direct impacts (along the south side of the creek) and meadow margins are known to be archaeologically sensitive throughout the Sierra. There are also remnant drystack rock diversion walls near the east end of the historic Pump House (recorded as an update to the Pump House record form). However, no significant archeological resources have been identified or are known to exist within the project construction zone. However, to avoid any possible impact, implementation of Mitigation Measure CULT-2 below would reduce any potential impact to a less than significant level.

MITIGATION MEASURE CULT-2

- A DPR-qualified archaeologist will monitor all ground-disturbing activities. If potentially significant resources are unearthed (including, but not limited to dark soil containing bone, flaked stone, groundstone, or other midden materials), work within 100 feet of that location will be halted or diverted until identification and proper treatment are determined and implemented.

- c) No human remains or burial sites have been documented or are known to exist at the proposed project sites. No impact is anticipated, but if any human remains or burial artifacts are identified, implementation of Mitigation Measures CULT-3 below would reduce the impact to a less than significant level.

MITIGATION MEASURES CULT-3

- In the event that human remains are discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate DPR personnel. Any human remains and/or funerary objects would be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized State representative) would 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 would be responsible for notifying the appropriate Native American authorities.

MITIGATION MEASURES CULT-3 (CONT)

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

VI. GEOLOGY AND SOILS.

ENVIRONMENTAL SETTING

Rock units exposed in Calaveras Big Trees SP include surficial deposits of the late Cenozoic, such as alluvium, colluvium, and soils, volcanic flow and pyroclastic rocks of the Cenozoic era, plutonic rocks (granitics) of the Mesozoic era, and metamorphic rocks of the Paleozoic era. There has been no known historic seismicity at Calaveras Big Trees State Park. No faults or folds are known to exist within the unit.

Volcanic rocks include Eureka Valley Tuff, Table Mountain Latite, and the Mehrten Formation. The Eureka Valley Tuff is hard, dense, moderately permeable, and is not expected to be involved in any geologic hazard condition. The Table Mountain Latite is hard, dense, and is not expected to be a hazard to park facilities nor should it negatively impact use of the park. The Mehrten Formation is dense and less permeable than the Eureka Valley Tuff or the Table Mountain Latite, but more permeable than weathered granitic rocks. Slopes cut into lahar units of the Mehrten can be expected to be stable.

Plutonic rocks in the Calaveras Big Trees SP area range in composition from granite to diorite. Fresh granitic rocks are stable, but weathered granitic rocks are much softer and more susceptible to erosion and, occasionally, landsliding, although landslides are not a widespread problem at Calaveras Big Trees.

Metamorphic rocks occur as small roof pendants on the underlying granitic rocks. These mostly metaquartzite pods are scattered throughout the granitic terrane, especially near or on the ridge tops underlain by granitic rocks. Metaquartzite at Calaveras Big Trees State Park is generally stable since little groundwater is expected to be found at these sites.

There are three landslides along the W. W. Smith Memorial Parkway which occur in weathered granitic rocks; two major slides at the River Trail crossing and another less active slide on the Tuolumne County side of the river. The two slides located west of the Stanislaus River are recurring problems, and both have the potential for closing the road that provides access to the Stanislaus River and South Grove areas. Both slides are underlain entirely by granitic rocks.

Calaveras Big Trees SP is located in Soils Region III, as defined by the California Department of Conservation. This is the Sierra Nevada, Trinity, Cascade, and Sierras of Southern California unit, which comprises 21% of the state. These soils, typically derived from igneous rocks, typically have an acid reaction and are low in available phosphorous.

The soils of the park can be placed into one of eleven representative series. These, in turn, are subdivided into phases that are mapped according to dominant soil type, topography, slope, and other associated soils. Two soil orders are represented in the park: inceptisols and alfisols. Inceptisols are defined as soils that either have a significant accumulation of organic matter in the surface (xerumbrepts) or have undergone some form of subsoil alteration

(xerochrepts). Fiddletown, Gerle, Hugo, Ovall, McCarthy, Wilder, and Windy families are all inceptisols. Alfisols are more developed soils which have had sufficient time for clay accumulation in the subsoil. Holland and Wintoner families, both found within the park, have subsoils with an obvious clay increase and evidence that the clay has moved from above.

The soils of Calaveras Big Trees State Park vary widely in their sensitivity to disturbance. Indications of soil instability already exist in the park, as either active or inactive landslides. These are located on both sides of the Stanislaus River canyon. The presence of older landslide scars indicate that this area had been prone to mass movement prior to any action by man.

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

DISCUSSION

- a) The project site is not in an area prone to landslide or other mass wasting. There is no known risk of seismicity at Calaveras Big Trees State Park. No impact.
- b) The purpose of the proposed work is to restore the natural hydrology and topography of the area, to the greatest extent practicable. A temporary increase in erosion may occur at some locations because fill is exposed as part of the restoration, but the loss should not be substantial. Topography would change from the existing disturbed condition; imprudent grading, excavation, or fill placement during the restoration could initially affect natural topography. Minor side-casting of fill soil may bury some undisturbed topsoil adjacent to the existing ditch; this impact is limited by the comparatively larger area of restored meadow and topsoil overlay. Overall, the work would diminish erosion and, with the implementation of Mitigation Measures GEO-1 and GEO-2 below, any contribution to substantial soil erosion or loss of topsoil by the proposed project would be reduced to a less than significant level.

MITIGATION MEASURES GEO-1

- | |
|---|
| <ul style="list-style-type: none">• The filled ditch and elevated thalweg will be compacted in layers to prevent loose material from sloughing off, then smoothed and raked to provide uniform drainage and prevent concentration of flow. Bare ground will be mulched and thatched to minimize surface erosion, also using vegetation plugs removed during the work whenever possible. |
|---|

MITIGATION MEASURES GEO-2

- | |
|--|
| <ul style="list-style-type: none">• Work will be conducted during the dry season when stream flow is non-existent. Other Best Management Practices (BMPs) prescribed by the California Department of Fish and Game (1601 Agreement) and the Regional Water Quality Control Board (CWA 401 Certification or Waiver) will be implemented, where appropriate. |
|--|

- c) The project is located within a meadow, where soil can be subject to disturbance if protective vegetation is removed. However, the goal of the project is to repair damage from headcutting and eliminate nick-points (abrupt drops in channel elevation, which accelerate flowing water and cause scour and erosion), stabilize the streambanks and reduce the potential for lateral erosion and gulying. Project benefit, negligible impact.
- d) Expansive soils do not exist in the project area. Construction of the ford is in an existing roadbed. No impact.
- e) No septic tanks or waste disposal systems would be constructed or impacted by this project. An existing sewer line in the area will be avoided. No impact.
- f) There are no known unique paleontological resources or sites, or unique geologic features, in the project area. No impact.

VII. HAZARDS AND HAZARDOUS MATERIALS.

ENVIRONMENTAL SETTING

Calaveras Big Trees SP is relatively free of hazardous materials. The main such material used and stored in the Park is motor fuel. DPR has fuel storage facilities within the Park. Fuel is not transported through the Park other than within individual vehicles' tanks (including heavy equipment).

Hazards in Calaveras Big Trees SP are similar to any outdoor setting and include steep slopes, rushing water, poison plants, wild animals, disease carrying insects, and inclement weather. In addition, the park is in a remote portion of Calaveras County and emergency transport to the nearest hospital would require up to one hour response time in some locations. The park also contains State Highway 4, which presents traffic hazards to staff and visitors and the potential for accidents involving hazardous materials that may be transported along this roadway. No airstrips exist within the park or adjacent to park property.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, create a significant hazard to the public or environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be located in the vicinity of a private airstrip? If so, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
h) Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Fuel or other hazardous materials will not be transported to the project site in large quantities. Adjacent campground sites will be closed during construction. No impact to the public is anticipated.
- b) Because of the design of the ford, with metal grates spanning the conveyance channel, future campground traffic will not actually drive through the water of Big Tree Creek. Therefore, accumulated oils or other vehicle fluids are unlikely to contaminate the waters of Big Tree Creek. The impact of stormwater runoff from the approaches to the ford will be no different than existing runoff from the existing campground road. No impact to water quality is anticipated from traffic using the completed ford.

Construction activities would require the use of certain potentially environmentally-hazardous materials, such as fuels, oils, and solvents. These materials are generally used for excavation equipment, chain saws, generators, and other construction equipment and would be contained within vessels engineered for safe storage. Large quantities of these materials would not be stored at the construction site. Spills, upsets, equipment failure, or other construction-related accidents could result in a release of fuel or other hazardous substances into the environment. The following mitigation measure would reduce the potential for adverse impacts from these incidents to a less than significant level.

MITIGATION MEASURE HAZMAT-1
<ul style="list-style-type: none"> ▪ All equipment would be inspected for leaks before arrival at the project site, again immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from the project site. ▪ Equipment would be cleaned and repaired (other than emergency repairs) outside the project area at the Park's maintenance yard. All contaminated water, sludge, spill residue, or other hazardous compounds would be disposed of outside park boundaries, at a lawfully permitted or authorized destination. • The contractor(s) or DPR personnel will prepare an emergency spill response plan prior to the start of construction and maintain a spill kit on-site throughout the life of the project. This plan would include a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form on or immediately adjacent to Calaveras Big Trees SP during construction; the contractor or project manager would immediately notify the appropriate DPR staff (e.g., State Representative or supervisor). The Emergency spill response plan will be immediately implemented with DPR supervision and approval.

- c) The project is not located within one-quarter mile of any school and no schools are proposed for this area. No impact.
- d) Calaveras Big Trees SP is not included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5. Thus, no such impact occurs from this project.
- e-f) The project site is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private air strip. Thus, no impact resulting from this project.
- g) All construction activities associated with the project would occur within the boundaries of Calaveras Big Trees State Park and work would not restrict access to or block any public road. Access to the project site would be limited during construction of the ford, but the campground road at the project site is not part of any emergency response or evacuation plan and an alternative access route has been designated for campground access. Emergency response requirements would be no greater using access from the other direction of the campground road. No significant impact.
- h) The project site is located in a meadow area, containing generally moist soils and a high percentage of wetland vegetation that does not present a high fire risk. Although most of Calaveras Big Trees SP and the surrounding area is dominated by montane forest and other vegetation that becomes highly flammable during the dry season (June-October), the construction equipment associated with this project would not be operating within this potential fire hazard. However, as an additional safety measure, power equipment (such as chain saws and generators) will have functioning spark arrestors. The project would not add any new uses that could create additional fire risks. Therefore, the impact of this project would be less than significant.

VIII. HYDROLOGY AND WATER QUALITY.

ENVIRONMENTAL SETTING

Major water systems at Calaveras Big Trees State Park are found in deeply entrenched, steep walled canyons that have a northeast-southwest trend. Minor systems, usually small, spring-fed streams, feed into the larger systems. Smaller, ephemeral (seasonal) streams flow down canyon slopes, while larger, perennial minor systems follow the same northeast-southwest trend previously noted. The unit has been placed into State Hydrologic Area B (San Joaquin River), specifically into Hydrologic Units B05C (South Fork Calaveras Hydrologic Area) and B09D (North Fork Stanislaus Hydrologic Area). Most of Calaveras Big Trees State Park is either part of the North Fork Stanislaus River drainage or that of its tributaries. Only two portions of the unit totaling 931 acres are part of drainages that flow elsewhere: San Antonio and Big Tree Creeks are tributaries of the Calaveras River.

Water quality in Calaveras Big Trees State Park is generally very clear and free of any pollutants in streams. The Central Valley Regional Water Quality Control Board regulates water quality in the Park. Ground water in the park is free of pollutants and considered very high quality because very few potential pollution sources exist. The groundwater table fluctuates annually, depending on rainfall and seasonal temperatures and varies throughout the area because of the influences of geology and topography.

Big Tree Creek, the site of the proposed project, is a seasonal stream until a series of springs emerge as the stream approaches State Highway 4 (immediately downstream of the project site). The springs provide permanent flow that persists downstream to the mouth of the creek at White Pines Lake. (White Pines Lake is a facility of the Calaveras County Water District that impounds San Antonio Creek). The North Grove area, including the North Grove Meadow, probably serves to recharge the aquifer that supplies Big Tree Creek; storage in these meadow soils may have a relationship to the production of the Big Tree Creek springs. Other than White Pines Lake about 1.5 miles downstream, there are no public water sources in the area impacted by the proposed project.

California State Parks has conducted other watershed rehabilitation projects in the Big Tree Creek watershed. Ongoing monitoring of past projects has revealed increased streambank stability, reduction in soil erosion, reduction in sediment sources, rapid natural revegetation, and increased aquatic habitat in Big Tree Creek in areas where thalweg restoration, sediment control, and road-sand removal activities have occurred.

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

DISCUSSION

- a) The project would be in compliance with all applicable water quality standards and waste discharge requirements (see Mitigation Measure Hazmat 1 regarding potential impacts from accidents, spills, or upset). The project would result in a net decrease in non-point source pollution. Additionally, all work would be accomplished during late summer and early fall, when the intermittent stream is dry, further lessening any chance of impact to surface water quality. The project scope does not include waste discharge work of any kind. Project location, design, and timing, in combination with the hazmat mitigation measures indicated above for accidental hazardous material exposure, would result in a less than significant impact to water quality and waste discharge.
- b) The project would not deplete groundwater supplies or interfere substantially with groundwater recharge. Groundwater quantity may be influenced by changes in surface drainage patterns and/or changes in porosity of earth materials at fill sites. Increasing surface flows in certain locations through reconnection of channels would alter existing groundwater conditions at both the reconnected and the abandoned channel site. Newly restored fills would experience a period of interactive adjustment to groundwater flows as the fills consolidate over time; however, in the long term, both the fill and groundwater flows would evolve toward their pre-disturbance patterns. Fills will be compacted during their placement to speed this process of consolidation. Changes in the direction or rate of groundwater flow may be influenced by changes in surface drainage patterns. Substantial short-term reductions in the amount of groundwater or surface water available for public water supplies would not occur as a result of the project; the amount of local groundwater would eventually increase, due to the anticipated higher water table in the North Grove Meadow. The impact of the project on groundwater supplies would be less than significant.
- c) Existing (altered) drainage patterns would be restored to pre-disturbance patterns. In the case of the historically-significant pump house, where the pre-disturbance pattern cannot be restored, the rehabilitation work will require the realignment of a 30-foot stream segment. Reconnecting diverted streams to their natural flow pattern would increase discharge in abandoned channels. However, significant geomorphic adjustments are not likely to occur due to the increased discharge because the reoccupied channels had originally formed under the post-treatment flow regime. Effects of reestablishing pre-disturbance drainage patterns and discharge have been evaluated to ensure increased discharge would not adversely impact fluvial geomorphic functioning at the site or downstream. The Best Management Practices described in Mitigations Measures Geo 1 and Geo 2 would reduce the potential for adverse impacts to a less than significant level; on-site erosion and siltation would be short term and less than the existing conditions that are being remedied.
- d) The project is designed to reduce the severity of peak runoff events, and combined with completion of the work during the dry season, would reduce the possibility of project-related flooding on- or off-site. The work would significantly restore the creek's access to its natural and historic floodplain, reducing erosive velocities and allowing stormwater to percolate into the soil. The work would eliminate unnatural concentrations of flow in the

entrenched channel, thereby reducing peak runoff events and streambank erosion. Runoff would be more evenly distributed across the landscape and restore natural flow paths. Flood stages will be reduced although minor flood frequency may increase; existing campground features are currently subject to occasional minor inundation, and the impact of minor modification of the flood regime is not expected to be significant on- or off-site.

- e) The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. No stormwater systems exist downslope from the project. No adverse impact.
- f) The project, in and of itself, reduces soil erosion and sediment inputs to streams, thereby improving water quality once construction is complete. However, there is the potential for short-term sedimentation and the accidental spillage of toxic substances (e.g., diesel fuel and hydraulic oil) during the construction process. The Best Management Practices described in Mitigation Measures HAZMAT-1, GEO-1, and GEO-2 would reduce the potential for adverse impacts to a less than significant level.
- g,h) The project does not involve housing or construction of any structure designed for human occupation. No impact.
- i) The project would not 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. No adverse impact.
- j) Calaveras Big Trees SP is not in an area subject to any risk of inundation by seiche, tsunami, or mudflow. No impact.

IX. LAND USE AND PLANNING.

ENVIRONMENTAL SETTING

The project is located within the boundaries of Calaveras Big Trees SP and will operate under the planning guidelines of the 1989 CBTSP General Plan. The Plan presents the goals and guidelines that apply park-wide for resource management and facility planning for public access, recreation, interpretation, resource protection, and park administration in a setting where many resources are rare and sensitive. The highest priority Land Use Objective stated in the plan is to “Restore the North Grove Meadow to a natural State.” The Plan also states the following Natural Resource Policy: “The Department shall develop and implement a program designed to restore the moisture level in the meadow near the North Grove, and to replace alien species with native grasses and forbs. The objective shall be to restore the meadow as nearly as possible to its original, natural condition.”

Calaveras Big Trees SP, which contains the entire upper Big Tree Creek watershed where the project is located, is classified as a State Park in the Public Resources Code, Section 5019.53. The purpose of land under this classification is to preserve outstanding natural, scenic, and cultural values, and indigenous aquatic and terrestrial fauna and flora. DPR’s Resource Management Directives define the techniques to be used in restoration of natural resources. The area is zoned for recreation in Calaveras County; State Highway 4 east of Arnold, including the portion through the Park, is designated a State Scenic Highway.

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

DISCUSSION

- a) The project would not physically divide an established community because no community exists within or adjacent to the project boundary. The nearest communities are approximately three miles away by road: the towns of Arnold and Camp Connell including the rural subdivisions known as Blue Lake Springs and Big Trees Village. No impact.
- b) This project was identified as a high priority of, and is consistent with, the Calaveras Big Trees SP General Plan. It will not conflict with any other regional or other plan. No impact.

- c) The project would not conflict with any applicable habitat conservation plan or natural community conservation plan because no such plans exist with jurisdiction over the Big Tree Creek watershed or Calaveras Big Trees SP. No impact.

X. MINERAL RESOURCES.

ENVIRONMENTAL SETTING

No significant mineral resources have been identified within the boundaries of Calaveras Big Trees SP. Mineral resource extraction is not permitted under the Resource Management Directives of the Department of Parks and Recreation.

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

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 park. No impact.
- b) The project would not result in the loss of availability of a locally important mineral resource recovery site because none exist within the park. No impact.

XI. NOISE.

ENVIRONMENTAL SETTING

Calaveras Big Trees SP is located in forested, moderately-rugged terrain in Central California. The west side of the park is impacted by noise from State Highway 4, which has vehicle (including truck) traffic 24 hours a day. The park is bisected by the 9.5-mile W.W.Smith Parkway, which is a popular drive among Park visitors and provides access for fire-fighting equipment to the remote Skull Creek CDF Station. Other sources of noise include helicopter logging on property owned by Sierra Pacific Industries to the north, east, and south; recreational vehicle (RV) and car traffic in the campgrounds; and other very occasional air traffic, including small private planes and CDF firefighting aircraft.

Existing noise affecting the project area is primarily due to its close proximity to a portion of State Highway 4, and the vehicles of campground users.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) Construction noise levels at and near the project area would fluctuate, depending on the type and number of construction equipment and tools operating at any given time. There are no known noise standards applicable to this area. However, depending on the specific construction activities being performed, short-term increases in ambient noise levels could result in speech interference near the project site and disrupt the ambience of the campground. Implementation of the following Mitigation Measure NOISE-1 will reduce the any potential adverse impacts to a less than significant level.

MITIGATION MEASURES NOISE-1
<ul style="list-style-type: none">• Construction activities would be limited to the hours between 8 a.m. and 5 p.m.• Internal combustion engines used for any purpose at the job site would be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction would utilize the best available noise control techniques (e.g., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

- b) The project would not generate or expose people to excessive groundborne vibrations or groundborne noise levels because only one relatively-small piece of heavy equipment would be operating at any one time. The sizes of the machines and equipment used do not generate excessive vibrations. No impact.
- c) Project-related noise would only occur during actual construction. Once construction is completed, all noise-generating equipment will be removed from the site. The project would not create any source that would contribute to a substantial permanent increase in ambient noise levels in the vicinity of the project. No impact.
- d) See Discussion XI(a) above. No more than one piece of heavy equipment would be operating at any one time. Campsites immediately adjacent to the project would be temporarily closed to the public during construction. Because the project site is adjacent to a portion of the campground that is also adjacent to State Highway 4, motor vehicle noise is common. Implementation of the mitigations indicated in Mitigation Measure NOISE-1 would reduce any potential impacts to a less than significant level.
- e,f) The project is not within an airport land use plan and is not within two miles of an airport; therefore, the project would have no impact.

XII. POPULATION AND HOUSING

ENVIRONMENTAL SETTING

The project area including the upper Big Tree Creek watershed, located in Calaveras Big Trees SP, contains one mobile residential unit that is occupied by a State Park employee. No other housing exists within the upper watershed, and no housing developments are planned, as the entire upper watershed is owned by State Parks. Therefore, no future housing developments would occur. The communities surrounding the park are expansive rural subdivisions and small towns with a few small businesses, motels, and service stations about three to four miles away along the State Highway 4 corridor. Tourism does result in temporary seasonal fluctuations in the population of this area, but the project would not contribute to these variations.

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

DISCUSSION

a,b,c) The project would not induce substantial population growth because the project does not involve housing or new businesses. The project involves restoring a creek and a meadow within a State Park campground and is not anticipated to discernibly affect public visitation or campground use, much less have any direct or indirect effect on population growth. The project would not require hiring additional employees, so no replacement housing would be required, because all workers already maintain housing in the region or provide their own temporary facilities. No people would be displaced because the project only involves temporary closure of a campground road that has no access or use by residences. Alternative access to the rest of the campground is available similarly unconstrained; the closure of two campsites in the work area will not affect campers because the campground typically does not fill during the months scheduled for project construction. All work would take place within the confines of the Park boundaries, with no additions or changes to the existing local infrastructure. Therefore, the project would have no impact on population growth or housing requirements in the area.

XIII. PUBLIC SERVICES.

ENVIRONMENTAL SETTING

The project area including the upper Big Tree Creek watershed is a gently-sloping to nearly flat area popular with tourists. It is completely within the boundaries of Calaveras Big Trees SP. Trails and fire roads provide generally easy access to these locations for recreation, project work, or in an emergency. Other areas within the Park are accessed by a network of service roads for use by fire suppression crews, Ranger patrol, and utility access to a few power lines traversing the park. These roads are periodically maintained to provide improved drainage and a hardened base, but are inaccessible in winter except on foot or snowmobile.

Calaveras Big Trees SP maintains daily Ranger police protection year around with primary patrol in campgrounds and public use areas. Mutual aid coordination occurs with other local law enforcement agencies that have jurisdiction and maintain regular presence in the area (mainly the Calaveras County Sheriff and California Highway Patrol).

CDF provides fire protection for the area and maintains a fire station in Arnold, approximately four miles from the project location. There is also a seasonal CDF station, located amidst vast commercial timberlands, about eight miles south of the Park at Skull Creek. The CDF Air Attack base is located in Columbia, approximately 20 miles from CBTSP. The Park is also within the response area of the Ebbetts Pass Fire District, which has a permanently-staffed station in Arnold.

No schools exist within the project area; and the nearest school is about three miles away from the work sites.

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

DISCUSSION

- a) As noted in the Environmental Setting above, Calaveras Big Trees SP maintains daily Ranger police protection year-round, with primary patrols in campgrounds and public use areas. State Park Rangers have full law enforcement authority and only require assistance from local Sheriff as backup for unusual situations. No additional demands on Rangers or local law enforcement staff are expected as a result of this project.

No schools exist within or near the project area. No changes would occur that would affect existing schools or require additional schools or school personnel. No impact.

The project would improve CBTSP by protecting the natural resources of the Park. The project would improve the aesthetic quality of a high public use area, improve visitor safety, reduce sediment sources, and encourage natural revegetation. Since no public use areas would be permanently closed nor access significantly limited as a result of this project, no other parks in the area should show a related increase in use. Requirements for maintenance of the restored stream channel are expected to be less than the effort currently needed to temporarily repair or prevent erosion. Seasonal removal and replacement of the removable grates spanning the ford will take Park staff or labor crews only a few minutes each season, easily integratable into routine seasonal campground preparation activities. No adverse impact would occur at CBTSP or any other public facilities as a result of this project.

The project would have no impact on fire protection. The project, as a whole, would have a less than significant effect on any public services.

XIV. RECREATION.

ENVIRONMENTAL SETTING

Calaveras Big Trees SP is one of the most visited units of the California State Park System, usually logging over 200,000 visitor-days each year. Visitor activities include hiking, camping, fishing, swimming, birding, and other forms of nature study. Also, cross-country skiing and snowshoeing are pursued in the winter.

Facilities available to the public include three campgrounds (129 family campsites and a group site), five backcountry campsites, four picnic areas (150 picnic sites), four main trails (over 15 miles total), a campfire center, numerous outdoor interpretive displays, and a visitor center/museum. These facilities are most heavily used during the vacation season from Memorial Day through Labor Day, but use continues throughout the entire year. Although most of the Park is closed to vehicles during the winter months due to snow, the heavy use access area around the North Grove is kept open, and winter camping is allowed in 12 sites.

The project site is located within the 74-site North Grove Campground. The campground surrounds the North Grove Meadows and several sites are along Big Tree Creek. The campground usually only fills to capacity on Friday and Saturday nights (plus an additional night on holiday weekends) during the aforementioned vacation season. An overflow area for self-contained motor homes and trailers is sometimes provided in the main parking lot or group picnic area.

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

DISCUSSION

- a) The project may slightly increase day use of the rehabilitated areas of the meadow and creek, once construction is completed, primarily because of its value for interpretive programs. However, the overall increase would be minimal and would not accelerate the deterioration of any facility. No impact to other neighboring areas or parks is expected.
- b) The project does not include the construction of recreational facilities or the expansion of any facility; therefore, no impact would occur.

XV. TRANSPORTATION/TRAFFIC.

ENVIRONMENTAL SETTING

Traffic circulation at Calaveras Big Trees SP is generally confined to two main corridors traversing the park. State Highway 4 is the main regional traffic corridor, with traffic volumes of a few-hundred vehicles per hour throughout much of the summer. The location of the Park's controlled public vehicle entrance (where visitors must stop to pay Park fees) is a short distance off the Highway, where the W.W. Smith Parkway begins. The Parkway is the route providing the public vehicle access to remote developed areas of the Park. All park backcountry roads are currently closed to visitors' vehicles, but serve as patrol roads, emergency access, and limited multi-purpose trails.

Access to the project is by Highway 4, then through the Park entrance station and into the nearby North Grove Campground. The North Grove Campground road is a relatively narrow, winding road that is used by campers and few other visitors. The average traffic volume in the campground after the summer months is only a few vehicles per hour.

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

DISCUSSION

- a) The maximum number of project-related vehicle roundtrips each day is negligible compared to existing campground traffic, and no new staff or crews will be added for this project. The project would require temporary closure of the campground road at the project site, but signage will direct campers along a short detour to areas beyond the project. The project will not result in significant traffic stops or delays. No impact to State Highway 4 traffic will occur. This would result in no significant impact on existing traffic or the capacity of the existing highway and road system.
- b) The project would not cause traffic levels to exceed, individually or cumulatively, the level of service standards for designated roads or highways because no traffic increase is anticipated. No impact.
- c) The project sites are not located within an airport land use plan, within two miles of a public airport, in the vicinity of a private air strip, and do not serve as a normal reporting point for air traffic in the area. Nothing in the proposed project would in any way affect or change existing air traffic patterns; therefore, no impact would occur as a result of this project.
- d) The project does not contain a design feature or incompatible uses that would substantially increase traffic hazards. The ford will result in a new dip in the campground road, but since the campground speed limit is 15 mph, no traffic hazard will exist. The one-foot descent over a 30-foot distance is within accepted specifications for standard vehicle and truck traffic. The grates spanning the ford are of a standard design engineered to safely allow passage by bicycles and pedestrians. These impacts to campground traffic are less than significant.
- e) The project would not result in inadequate emergency access because the alternative route to areas beyond the temporary closure requires only a few hundred yards of additional driving. This impact to emergency access is less than significant; the work would not disrupt normal emergency access to any other portion of the Park.
- f) The project would not result in inadequate parking capacity because the North Grove Campground does not fill to capacity during the months scheduled for project construction. Park staff and construction workers will park in service areas or in closed areas at the work site. Adequate parking exists in the nearby campground and day use areas that will not be altered or used by construction crews. The project is also not expected to have a measurable effect on total visitation to the park. No impact.
- g) The project would not conflict with adopted policies, plans, or programs supporting alternative transportation because it does not reduce or increase transportation uses. No impact.

XVI. UTILITIES AND SERVICE SYSTEMS.

ENVIRONMENTAL SETTING

Calaveras Big Trees SP is serviced by several public utilities but provides its own wastewater disposal system. Surface water is supplied to the project area by precipitation, runoff during storm events, and snowmelt; potable water is supplied by the Calaveras County Water District. Electricity for the Park is provided by Pacific Gas and Electric Company, propane gas is delivered to various-sized domestic tanks by any one of several local mobile distribution companies, and commercial telecommunications are provided by SBC. A local waste management company provides solid waste disposal services.

One utility pole conveying SBC telecommunication lines is located adjacent to the project site, and a guy-wire from that pole is anchored within the project site. Relocation of that guy-wire may be necessary and will be coordinated with SBC.

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

DISCUSSION

- a-b) No wastewater would be produced by this project. No impact.
- c) The project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. No impact.
- d) No outside source of water is required during or after construction; therefore, no impact.
- e-g) No impact; no wastewater or solid waste would be generated by this project.

CHAPTER 4

MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION

- a) The proposed project is expected to improve the quality of the environment by restoring high-value functioning wetland, substantially increasing the habitat for several wildlife and wetland plant species. Some mortality of upland plant species, including some meadowside trees, may be succeeded by slight expansion of the meadow habitat and is considered a less than significant environmental impact.

- b) The proposed project has been evaluated for potential significant impacts to cultural resources. The project has been modified to avoid and mitigate for potentially significant impacts to significant cultural resources that exist at and near the project site. Past and ongoing collaboration with DPR’s cultural resource professionals, project design, and the full implementation of the proposed mitigations, will reduce to a less-than-significant level any impact on examples of California history or prehistory.

- c) Calaveras Big Trees SP is the site of other maintenance programs and rehabilitation projects, as well as routine, ongoing maintenance planned for this Park unit in the foreseeable future. However, full implementation of all mitigation measures incorporated into this project would reduce project and cumulative impacts to a less than significant level

and impacts from environmental issues addressed in this evaluation do not overlap the additional planned projects in such a way as to result in cumulative adverse impacts that are greater than the sum of the parts.

- d) Project-related environmental effects have been determined to pose a less than significant impact on humans. However, possible impacts from construction accidents (Hazards and Hazardous Materials) and Noise, though temporary in nature, have the potential to result in adverse effects on humans. These adverse impacts are expected to be less than significant and would be reduced further with the full implementation of all mitigation measures incorporated into this project.

CHAPTER 5

SUMMARY OF MITIGATION MEASURES

The following mitigation measures would be implemented by DPR as part of the Big Tree Creek Ford: Alignment and Elevation Restoration Project.

AIR QUALITY

MITIGATION MEASURE AIR-1

- All trucks hauling fill dirt or soil, if dry, would be covered or required to maintain at least two feet of freeboard or travel at less than 35 miles per hour.
- All equipment engines would be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.

BIOLOGICAL RESOURCES

MITIGATION MEASURE BIO-1

- Prior to the start of construction, a survey of the proposed project area for amphibians will be conducted by an DPR-approved biologist/resource ecologist. Any amphibians found in the project area or during the construction period will be relocated to the permanent section of Big Tree Creek downstream from the project site.

CULTURAL RESOURCES

MITIGATION MEASURES CULT-1

- Approximately 30 feet of the existing historic channel will be widened to prevent restored normal streamflow from impacting the historic pumphouse.
- The existing culvert under North Grove Campground Road will be abandoned as the primary channel, with continuing maintenance to preserve its historic appearance, usability for seasonal runoff and seepage, and stability of adjoining rock supports.
- The CCC-era camp furniture (stove and table) will be relocated from Campsite #32 to a nearby campsite, where similar CCC-era furniture was previously located. This will restore the historic appearance and use of that campsite and maintain the overall historic design and setting of the campground facilities.
- All ground-disturbing work will be monitored by a DPR-qualified archaeologist. If potentially significant resources are unearthed (including, but not limited to deposits of historic trash, artifacts from Native American or historic eras), work in the immediate area of the find will be halted or diverted until identification and proper treatment are determined and implemented.

MITIGATION MEASURE CULT-2

- A DPR-qualified archaeologist will monitor all ground-disturbing activities. If potentially significant resources are unearthed (including, but not limited to dark soil containing bone, flaked stone, groundstone, or other midden materials), work within 100 feet of that location will be halted or diverted until identification and proper treatment are determined and implemented.

MITIGATION MEASURE CULT-3

- In the event that human remains are discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate DPR personnel. Any human remains and/or funerary objects would be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized State representative) would 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 would be responsible for notifying the appropriate Native American authorities.

If the coroner or tribal representative determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe would be consulted to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects would be cleaned, photographed, analyzed, or removed from the site prior to determination.

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

GEOLOGY AND SOILS

MITIGATION MEASURES GEO-1

- The filled ditch and elevated thalweg will be compacted in layers to prevent loose material from sloughing off, then smoothed and raked to provide uniform drainage and prevent concentration of flow. Bare ground will be mulched and thatched to minimize surface erosion, also using vegetation plugs removed during the work whenever possible.

MITIGATION MEASURES GEO-2

- Work will be conducted during the dry season when stream flow is non-existent. Other Best Management Practices (BMPs) prescribed by the California Department of Fish and Game (1601 Agreement) and the Regional Water Quality Control Board (CWA 401 Certification or Waiver) will be implemented, where appropriate.

HAZARDS AND HAZARDOUS MATERIALS

MITIGATION MEASURES HAZMAT-1

- All equipment would be inspected for leaks before arrival at the project site, again immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from the project site.
- Equipment would be cleaned and repaired (other than emergency repairs) outside the project area at the Park's maintenance yard. All contaminated water, sludge, spill residue, or other hazardous compounds would be disposed of outside park boundaries, at a lawfully permitted or authorized destination.
- The contractor(s) or DPR personnel will prepare an emergency spill response plan prior to the start of construction and maintain a spill kit on-site throughout the life of the project. This plan would include a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form on or immediately adjacent to Calaveras Big Trees SP during construction; the contractor or project manager would immediately notify the appropriate DPR staff (e.g., State Representative or supervisor). The Emergency spill response plan will be immediately implemented with DPR supervision and approval.

NOISE

MITIGATION MEASURES NOISE-1

- Construction activities would be limited to the hours between 8 a.m. and 5 p.m.
- Internal combustion engines used for any purpose at the job site would be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction would utilize the best available noise control techniques (e.g., engine enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

BIG TREE CREEK FORD ALIGNMENT AND ELEVATION RESTORATION PROJECT
Calaveras Big Trees State Park
Mitigation Monitoring and Reporting Plan
August 2003

Mitigation Measure	Timing	Responsible for Implementing Mitigations	Responsible for Ensuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
MITIGATION MEASURE AIR-1	During Construction	DPR Resource Staff, Contractor(s)	DPR Resource Ecologist	End of Construction		
MITIGATION MEASURE BIO-1	July thru mid-September prior to the start of construction	DPR-qualified resource ecologist, or aide under supervision of DPR-qualified staff	DPR Resource Ecologist	Completion of surveys and written report of results to DFG		
MITIGATION MEASURES CULT-1	During Construction	DPR-qualified archaeologist	DPR Resource Ecologist	End of Construction		
MITIGATION MEASURES CULT-2	During Construction	DPR-qualified archaeologist	DPR Resource Ecologist	End of Construction		
MITIGATION MEASURES CULT-3	During Construction	DPR-qualified archaeologist	DPR-qualified archaeologist, DPR Resource Ecologist	End of Construction		
MITIGATION MEASURES GEO-1	During Construction	DPR Resource Staff, Contractor(s)	DPR Resource Ecologist	End of Construction		
MITIGATION MEASURES GEO-2	During Construction	DPR Resource Staff, Contractor(s)	DPR Resource Ecologist	Revegetation, season following end of construction		
MITIGATION MEASURE HAZMAT-1	Prior to and During Construction	DPR Resource Staff, Contractor(s)	DPR Resource Ecologist	End of Construction		
MITIGATION MEASURES NOISE-1	During Construction	DPR Resource Staff, Contractor(s)	DPR Resource Staff, Contractor(s)	End of Construction		

CHAPTER 6 REFERENCES

California Air Resources Board. (CARB). Website accessed May 1, 2003.
<http://www.arb.ca.gov/desig/desig.htm>

California Department of Parks and Recreation. May 1989. Calaveras Big Trees State Park General Plan.

California Department of Parks and Recreation (Rischbieter, D. and R. W. Harrison). July 1995. A Management Plan for Prescribed Burning at Calaveras Big Trees State Park, Calaveras and Tuolumne Counties, California.

California Department of Parks and Recreation. March 1996. Big Tree Creek Channel Restoration. Negative Declaration SCH#96032104.

University of California, Davis (Boyd, R. and R. Woodward). February 1988. An Assessment of the Condition of the North Grove Meadow, Calaveras Big Trees State Park.

Report Preparation

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APPENDIX A
MAPS

APPENDIX B
PROJECT DESIGN GRAPHICS

APPENDIX C
CNDDDB RECORD SEARCH

APPENDIX D
ACRONYMS

APPENDIX D
LIST OF ACRONYMS

ADA	Americans with Disabilities Act
APE	Area of Potential Effect
ACOE	Army Corps of Engineers
BMPs	Best Management Practices
CARB/ ARB	California Air Resources Board
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CMP	Corrugated Metal Pipe
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
DFG	California Department of Fish and Game
DPR	California Department of Parks and Recreation
EIR	Environmental Impact Report
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FMC	Folsom Municipal Code
FMMP	Farmland Mapping and Monitoring Program
GP	General Plan
Hazmat	Hazardous Material
HCP	Habitat Conservation Plan
Hydro	Hydrology
IS/MND	Initial Study/Mitigated Negative Declaration
LUDC	Land Use Development Code
NAHC	Native American Heritage Commission
NOx	Nitrogen Oxide
NRHP	National Register of Historic Places
PRC	Public Resources Code
PM10	Particulate matter with an aerodynamic diameter of 10 microns or less
ROG	reactive organic gases
RWQCD	Regional Water Quality Control District
SP	State Park
SHP	State Historic Park
SHPO	State Historic Preservation Office
SPPP	Stormwater Pollution Prevention Plan
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VRP	visibility-reducing particles