FINAL INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

MOUNTAIN ROAD M319 BRIDGE REPLACEMENT

January 11, 2011

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Final Initial Study/Mitigated Negative Declaration
Mountain Road 319 Bridge Replacement

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January 11, 2011

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SECTION ONE

INTRODUCTION

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SECTION ONE – INTRODUCTION

1.1 CEQA Requirements

This document is the Initial Study/Mitigated Negative Declaration on the potential environmental effects of the replacement of the Mountain Road Bridge M319 (also known as Grouse Valley Road) over the South Fork of the Kaweah River, located approximately six miles southeast of the Community of Three Rivers. Tulare County Resource Management Agency will act as the Lead Agency for this project pursuant to the *California Environmental Quality Act (CEQA)* and the *CEQA Guidelines.*

Section 15063 of the CEQA Guidelines requires the Lead Agency to prepare an Initial Study to determine whether a discretionary project will have a significant effect on the environment. The purposes of an Initial Study, as listed under Section 15063[c] of the CEQA Guidelines, include:

(1) Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR [Environmental Impact Report] or a Negative Declaration.

(2) Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.

(3) Assist in the preparation of an EIR, if one is required, by:

- *(A) Focusing the EIR on the effects determined to be significant,*
- *(B) Identifying the effects determined not to be significant,*
- *(C) Explaining the reasons for determining that potentially significant effects would not be significant, and*
- *(D) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.*

(4) Facilitate environmental assessment early in the design of a project;

(5) Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;

(6) Eliminate unnecessary EIRs;

(7) Determine whether a previously prepared EIR could be used with the project.

Regardless of the type of CEQA document that must be prepared, the basic purpose of the CEQA process as set forth in the CEQA Guidelines Section 15002(a) is to:

(1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.

(2) Identify ways that environmental damage can be avoided or significantly reduced.

(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

According to Section 15070(b), a Mitigated Negative Declaration is appropriate if it is determined that:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

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

The Initial Study contained in Section Three of this document has determined that with mitigation measures and features incorporated into the project design and operation, the environmental impacts are less than significant.

1.2 Intended Uses of the Mitigated Negative Declaration

This Mitigated Negative Declaration is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed project. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the District must balance any potential environmental effects against other public objectives, including economic and social goals.

The Tulare County Resource Management Agency (RMA), as the Lead Agency, has determined, based on the Initial Study, that the environmental review for the proposed application can be completed with a Mitigated Negative Declaration. This report, together with a Notice of Intent to Adopt a Negative Declaration, will be circulated and published for a period of 30 days for public and agency review. Responsible agencies that may have discretionary approval authority over the project and trustee agencies having jurisdiction over natural resources affected by the project will have the opportunity to review and provide comments during the review period. Other agencies and the public may also contribute comments.

The written and oral comments received during the public review period will be considered by the RMA prior to adopting the Mitigated Negative Declaration.

1.3 Document Organization and Contents

The Mitigated Negative Declaration is organized as follows:

Section I. Introduction presents an introduction to the entire report. This section identifies contact persons involved in the process, scope of environmental review and environmental procedures.

Section II. Project Description describes the proposed project and project design features.

Section III. Environmental Evaluation contains the environmental checklist and Initial Study form. The checklist form presents results of the environmental evaluation for the proposed project and those issue areas that would either have a potentially significant impact, a less than significant impact, or no impact.

Section IV. Mitigation Monitoring Plan

Section V. Persons and Documents Consulted

Section VI. List of Preparers

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SECTION TWO

PROJECT DESCRIPTION

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SECTION TWO – PROJECT DESCRIPTION

2.1 Introduction

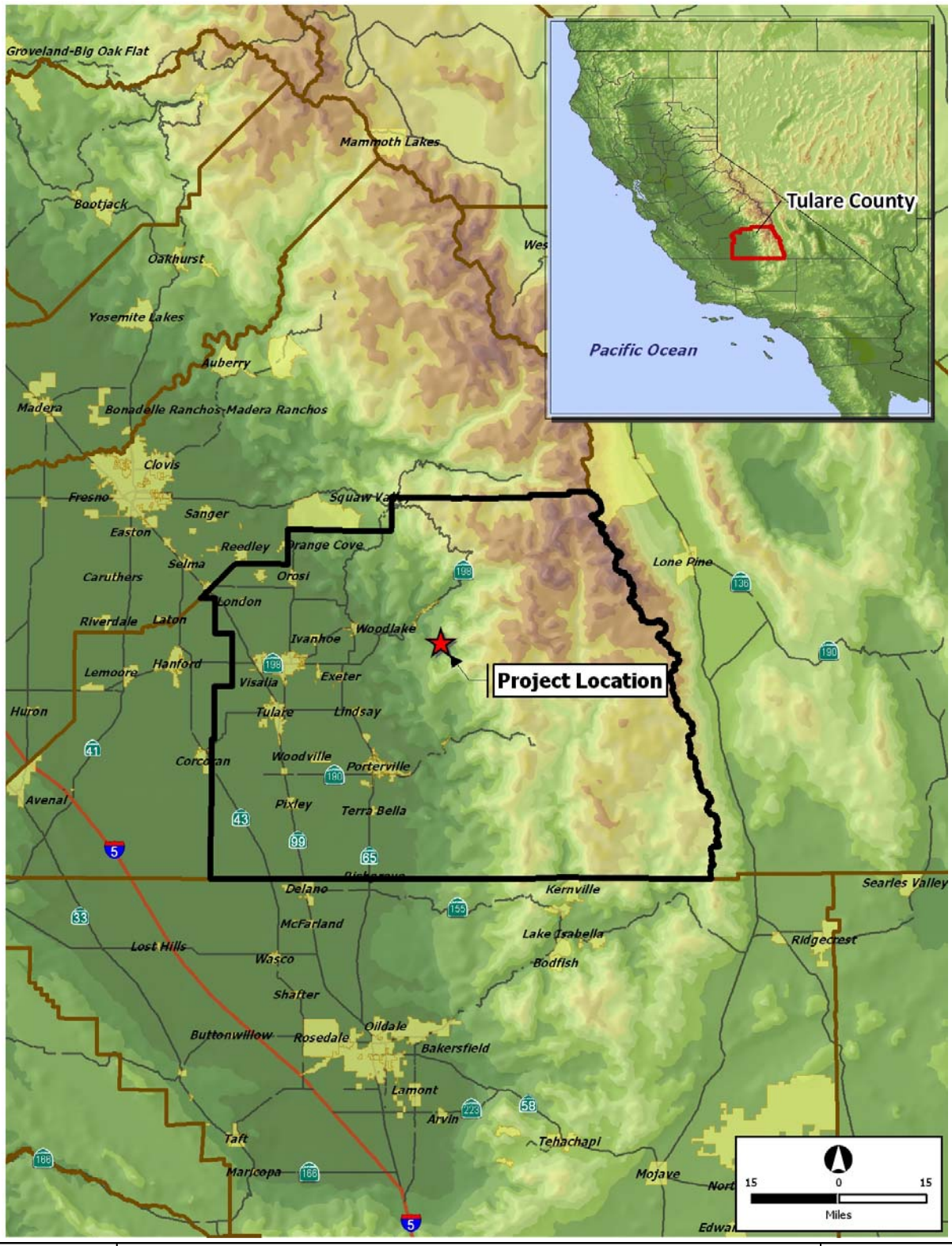
This document is an Initial Study and a Mitigated Negative Declaration of the potential environmental effects associated with the replacement of the M319 Bridge (Bridge No. 46C-0119) along Mountain Road M319, in rural Tulare County. Pursuant to Section 15063 of the CEQA Guidelines, this Initial Study has been conducted to determine whether the proposed project will have a significant effect on the environment. The Initial Study Checklist, in Section Three, found that while there are potentially significant environmental impacts that may result from the proposed project, they could be mitigated to a less than significant level by the mitigation measures proposed in this document.

2.2 Project Location and Background

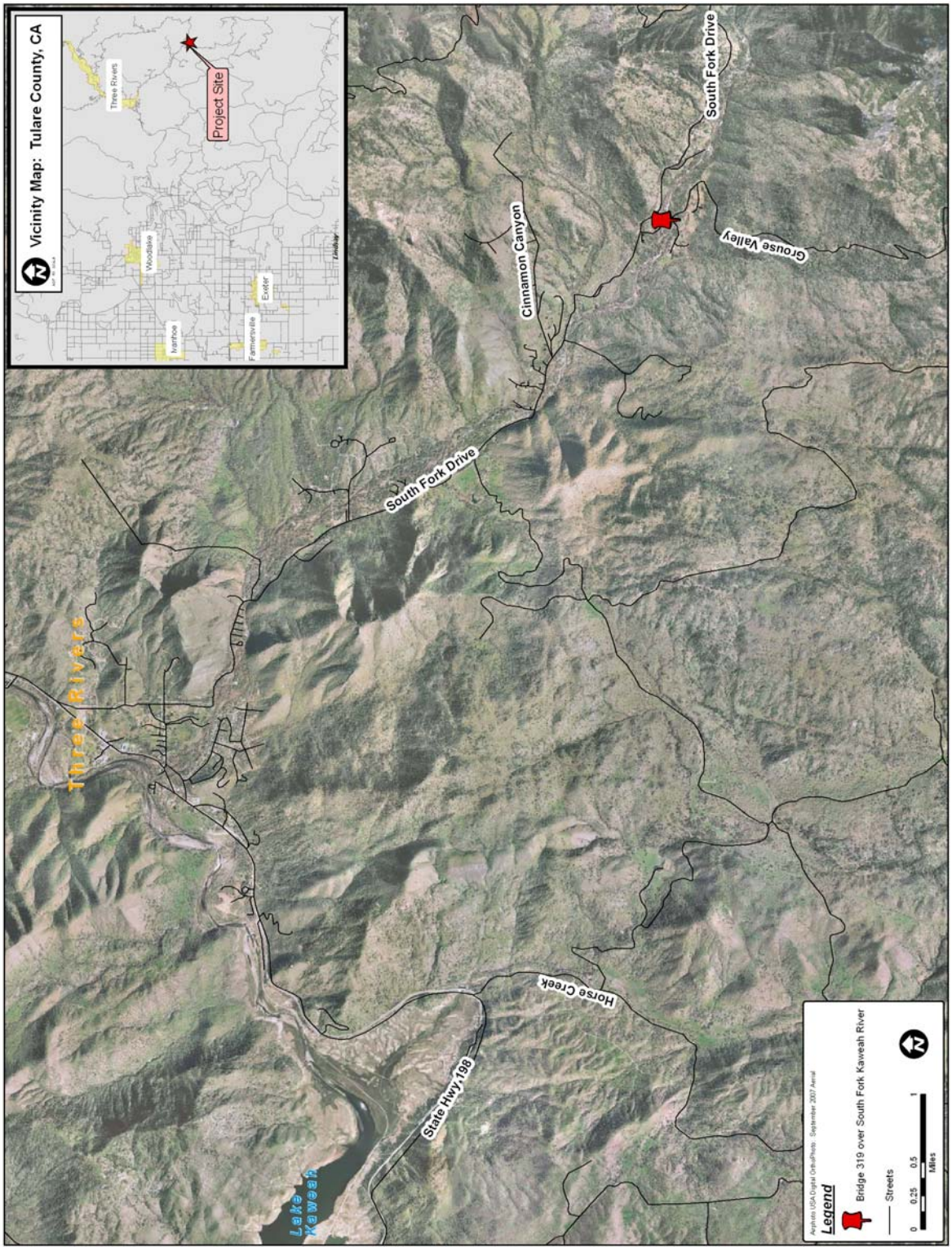
The bridge replacement project site is situated on Mountain Road M319 (also known as Grouse Valley Road), approximately 0.2 miles south of South Fork Drive and six miles southeast of State Route 198 near the community of Three Rivers. The M319 Bridge crosses the South Fork of the Kaweah River, and provides access to rural residences and rangeland to the southeast. Three Rivers is situated in eastern Tulare County, California (Figures 2-1, 2-2, and 2-3). The South Fork of the Kaweah River flows from the southeast to the northwest, where it flows northeast to the confluence with the North Fork of the Kaweah River, then southwest into Lake Kaweah, approximately seven miles from the M319 Bridge site.

The project is situated in the Sierra Nevada foothills southeast of the community of Three Rivers. The project is located in the Northern half of Section 16, Township 18S, Range 29E, and includes portions of six parcels: 114-060-008, 114-060-010, 114-060-031, 114-060-032 and 114-060-044 (Figure 2-4). Elevation on the site is approximately 1,870 feet above mean sea level (MSL). Land use in the area surrounding the project site is primarily agricultural ranching (livestock grazing), open space, and scattered rural residents.

"As-Built" drawings of the existing bridge are not available, and the date of bridge construction is unknown. The bridge was likely constructed in the 1950's, which would coincide with construction of other bridges in the area. Based on a field visit and a review of Caltrans Bridge Inspection Reports for this bridge, it is approximately 60' long by approximately 12' wide. The existing bridge superstructure consists of two open web, box steel trusses, approximately 4'-0" deep and spaced 7'-4" apart, which support precast concrete deck panels approximately 12'-0" long by 6'-9" wide by 2 5/8" thick each. A timber plank wearing surface exists along the wheel lines on top of the deck panels. The existing bridge rails and curbs are made of timber and are in fair to poor condition based on the Bridge Inspection Reports prepared by Caltrans. Some of the rail members are noted in the Caltrans Bridge Inspection Reports as exhibiting advanced signs of decay. The superstructure is supported on tall cantilever abutments, founded on spread footings bearing on rock. Flared wingwalls retain the approach roadway fills at each of the bridge abutments.



Quad Knopf	REGIONAL LOCATION	Figure 2 - 1



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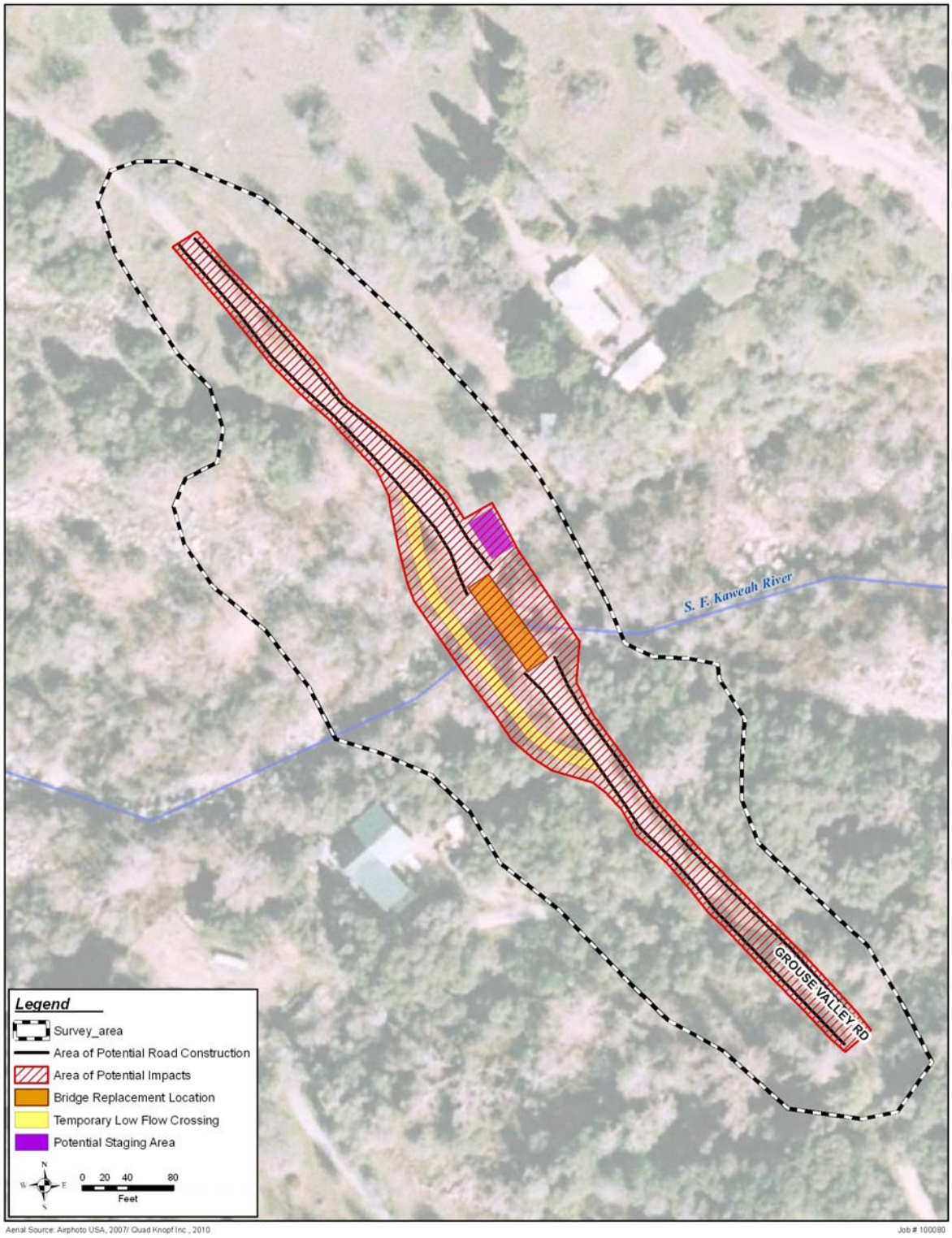

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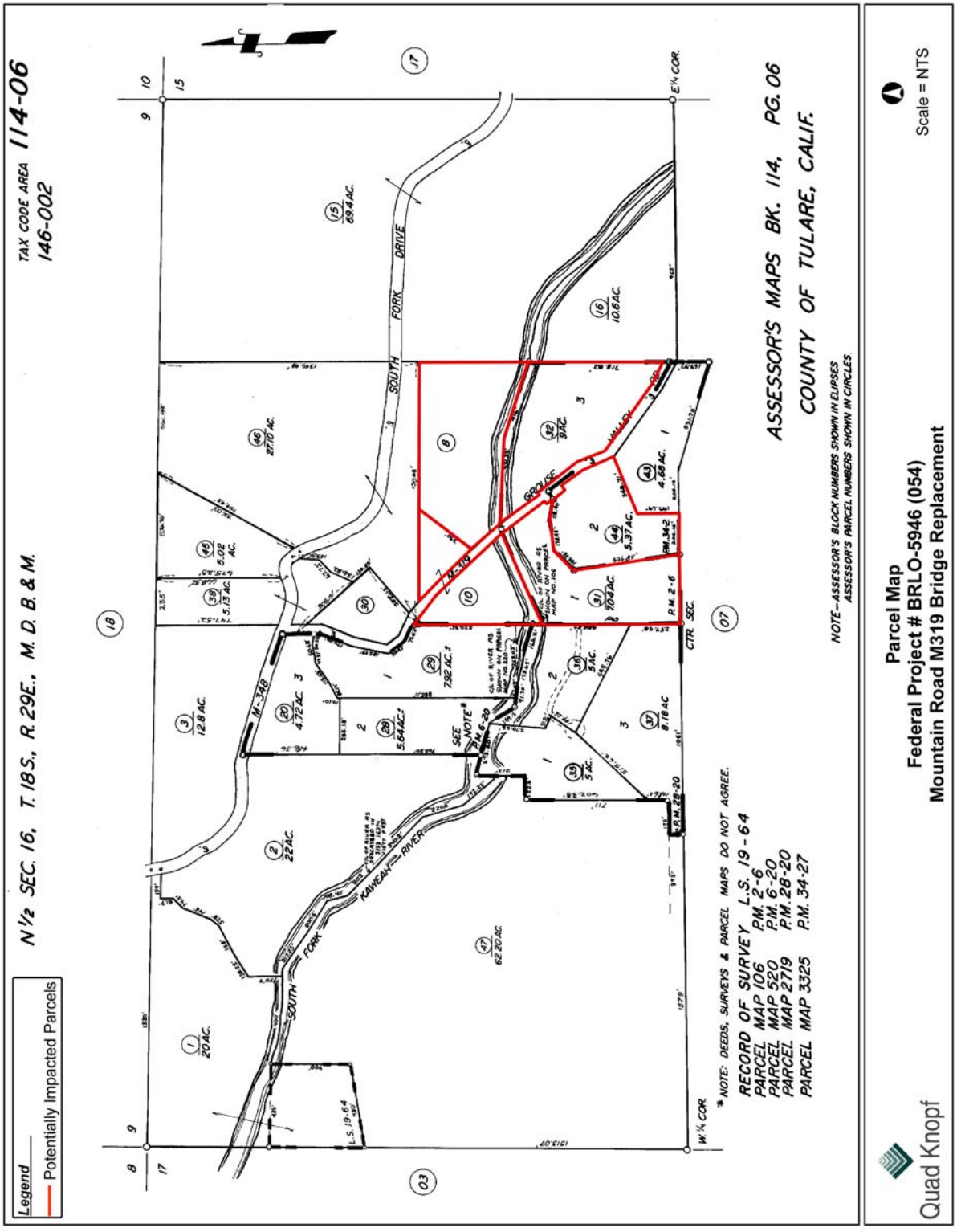


Quad Knopf

ASSESSORS PARCEL MAP

Figure
2 - 4

Based on a Structure Inventory and Appraisal Report, the existing bridge has a sufficiency rating of 37.4 and is considered structurally deficient because of its low load-bearing rating of 8.2 metric tons. The Structural Evaluation is rated as 2, which accounts for the low load rating and triggers the structural deficiency. The bridge was posted in 1975 for less than highway legal loads based on the load rating calculations prepared by Caltrans in November of 1974. The low load bearing and structural deficiency ratings of this bridge require its replacement according to the "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges".

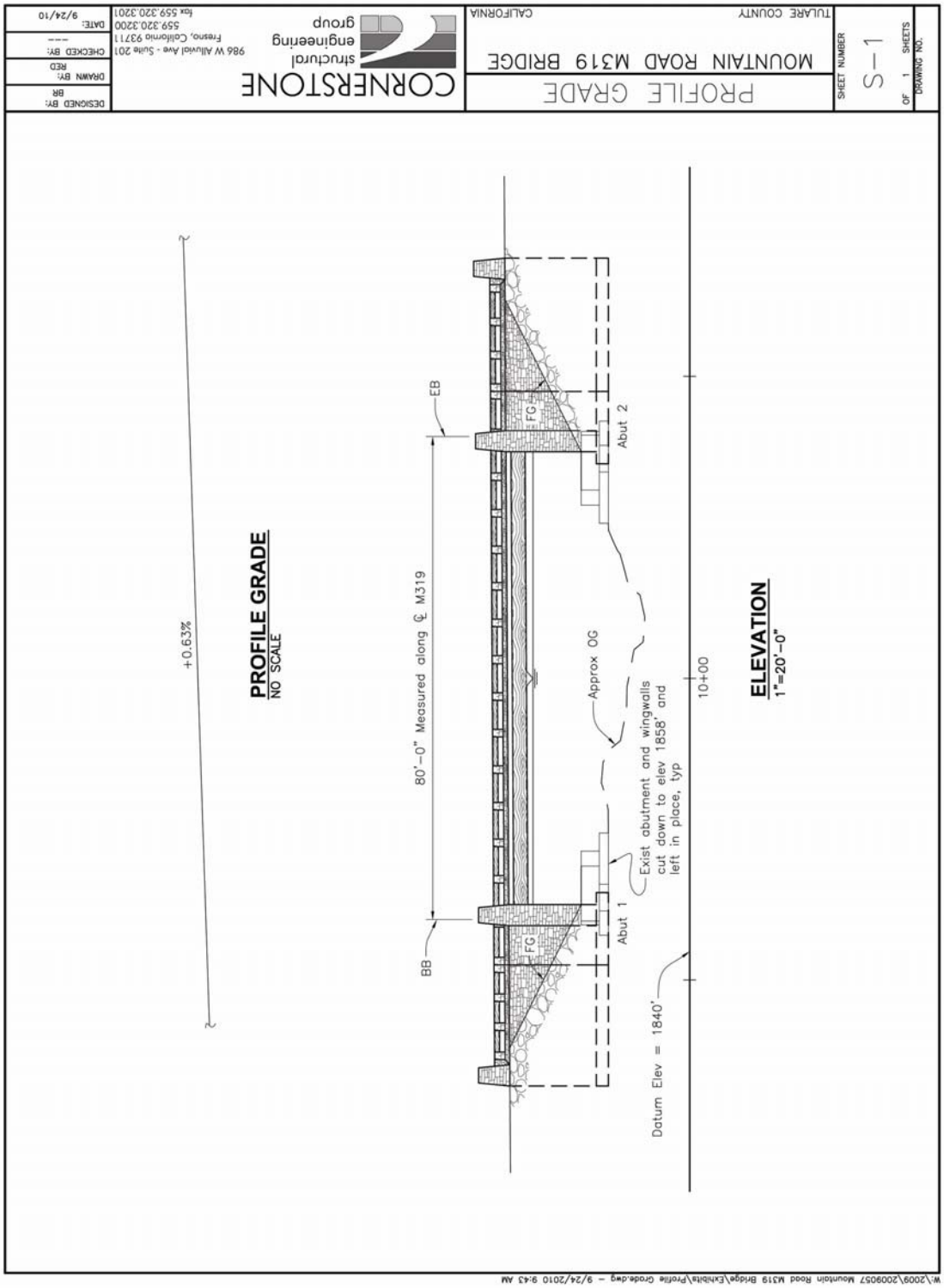
There are no utilities, including fiber optic lines within the project area or attached to the existing bridge. An overhead electrical line exists downstream of the bridge approximately 20 feet from the bridge that will not be impacted by construction or operation.

2.3 Project Description

The project includes construction of a replacement bridge along the existing alignment in a single stage. A temporary low crossing will be provided downstream of the bridge to maintain access to residents. The proposed bridge will be a single precast, prestressed box girder bridge approximately 80 feet long and 22 feet wide to accommodate a two-lane, 18-foot wide travel lane (see Figure 2-5 Bridge Profile). The new bridge will be approximately ten feet wider and 20 feet longer than the existing, single lane bridge. The superstructure will consist of six, 3-foot wide Caltrans standard precast box girders with a 5-inch thick concrete topping slab. The superstructure will span over the 50-year high water elevation. Caltrans Type 80 railing will be placed along each edge of deck and will extend along the wingwalls and retaining walls at each corner of the bridge.

The new approach will accommodate two traffic lanes. Including the approaches to the bridge from the northwest and southeast, the project area extends approximately 180 feet along Mountain Road 319. The existing piers and bridge abutments will be removed to a height of three feet, maintaining the footings that reduce scouring. The replacement abutments will be installed outside the existing abutments.

The Project will require that a temporary, alternative route be installed downstream of the existing bridge site that will allow access to land southeast of the bridge. This access will be installed within the temporary construction easement and will include a low-flow river crossing (See Figure 2-3). It will be constructed in a manner that will avoid impacts to the Kaweah River during both the construction and operations phases. A staging area may be located on the northeast side of the bridge to be utilized during construction for storage of equipment and materials. The staging area would be reclaimed to conditions equivalent to its existing condition (e.g., relatively flat and primarily without vegetation) after project construction has been completed.



Quad Knopf	BRIDGE PROFILE	Figure 2 - 5

Because the area surrounding the bridge is primarily comprised of dense riparian vegetation, the potential exists for impacts to occur to some riparian species within the easement and staging area. Original design plans include disturbance or loss of up to 0.22 acres of Great Valley Mixed Riparian Forest. Additionally, the portion of the Ordinary High Water elevation of the South Fork of the Kaweah River that was located within the footprint of the project site was approximately 0.16 acres. The design plans were modified after the biology report was reviewed to reduce the area of disturbance or loss to less than 0.1 acre within the Ordinary High Water elevation. Modifications included leaving existing footings in place to a height of three feet and construction of the temporary crossing above the high water elevation to avoid impacts to the River and banks. Potential impacts to Great Valley Mixed Riparian Forest were also reduced. Activity in the riverbed will be limited, when possible, to drier seasons of the year (typically June to October, or other periods when water flow is at its lowest levels). The habitat surrounding the project site consists of blue oak woodland and riparian woodland. Twenty oak trees with a diameter of five inches or greater are located within the project area, with nine located within the project footprint. Eighteen riparian species with a diameter of four inches or greater were located within the project area, with eight potentially within the easement to be used for the temporary low water crossing. The original design indicated that many of the oaks and riparian trees would require removal or trimming to accommodate the larger bridge area or the low water crossing. The revised design reduces the number of oak and riparian trees potentially impacted. Two residences are located within 200-300 feet of the project site: one on a hilltop above the vehicle/storage site, and one adjacent to the temporary access on the southwestern bank of the River. Please refer to Appendix A – Excerpt from Type Selection Report for more specific project information.

SECTION THREE

EVALUATION OF ENVIRONMENTAL IMPACTS

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SECTION THREE – EVALUATION OF ENVIRONMENTAL IMPACTS

Environmental Checklist and Discussion

1. **Project title**:
   Mountain Road M319 Bridge Replacement

2. **Lead agency name and address**:
   Tulare County Resource Management Agency
   5961 South Mooney Boulevard
   Visalia, CA 93277-93274

3. **Contact person and phone number**:
   Kuna Muthusamy
   Tulare County Resource Management Agency
   (559) 624-7000

4. **Project location**: Mountain Road M319 (also known as Grouse Valley Road), approximately six miles southeast of junction State Route 198 and South Fork Drive, which is southeast of the community of Three Rivers in Tulare County, California. The bridge site is located approximately 0.2 miles south of the junction of Mountain Road M319 and South Fork Drive.

5. **Project sponsor's name and address**:
   Tulare County Resource Management Agency
   5961 South Mooney Boulevard
   Visalia, CA 93277-93274

6. **General plan designation**: Not applicable. Tulare County Right-of-Way

7. **Zoning**: Not applicable. Tulare County Right-of-Way

8. **Description of project**: The project entails replacement of Bridge No. 46C0119, M319 over the South Fork of the Kaweah River. The bridge replacement would consist of removing the existing single-lane structure of approximately 60 feet in length and 12 feet in width, and replacing it on its existing alignment with a pre-cast, prestressed box girder bridge. The new structure would accommodate a two-lane bridge, approximately 80 feet long and 22 feet wide, providing access to residents to the southeast of the bridge. The superstructure will span over the 50-year, high water elevation with a minimum of two feet of freeboard, and the 100-year high water elevation with approximately one foot of freeboard. The bridge will include a railing along each side of the deck. The superstructure will be supported at each end by high cantilever-type abutments founded on spread footings. These footings and the retaining walls that will extend beyond the wingwalls at each corner of the bridge will sit atop bedrock. Existing abutments and flared wingwalls will be cut down to approximately three feet in height and

left in place to provide scour protection for the new abutments. The new footings and retaining wall will be constructed behind the existing abutments, and above the ordinary high water elevation, which will reduce the introduction of materials into the river during the construction phase and thereby minimize channel impacts and serve as further erosion protection. An aesthetic treatment of river rock is proposed, to be applied to the exposed faces of the abutments, wingwalls and retaining walls, and a timber treatment is proposed for the exposed side face of the exterior precast girders, with other aesthetic treatments proposed within budgetary constraints.

Because access must be maintained for the residents living on the east side of the South Fork of the Kaweah River during removal of the existing bridge and construction of its replacement, a temporary low water crossing will be constructed downstream of the existing bridge. Grading and fill for this temporary crossing will be outside the ordinary high water elevation to avoid impacts to the river.

9. **Surrounding land uses and setting**: The project area is a bridge and rural, paved roadway leading from South Kaweah Road to a number of scattered residences and range land in Tulare County. The project is located in the foothills of the Sierra Nevada Mountains at about 1,870 feet above MSL. Surrounding land is privately owned. Two residences are in close proximity to the proposed Project: one is on a hilltop approximately 300 feet upslope from the northeastern side of the bridge, and the other is downstream of the bridge, to the southwest of the road easement.

10. **Other public agencies whose approval or consultation is required** (e.g., permits, financing approval, participation agreements):

- State of California Native American Heritage Commission
- State of California Department of Fish and Game
- California State Clearinghouse
- U.S. Army Corps of Engineers
- State of California Department of Transportation (Caltrans)
- San Joaquin Valley Air Pollution Control District
- Central Valley Regional Water Quality Control Board

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☐ Aesthetics	☐ Agricultural and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology /Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation/ Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Prepared by: Travis Crawford — Date: 12/23/10

Senior Environmental Planner
Quad Knopf, Inc.

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

Response:

Scenic Resources and Visual Character (a, b, c): The project site is a rural roadway, with the bridge crossing the South Fork of the Kaweah River. Twenty oak trees over 5 inches in diameter are located in the Project area and within a 400-foot long approach of Mountain Road M319 on either side of the existing bridge. The bridge will be expanded from 12 to 22 feet in width and from 60 to 80 feet in length, which may require some of these trees to be removed while others may require trimming. Additionally, 18 trees of various riparian species are located within the project area, primarily within and adjacent to the easement that will serve as temporary access for the river crossing. This area, included as Great Valley Mixed Riparian Forest, will require that some trees, as well as existent wild grapes, spice bush, blackberry, and other plants be removed or trimmed during construction. No other known aesthetic resources exist on the site, and it is not within any State, City or County-identified scenic vista or scenic highway corridor. The bridge replacement project will not impact trees or other scenic resources upstream of the bridge. The upstream area of the bridge includes a large island with mature riparian trees and other species.

The bridge design includes proposed aesthetic treatments such as river rock treatment on exposed faces of the abutments and retaining walls, and a timber treatment on the exposed side face of the exterior precast girders. Other timber and river rock may be applied to other

exposed areas, and boulders may be placed to top of the existing footings to disguise existing abutments. These features will improve the visual character of the replacement bridge.

Conclusion: The Project area includes the river, river bank, riparian forest, and several oak trees. No heritage trees are present on or adjacent to the project site. Although design plans were modified to avoid or reduce impacts to a greater extent, widening of the bridge approach and shoulders of the roadway could require removal of several oak trees on or immediately adjacent to the project site, as well as riparian species within the easement. Widening may also disturb the ground adjoining the roadway, so that seeding may also be needed. The following mitigation measures will reduce impacts to scenic resources to a ***less than significant*** level of impact.

Mitigation Measure #3.1-1 – Tulare County RMA shall protect and provide compensation for impacts to Sensitive Vegetative Communities: Tulare County RMA shall avoid to the maximum extent feasible, all Great Valley Mixed Riparian Forest. This shall be accomplished through judicious project design, installation of high visibility construction work area fencing, and implementation of a worker awareness training program (see Measure # 3.1-3)

Tulare County RMA shall provide for the restoration of Great Valley Mixed Riparian Forest that is temporarily disturbed by project activities. Restoration prescriptions, criteria for success, long-term monitoring of monitoring viability, and reporting shall be developed with the cooperation of the California Department of Fish and Game during the application process for acquisition of a Stream Alteration Agreement.

Tulare County RMA shall compensate for the loss of sensitive habitats caused by activities associated with the demolition and construction of the M319 bridge and adjacent temporary low water crossing. Compensation for losses of sensitive vegetative communities would be accomplished through off-site preservation. Compensation shall be "in-kind" and provided by either the purchase of conservation credits from an approved conservation bank or by the establishment of a conservation easement on an approved conservation site. The County of Tulare RMA shall cooperatively consult with the California Department of Fish and Game to determine the habitat compensation ratios to be implemented to offset losses.

Effectiveness of Measure #3.1-1: Implementation of Measure #3.1-1 will reduce impacts to sensitive vegetative communities to by protecting existing habitats to the extent feasible, and by preserving in-kind habitat at a ratio commensurate with past and future habitat removal and degradation. Impacts will be ***less than significant with implementation of this mitigation measure.***

Measure #3.1-2 – Tulare County RMA shall protect and provide compensation for impacts to oak trees and riparian trees: Tulare County RMA shall reduce impacts (e.g., removal, construction beneath the canopy, and trimming) to oak trees and riparian trees to the extent feasible. To facilitate avoidance, high visibility construction fencing shall be placed around oak trees to be avoided. All fencing must provide a buffer area around each oak tree that is not less that the aerial cover of the canopy. When avoidance and full protection is not

possible, Tulare County RMA shall provide compensation for the loss of oak trees. Tulare County RMA does not have an adopted Oak Woodland Management Plan or other plan that specifies adopted compensation for the loss of oak trees. In lieu of a plan, the compensation for losses of oak trees shall be determined through consultation with the California Department of Fish and Game and State required compensation shall apply.

Avoidance, protection, and compensation for the loss of riparian trees is covered under Measure #3.1-1 above because, by definition, riparian trees are a dominant component of Great Valley Mixed riparian Forest.

Effectiveness of Measure #3.1-2: Implementation of Measure #3.1-2 will reduce impacts to oak trees by protecting existing trees to the extent feasible, and by providing in-kind compensation commensurate with project impacts. Impacts will be ***less than significant with implementation of this mitigation measure.***

Mitigation Measure #3.1-3 – Tulare County RMA shall implement a worker training and construction monitoring and reporting program: All on-site contractors and construction workers, including supervisors and inspectors shall attend a worker training and awareness program. At a minimum, the training program shall include discussions of the natural history of the special status species potentially occurring on the project site, descriptions of the sensitive vegetation communities, and information on the measures that are being implemented. The construction workers shall be made aware of their roles and responsibilities in implementing the project protection measures and other requirements.

Construction activities shall be monitored on a weekly basis by a qualified biological monitor to ensure that all construction fencing and exclusionary fencing is appropriately maintained and that all other measures are fully and faithfully implemented. The biological monitor and the construction team shall work cooperatively to ensure that all measures are effective. The biological monitor shall be on-call to assist with any issues which may arise (such as the "take" of a sensitive species). The biological monitor shall discuss any infractions of the measures with the construction contractor, remedial actions shall be implemented when needed, and solutions shall be devised to prohibit subsequent infractions.

A monthly progress report shall be prepared by the biological monitor, which shall be submitted to the California Department of Fish and Game. That report shall include dates of construction, types of construction activities occurring, descriptions of the measures that were implemented, infractions that occurred, and descriptions of any remedial actions that were taken. A final report shall be submitted once all construction has been completed and site restoration has been completed.

Effectiveness of Mitigation Measure #3.1-3: Implementation of worker training, biological monitoring, and reporting will contribute to assurances that the degradation of sensitive habitats will be minimized and that all provisions of the listed measures will be appropriately implemented and followed.

Conclusion: Impacts to scenic resources will result in a ***less than significant with implementation of mitigation measures***.

Creation of light or glare (d): With the removal of large trees along the temporary access route, natural light would be increased that could adversely affect day or nighttime views in the area. The closest residence, located adjacent to the temporary access, would become more visible from both the temporary access and the bridge. Mitigation Measure #3.1-2, as stated above, requires that Tulare County RMA avoid oak trees and riparian trees and otherwise reduce impacts to these trees to the extend feasible. Additionally, trees removed in the project area will be replaced as agreed upon in consultation with the California Department of Fish and Game.

Mitigation Measures: None are required.

Conclusion: ***Less than significant impact***.

3.2 AGRICULTURE AND FOREST RESOURCES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12229(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by GC section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒	☐	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Response:

Farmland Conversion (a, e): The project site is located in an area of the County considered as rural, nonagricultural. No *Prime Farmland, Unique Farmland, or Farmland of Statewide* Importance or lands under a Williamson Act contract occur in the project area. No land conversion from Farmland will occur from the bridge replacement project.

Conclusion: There is ***no impact***.

Mitigation Measures: None are required.

Zoning Conflicts (b, c): The site is not covered by a Williamson Act contract. The project does not propose any zone changes related to forest or timberland.

Conclusion: There are ***no impacts***.

Forest Land Conversion or Loss (d): No conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, will occur as a result of the Project. The project may result in the loss of up to .22 acres of Great Valley Mixed Riparian Forest within the Project site, as well as the loss of one or more oaks in the Blue Oak Woodland along Mountain Road M319.

The following measures are duplicated from Section 3.1 and are also applicable here.

Mitigation Measure #3.1-1 – Tulare County RMA shall protect and provide compensation for impacts to Sensitive Vegetative Communities: Tulare County RMA shall avoid to the maximum extent feasible, all Great Valley Mixed Riparian Forest. This shall be accomplished through judicious project design, installation of high visibility construction work area fencing, and implementation of a worker awareness training program.

Tulare County RMA shall provide for the restoration of Great Valley Mixed Riparian Forest that is temporarily disturbed by project activities. Restoration prescriptions, criteria for success, long-term monitoring of monitoring viability, and reporting shall be developed with the cooperation of the California Department of Fish and Game during the application process for acquisition of a Stream Alteration Agreement.

Tulare County RMA shall compensate for the loss of sensitive habitats caused by activities associated with the demolition and construction of the M319 bridge and adjacent temporary low water crossing. Compensation for losses of sensitive vegetative communities would be accomplished through off-site preservation. Compensation shall be "in-kind" and provided by either the purchase of conservation credits from an approved conservation bank or by the establishment of a conservation easement on an approved conservation site. The County of Tulare RMA shall cooperatively consult with the California Department of Fish and Game to determine the habitat compensation ratios to be implemented to offset losses.

Effectiveness of Measure #3.1-1: Implementation of Measure #3.1-1 will reduce impacts to sensitive vegetative communities to by protecting existing habitats to the extent feasible, and by preserving in-kind habitat at a ratio commensurate with past and future habitat removal and degradation.

Mitigation Measure #3.1-2 – Tulare County RMA shall protect and provide compensation for impacts to oak trees and riparian trees: Tulare County RMA shall reduce impacts (e.g., removal, construction beneath the canopy, and trimming) to oak trees and riparian trees to the extent feasible. To facilitate avoidance, high visibility construction fencing shall be placed around oak trees to be avoided. All fencing must provide a buffer area around each oak tree that is not less that the aerial cover of the canopy. When avoidance and full protection is not possible, Tulare County RMA shall provide compensation for the loss of oak trees. Tulare County RMA does not have an adopted Oak Woodland Management Plan or other plan that specifies adopted compensation for the loss of oak trees. In lieu of a plan, the compensation for losses of oak trees shall be determined through consultation with the California Department of Fish and Game and State required compensation shall apply.

Avoidance, protection, and compensation for the loss of riparian trees is covered under measure #1 above because, by definition, riparian trees are a dominant component of Great Valley Mixed riparian Forest.

Effectiveness of Measure #3.1-2: Implementation of Measure #3.1-2 will reduce impacts to oak trees by protecting existing trees to the extent feasible, and by providing in-kind compensation commensurate with project impacts.

Conclusion: With the implementation of these mitigation measures, impacts will be ***less than significant***.

3.3 AIR QUALITY

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

Response:

This environmental issue focuses on the project's air quality impacts. Issues over project consistency with applicable air quality plans, policies and regulations, increases of any pollutant for which the area has been designated as a "non-attainment" area are to be addressed. Additional concerns are over the exposure of sensitive receptors, such as nearby residents, to high levels of air pollution or odors.

Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$) Construction Emissions (a), (b), (c), (d): Project demolition and construction will result in activities that generate dust which may create a nuisance if left unmitigated. Grading, earthmoving, demotion, and excavation are the activities that generate the most (PM_{10}) and ($PM_{2.5}$) emissions.

Construction activities associated with project development include site preparation, grading, demolition and removal of the current bridge structure, equipment traffic on paved and unpaved surfaces, and the construction of bridge structures and paving.

Because prediction of (PM_{10})/ ($PM_{2.5}$) generation depends on a large number of variables which may change from project to project or from day to day, a qualitative, rather than quantitative, approach has been recommended to assess impacts significance for (PM_{10})/ ($PM_{2.5}$) construction activity emissions.

The District has developed a menu of (PM_{10})/ ($PM_{2.5}$) control options that define the minimum content of a construction dust control program. The control measures are required under Regulation VIII. Regulation VIII (Table 3.3.1) control measures reduce the amount of (PM_{10})/ ($PM_{2.5}$) emissions generated from fugitive dust sources.

Regulation VIII, Rule 8021 was amended most recently in August of 2004. Rule 8021 was adopted by the District to limit dust emissions from construction, excavation and other earthmoving activities. Prior to the start of construction activities, the owner/operator will be required to file a Dust Control Plan with the District in accordance with Section 6.3 of Rule 8021. In addition to other measures, the District reported an 87 percent control in reducing (PM_{10}) emissions when properly using water as a control measure according to a UC Davis study conducted in 1994.

a) The proposed project does not conflict with the implementation strategy of the San Joaquin Valley Regional Air Quality Management Plans (2008 $PM_{2.5}$ Plan; 2007 8-Hour Ozone Plan; 2007 PM_{10} Maintenance Plan; 2006 PM_{10} SIP; 2004 1-Hour Ozone SIP; 2003 PM_{10} SIP; and Carbon Monoxide Plans). The short-term impact of the proposed project's construction emissions will be less than significant. The long-term impact from area source emissions will also be less than significant. The District considers impacts that are individually less than significant not to have a cumulatively significant impact.

Conclusion: There will be ***less than significant*** impacts.

Mitigation Measures: None are required.

b and c) Air quality impacts related to this project will come mainly from three sources – particulate (dust) emissions from construction on the properties, particulate (exhaust) emissions from construction on the properties and operational emissions from vehicular trips (exhaust) associated with the project.

Particulate emissions are primarily particulate matter (PM_{10}). Construction emissions are temporary in nature, and are considered by the District to be less than significant if the District's Regulation VIII mandatory dust control measures are followed. Because these measures are mandatory, and therefore part of the regulatory setting of the project, they do not constitute mitigation. Regulation VIII measures are listed in Tables 3.3-1

Table 3.3-1
Regulation VIII
Mandatory Control Measures for Construction, Excavation, Extraction, and Other Earthmoving Activities

A. Pre-Activity:

A1: Pre-water site sufficient to limit Visible Dust Emissions (VDE) to 20% opacity

A2: Phase work to reduce the amount of disturbed surface area at any one time.

B. During Active Operations:

B1: Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity

B2: Construct and maintain wind barriers sufficient to limit VDE to 20% opacity. If utilizing wind barriers, control measure B1 above shall also be implemented.

B3: Apply water or chemical/organic stabilizers/suppressants to unpaved haul/access roads and unpaved vehicle/equipment traffic areas sufficient to limit VDE to 20% opacity and meet the conditions of a stabilized unpaved road surface.

C. Temporary Stabilization During Periods Of Inactivity:

C1: Restrict vehicular access to the area

C2: Apply water or chemical/organic stabilizers/suppressants, sufficient to comply with the conditions of a stabilized surface. If an area having 0.5 acres or more of disturbed surface area remains unused for seven or more days, the area must comply with the conditions for a stabilized surface area as defined below:

Stabilized Surface: any disturbed surface area or open bulk material storage pile that is resistant to wind blown fugitive dust emissions. A surface is considered to be stabilized if it meets at least one of the following conditions:

- A visible crust; or
- A threshold friction velocity (TFV) for disturbed surface areas corrected for nonerodible elements of 100 centimeters per second or greater; or
- A flat vegetative cover of at least 50 percent that is attached or rooted vegetation; or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind; or
- A standing vegetative cover of at least 30 percent that is attached or rooted vegetation with a predominant vertical orientation; or
- A standing vegetative cover that is attached or rooted vegetation with a predominant vertical orientation that is at least 10 percent and where the TFV is at least 43 centimeters per second when corrected for nonerodible elements; or
- A surface that is greater than or equal to 10 percent of non-erodible elements such as rocks, stones, or hard-packed clumps of soil.

D. Speed Limitations and Posting of Speed Limit Signs

D1: Limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.

D2: Post speed limit signs that meet State and Federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.

E. Wind Generated Fugitive Dust Requirements

E1: Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20% opacity. Indoor activities such as electrical, plumbing, dry wall installation, painting, and any other activity that does not cause any disturbances to the soil are not subject to this requirement.

E2: Continue operation of water trucks/devices when outdoor construction excavation, extraction, and other earthmoving activities cease, unless unsafe to do so.

Compliance with the District's rules and regulations will reduce the potential impact to a ***less than significant*** level.

Conclusion: There will be ***less than significant impacts***.

Mitigation Measures: None are required.

d) The project will contribute to the creation of air pollution in the general vicinity in the form of automobile exhaust. The current and anticipated estimated ADT is 40. However, projects that are expected to generate fewer than 1,707 vehicle trips per day qualify for the Small Project Analysis Level (SPAL) standards of the District guidelines for project assessment and will not exceed emission thresholds. According to District standards, the project is not expected to create traffic concentrations that exceed established thresholds or that would result in the creation of significant air pollution concentrations and/or expose sensitive receptors to such concentrations.

Conclusion: There will be ***less than significant*** impacts.

Mitigation Measures: None are required.

e) The project will not expose sensitive receptors to substantial pollutant concentrations or objectionable odors. However, as noted previously, there is a potential for travelers to notice temporary odors arising from typical construction activities. The impact is temporary and is considered to be less than significant. Developments such as this project do not create substantial pollutant concentration or objectionable odors.

Conclusion: There will be ***less than significant*** impacts.

Mitigation Measures: None are required.

3.4 BIOLOGICAL RESOURCES

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

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Response:

Quad Knopf biologist conducted a literature and database review and conducted field surveys of the project site and surrounding area to determine potential project impacts. Information on existing vegetative communities, rare plant species, oak trees and riparian trees, special status wildlife species, raptors, and wetlands and waters of the United States was gathered. This information is presented, along with an analysis of potential project impacts and recommended protection measures. See Appendix B for the full Biological Report.

Substantial adverse effect on sensitive species (a): The project area is within a riparian area, surrounded by blue oak woodland. This setting, with the river passing through a relatively dry, hot valley includes diverse habitats for a number of species. Of 24 special status plant species know to exist in the area, eight are considered to have the potential to occur on or immediately adjacent to the project site (Figure 3-4.1).

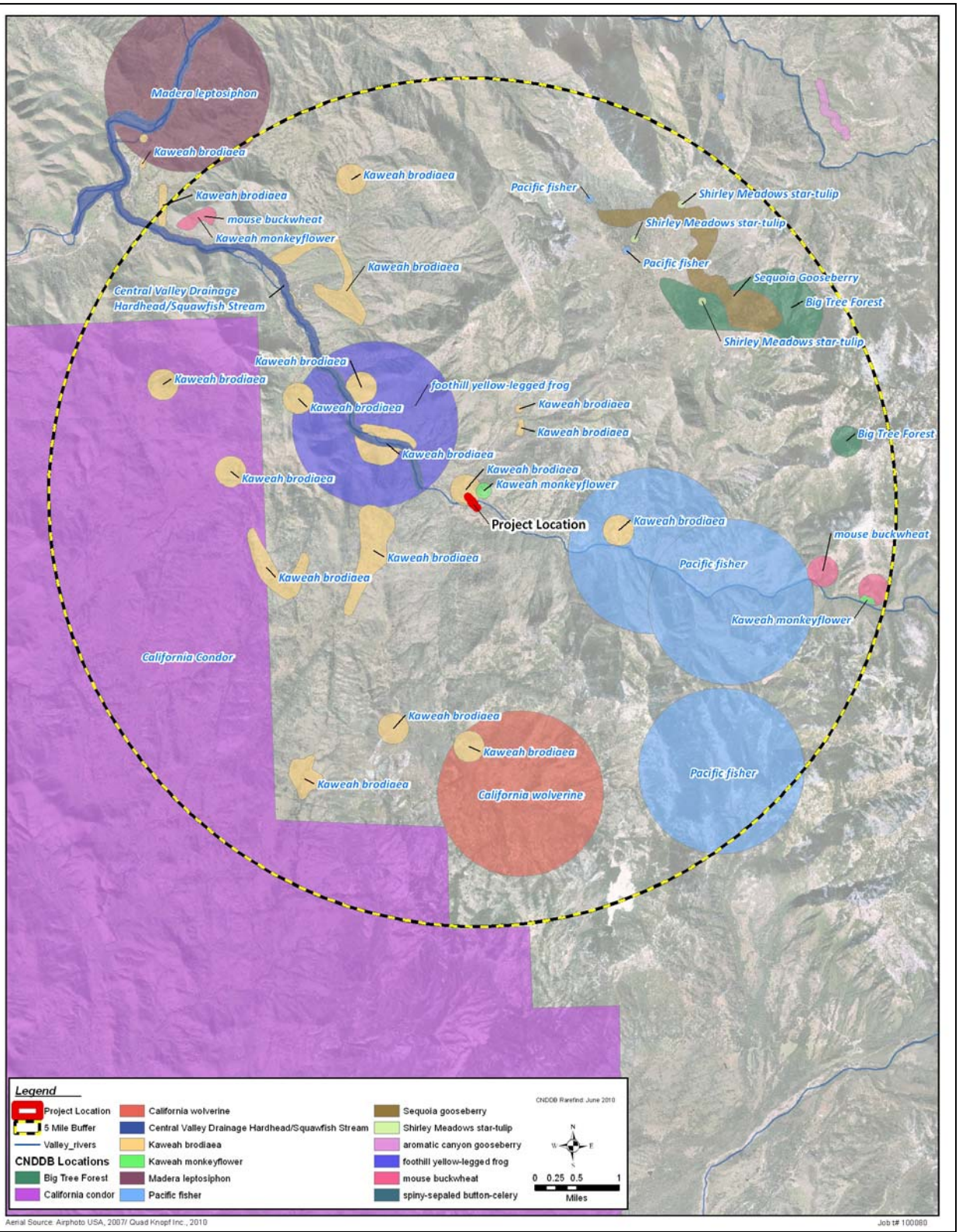
Special-Status Plant Species

Brodiaea insignis (Kaweah brodiaea) (California endangered, California Native Plant Society fairly endangered in California) may possibly occur in the project area, as the species is known to exist from within five miles of the site, although habitat in the project area is marginal and it was not observed during the site survey. See Appendix B for the complete biology report including a listing of all special status species.

Springville clarkia (*Clarkia springvillensis*) (Federally endangered, California endangered, California Native Plant Society fairly endangered in California) may possibly occur in the project area, although it was not observed during the site survey. Habitat suitable to support this species is present in the immediate vicinity of the project footprint.

Although marginal habitat for Kern County larkspur (*Delphinium purpusii*) (California Native Plant Society not very endangered in California)exists in the project area, it is not known to exist within five miles of the project area, and would be unlikely to occur there.

Suitable habitat to support mouse buckwheat (*Eriogonum nudum* var. *murinum*) (California Native Plant Society fairly endangered in California)exists in the project area. It is possible this species may occur there, although it was not observed during the site survey.



Quad Knopf

RECORDS OF SPECIAL STATUS SPECIES KNOWN WITHIN FIVE MILES OF THE PROJECT SITE

Figure 3.4-1

Although Munz'iris (*Iris munzii)* (California Native Plant Society not very endangered in California)was not observed during the site survey, habitat suitable to support this species is present in the immediate vicinity of the project footprint, and it is possible that this species may occur.

Only marginal habitat suitable to support Madera leptosiphon (*Leptosiphon serrulatus*) (California Native Plant Society fairly endangered in California) is present in the immediate vicinity of the project footprint, and no populations are recorded within 5 miles of the project site. Although this species was not observed during the site survey, the survey was executed after the flowering period of this species, and it unlikely to occur in the project area.

It is possible for Kaweah monkeyflower (*Mimulus norrisii*) (California Native Plant Society not very endangered in California) to occur in the project area, although it was not observed during the site survey. The survey was executed after the flowering period of this species, and marginal habitat suitable to support this species is present in the immediate vicinity of the project footprint. Also, this species is known to occur within five miles of the project site.

Calico monkeyflower (*Mimulus pictus*) (California Native Plant Society fairly endangered in California) may possibly occur within the project site, although it was not observed during the site survey. The survey was executed after the flowering period of this species, and marginal habitat suitable to support this species is present in the immediate vicinity of the project footprint.

Habitat suitable to support aromatic canyon gooseberry (*Rives menziesii* var. *ixoderme*) (California Native Plant Society fairly endangered in California) is present in the immediate vicinity of the project area, although this species is unlikely to occur. This species was not observed during the site survey, although the survey was executed after the flowering period.

Conclusion: The project has the potential to impact Kaweah brodiaea, Springville clarkia, and Munz' iris, which can be reduced by implementing the following mitigation measure. Potential impacts will only occur during the construction phase and are not anticipated during on-going operation of the project.

Mitigation Measure #3.4-1 – Tulare County RMA shall protect and provide compensation for impacts to special status plant species: At this time, there are no identifiable impacts to special status plant species. However, the project could potentially impact Kaweah brodiaea, Springville clarkia, and Munz' iris. Additional information is needed to determine impacts to these species and determine appropriate avoidance and compensation measures. Tulare County RMA shall perform surveys of the project site to determine presence/absence of these species prior to construction activities. Surveys shall be conducted during appropriate flower periods of these plants. Appropriate survey periods are: Kaweah brodiaea – April to June, Springville clarkia – May to June, and Munz' iris – February to April. If these species are determined to be absent, then no further measures are warranted. If any one or more of these species are found to be present, then the following shall be implemented.

Tulare County RMA shall avoid populations and individuals of Kaweah brodiaea, Springville clarkia, and Munz' iris. Exclusion fencing shall be established around populations or individuals to protect against take during construction activities.

If the removal of populations or individuals is required, then Tulare County RMA shall consult with the California Department of Fish and Game (and in the case of the Springville clarkia, the United States Fish and Wildlife Service), to determine appropriate permitting requirements and compensation requirements.

Effectiveness of Mitigation Measure #3.4-1: Implementation of Measure #3.4-1 will reduce impacts to special status plants to ***less than significant*** by protecting existing populations and individuals to the extent feasible, and by providing in-kind compensation commensurate with project impacts.

Special-Status Amphibians and Reptiles

Although *Actinemys marmorata* (western pond turtle) (California Species of Concern) is not found within five miles of the project site, they are known from south and west within 7 to 15 miles. Swift water at the project site would preclude occupation of the river channel during high flows, but during the dry season of slow-moving water, western pond turtles could utilize the site, and it is possible for this species to occur in the project area.

Although foothill yellow-legged frog (*Rana boylii*) (California Species of Concern) was not observed during the site survey, and no populations of this species are recorded within five miles of the project site, habitat suitable to support this species is present in the immediate vicinity of the project footprint, and is possible for this species to occur in the project area.

It is unlikely for Sierra Madra yellow-legged frog (*Rana muscosa*) to occur in the project area, as the nearest population is 12 miles to the southeast, at over 9,000 ft above mean sea level.

Conclusion: The project has the potential to have a significant impact on western pond turtle, foothill yellow-legged frog, and Sierra Madra yellow-legged frog. ***With implementation of mitigation measures impacts will be less than significant.***

Mitigation Measure #3.4-2: The project could potentially impact the foothill yellow-legged frog and the western pond turtle. Additional information is needed to determine impacts to these species and develop appropriate avoidance and compensation measures. Tulare County RMA shall perform surveys of the project site to determine presence/absence of these species prior to construction activities. Surveys shall be conducted during periods when these species are most likely to be present and observable. Appropriate survey periods are during low water flows in late spring and early summer when these species are active: If these species are determined to be absent, then no further measures are warranted. If any one or more of these species are found to be present, then the following shall be implemented.

Tulare County RMA shall develop avoidance measures and provide compensation commensurate with project impacts. The California Department of Fish and Game shall be consulted during the development of avoidance measures and compensations requirements.

Effectiveness of Measure #3.4-2: Implementation of Measure #3.4-2 will reduce impacts amphibian and reptile species to ***less than significant*** by protecting existing populations and individuals to the extent feasible, and by providing in-kind compensation commensurate with project impacts.

Special-Status Fish

There are no recorded occurrences of hardhead (*Mylopharadon conocephalus*) (California Species of Concern) within the project area, however they are known to occur within .5 miles downstream of the project site and it likely occurs at the project site, at least on a temporary basis. Impacts to the river including increased siltation, reductions and diversions in water flows, increases in water temperature, and an influx of contaminants could result in the loss of individual hardheads and a reduction in population levels to below self-sustaining levels.

Habitat for the *Actinemys marmorata* (western pond turtle) is suitable and there are recorded occurrences within five miles of the site. Potential for the occurrence of this California species of special concern is considered moderate, although none were observed during the field study conducted in June 2010.

Conclusion: The project has the potential to have a significant impact on hardhead that can be reduced by implementing the following mitigation measure.

Mitigation Measure #3.4-3: Tulare County RMA shall protect and provide compensation for impacts to special status wildlife species: The hardhead is known to occur downstream of the project site and it may be present on the site, at least on a temporary basis. Tulare County RMA will implement the following measures to protect hardheads to the greatest extent feasible:

- Reduce debris and fill in the river to the extent feasible;
- Install coffer dams where necessary to divert flow away from construction activities and reduce the potential for siltation;
- Provide habitat restoration along disturbed riverbanks once construction is complete to reduce siltation;
- Limit construction activities within the river to periods of low water flow; and
- Ensure that all fueling and maintenance of equipment occurs in areas isolated from the river so that contamination and accidental spills do not affect riverine resources.

Effectiveness of Measure: ***With implementation of this mitigation measure***, impacts will be reduced on special-status fish species to a level that is ***less than significant.***

Special-Status Birds

It is possible for northern goshawk (*Accipiter gentiles*) (California Species of Concern) to occur in the project area as a winter transient, although no suitable breeding habitat for this species occurs on or near the project site.

The California condor (*Cypseloides niger*) (Federally endangered, California endangered) may possibly occur as a transient soaring over the project site, as suitable nesting sites are absent.

No raptor nests or migratory bird's nests were located on or near the project site. Impacts to breeding raptors and migratory birds are not anticipated. However, pre-construction surveys for active nests will need to be conducted to determine if on-site avoidance measures during construction are warranted.

Conclusion: With the inclusion of mitigation measures, the project will have a less than significant impact on the northern goshawk and California condor.

Mitigation Measure #3.4-4: Tulare County RMA shall protect raptor nests and migratory birds nests: If construction activities (including vegetation removal, grading or other ground clearing activities, bridge demolition and construction, road demolition and construction) occur during the breeding season of raptors and migratory birds (February 15 to September 15), then pre-construction surveys shall be conducted no more than 14 days prior to initiation of those activities. If more than 14 days lapse between the time of the pre-construction survey and the start of ground-disturbing activities, another pre-construction survey must be completed. Pre-construction surveys shall include the examination of all trees, shrubs, and appropriate ground nesting locations (for ground nesting species such as California horned lark, long-billed curlew, etc.) within 500 feet of planned construction related activities (e.g., site grading, bridge and road construction). If nests are found that are not active, they may be removed by hand and construction may proceed within the area cleared by the surveys. If active nests are found, they must be avoided. Raptor nests shall be avoided by a distance of 500 feet and migratory birds nests shall be avoided by 250 feet. Avoidance shall be accomplished by the installation of exclusion area established around active nests.

Construction within these excluded areas must be delayed until young have fledged (as determined by a qualified biologist) or until the nest has been abandoned. A qualified biologist may modify the size of the buffer based on site conditions and the bird's apparent acclimation to activities. If the buffer is modified, the biologist would be required to monitor stress levels of the nesting birds daily to ensure that project activities would not cause nest site abandonment or loss of eggs or young. At any time, the biologist shall have the right to implement the full buffer size if stress levels are elevated to the extent that could cause nest abandonment and/or loss of eggs or young.

Effectiveness of Measure #3.4-4: Impacts to nesting raptors and migratory birds will be reduced to ***less than significant with implementation of mitigation measures***.

Special-Status Mammals

Of the five special status species of mammals found in the general area, only the Pacific fisher (*Martes pennanti pacificia*) has the potential of occur in the project area on a regular basis. This martin has been found within five miles of the project site, and marginal habitat exists there. No impacts are anticipated to occur to the Pacific fisher because the project site does not contain typical habitat for this species and because this species does not exhibit seasonal migratory movements that would allow it to occupy the project site on a seasonal basis. Furthermore, the Pacific fisher is nocturnal and crepuscular, which would further reduce its chances of being on the project site while construction activities are occurring.

The pallid bat (*Antrozous pallidus*) may occur in the project area as a transient. Although the bat may forage in the project area, the project site does not contain habitat suitable for nesting.

Conclusion: The project will have a ***less than significant impact*** on the Pacific fisher and pallid bat.

Mitigation Measures: None required.

Have a substantial adverse effect on any riparian habitat or other sensitive natural community (b): As noted in the biology report (see Appendix B), the originally proposed project could have resulted in disturbance to or loss of up to approximately 0.09 acres as a result of replacement of the bridge. It was also estimated that 0.014 acres would be temporarily disturbed due to the placement of the laydown area, and up to 0.21 acres would be temporarily disturbed because of the construction of the temporary low-flow crossing. The biology report also states that these estimates of disturbance are maximum acreages, based upon a design footprint that does not consider impacts to the river within the ordinary high water mark, and does not consider implementation of recommended avoidance measures. The final design plan was revised, based on information presented in this biology report, to eliminate construction within the Ordinary High Water elevation and surrounding riparian areas, so that permanent and temporary disturbance and loss will be less than that originally estimated. The biology report states that impacts to Great Valley Mixed Riparian Forest would not result from construction work associated with upgrading the approaches to the bridge. By using the finalized design plans and incorporating the mitigation measures stated within this document, adverse effects on the riparian habitat and natural community will be less than significant.

Conclusion: Because grading, fill, and construction operations for the replacement bridge and the temporary low-water crossing have been designed to minimize impacts to the river, and recommended mitigation measures will be included during the construction phase, it is anticipated that actual loss or disturbance would be less than significant.

Mitigation Measures are duplicated from Sections 3.1 and 3.2 and are also applicable here.

Mitigation Measure #3.1-1: Tulare County RMA shall protect and provide compensation for impacts to Sensitive Vegetative Communities: Tulare County RMA shall avoid to the maximum extent feasible, all Great Valley Mixed Riparian Forest. This shall be accomplished

through judicious project design, installation of high visibility construction work area fencing, and implementation of a worker awareness training program.

Tulare County RMA shall provide for the restoration of Great Valley Mixed Riparian Forest that is temporarily disturbed by project activities. Restoration prescriptions, criteria for success, long-term monitoring of monitoring viability, and reporting shall be developed with the cooperation of the California Department of Fish and Game during the application process for acquisition of a Stream Alteration Agreement.

Tulare County RMA shall compensate for the loss of sensitive habitats caused by activities associated with the demolition and construction of the M319 bridge and adjacent temporary low water crossing. Compensation for losses of sensitive vegetative communities would be accomplished through off-site preservation. Compensation shall be "in-kind" and provided by either the purchase of conservation credits from an approved conservation bank or by the establishment of a conservation easement on an approved conservation site. The County of Tulare RMA shall cooperatively consult with the California Department of Fish and Game to determine the habitat compensation ratios to be implemented to offset losses.

Effectiveness of Measure #3.1-1: Implementation of Measure #3.1-1 will reduce impacts to sensitive vegetative communities by protecting existing habitats to the extent feasible, and by preserving in-kind habitat at a ratio commensurate with past and future habitat removal and degradation. Impacts will be ***less than significant with implementation of mitigation measures.***

Measure #3.1-2 – Tulare County RMA shall protect and provide compensation for impacts to oak trees and riparian trees: Tulare County RMA shall reduce impacts (e.g., removal, construction beneath the canopy, and trimming) to oak trees and riparian trees to the extent feasible. To facilitate avoidance, high visibility construction fencing shall be placed around oak trees to be avoided. All fencing must provide a buffer area around each oak tree that is not less that the aerial cover of the canopy. When avoidance and full protection is not possible, Tulare County RMA shall provide compensation for the loss of oak trees. Tulare County RMA does not have an adopted Oak Woodland Management Plan or other plan that specifies adopted compensation for the loss of oak trees. In lieu of a plan, the compensation for losses of oak trees shall be determined through consultation with the California Department of Fish and Game and State required compensation shall apply.

Conclusion: Avoidance, protection, and compensation for the loss of riparian trees is covered above because, by definition, riparian trees are a dominant component of Great Valley Mixed riparian Forest.

Effectiveness of Measure #3.1-2: Implementation of Measure #3.1-2 will reduce impacts to oak trees by protecting existing trees to the extent feasible, and by providing in-kind compensation commensurate with project impacts. Impacts to oak trees and riparian trees will be reduced to ***less than significant with implementation of mitigation measures***.

Have a substantial adverse effect on federally protected wetlands (c): No wetlands occur on or near the project site, and no impacts to wetlands will result from project activities. However,

the South Fork of the Kaweah River is most likely a jurisdictional Water of the United States. Final design measures will eliminate cut and fill within the Ordinary High Water elevation (bank to bank) to reduce impacts to the river to fewer than 0.1 acres. The area from bank to bank falls under the jurisdiction of the California Department of Fish and Game, and impacts within this area will be less than significant with the implementation of mitigation measures.

Conclusion: The project will not result in impacts to wetlands with the ordinary high water elevation with the use of the final design features. Although the original biology report anticipated impacts to the South Fork of the Kaweah River, which is likely considered a Water of the United States, final design eliminates cut and fill in the River, so that impacts will be less than significant with mitigation as necessary.

Mitigation Measure #3.4.5: The biology report anticipated that the project could result in a maximum of 0.155 acres of cut and fill within the river, should the design and construction not include measures to minimize this impact. Impacts are expected to be reduced to less than 0.1 acres within the ordinary high water elevation with the implementation of various design features. Tulare County RMA shall procure an appropriate permit from the United States Army Corps of Engineers (USACOE) and/or the Regional Water Quality Control Board. If, as planned, less than 0.1 acre will be impacted, the appropriate permit from the USACOE would be a Nonreporting Permit under the Nationwide Permit. This permit must also be provided to Caltrans. Tulare County RMA shall reduce impacts to the South Fork of the Kaweah River to the extent feasible. Pursuant to USACOE regulations, if less than 0.1 acres of impacts or less will occur, then compensation for impacts to the river is not required. However, if impacts to the river exceed 0.1 acres, then Tulare County RMA will provide a Mitigation Plan describing restoration and compensation, as required by the permit approval process. Additionally, the Tulare County RMA will coordinate with California Department of Game and Fish to acquire the appropriate authorization, most likely a Steam Alteration Agreement.

Effectiveness of Measure #3.4-5: Implementation of this mitigation measure will reduce impacts to waters of the United States by reducing cut and fill to minimal levels or eliminating cut and fill within the riparian area, and by providing restoration and compensation commensurate with project impacts when necessary. Impacts will be reduced to ***less than significant with implementation of mitigation measures***.

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 (d): Movements of wildlife generally fall into three basic categories: a) movements along corridors or habitat linkages associated with home range activities such as foraging, territory defense, and breeding; b) dispersal movements—typically one-way movements (e.g., juvenile animals leaving their natal areas or individuals colonizing new areas), and; c) temporal migration movements – these movements are essentially dispersal actions which involve a return to the place of origin (e.g., deer moving from winter grounds to summer ranges and fawning areas).

Use of the South Fork of the Kaweah River for a movement corridor by animals is a possibility, but since a bridge already exists there, it is unlikely that construction would alter the disturbance

regime currently in place. The project site contains no designated wildlife corridors within its boundaries. Hardhead (fish) are found within one-half mile downstream of the bridge location. Impacts to the river that could result from construction, such as increased siltation, reductions or diversions in water flows, increases in water temperature, or an influx of contaminants could result in the loss of individual hardheads and a reduction in population levels to below self-sustaining levels. However, the replacement bridge and temporary low-water crossing have been designed to minimize impacts to the river within the ordinary high water mark, minimizing impacts to the river channel and hardhead.

Conclusion Construction of a replacement bridge would not put the continued existence of any native or migratory species in jeopardy and the ***impact would be less than*** significant with implementation of mitigation measures stated elsewhere in this document.

Mitigation Measure: With the implementation of Mitigation Measures #3.4.1 through #3.4.7, no additional mitigation measures are required.

Impact #3.4.5 - Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (e): Tulare County has no specific ordinance regarding oak trees or other biological resources.

Conclusion: Implementation of the proposed project will have ***no impact*** on any local policies or ordinances to protect biological resources.

Mitigation Measure: None are required.

Impact #3.4.6 - Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (f): There are no adopted habitat conservation plans or natural community conservation plans within Tulare County.

Conclusion: There is ***no impact.***

Mitigation Measure: None are required.

3.5 CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064385?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Response:

Disturbance of Cultural Resources (a - d): A Cultural Resources Survey and Report (see Appendix C) revealed that no archaeological or historical sites have been recorded. A cultural resources survey was conducted in July 2010, and no significant resources or properties that are eligible for listing on either the National Register of Historic Places and/or the California Register of Historical Resources were identified. Sierra Valley Cultural Planning notes in their report, that no recorded cultural resources are situated within the Project area and that six cultural resource sites have been documented within ¼ mile of the Project area. However, there is little potential for buried cultural deposits within the area that will be affected by the proposed replacement bridge project. There are no unique geological features or paleontological resources in the project vicinity. No further cultural resource investigation is recommended.

Although no cultural resources have been recorded in the vicinity of the project area, and it is unlikely that resources will be encountered, there is the potential for disturbance or destruction of unknown archaeological resources or human remains resulting from the activities associated with the project.

Conclusion: Any archaeological or historic resources revealed in the survey will be recorded and evaluated by a qualified archaeologist. Should any unidentified skeletal remain or Native American burial grounds be found during project construction or operation, appropriate procedures will be followed to assure that Native American burial sites encountered are

avoided, treated in accordance with the recommendations of the most likely descendant (for Native American remains), or relocated. The impact is ***less than significant with mitigation incorporation.***

Mitigation Measure #3.5-1: Although there is no recorded evidence of archaeological sites on the project site, there is the potential during project-related excavation and construction for the discovery of cultural resources. The County will incorporate into the construction contract a provision that the contractor and all subcontractors shall implement the following measures:

- If, in the course of the bridge demolition or construction, or associated roadway improvement, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within 50 feet of the find area shall cease. A qualified archaeologist shall be contacted and will advise the lead agency of the site's significance. If the findings are deemed significant, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the project.

- If, in the course of project construction, any skeletal remains are uncovered, discovered, or otherwise detected or observed, activities in the affected area shall cease. A qualified archaeologist, the County Coroner and local Native American organizations shall be consulted, and appropriate measures shall be required that may include avoidance of the burial site or reburial of the remains.

Effectiveness of Measure #3.5-1: Should any archaeological or historic resources or human remains be detected during the demolition or construction of the proposed Project, mitigation measures would reduce impacts to a less than significant level.

3.6 GEOLOGY/SOILS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction of collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems when sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Response:

Seismic Effects (a-i through a-iii): There are no active or potentially active earthquake faults of major historic significance within Tulare County. The San Andreas Fault lies west of the County line (over 50 miles from the project area), and the Owens Valley Fault Group is approximately 80 miles east of the County line. Other, more minor faults occur in the Sierra Nevada Range on the eastern side of the County, although none occur in close proximity to the project area. The proposed Project is located in the eastern section of the County, in a transitional zone between the Sierra Nevada Mountains and the San Joaquin Valley. This area consists of old alluvium intermixed with bedrock, and tends to experience low levels of groundshaking. At the recommendation of the geotechnical engineer, the bridge abutment footings will be placed on sound granitic bedrock, so that the potential for impacts resulting from seismic activity, such as settlement and liquefaction, is very low.

Conclusion: The soils of the site will accommodate the bridge replacement project. Any impact of ground shaking will be mitigated to a ***less than significant level*** by designs to comply with *Caltrans Bridge Standards*.

Mitigation Measures: None are required.

Landslides (a-iv): According to the Tulare County General Plan Background Report (2007), the foothills area of the County, where steep slopes exist, could experience landslides. "Erosion and slumping of soils can also occur along bluffs along the Tule, Kings, and Kaweah River." Upstream of the project area, banks are approximately 30 feet higher than the water level, while downstream of the bridge, the water is only one to five feet below the top of the bank. However, soil along the banks is held in place by dense vegetation, making erosion or slumping unlikely under most circumstances.

Conclusion: There is a ***less than significant*** potential landslide impact.

Mitigation Measures: None are required.

Soil Erosion, Instability, and Expansive Soil Hazards (b, c, d): The roadway and bridge are located at elevations varying from 1858 feet above MSL at the bridge base to 1870 feet above MSL on the bridge deck. The bridge crosses the South Fork of the Kaweah River and will remain at its present elevation. According to the County's General Plan Background Report, soils in the project area are of Ahwahnee-Vista soil association, common in the foothills between 500 and 3,000 feet above MSL. Both the Ahwahnee and Vista soils occur on decomposing granite, at slopes varying from 8 to 75 percent. The Ahwahnee soils are generally deep, and consist of coarse sandy loams to very rocky coarse sandy loams, and can include bedrock outcrops. Thicker profiles provide moderate water holding capacity. Soil types in the area are not conducive to liquefaction, as they are either too coarse or are too high in clay content.

Conclusion: The soils of the site will accommodate the development. Should the roadway require widening that includes removal of plant materials, seeding will occur upon completion of the construction phase. Seeding will also occur within the area disturbed for the roadway

leading to and from the temporary low river crossing once construction of the replacement bridge is complete. Design features and construction activities for the bridge foundation and deck will minimize disturbance of soils in the creek bed. The temporary low water crossing, to be installed downstream of the bridge, has also been designed to avoid impacts to the river channel. The temporary roadway leading to and from this crossing will require removal of plant material. ***No long-term impacts will occur*** in the creekbed.

Mitigation Measure #3.6.1 Construction activities shall follow Tulare County General Plan policies designed to protect surface water from adverse effects, including Best Management Practices and compliance with NPDES requirements.

Effectiveness of Mitigation Measure #3.6.1 The impact is ***less than significant with mitigation incorporation.***

Wastewater Disposal (e): The project will not involve wastewater facilities and is not a development that would require such facilities.

Conclusion: There will be ***no impact*** to wastewater disposal.

Mitigation Measures: None are required.

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

Response:

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide, methane, nitrous oxide, ozone, and water vapor.

Although the presence of the primary GHGs in the atmosphere are naturally occurring, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) are largely emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of carbon dioxide are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes. Greenhouse gases are typically reported in "carbon dioxide-equivalent" measures (CO_2E).

An international scientific consensus has been reached that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity (California Climate Change Portal, 2010).

The California Air Resources Board (CARB) estimated that in 2006, California produced about 484 million gross metric tons of CO_2E ($MMTCO_2E$), or about 535 million U.S. tons (CARB, 2009a). The CARB found that transportation is the source of 38 percent of the State's GHG emissions, followed by electricity generation (both in-state and out-of-state) at 22 percent, and

industrial sources at 20 percent. Commercial and residential fuel use (primarily for heating) accounted for 9 percent of GHG emissions (CARB, 2009a).

Senate Bill (SB) 97 requires the Office of Planning and Research (OPR) to amend the state CEQA guidelines to address the feasible mitigation of GHG emissions or the effects of GHGs. In response, OPR amended the CEQA guidelines, effective March 18, 2010, by amending various sections of the guidelines to provide guidance for analyzing GHG emissions. Among other CEQA Guideline changes, the amendments add a new section to the CEQA Checklist (CEQA Guidelines Appendix G) to address questions regarding the project's potential to emit GHG. OPR's amendments to the CEQA Guidelines have been incorporated into this analysis accordingly.

Greenhouse Gases (a): The most common GHGs resulting from human activity are CO_2, CH_4, and N_2O (OPR, 2008). State law defines GHGs to also include hydrofluorocarbons and sulfur hexafluoride. These latter GHG compounds are usually emitted in industrial processes, and therefore are not applicable to the proposed project. Individual projects contribute to the cumulative effects of climate change by emitting GHGs during construction and operational phases.

Once project construction activities are complete, ongoing maintenance and operations activities would occur as described in the Project Description, and would be similar to existing maintenance operations, and therefore would not generate additional operational vehicle trips and associated air emissions. Furthermore, the project would not directly generate operational emissions, nor would the project result in a significant increase in energy demand that would result in secondary GHG emissions.

Although the San Joaquin Valley Air Pollution Control District (SJVAPCD) recently released its Final Staff Report (SJVAPCD, 2009) on addressing GHGs in California Environmental Quality Act (CEQA) documents, this report does not specifically address the significance of construction emissions. Instead, it addresses large, stationary sources of GHG emissions, such as those from large industrial equipment (boilers, steam generators) and power plants. The SJVAPCD does not have specific guidelines that would apply to the proposed project. Since the project is not expected to increase traffic and the bridge itself does not emit significant levels of greenhouse gases, there is a less than significant impact.

Conflict with Plans (b): CARB is responsible for establishing and reviewing the State standards, compiling the California SIP and securing approval of that plan from USEPA, conducting research and planning, and identifying toxic air contaminants (TACs). CARB also regulates mobile sources of emissions in California, such as construction equipment, trucks, and automobiles, and oversees the activities of California's air quality management districts, which are organized at the county or regional level.

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32 – California Global Warming Solutions Act

California Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, was enacted in 2006 and requires CARB to establish a statewide GHG emission cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt regulations by January 1, 2008, that identified and required selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions, and CARB is authorized to enforce compliance with the program. Under AB 32, CARB also was required to adopt, by January 1, 2008, a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. By January 1, 2011, CARB is required to adopt rules and regulations (which shall become operative January 1, 2012), to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 permits the use of market-based compliance mechanisms to achieve those reductions. AB 32 also requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

In June 2007, CARB directed staff to pursue 37 early actions for reducing GHG emissions under AB 32. The broad spectrum of strategies to be developed – including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potentials, guidance and protocols for local governments to facilitate GHG reductions, and green ports – reflects that the serous threat of climate change requires action as soon as possible (CARB, 2007a).

In addition to approving the 37 GHG reduction strategies, CARB directed staff to further evaluate early action recommendations made at the June 2007 meeting, and to report back to CARB within six months. The general sentiment of CARB suggested a desire to try to pursue greater GHG emissions reductions in California in the near-term. Following the Jun 2007 CARB hearing, CARB staff evaluated all 48 recommendations submitted by stakeholders and several internally-generated staff ideas and published the *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration* in October 2007 (CARB, 2007b).

Climate Change Scoping Plan

In December of 2008, CARB adopted a Scoping Plan outlining the State's strategy to achieve the 2020 GHG emissions limit (CARB, 2008a). This Scoping Plan, developed by CARB in coordination with the Climate Action Team (CAT), proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce

dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. The measures in the Scoping Plan will be developed over the next two years and be in place by 2012.

CARB Preliminary Draft Staff Proposal, October 2008

In its Staff Proposal, CARB took the first step toward developing recommended statewide interim thresholds of significance for GHGs that may be adopted by local agencies for their own use. The proposal does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that, collectively, are responsible for substantial GHG emissions – specifically, industrial, residential, and commercial projects. CARB is developing these thresholds in these sectors to advance climate objectives, streamline project review, and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State.

CARB's staff has developed a preliminary interim threshold concept for industrial projects (CARB, 2008b). CARB staff's objective in this proposal is to develop a threshold of significance that will result in the vast majority (~90 percent statewide) of the GHG emissions from new industrial projects that are subject to CEQA's requirement to impose feasible mitigation. CARB believes this can be accomplished with a threshold that allows small projects to be considered less than significant.

Local Regulations and Plans

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

The Proposed Project would be located within the jurisdiction of the SJVAPCD. The SJVAPCD regulates air pollutant emissions for all sources throughout the SJVAB other than motor vehicles. The SJVAPCD enforces regulations and administers permits governing stationary sources. The following rules and regulations would apply to the Proposed Project.

Regulation VIII (Fugitive PM_{10} Prohibitions): Regulation VIII contains rules developed pursuant to USEPA guidance for Serious PM_{10} Nonattainment Areas. Rules included under this regulation limit fugitive PM_{10} emissions from the following sources: construction, demolition, excavation, extraction and other earth moving activities, bulk materials handling, carryout and track-out, open areas, paved and unpaved roads, unpaved vehicle/equipment traffic areas, and agricultural sources. Table 3.3-5 contains control measures that SCE would be required to implement during Proposed Project construction activities pursuant to Rule 8021, *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities*.

Rule 4102 (Nuisance): Rule 4102 prohibits the discharge of air contaminants or other materials in quantities that may cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such person or the public.

Rule 9510 (Indirect Source Review): Rule 9510 requires certain development projects to mitigate exhaust emissions from construction equipment greater than 50 horsepower to 20 percent below statewide average NOx, emissions and 45 percent below statewide average PM_{10} exhaust emissions. This rule also requires applicants to reduce baseline emissions of NOx and PM_{10} emissions associated with operations by 33.3 percent and 50 percent respectively over a period of 10 years.

TULARE COUNTY GENERAL PLAN

The County of Tulare has drafted a Draft climate Action Plan as part of the 2030 General Plan Update. However, the document has not been formally adopted.

Conclusion: Once project construction activities are complete, ongoing maintenance and operations activities would occur as described in the Project Description, and would be similar to existing maintenance operations, and therefore would not generate additional vehicle trips an associated air emissions. Furthermore, since the project is not expected to increase traffic and the bridge itself does not emit significant levels of greenhouse gases there is a less than significant impact. Thus, the Proposed Project would not conflict with proposed County's policies related to GHG/climate change. Furthermore, it is assumed that the Proposed Project would not interfere with implementation of AB 32 because it would not conflict with the 39 Recommended Actions designed to achieve the 2020 GHG emissions limit required by AB 32 identified in CARB's Climate Scoping Plan, impacts would be ***less than significant***.

Mitigation Measures: None are required.

3.8 HAZARDS/HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Response:

Hazardous Materials (a, b): The project will not involve the use or transport of more than small amounts of hazardous materials (such as fuel, solvents, and resurfacing materials) during construction. There are no known hazardous emitting sites within one mile, including either hazardous waste sites or underground storage tanks.

Conclusion: With the compliance of Federal and state laws, this impact will be reduced to ***less than significant***.

Mitigation Measures: None are required.

Hazardous Emissions (c, d): There are no schools, existing or proposed, within one-quarter mile of the project site. A search of the State Environmental Protection Agency Cortese Lists revealed that the project site is not included on any list of hazardous material sites or within one mile of a hazardous materials site and would not create a significant hazard to the public or the environment.

Conclusion: There are ***no impacts.***

Mitigation Measures: None are required.

Airport Land Use (e, f): The project is not located within an airport land use plan. The project is not located in the vicinity of a private airstrip.

Conclusion: There are ***no impacts***.

Mitigation Measures: None are required.

Adopted Emergency Response Plan or Emergency Evacuation Plan and Wildfires (g, h): The Project site is located in a rural section of the County, approximately seven miles from the community of Three Rivers. The threat of fire in this area ranges from high to very high, particularly during the dryer months of the year. It is surrounded by privately owned, sparsely populated land in an unincorporated area. This area is under the State Responsibility Area for fire protection, with services provided by California Department of Forestry. Upon

completion of the bridge replacement and widening project, the Project area will meet Tulare County Fire-Safe Regulations and Road Standards which require a minimum 18-foot road width. During the construction phase of the project, a temporary low-water crossing will provide an access route for emergency vehicles. If a wildfire were to occur in the area that required that residents to the south of the bridge location to evacuate, the temporary low-water crossing would provide an exit route. No Emergency Response Plan or Emergency Evacuation Plan has been established in the part of the County.

Conclusion: Impacts would be ***less than significant***.

Mitigation Measures: None are required.

3.9 HYDROLOGY/WATER QUALITY	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Response:

Water Quality (a): The proposed Project will not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality. Water quality objectives will be met through the adherence to requirements described in permits, such as the CWA Section 401 certification and the CDFG 1600 Streambed Alternation Agreement.

Conclusion: Impacts will be ***less than significant***.

Mitigation Measures: None are required.

Groundwater (b): The proposed project will not require use of any surface or groundwater either during or after construction.

Conclusion: Impacts will be ***less than significant***.

Mitigation Measures: None are required.

Surface Water (c, d): The M319 bridge crosses over the South Fork of the Kaweah River, which flows year around. The existing bridge will be demolished and removed, except that the existing footings will remain to a height of three feet. The replacement foundation will be constructed behind the existing footings to minimize release of sediment into the river channel. The temporary low-water crossing will also be constructed to avoid either altering the existing streambed or disturbing the streambed and thereby releasing sediment. Construction is

scheduled to occur during the warmest months (approximately between June 15 through October 15) to avoid disturbance of the river channel and water below the ordinary high water elevation.

Conclusion: The proposed project will not substantially alter the existing drainage pattern at the completion of the project. Erosion, siltation, and/or increased runoff in the river drainage will not result from the project.

Mitigation Measure #3.9-1: Construction activities shall follow Tulare County General Plan policies designed to protect surface water from adverse effects, including Best Management Practices and compliance with NPDES requirements.

Effectiveness of Mitigation Measure #3.9-1 The impact is ***less than significant with mitigation incorporation*.**

Stormwater (e): Construction will not require the use of significant amounts of water that would result in an increase in runoff or result in flooding. As the project will disturb less than one acre, the National Pollutant Discharge Elimination System (NPDES) for Discharge and Storm Water Associated with Construction Activity will not be required.

Conclusion: Impacts will be ***less than significant.***

Mitigation Measures: None are required.

Water Quality (f): The Project will not otherwise substantially degrade water quality.

Conclusion: ***No impacts*** will result.

Mitigation Measures: None are required.

Flood Hazard (g, h, i): According to the Flood Insurance Rate Map (2009), the Project area is not in Zone A, the 100-year flood zone. The riverbed of the South Fork of the Kaweah River is, however, included in Zone A downstream of the project area, where it has a higher volume of water. No buildings or other structures will be placed in the project area which will impede the flow from the River. Flow into the South Fork of the Kaweah River is not controlled by an upstream dam, and is, therefore, not subject to the failure of a dam or levee.

Conclusion: ***No impact*** will result from the replacement of the bridge.

Mitigation Measures: None are required.

Seiche/Tsunami (j): There is no potential for seiche or tsunami due to the lack of a significant water body near the site. The likelihood for a mudflow will not be increased because of, or as a result of, construction over the South Fork of the Kaweah River.

Conclusion: ***No impact*** will result.

Mitigation Measures: None are required.

3.10 LAND USE/PLANNING	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Response:

Divide Established Community (a): The project will provide a wider, more stable bridge leading to the residences to the southeast of the bridge. Development at this site will not result in any surrounding land use change, including the division of a community.

Conclusion: There is ***no impact***.

Mitigation Measures: None are required.

Conflicts with Land Use and Zoning (b): The project does not involve any change to, or conflict with, applicable land use plans, policies, or regulations.

Conclusion: There is ***no impact***.

Mitigation Measures: None are required.

Conservation Plan (c): There are no habitat conservation plans applicable to the proposed project.

Conclusion: ***No impacts*** will result.

Mitigation Measures: None are required.

3.11 MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Response:

Mineral Resources (a, b): The most important minerals in the County, for economic purposes, include sand, gravel, crushed rock and natural gas. The Kaweah River is one of three main sources of high quality sand and gravel. No mining occurs in the Project area or in the nearby vicinity. The closest mining operation is in the community of Lemon Cove, approximately 15 miles from the Project site**.** The project will not result in a loss of mineral resources.

Conclusion: ***No impacts*** to mineral resources will result.

Mitigation Measures: None are required.

3.12 NOISE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Response:

Permanent and Temporary Ambient Noise Levels (a, b, c, d): Roadway construction will create short-term noise above those deemed by the County as acceptable in noise-sensitive areas. Because the project area is not in a noise-sensitive area, County restrictions to noise levels above 65 dBA L_{dn} in residential areas do not apply. Attenuation (decrease) in noise levels is estimated to be approximately 20 dBA inside a building, so that residents of the two homes closest to the project will not typically experience noise levels in excess of 62 dBA

when inside. Excessive generation of groundborne vibration or groundborne noise will not occur during construction.

There will be no permanent increase in ambient noise levels as a result of the project.

Typical construction equipment would include tractors, forklifts, and miscellaneous equipment (e.g., pneumatic tools, generators, and portable air compressors). Noise levels generated by this type of construction equipment at various distances from the noise source are shown in Table 3.11-1.

Table 3.11-1
Estimated Construction Noise Levels

	Typical Noise Level dBA (Distance from source)		
Construction Equipment	**50 feet**	**100 feet**	**1.0 mile**
Pneumatic tools	85	79	45
Truck (e.g., dump, water)	88	82	48
Concrete mixer (truck)	85	79	45
Scraper	88	82	48
Bulldozer	87	81	47
Backhoe	85	79	45
Portable air compressor	81	75	41

Conclusion: Construction activities will be temporary in nature and will occur during only daytime hours. Construction shall be limited to the hours between 7:00 a.m. and 7:00 p.m. on weekdays, and between 9:00 a.m. and 6:00 p.m. on Saturday and Sunday in order to reduce the impacts to a less than significant level. Construction noise impacts could result in annoyance or sleep disruption for residents if nighttime operations were to occur or if equipment were not properly muffled or maintained. Construction noise will be temporary. Temporary noise impacts will be ***less than significant*** with the restriction to daytime construction activities. No permanent increase in noise levels will occur.

Mitigation Measure: None are required.

Airport Noise (e, f): The project site is not located near a public or private airport.

Conclusion: There is ***no impact***.

Mitigation Measures: None are required.

3.13 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Response:

Population Growth and Displacement (a, b, c): Replacement of the bridge and associated roadway improvements are in response to the County's determination that they do not meet current safety standards. No population growth will occur, and no dwelling units will be displaced.

Conclusion: There is ***no impact*** to population or housing.

Mitigation Measures: None are required.

3.14 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact, in order to maintain acceptable service ratios for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Response:

Fire Protection Services (a): Fire suppression support is provided by the California Department of Fire (Calfire) in this unincorporated area of the County. The project will not result in the need to provide additional fire protection facilities.

Conclusion: The project will not create a significant demand for additional fire services.
Mitigation Measures: None are required.

Police Protection (a): Law enforcement and police protection are provided by the Tulare County Sheriff's Department.

Conclusion: The project will not create a significant demand for additional police protection services.

Mitigation Measures: None are required.

School Facilities (a): Primary educational services are provided by Three Rivers Union School District.

Conclusion: The project will not create a significant demand for additional school facilities or staff.

Mitigation Measures: None are required.

Park Facilities (a): The proposed project does not include the construction of residential uses that would require new parks. Existing park facilities will not be impacted by this project.

Conclusion: There is ***no significant impact***.

Mitigation Measures: None are required.

Other Public Facilities (a): The proposed project does not include any other impacts to public facilities.

Conclusion: There is ***no significant impact***.

Mitigation Measures: None are required.

Conclusion: ***No impacts*** to pubic services will result during the construction or resulting from the Project.

3.15 RECREATION

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Response:

Recreational Facilities (a, b): The project will not increase the use or construction of existing parks or require construction of recreational facilities.

Conclusion: The proposed project does not include the construction of residential uses which would require new parks. Existing park facilities will not be impacted by this project. ***No impacts*** will occur.

Mitigation Measures: None are required.

3.16 TRANSPORTATION/TRAFFIC	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management City for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Response:

Conflict with plans or programs (a, b): The proposed Project will not conflict with the County's General Plan Elements, or any applicable ordinance or policy regarding the circulation system. The Project will not require construction of new streets or otherwise effect mass transit or bicycle paths. South Kaweah Drive leading from State Highway 198, and Mountain Road M319 (a.k.a. Grouse Valley Road) which branches from South Kaweah Drive are rural, two lane roads. As such, they are not included in the Tulare County Level of Service standards analysis. The Project will not increase the amount of traffic on Grouse Valley Road, although the replacement bridge and access will be widened to meet federal and State standards. The average daily traffic (ADT), or average number of vehicles utilizing the bridge is estimated to be 40 per day.

Conclusion: ***Less than significant impact***.

Mitigation Measures: None are required.

Air Traffic Patterns (c): The project site is not located in close proximity to an airport; therefore, the proposed project will not change or effect any air traffic patterns or airport land use plan.

Conclusion: There are ***no impacts***.

Mitigation Measures: None are required.

Hazards, Emergency Access and Parking (d, e): The project is expected to improve the condition of the roadway leading to the bridge, provide improved bridge safety, and improve structural integrity. The site will have adequate access for emergency traffic. Construction of the temporary crossing will provide emergency access during project construction. Parking for workers during construction will be provided adjacent to the northeast section of the project. Once construction has been completed, space for parking need not be provided in the project area.

Conclusion: ***Less than significant impact***.

Mitigation Measures: None are required.

Alternative Transportation (f): The project is not in conflict with alternative transportation policies, plans, or programs.

Conclusion: There will be ***no adverse impact*** on existing transit systems.

Mitigation Measures: None are required.

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

Response:

Wastewater (a, b, e): The proposed project will not require the use or construction of new wastewater facilities.

Conclusion: There is ***no impact***.

Mitigation Measures: None are required.

Storm Water (c): The proposed project will not alter existing drainage conditions.

Conclusion: The Project's stormwater impact is ***less than significant***.

Mitigation Measures: None are required.

Water Service (d): The project will not require use of water onsite. No new resources or entitlements will be needed.

Conclusion: The Project will have ***no impact*** on the County's ability to serve existing water users.

Mitigation Measures: None are required.

Solid Waste (f, g): The project will include demolition of the current bridge, including its footings, and construction of a replacement bridge. These activities are expected to generate construction debris including concrete, metal, and asphalt. Solid waste materials will be transported to the permitted landfill in Tulare County. In compliance with state, federal, and local regulations, materials will be recycled or composed to the extent possible.

Conclusion: The proposed project would not generate the need for new solid waste facilities and the impacts would be ***less than significant***.

Mitigation Measures: None are required.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Have the potential to: substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☒	☐
c) Have possible environmental effects that are individually limited but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.	☐	☐	☒	☐
d) Include environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Response:

(a) The proposed project has the potential to significantly impact several species during the construction phase. The potential for significant impact can be reduced to a less than significant level by implementing measures as outlined under Sections 3.1 and 3.4, so that no long-term affects to any species will occur. The proposed project is consistent with long-

range plans for the County's transportation system and would not be inconsistent with existing environmental plans.

(b) The project is in response to priorities for transportation related projects, as outlined by the Tulare County Federal Transportation Improvement Program. There will be no impacts to long term environmental goals.

(c) CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature and location of the project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., an increase in population that could lead to an increased need for housing, increase in traffic, air pollutants, etc).

(d) The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to less than significant.

SECTION FOUR

MITIGATION REPORTING/MONITORING PLAN

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SECTION FOUR – MITIGATION MONITORING PLAN

State and local agencies are required by Section 21081.6 of the California Public Resources Code to establish a monitoring and reporting program for all projects which are approved and which require CEQA processing.

Local agencies are given broad latitude in developing programs to meet the requirements of Public Resources Code Section 21081.6. The mitigation monitoring program outlined in this document is based upon guidance issued by the Governor's Office of Planning and Research.

The mitigation monitoring and reporting program for the proposed project corresponds to mitigation measures outlined in the project Mitigated Negative Declaration (MND). The Program summarizes the environmental issues identified in the MND, the mitigation measures required to reduce each potentially significant impact and the agency or agencies responsible for monitoring and reporting on the implementation of the mitigation measures.

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Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
3.1 Aesthetics				
3.1-1	Tulare County RMA shall avoid to the maximum extent feasible, all Great Valley Mixed Riparian Forest. This shall be accomplished through judicious project design, installation of high visibility construction work area fencing, and implementation of a worker awareness training program. Tulare County RMA shall provide for the restoration of Great Valley Mixed Riparian Forest that is temporarily disturbed by project activities. Restoration prescriptions, criteria for success, long-term monitoring of monitoring viability, and reporting shall be developed with the cooperation of the California Department of Fish and Game during the application process for acquisition of a Stream Alteration Agreement. Tulare County RMA shall compensate for the loss of sensitive habitats caused by activities associated with the demolition and construction of the M319 bridge and adjacent temporary low water crossing. Compensation for losses of sensitive vegetative communities would be accomplished through off-site preservation. Compensation shall be "in-kind" and provided by either the purchase of conservation credits from an approved conservation bank or by the establishment of a conservation easement on an approved conservation site. The County of Tulare RMA shall cooperatively consult with the California Department of Fish and Game to determine the habitat compensation ratios to be implemented to offset losses.	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
3.1-2	Tulare County RMA shall reduce impacts (e.g., removal, construction beneath the canopy, and trimming) to oak trees and riparian trees to the extent feasible. To facilitate avoidance, high visibility construction fencing shall be placed around oak trees to be avoided. All fencing must provide a buffer area around each oak tree that is not less that the aerial cover of the canopy. When avoidance and full protection is not possible, Tulare County RMA shall provide compensation for the loss of oak trees. Tulare County RMA does not have an adopted Oak Woodland Management Plan or other plan that specifies adopted compensation for the loss of oak trees. In lieu of a plan, the compensation for losses of oak trees shall be determined through consultation with the California Department of Fish and Game and State required compensation shall apply. Avoidance, protection, and compensation for the loss of riparian trees is covered under measure #1 above because, by definition, riparian trees are a dominant component of Great Valley Mixed riparian Forest.	Tulare County RMA	CDFG	Less Than Significant
3.1-3	All on-site contractors and construction workers, including supervisors and inspectors shall attend a worker training and awareness program. At a minimum, the training program shall include discussions of the natural history of the special status species potentially occurring on the project site, descriptions of the sensitive vegetation communities, and information on the measures that are being implemented. The construction workers shall be made aware of their roles and responsibilities in implementing the project protection measures and other requirements.	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	Construction activities shall be monitored on a weekly basis by a qualified biological monitor to ensure that all construction fencing and exclusionary fencing is appropriately maintained and that all other measures are fully and faithfully implemented. The biological monitor and the construction team shall work cooperatively to ensure that all measures are effective. The biological monitor shall be on-call to assist with any issues which may arise (such as the "take" of a sensitive species). The biological monitor shall discuss any infractions of the measures with the construction contractor, remedial actions shall be implemented when needed, and solutions shall be devised to prohibit subsequent infractions. A monthly progress report shall be prepared by the biological monitor, which shall be submitted to the California Department of Fish and Game. That report shall include dates of construction, types of construction activities occurring, descriptions of the measures that were implemented, infractions that occurred, and descriptions of any remedial actions that were taken. A final report shall be submitted once all construction has been completed and site restoration has been completed.			
3.2 Agriculture and Forest Resources				
3.1-1	Tulare County RMA shall avoid to the maximum extent feasible, all Great Valley Mixed Riparian Forest. This shall be accomplished through judicious project design, installation of high visibility construction work area fencing, and implementation of a worker awareness training program.	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	Tulare County RMA shall provide for the restoration of Great Valley Mixed Riparian Forest that is temporarily disturbed by project activities. Restoration prescriptions, criteria for success, long-term monitoring of monitoring viability, and reporting shall be developed with the cooperation of the California Department of Fish and Game during the application process for acquisition of a Stream Alteration Agreement. Tulare County RMA shall compensate for the loss of sensitive habitats caused by activities associated with the demolition and construction of the M319 bridge and adjacent temporary low water crossing. Compensation for losses of sensitive vegetative communities would be accomplished through off-site preservation. Compensation shall be "in-kind" and provided by either the purchase of conservation credits from an approved conservation bank or by the establishment of a conservation easement on an approved conservation site. The County of Tulare RMA shall cooperatively consult with the California Department of Fish and Game to determine the habitat compensation ratios to be implemented to offset losses.			
3.1-2	Tulare County RMA shall reduce impacts (e.g., removal, construction beneath the canopy, and trimming) to oak trees and riparian trees to the extent feasible. To facilitate avoidance, high visibility construction fencing shall be placed around oak trees to be avoided. All fencing must provide a buffer area around each oak tree that is not less that the aerial cover of the canopy. When avoidance and full protection is not possible, Tulare County RMA shall provide compensation for the loss of oak trees. Tulare County RMA	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	does not have an adopted Oak Woodland Management Plan or other plan that specifies adopted compensation for the loss of oak trees. In lieu of a plan, the compensation for losses of oak trees shall be determined through consultation with the California Department of Fish and Game and State required compensation shall apply. Avoidance, protection, and compensation for the loss of riparian trees is covered under measure #1 above because, by definition, riparian trees are a dominant component of Great Valley Mixed riparian Forest.			
3.4 Biological Resources				
3.4-1	Tulare County RMA shall perform surveys of the project site to determine presence/absence of plant species listed below prior to construction activities. Surveys shall be conducted during appropriate flower periods of these plants. Appropriate survey periods are: Kaweah brodiaea – April to June, Springville clarkia – May to June, and Munz' iris – February to April. If these species are determined to be absent, then no further measures are warranted. If any one or more of these species are found to be present, then the following shall be implemented. Tulare County RMA shall avoid populations and individuals of Kaweah brodiaea, Springville clarkia, and Munz' iris. Exclusion fencing shall be established around populations or individuals to protect against take during construction activities. If the removal of populations or individuals is required, then Tulare County RMA shall consult with the California	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	Department of Fish and Game (and in the case of the Springville clarkia, the United States Fish and Wildlife Service), to determine appropriate permitting requirements and compensation requirements.			
3.4-2	The project could potentially impact the foothill yellow-legged frog and the western pond turtle. Additional information is needed to determine impacts to these species and develop appropriate avoidance and compensation measures. Tulare County RMA shall perform surveys of the project site to determine presence/absence of these species prior to construction activities. Surveys shall be conducted during periods when these species are most likely to be present and observable. Appropriate survey periods are during low water flows in late spring and early summer when these species are active: If these species are determined to be absent, then no further measures are warranted. If any one or more of these species are found to be present, then the following shall be implemented. Tulare County RMA shall develop avoidance measures and provide compensation commensurate with project impacts. The California Department of Fish and Game shall be consulted during the development of avoidance measures and compensations requirements.	Tulare County RMA	CDFG	Less Than Significant
3.4-3	The hardhead (fish) is known to occur downstream of the project site and it may be present on the site, at least on a temporary basis. Tulare County RMA will implement the following measures to protect hardheads to the greatest extent feasible:	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	▪ Reduce debris and fill in the river to the extent feasible; ▪ Install coffer dams where necessary to divert flow away from construction activities and reduce the potential for siltation; ▪ Provide habitat restoration along disturbed riverbanks once construction is complete to reduce siltation; ▪ Limit construction activities within the river to periods of low water flow; and ▪ Ensure that all fueling and maintenance of equipment occurs in areas isolated from the river so that contamination and accidental spills do not affect riverine resources.			
3.4-4	If construction activities (including vegetation removal, grading or other ground clearing activities, bridge demolition and construction, road demolition and construction) occur during the breeding season of raptors and migratory birds (February 15 to September 15), then pre-construction surveys shall be conducted no more than 14 days prior to initiation of those activities. If more than 14 days lapse between the time of the pre-construction survey and the start of ground-disturbing activities, another pre-construction survey must be completed. Pre-construction surveys shall include the examination of all trees, shrubs, and appropriate ground nesting locations (for ground nesting species such as California horned lark, long-billed curlew, etc.) within 500 feet of planned construction related activities (e.g., site grading, bridge and road construction). If nests are found	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	that are not active, they may be removed by hand and construction may proceed within the area cleared by the surveys. If active nests are found, they must be avoided. Raptor nests shall be avoided by a distance of 500 feet and migratory birds nests shall be avoided by 250 feet. Avoidance shall be accomplished by the installation of exclusion area established around active nests. Construction within these excluded areas must be delayed until young have fledged (as determined by a qualified biologist) or until the nest has been abandoned. A qualified biologist may modify the size of the buffer based on site conditions and the bird's apparent acclimation to activities. If the buffer is modified, the biologist would be required to monitor stress levels of the nesting birds daily to ensure that project activities would not cause nest site abandonment or loss of eggs or young. At any time, the biologist shall have the right to implement the full buffer size if stress levels are elevated to the extent that could cause nest abandonment and/or loss of eggs or young.			
3.1-1	Tulare County RMA shall avoid to the maximum extent feasible, all Great Valley Mixed Riparian Forest. This shall be accomplished through judicious project design, installation of high visibility construction work area fencing, and implementation of a worker awareness training program. Tulare County RMA shall provide for the restoration of Great Valley Mixed Riparian Forest that is temporarily disturbed by project activities. Restoration prescriptions, criteria for success, long-term monitoring of monitoring viability, and reporting shall be developed with the	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	cooperation of the California Department of Fish and Game during the application process for acquisition of a Stream Alteration Agreement. Tulare County RMA shall compensate for the loss of sensitive habitats caused by activities associated with the demolition and construction of the M319 bridge and adjacent temporary low water crossing. Compensation for losses of sensitive vegetative communities would be accomplished through off-site preservation. Compensation shall be "in-kind" and provided by either the purchase of conservation credits from an approved conservation bank or by the establishment of a conservation easement on an approved conservation site. The County of Tulare RMA shall cooperatively consult with the California Department of Fish and Game to determine the habitat compensation ratios to be implemented to offset losses.			
3.2-1	Tulare County RMA shall reduce impacts (e.g., removal, construction beneath the canopy, and trimming) to oak trees and riparian trees to the extent feasible. To facilitate avoidance, high visibility construction fencing shall be placed around oak trees to be avoided. All fencing must provide a buffer area around each oak tree that is not less that the aerial cover of the canopy. When avoidance and full protection is not possible, Tulare County RMA shall provide compensation for the loss of oak trees. Tulare County RMA does not have an adopted Oak Woodland Management Plan or other plan that specifies adopted compensation for the loss of oak trees. In lieu of a plan, the compensation for losses of oak trees shall be determined through consultation with the California Department of Fish and Game and State required compensation shall apply.	Tulare County RMA	CDFG	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
3.4-5	The project could result in up to 0.155 acres of cut and fill within the river, although impacts are expected to be reduced to less than 0.1 acres within the ordinary high water elevation with the implementation of various design features. Tulare County RMA shall procure an appropriate permit from the United States Army Corps of Engineers (USACOE) and/or the Regional Water Quality Control Board. If, as planned, less than .1 acre will be impacted, the appropriate permit from the USACOE would be a Nonreporting Permit under the Nationwide Permit. This permit must also be provided to Caltrans. Tulare County RMA shall reduce impacts to the South Fork of the Kaweah River to the extent feasible. Pursuant to USACOE regulations, if less than 0.1 acres of impacts or less will occur, then compensation for impacts to the river is not required. However, if impacts to the river exceed 0.1 acres, then Tulare County RMA will provide a Mitigation Plan describing restoration and compensation, as required by the permit approval process. Additionally, the Tulare County RMA will coordinate with California Department of Game and Fish to acquire the appropriate authorization, most likely a Steam Alteration Agreement.	Tulare County RMA	CDFG, US Army Corps of Engineers, Caltrans, Regional Water Quality Control Board	Less Than Significant
3.5 Cultural Resources				
3.5-1	Although there is no recorded evidence of archaeological sites on the project site, there is the potential during project-related excavation and construction for the discovery of cultural resources. The County will incorporate into the construction contract a provision that the contractor and all subcontractors shall implement the following measures:	Tulare County RMA	Tulare County RMA	Less Than Significant

Impact Number	Mitigation Measure	Implementing Agency	Monitoring Agency	Level of Significance After Mitigation
	▪ If, in the course of the bridge demolition or construction, or associated roadway improvement, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within 50 feet of the find area shall cease. A qualified archaeologist shall be contacted and will advise the lead agency of the site's significance. If the findings are deemed significant, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the project. ▪ If, in the course of project construction, any skeletal remains are uncovered, discovered, or otherwise detected or observed, activities in the affected area shall cease. A qualified archaeologist, the County Coroner and local Native American organizations shall be consulted, and appropriate measures shall be required that may include avoidance of the burial site or reburial of the remains.			
3.6 Geology/Soils				
3.6-1	Construction activities shall follow Tulare County General Plan policies designed to protect surface water from adverse effects, including Best Management Practices and compliance with NPDES requirements.	Tulare County RMA	Tulare County RMA	Less Than Significant
3.9 Hydrology/Water Quality				
3.9-1	Construction activities shall follow Tulare County General Plan policies designed to protect surface water from adverse effects, including Best Management Practices and compliance with NPDES requirements.	Tulare County RMA	Tulare County RMA	Less Than Significant

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SECTION FIVE

PERSONS AND SOURCES CONSULTED

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SECTION FIVE – PERSONS AND SOURCES CONSULTED

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SECTION SIX

LIST OF PREPARERS

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SECTION SIX – LIST OF PREPARERS

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APPENDICES

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Appendix A

Excerpt from Type Selection Report

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MEMORANDUM

TO:	County of Tulare Kuna Muthusamy, Project Manager	Date: Job No:	August 23, 2010 2009057
FROM:	Mr. Ben Ruiz, Jr., SE		
PROJECT:	M319 Bridge over the South Fork of the Kaweah River Type Selection Recommendations		

I. GENERAL DESCRIPTION

The M319 Kaweah River Bridge is located in the County of Tulare, near the town of Three Rivers (see Figure 1for Vicinity Map) and is estimated, based on the year of construction of the adjacent bridges, to have been constructed in the 1950's. The existing bridge is a single-lane bridge which provides access to residences located east of the South Fork of the Kaweah River at M319. The single-span bridge consists of two parallel steel box trusses with precast concrete panel decking, and is supported on tall, reinforced concrete abutments with flared wingwalls at each corner. The abutments and wingwalls are founded on spread footings which are doweled into bedrock. The existing structure is approximately 60 ft. long and 12 ft. wide with a curb-to-curb width of approximately 10.5 ft. Timber curb and railing run along each edge of deck, and timber planks overlain with asphalt concrete run longitudinal over the bridge deck at the wheel lines.

The existing bridge has a sufficiency rating of 37.4, and is considered structurally deficient and functionally obsolete due to its insufficient deck geometry. The current curb-to-curb width does not satisfy the AASHTO standard for local roads in rural areas, which requires that a minimum roadway width of 15 ft. be carried over a one-lane bridge. Additionally, the timber rails are deteriorated and do not meet current Caltrans standards for bridge barrier railing. The low sufficiency rating, resultant of several bridge deficiencies, qualifies the bridge for replacement using HBP funds.

II. TYPE SELECTION RECOMMENDATION

The purpose of the type selection recommendation is to identify alternatives for the replacement of the M319 Kaweah River Bridge and evaluate the effectiveness of each alternative, taking into account hydraulics, geotechnical recommendations, roadway alignment, environmental concerns, and cost. A thorough evaluation of the factors affecting the design of the bridge yielded three bridge alternatives.

Figure 1: M319 Kaweah River Bridge Vicinity Map.

Alternative 1

Alternative 1 consists of constructing a replacement bridge along the existing alignment in a single stage. In order to maintain access to residences located east of the river, a temporary low water crossing will be provided on the downstream side during construction of the new bridge and approach roadway.

The proposed bridge will be a single-span precast, prestressed box girder bridge, approximately 80 ft. long and ~~20~~ 22 ft. wide and will accommodate an ~~single 12 ft. travel lane with 2 ft. shoulders on either side~~18 ft. roadway (satisfying the AASHTO ~~requirement for a~~ minimum of ~~15~~ 18 ft. of roadway ~~over the bridge~~on minor access roads located in rural areas). The provided clear width (18 ft.) will allow two vehicles to access the bridge at the same time so that opposing directions of travel will not be prohibited from passing one another while on the bridge. The superstructure will consist

of six, 3 ft. wide Caltrans standard precast box girders with a 5 in. thick concrete topping slab. The superstructure will have a depth of approximately 3.17 ft. and will span over the 50 year high water elevation with a minimum of 2 ft. of freeboard, and the 100 year high water surface elevation with approximately 1 ft. of freeboard. Caltrans Type 80 railing will be placed along each edge of deck, and will extend along the wingwalls and retaining walls at each corner of the bridge. Retaining walls will be flared 5(?) ft. at the end in order to provide the required clear-zone distance specified in the AASHTO Roadside Design Guide (Table 3.1).

The superstructure will be supported at each end by high cantilever-type abutments founded on spread footings that will sit atop bedrock. The retaining walls that will extend beyond the wingwalls at each corner of the bridge will also sit atop bedrock. The existing abutments and flared wingwalls will be cut down to approximately 3 ft. in height and left in place to provide scour protection for the new abutments.

Alternative 2

Alternative 2 consists of constructing a replacement bridge along the existing alignment in two stages. The first stage will construct a portion of the new bridge on the downstream side (west side) of the existing bridge while maintaining traffic on the existing bridge. After completion of the first stage, traffic will be diverted to the new portion allowing the existing bridge to be removed and the remainder of the new bridge to be constructed in its place. In the first stage of construction, enough bridge width must be built to accommodate one lane of traffic, resulting in a final bridge width that exceeds what is required by AASHTO given the anticipated ADT. The final bridge width will be approximately 33 ft. and have a curb-to-curb width of 29 ft. This is enough width to provide two 12 ft. lanes with 2.5 ft. shoulders, ~~however the County does not intend to widen the M319 roadway so that two lanes of traffic can access the bridge~~however AASHTO only requires an 18 ft. roadway given the very low volume of traffic. ~~Instead, the bridge will provide an excessive amount of width for a single lane of traffic. The AASHTO Guidelines for Geometric Design of Very Low Volume Local Roads cautions that providing a roadway width in excess of 16 ft. over a one-lane bridge may result in drivers using the bridge as a two-lane structure, and recommends that measures are taken to assure this does not happen.~~

The proposed bridge will be a single-span precast, prestressed box girder bridge, approximately 80 ft. long and 33 ft. wide, utilizing ten, 3 ft. wide Caltrans standard precast box girders with a 5 in. thick topping slab. The superstructure will have a depth of approximately 3.17 ft. and will span over the 50 year high water surface elevation with a minimum of 2 ft. of freeboard, and the 100 year high water surface elevation with approximately 1 ft. of freeboard. Caltrans Type 80 railing will be placed along each edge of deck, and will extend along the wingwalls and retaining walls at each corner of the bridge. The superstructure will be supported at each end by either high cantilever-type abutments founded on spread footings that will sit atop bedrock, or by

short seat-type abutments founded on four, 30 in. diameter CIDH piles with 24 in. diameter rock sockets.

Staging the construction of the replacement bridge within the right-of-way becomes problematic given the geotechnical and hydraulic conditions. High velocity flow in the channel requires that a spread footing type foundation be placed atop bedrock. Due to the depth of bedrock relative to the roadway surface, a significant amount of room is required to excavate down to place the spread footing (shoring would be difficult in this case do to the presence of boulders and cobbles that would prohibit vibration or impact driving of sheet piles). To prevent the temporary excavation slopes from extending into the existing travel way, the bridge must be shifted outside of the right-of-way. If additional right-of-way is to be required for the construction of the replacement bridge, it becomes more economical to place the bridge along a new alignment rather than to stage the construction (see Alternative 3). By moving the bridge slightly more downstream, a ~~20~~ 22 ft. wide bridge similar to that proposed in Alternative 1could be constructed in a single stage.

A short seat-type abutment could be provided if founded on piles that have a socket into bedrock. This type of abutment would not require nearly as much room for excavation as the high cantilever-type abutment, and could be constructed within the existing right-of-way. However, difficulty arises in placing the drilled piles. The rock at this location has very high compressive strength (near 14,000 psi) making the feasibility of drilling rock sockets questionable. Discussion with a large pile drilling contractor indicates rock socket piles with conventional equipment are possible in fractured rock with compressive strength to about 7,000 to 8,000 psi. With higher strengths (about 11,000 to 12,000 psi), placement of the rock sockets requires large, heavy-duty equipment that would be difficult to transport to the mountainous site. The roadway would likely need to be closed. Once on site, the equipment would take up a significant amount of room, perhaps blocking access to the existing bridge. Even with the large drilling rig, the feasibility of drilling in rock with unconfined compressive strength approaching 14,000 psi is questionable. It may still be necessary to employ costly and time consuming diamond coring and/or demolition tools and progressive rock fracturing expansion chemicals.

Alternative 3

Alternative 3 consists of constructing a replacement bridge along a new alignment located on the downstream side of the existing bridge. This alternative would require the acquisition of additional right-of-way. Like Alternative 1, the proposed bridge would be a single-span precast, prestressed concrete box girder bridge, approximately 80 ft. long and ~~20~~ 22 ft. wide. The superstructure will utilize six, 3 ft. wide Caltrans standard precast box girders with a 5 in. thick concrete topping slab, and have a total depth of approximately 3.17 ft. The superstructure will span the river, providing a minimum of 2 ft. of freeboard on the 50 year high water surface elevation and

approximately 1 ft. of freeboard on the 100 year high water surface elevation. The bridge will accommodate an 18 ft. roadway ~~single 12 ft. lane with 2 ft. shoulders~~, and have Caltrans Type 80 railing at each edge of deck that will extend along the wingwalls and retaining walls at all corners of the bridge.

Recommended Alternative

The recommended alternative is Alternative 1(see Appendix 1 for General Plan) because it is the most economical and has the least amount of permanent impacts to the site. Constructing a replacement bridge in a single stage along the same alignment as the existing bridge allows the bridge width to be optimized, and eliminates the roadway work associated with shifting the alignment and the purchase of additional right-of-way.

III. DESIGN AND CONSTRUCTION DATA

Abutment Type

Considering the hydraulic and geotechnical conditions at the site, high cantilever-type abutments are the practical choice. The cantilever-type is more economical and efficient than the seat-type for abutment heights in excess of 14 ft. Tall abutments are required at this site in order to place the spread footing foundation atop bedrock and thereby eliminate the risk of scour due to high velocity flows.

Alignment and Grade

The alignment of the proposed bridge will match the existing bridge alignment, and will bear straight at approximately N34°42'9"W. A slight grade will be provided on the bridge to facilitate deck drainage towards the northern abutment. The bridge elevation will be 0.5 ft. higher at the southern abutment, providing a longitudinal slope of 0.63%.

Aesthetics

We understand that the County of Tulare desires that aesthetic treatments be added to the bridge. Based upon the surrounding terrain, we propose that a river rock treatment be applied to the exposed faces of the abutments, wingwalls and retaining walls, and a timber treatment be applied to the exposed side face of the exterior precast girders (see Figure 2). On the bridge deck, we propose the Type 80 barrier rail be treated so that ~~the curb and posts have a river rock appearance and~~ the horizontal beam has a timber appearance (see Figure 3). The curb and posts would not be stamped as shown in Figure 3, but would be stained to match the horizontal beam. To disguise the existing abutment and wingwall portions left in place, we suggest placing large landscaping boulders (approximately 4 ft. diameter) on top of the existing

footings. Their large size will prevent them from washing downstream, while providing a cover for the existing wingwalls and abutments and blending with the surrounding rock outcroppings. The County will ultimately decide which aesthetic treatments to apply to the bridge, within the maximum HBP permittable cost of 5% of the total cost of the bridge.

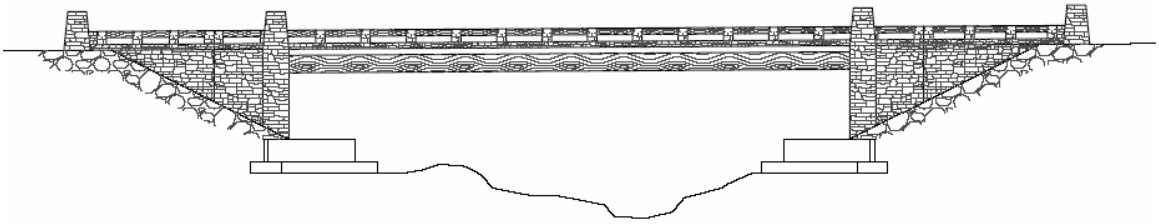

Figure 2: Proposed elevation with aesthetic treatments.

Figure 3: Caltrans Type 80 rail with aesthetic treatments.

Approach Slabs

According to Caltrans Memo to Designers, Section 5-3, structure approach slabs are not required for this bridge because it is not a multilane urbanized highway, not in a seismic prone area (i.e. peak rock acceleration greater than 0.6g), and not located at a sight that has unusual geological conditions. Therefore, approach slabs will not be provided.

Bridge Geometry

The overall width of the proposed bridge is ~~20~~ 22 ft. and accommodates ~~a~~ two lanes of traffic in 18 ft. of clear width, ~~single 12 ft. lane with 2 ft. shoulders~~ and a Caltrans Type 80 barrier rail at each edge of deck. The proposed curb-to-curb width of ~~16~~ 18 ft. satisfies the minimum ~~bridge~~ roadway width specified by AASHTO for local roads in rural areas (~~15~~ 18 ft.) with design speeds less than or equal to 40 mph. ~~ADT less than 100 and does not exceed the maximum recommended bridge width for one-lane bridges (16 ft.).~~

Bridge Rail

Caltrans Type 80 concrete barrier rail will be used at each edge of deck and will extend over the top of the wingwalls and retaining walls at all four corners of the bridge. At each approach, the retaining walls will flare 5(?) ft. providing 7 ft. clear between the edge of the travel way and the edge of the barrier. This offset satisfies the AASHTO clear-zone distance requirement given in the Roadside Design Guide (Table 3.1), which is intended to prevent drivers from running off the road and into a blunt corner of the barrier rail (see Figure 4).

Bridge Removal

The existing bridge superstructure will be removed, and the existing abutments and flared wingwalls will be cut down to approximately 3 ft. in height and left in place. Construction of the new abutments and placement of fill will occur behind the existing abutments to minimize channel impacts, and the portions of the existing abutment and wingwalls left in place will serve as erosion protection.

Clearances

The Highway Design Manual (HDM) specifies that the bridge should span the 50 year high water surface elevation with sufficient freeboard and convey the 100 year high water surface elevation without freeboard. According to the HDM, 2 ft. of freeboard

on the 50 year high water surface elevation is an acceptable assumption for preliminary design.

According to the preliminary hydraulics report prepared by Avila and Associates dated July 23, 2010 (see Appendix 5), the 50 year high water surface elevation is 1864.2 ft. and

[U.S. Customary Units]

DESIGN SPEED	DESIGN ADT	FORESLOPES			BACKSLOPES		
		1V:6H or flatter	1V:5H TO 1V:4H	1V:3H	1V:3H	1V:5H TO 1V:4H	1V:6H or flatter
40 mph	UNDER 750	7 – 10	7 – 10	**	7 – 10	7 – 10	7 – 10
or less	750 – 1500	10 – 12	12 – 14	**	10 – 12	10 – 12	10 – 12
	1500 – 6000	12 – 14	14 – 16	**	12 – 14	12 – 14	12 – 14
	OVER 6000	14 – 16	16 – 18	**	14 – 16	14 – 16	14 – 16
45–50 mph	UNDER 750	10 – 12	12 – 14	**	8 – 10	8 – 10	10 – 12
	750 – 1500	14 – 16	16 – 20	**	10 – 12	12 – 14	14 – 16
	1500 – 6000	16 – 18	20 – 26	**	12 – 14	14 – 16	16 – 18
	OVER 6000	20 – 22	24 – 28	**	14 – 16	18 – 20	20 – 22
55 mph	UNDER 750	12 – 14	14 – 18	**	8 – 10	10 – 12	10 – 12
	750 – 1500	16 – 18	20 – 24	**	10 – 12	14 – 16	16 – 18
	1500 – 6000	20 – 22	24 – 30	**	14 – 16	16 – 18	20 – 22
	OVER 6000	22 – 24	26 – 32 *	**	16 – 18	20 – 22	22 – 24
60 mph	UNDER 750	16 – 18	20 – 24	**	10 – 12	12 – 14	14 – 16
	750 – 1500	20 – 24	26 – 32 *	**	12 – 14	16 – 18	20 – 22
	1500 – 6000	26 – 30	32 – 40 *	**	14 – 18	18 – 22	24 – 26
	OVER 6000	30 – 32 *	36 – 44 *	**	20 – 22	24 – 26	26 – 28
65–70 mph	UNDER 750	18 – 20	20 – 26	**	10 – 12	14 – 16	14 – 16
	750 – 1500	24 – 26	28 – 36 *	**	12 – 16	18 – 20	20 – 22
	1500 – 6000	28 – 32 *	34 – 42 *	**	16 – 20	22 – 24	26 – 28
	OVER 6000	30 – 34 *	38 – 46 *	**	22 – 24	26 – 30	28 – 30

Figure 4: AASHTO clear-zone guidelines.

the 100 year high water surface elevation is 1865.7 ft. The minimum proposed soffit elevation of 1866.6 ft. provides 2.4 ft. of freeboard on the 50 year high water surface elevation and conveys the 100 year high water surface elevation with approximately 1 ft. of freeboard. According to Avila and Associates, drift potential is minimal and the provided freeboard should be sufficient to pass all debris.

Construction Equipment

Typical construction equipment in the channel will include the following:

- Backhoes and dump trucks will be used for excavation at the abutments, and lighter equipment will be used for backfill compaction.

- Construction of cast-in-place high cantilever-type abutments and retaining walls will require a crane or forklift (i.e. gradall) and earth moving equipment (i.e. backhoe or grader).
- Superstructure construction will require the use of cranes and concrete pumps during concrete placement. Superstructure construction will also require that construction vehicles have access to the floodplain.

Construction Period

Construction will occur over three months, starting in the middle of July and extending through October. Water levels are expected to be lowest during these months, facilitating the construction of a low water crossing. Higher flows are anticipated during the spring and early summer due to snow pack run off, and during the late fall and winter due to rain fall.

Construction Staging

The contractor may choose to locate a staging area adjacent to the northeast corner of the bridge. The staging area will be used to store equipment and materials and to provide parking areas for construction workers and equipment for the duration of construction. This temporary staging area will be reclaimed to conditions equivalent to existing conditions after project construction has been completed.

Datum

The project datum is a local datum based on a benchmark set in a large rock to the northeast of the bridge by Tulare County surveyors in the 1980's. The datum is not known to correlate with the NGVD29 or the NAVD88 datum.

Detour

A temporary low water crossing will be constructed to maintain access to residences located east of the river during construction of the replacement bridge. Temporary fills will be provided (within a temporary construction easement) to provide access to the water crossing. Design of the low water crossing will be up to the Contractor, but will be reviewed by Cornerstone prior to placement.

Drains

No deck drains will be provided. The bridge deck will have a unidirectional slope of 2% towards the right edge of deck. Runoff from the deck will flow along the right edge of deck towards the northern abutment and run off the roadway onto rock at the end of the barrier rail. The roadway will be paved in front of the barrier rail in order to prevent erosion behind the retaining wall due to runoff.

Environmental Impacts

The environmental studies for this project have been conducted by Quad Knopf. A biological survey of the area surrounding the M319 bridge crossing was conducted by Quad Knopf in 2010 (see Appendix 7 for exhibits). The ordinary high water mark was identified based on the findings of this investigation.

Impacts, such as temporary and permanent fills, within the ordinary high water mark will be calculated and submitted to the U.S. Army Corps of Engineers as part of permitting (see Permits below). Because the proposed abutments will be located behind the existing abutments, which will in part be left in place, there will not be any permanent impacts within the channel. Grading for the low water crossing will also be kept outside of the ordinary high water mark, so that there will not be any temporary impact within the ordinary high water limits.

Falsework

No falsework is required to construct the precast superstructure.

Foundation

The foundation recommendations for this project will be prepared by Kleinfelder. Please refer to Appendix 6 for the preliminary foundation memorandum by Kleinfelder dated July 13, 2010. Final design will be dependent on the final geotechnical report.

Two borings conducted by Kleinfelder in 2010 (located near the proposed abutments) encountered granitic bedrock. Exposed granitic bedrock was observed at the existing supports and along the bottom of the channel. Due to the relatively shallow bedrock, spread footings were determined to be most suitable for the site. At the recommendation of the geotechnical engineer, abutment footings will be placed on sound granitic bedrock.

According to Kleinfelder, the drilling techniques used during the borings did not allow for the direct observation of groundwater seepage, but it is anticipated that the ground water coincides with the water level in the channel.

Based on the foundation memorandum, the potential for liquefaction and associated seismically induced settlement is nil due to the fact that the bridge foundation will be supported on bedrock. The design ARS curve for the site will be based on Caltrans Seismic Design Criteria (SDC) Version 1.5, and is based on an envelope of the deterministic and probabilistic response spectrums. The design ARS curve is governed by the Caltrans minimum default condition (i.e. M_{Max} 6.5 even 10 km from site).

Hydraulics

The hydraulic analysis was prepared by the project Hydraulics Engineer, Avila and Associates. Please refer to Appendix 5 for the Draft Design Hydraulic Study dated July 23, 2010.

The South Fork of the Kaweah River flows northwesterly through the center eastern part of Tulare County towards The Kaweah River and into Lake Kaweah. An approximate 50 square mile basin is drained at the M319 bridge crossing. A statistical regression analysis was performed on data obtained from three gages located on the Kaweah River to estimate the discharge at the bridge. Based on this analysis, the 50-year design discharge was found to be 7,400 cfs and the 100-year design discharge was found to be 10,000 cfs.

Hydraulic modeling of the proposed bridge showed a slight decrease in the water surface elevation at the upstream face of the bridge compared with the existing bridge. This is due to the increased length of the proposed bridge in relation with the existing bridge. According to Avila and Associates, replacing the existing bridge with the proposed bridge will improve the channel hydraulics slightly.

Scour was considered in the hydraulic study and found to be a nonissue (see Scour Protection for discussion of scour).

Lighting

No lighting will be provided on the bridge because the bridge is located in a rural area.

Loading

The bridge will be designed for HL93 and Permit design loading. No provisions will be made for special construction loading.

Permits

Permits will be required from the California Department of Fish and Game (CDFG), the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board (CRWQCB), and the State Reclamation Board, as well as other agencies that may have jurisdiction. Impact acreage within the Ordinary High Water (both temporary and permanent) will be calculated and submitted to the U.S. Army Corps of Engineers for approval. Impact within the Ordinary High Water is expected to be less than 0.1 acres. All permit applications will be prepared by the project team for the County of Tulare.

Roadway Approaches

The HBP program funds the improvement of up to 400 ft. of approach roadway at each abutment. According to AASHTO design guidelines for very low-volume local roads in rural areas, the total roadway width (including traveled way and shoulders) for a minor access road with a design speed up to 40 mph is 18 ft. (see Figure 5). This will provide enough room for vehicles in opposing directions of travel to pass one another on the roadway. The County proposes to pave ~~16~~ 18 ft. of roadway at the approaches.~~in order to match the proposed bridge width and provide graded shoulders on either side.~~ and in addition, the areas located in front of the barrier flares. The paved roadway width will transition to the existing roadway width over the length of the improvement. The County proposes to improve approximately 400 ft. of approach roadway on the north side of the bridge and approximately 200 ft. on the south side.

~~At the bridge, AASHTO specifies that intervisible pull-offs be provided at each end to provide space for vehicles to wait for opposing traffic to clear the bridge. The County proposes to provide a 20 ft. wide paved roadway for 50 ft. beyond the end of the bridge rail on the right hand side of each approach. This will allow approaching vehicles to pull off to the right so that opposing bridge traffic can pass. At the bridge rail, the 20 ft. wide paved roadway will transition to 26 ft. wide so that the entire roadway between the bridge rails is paved.~~

US Customary

Design speed (mph)	Total roadway width (ft) by functional subclass					
	Major access	Minor access	Recreational and scenic	Industrial/ commercial access	Resource recovery	Agricultural access
15	–	18.0	18.0	20.0	20.0	22.0
20	–	18.0	18.0	20.0	20.0	24.0
25	18.0	18.0	18.0	21.0	21.0	24.0
30	18.0	18.0	18.0	22.5	22.5	24.0
35	18.0	18.0	18.0	22.5	22.5	24.0
40	18.0	18.0	20.0	22.5	–	24.0
45	20.0	20.0	20.0	23.0	–	26.0
50	20.0	20.0	20.0	24.5	–	–
55	22.0	–	22.0	–	–	–
60	22.0	–	–	–	–	–

Note: Total roadway width includes the width of both traveled way and shoulders.

Figure 5: AASHTO guidelines for total roadway width.

Scour Protection

No scour protection will be provided because, according to Avila and Associates, scour is not anticipated to occur at the proposed bridge. Abutment scour is not anticipated as the proposed abutments will be founded on granitic bedrock. Even though the bridge significantly contracts the channel, contraction scour is not anticipated due to the outcroppings of bedrock within the channel and the rock profile at the bridge. Long term degradation is considered negligible as channel cross sections at the bridge taken in 1974 and 2010 show no significant change in the channel.

To protect the approach embankments from the relatively high velocities (peak velocities of 17 fps), Avila and Associates recommends that rock slope protection be provided and extend up to the 100-year high water surface elevation (elevation 1866 ft.). Using the California Bank and Shore Protection Methodology with assumed impinging flow requires a Type B fabric be used, overlaid by a 1.8 ft. thick layer of Backing #1 followed by a 3.4 ft. thick layer of ½ ton rock slope protection. Some rock riprap already located at the site could possibly be used to construct part of the proposed rock slope protection.

Superstructure Type

The superstructure will be a single-span precast, prestressed box girder bridge, approximately 80 ft. long and ~~20~~ 22 ft. wide. It will consist of six, 3 ft. wide Caltrans standard precast, prestressed box girders with a 5 in. topping slab. The bridge deck will have a unidirectional cross slope of 2% towards the right edge of deck. No falsework will be needed to construct the superstructure, and the channel will not be impacted.

Temperature Range

The temperature range is moderate per AASHTO LRFD Bridge Design Specifications. The ambient temperature in Tulare County ranges from 30°F to 115°F. This temperature range will be used to design bearings and joint openings at the abutments.

Utilities

No utilities are located on the existing bridge. Existing overhead electrical lines are located approximately 20 ft. off the proposed right edge of deck, on the downstream side. These electrical lines may need to be relocated ~~during construction to accommodate the low water crossing~~, or possibly left in place but taken out of service during erection of the temporary crossing. No utilities are expected to be located on the proposed bridge.

IV. APPENDICES

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Appendix 2:	Preliminary Roadway Plans
Appendix 3:	Project Estimate
Appendix 4:	Project Schedule
Appendix 5:	Draft Design Hydraulics Study
Appendix 6:	Preliminary Foundation Memorandum
Appendix 7:	Environmental Exhibits
Appendix 8:	Meeting Minutes

Appendix B

Biological Report

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REVISED BIOLOGICAL EVALUATION

PROPOSED M319 BRIDGE REPLACEMENT PROJECT SITE

September 2010

Quad Knopf

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Revised Biological Evaluation of the Proposed M319 Bridge Replacement Project Site, Tulare County, California

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September 2010

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Appendix B – Representative photographs of the M319 Bridge replacement project site, Tulare County, California

Appendix C – List of sensitive natural communities, special status plants, and special status wildlife potentially occurring on the M319 Bridge replacement project site

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EXECUTIVE SUMMARY

The County of Tulare Resource Management Agency (RMA) plans to replace Bridge No. 46C0119, M319 over the South Fork of the Kaweah River. The bridge replacement would consist of removing the existing structure and replacing it on its existing alignment with a pre-cast voided slab/box girder that is approximately 80 to 90-feet long and with a width of approximately 22 feet. The new structure would accommodate two travel lanes with two 2-foot shoulders. The bridge is located approximately 0.2 miles south of South Fork Drive and 6 miles southeast of State Route 198 near the community of Three Rivers. It is located on Grouse Valley Road and crosses the South Fork of the Kaweah River.

Quad Knopf biologists conducted a literature and database review and conducted field surveys of the project site and surrounding area to determine potential project impacts. Information on existing vegetative communities, rare plant species, oak trees and riparian trees, special status wildlife species, raptors, and wetlands and waters of the United States was gathered. This information is presented, along with an analysis of potential project impacts and recommended protection measures.

The project site is primarily within riparian habitat (Great Valley Mixed Riparian Forest) surrounded by dense blue oak woodland at an elevation of approximately 1,880 feet above mean sea level. Some impacts to riparian habitat, riparian trees, and oak trees are anticipated. No special status plant species were found on or near the site, but surveys were not conducted during the appropriate period to identify some species. Habitat conditions and edaphic characteristics on the site are suitable to support three species; Kaweah brodiaea, Springville clarkia, and Munz' iris. Similarly, no special status wildlife species were found on or near the project site, but the Hardhead is known to occur downstream of the site in the South Fork of the Kaweah River and it likely occurs in the waters of the site, at least on a temporary or seasonal basis. Two other special status wildlife species could potentially occur on or near the site on a seasonal or temporary basis; the foothill yellow-legged frog and the western pond turtle. No raptor nests or migratory birds nests were located during the site survey. No wetlands occur on the project site but the South Fork of the Kaweah River will likely fall under the jurisdiction of the Unites States Army Corps of Engineers.

As originally designed, construction of the bridge was likely to impact riparian habitat, riparian trees, oak trees, and Waters of the United States (Quad Knopf 2010). Based upon the findings of that initial biological report (Quad Knopf July 2010), the bridge was redesigned to minimize the potential to impact biological resources. Revisions include alternatives to demolition and construction methods that would have required cut and fill within the Ordinary High Water elevation, with the intent to reduce impacts within the Ordinary High Water Mark to less than 0.1 acre.

There remains a potential for the project to impact three special status plants, three special status wildlife species, and raptor and migratory birds nests. Measures to reduce impacts to these biological resources are recommended in this report. Should impacts within the South Fork of the Kaweah River exceed 0.1 acres, a permit from the United States Army Corps of Engineers

for cut and fill in the South Fork of the Kaweah River and a Stream Alteration Agreement from the California Department of Fish and Game for disturbance to riparian habitat would be needed.

1.0 INTRODUCTION

1.1 Project Description and Objective

The County of Tulare RMA plans to replace Bridge No. 46C0119, M319 over the South Fork of the Kaweah River (M319 Bridge Replacement). The existing Mountain Road M319 Bridge is a single span bridge carrying one lane of traffic over the South Fork of the Kaweah River. The project objective is to replace the existing, deficient bridge with another that will meet highway safety standards.

The bridge replacement would consist of removing the existing structure and replacing it on its existing alignment with a pre-cast, pre-stressed, voided slab/box girder that is approximately 80 to 90-feet long (pending the hydraulic analysis) and with a width of approximately 22 feet. The new structure would accommodate a two traffic lanes with two 2'-0" shoulders (clear width of 18'-0") and two 1'-9" wide concrete barriers. The superstructure would be supported on seat type abutments, likely founded on spread footings similar to the existing structure. Because access must be maintained for the residents living on the east side of the South Fork Kaweah River during removal of the existing bridge and construction of its replacement., a temporary low water crossing consisting of a temporary bridge (such as a railroad flatcar) or temporary cofferdams and culverts would be provided downstream of the existing structure. The temporary low-water crossing will be installed within the bridge easement, and will be constructed in a manner that avoids cut and fill within the Ordinary High Water elevation.

The area to the northeast of the existing bridge will be used as a staging area during construction. Improvements to approximately 400 feet of the roadway leading to both the north and south approaches to the bridge may be incorporated into this project. Potential improvements to the road may include overlay, shoulder work, and other improvements. The improvements to the approaches are dependent on availability of funding.

This current project description is the final proposed bridge design, and reflects a redesign of the project based upon biological findings and potential project impacts identified in an initial biological evaluation (Quad Knopf 2010).

1.2 Project History

"As-Built" drawings of the existing bridge are not available, and the date of bridge construction is unknown. The bridge was likely constructed in the 1950's, which would coincide with construction of other bridges in the area. Based on a field visit and a review of Caltrans Bridge Inspection Reports for this bridge, it is approximately 60' long by approximately 12' wide. The existing bridge superstructure consists of 2 open web box steel trusses, approximately 4'-0" deep and spaced 7'-4" apart, supporting precast concrete deck panels that are approximately 12'-0" long by 6'-9" wide by 2 5/8" thick each. A timber plank wearing surface exists along the wheel

lines on top of the deck panels. The existing bridge rails and curbs are made of timber and are in fair to poor condition based on the Bridge Inspection Reports prepared by Caltrans. Some of the rail members are noted in the Caltrans Bridge Inspection Reports as exhibiting advanced signs of decay. The superstructure is supported on tall cantilever abutments, founded on spread footings bearing on rock. Flared wingwalls retain the approach roadway fills at each of the bridge abutments.

Based on a Structure Inventory and Appraisal Report, the existing bridge has a sufficiency rating of 37.4 and is considered structurally deficient because of its low load-bearing rating of 8.2 metric tons. The Structural Evaluation is rated as 2 (for item 67), which accounts for the low load rating and triggers the structural deficiency. The bridge was posted in 1975 for less than highway legal loads based on the load rating calculations prepared by Caltrans in November of 1974. The low load bearing and structural deficiency ratings of this bridge require its replacement according to the "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges.

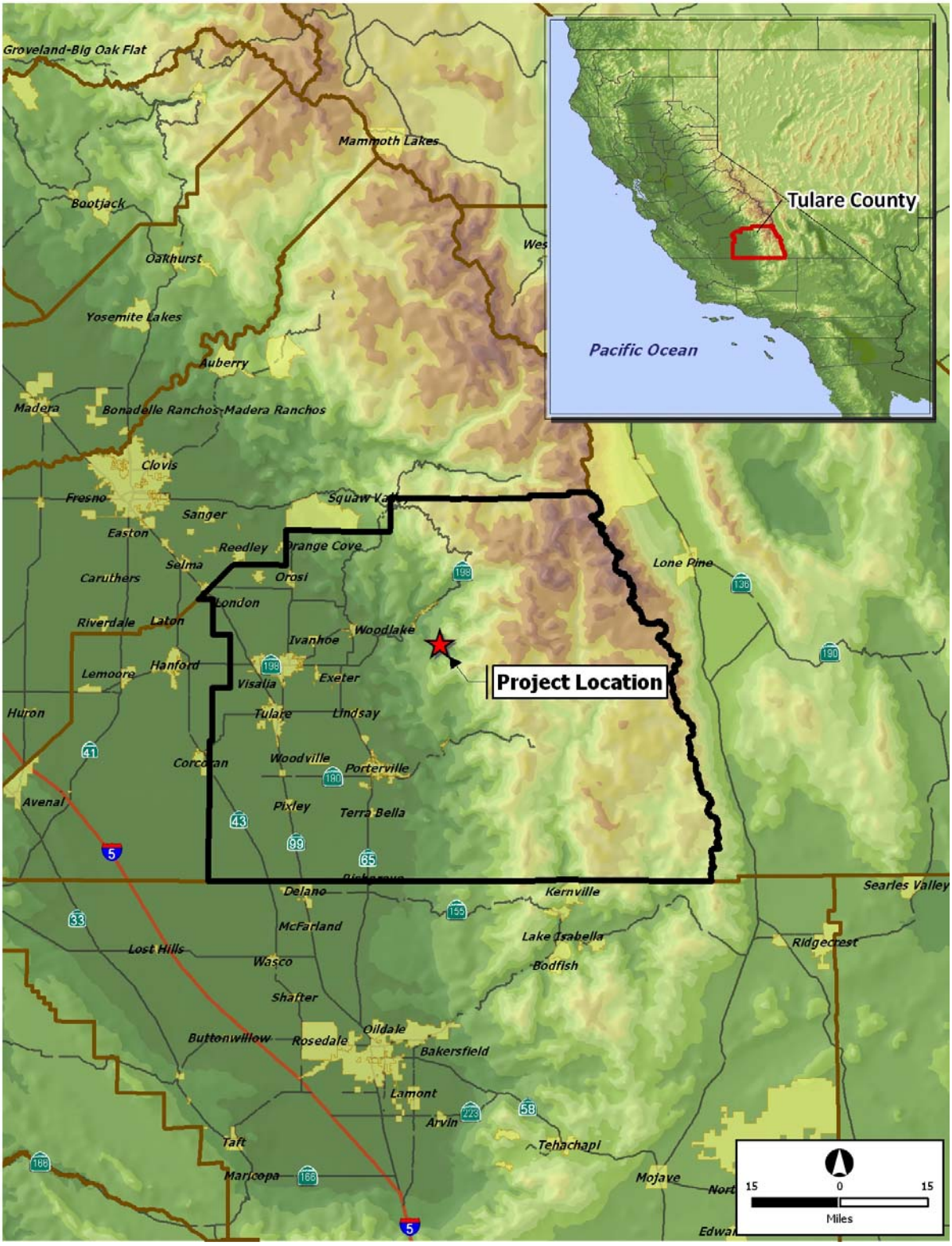
Prior to installing the replacement bridge, the County will obtain easements from property owners if necessary, and will obtain appropriate project approvals from regulatory agencies. Because the project site traverses habitat that potentially contains sensitive or important biological resources, the project must be reviewed by the California Department of Fish and Game (CDFG), the United States Fish and Wildlife Service (USFWS), the US Army Corps of Engineers (ACOE), and the Regional Water Quality Control Board (RWQCB). Tulare County RMA is working with those agencies to determine project permitting and mitigation needs. The information contained in this evaluation of biological resources of the project site will be used in that determination.

An initial biological evaluation was conducted and a report of biological findings and potential impacts of the project to biological resources was prepared (Quad Knopf 2010). The bridge was subsequently redesigned to reduce potential impacts of the project. This current report includes the methods used to evaluate the biological resources present on the project site and the findings of those surveys. These have not changed from the originally produced report. However, this current report includes an updated description of the project and an updated evaluation of the potential impacts of the project based upon the redesign of the bridge structure. This report contains provides an analysis of potential impacts to biological resources occurring from activities anticipated to occur during the demolition and construction of the bridge and the construction and use of the temporary low water crossing. Recommended mitigation measures are provided which, if enacted, would ensure would reduce impacts sensitive biological resources to the extent feasible, and provide compensation for past and future disturbance. This report does not contain final decisions regarding project permitting or a final determination and extent of mitigation measures that might be required. Those will be determined through consultation with the agencies, and be based upon the biological results contained in this report.

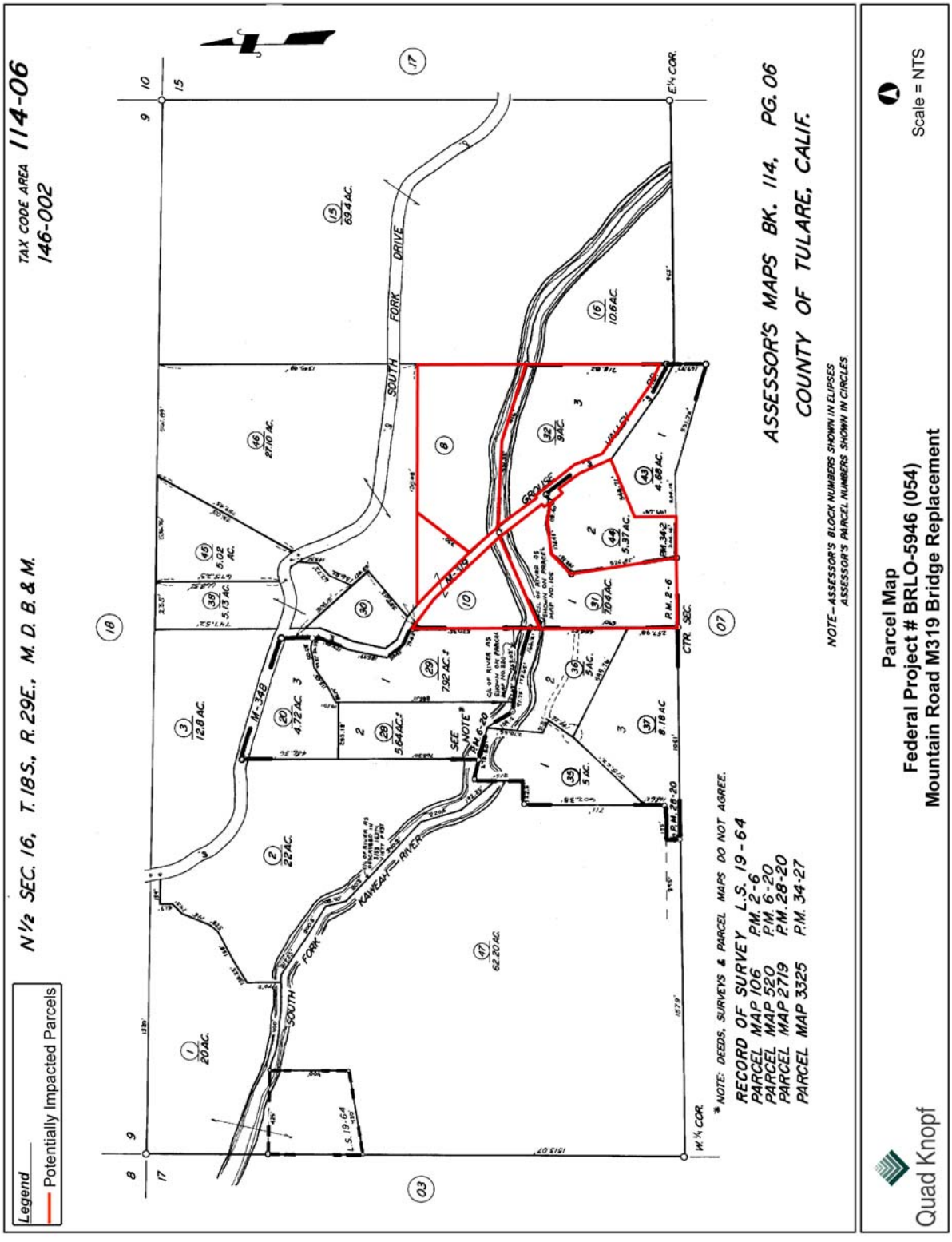
2.0 SETTING

2.1 Site Description

The bridge is located approximately 0.2 miles south of M348 (South Fork Drive), and 6 miles southeast of State Route 198 near the community of Three Rivers (Figure 1). The one-lane bridge serves residents on the southern side of the River. The project is located in the Northern half of Section 16, Township 18S, Range 29E. The bridge is located along Grouse Valley Road, within six parcels: 114-060-008, 114-060-010, 114-060-031, 114-060-032 and 114-060-044 (Figure 2). This project site is primarily within riparian habitat surrounded by dense blue oak woodland at an elevation of approximately 1,880 feet above mean sea level.



Quad Knopf	REGIONAL LOCATION OF THE M319 BRIDGE	Figure 1



Quad Knopf	ASSESSORS PARCEL MAP OF PROJECT SITE	Figure 2

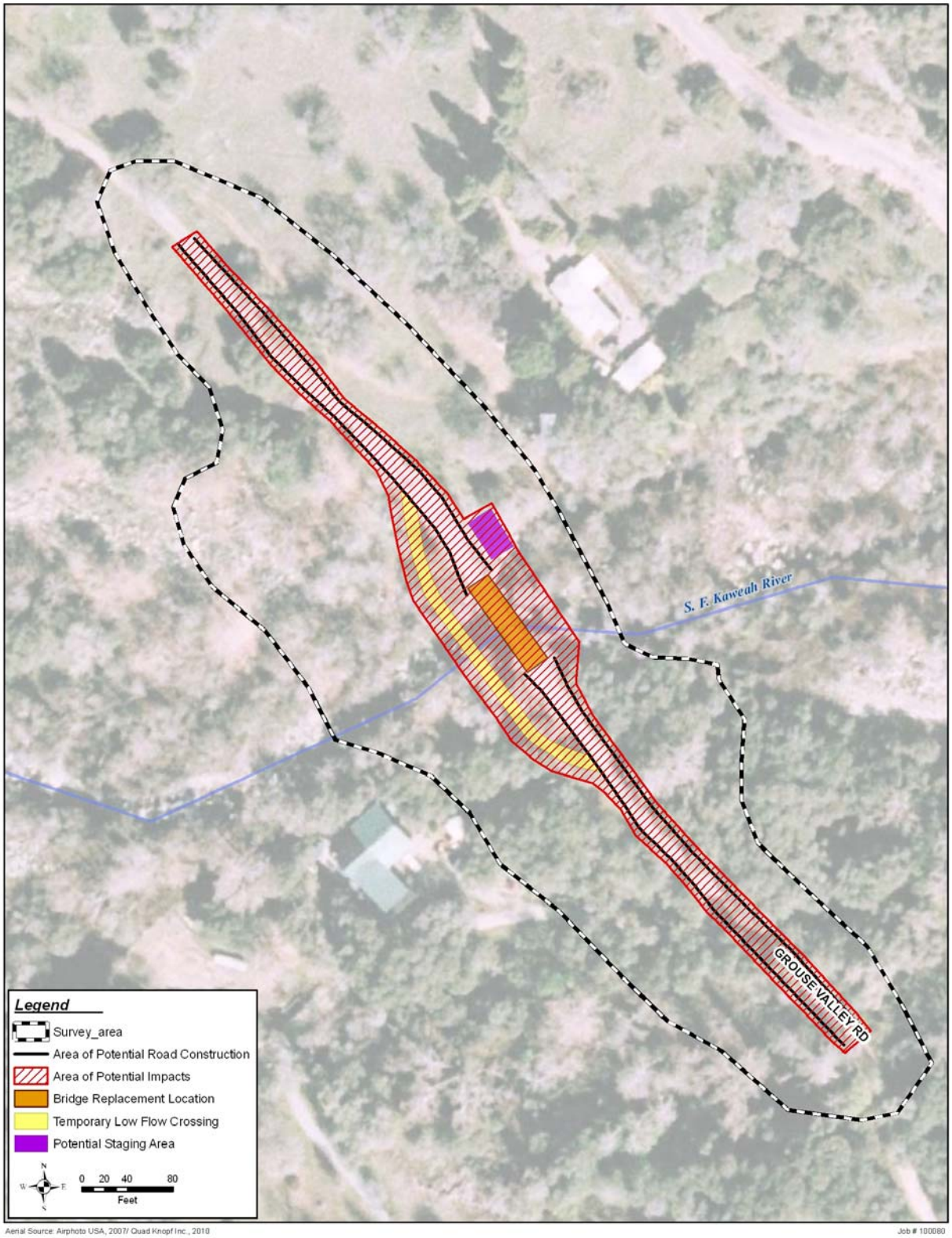
3.0 METHODS

The methods used to evaluate the biological resources on the project site and determine potential impacts to those resources caused by replacement of the existing bridge and installation of the temporary low water crossing include:

- Searching existing databases to obtain existing information of the site and surrounding area;
- Characterizing vegetation associations and habitat conditions present on the project site; and
- Conducting focused biological surveys to obtain information on special status species occurrences.

Although the bridge replacement will occur within an existing roadway, the presence of habitats adjacent to the bridge provides the potential for impacts to various biological resources to occur. To evaluate the potential for project impacts, it was necessary to conduct investigations outside of the actual proposed construction easement area. To ensure clarity concerning the locations of various surveys and the presence and distribution of biological resources relevant to the project, the following definitions of specific project areas (Figure 3) are consistently used throughout this report:

- Roadway easement – The 60 foot-wide corridor along the existing approaches to the bridge, the area where the existing bridge will be demolished and the replacement bridge constructed;
- Project site – The area, which is the area of potential impact, includes the existing bridge, the Grouse Valley Road approaches to the bridge, the area impacted by construction of the temporary low flow crossing and the laydown area adjacent to the bridge site. The project site varies in width from 60 to 100 feet;
- Survey area – the project site and a buffer approximately 500 feet surrounding the project site, which was inspected for biological resources during the site survey; and
- Project vicinity – The project site and a five mile radius surrounding the project site.



Quad Knopf

M319 BRIDGE DEFINED PROJECT AREAS

Figure 3

3.1 Pre-survey Investigations

Prior to conducting field work, a query of the California Natural Diversity Database (CNDDB, CDFG 2010) was conducted to obtain a list of sensitive natural communities and special status species that potentially occur on the project site. The query included the following United States Geologic Survey (USGS) 7.5-Minute topographic quadrangles:

- Silver City
- Case Mountain
- Kaweah
- Moses Mountain
- Dennison Peak
- Chicken Coop Canyon
- Camp Wishon
- Springville
- Frazier Valley

A query of the California Native Plant Society's Electronic Inventory (CNPS 2010) was conducted for the same quadrangles to provide information on additional plant species of concern that may occur in the project area and surrounding vicinity. A species list was obtained from the U.S. Fish and Wildlife Service website (USFWS 2010a) for the same quadrangles to provide information on additional federally-protected special-status species that have the potential to occur in the vicinity of the proposed project. The list was augmented as necessary, with animals designated as "Fully Protected" by the California Fish and Game Code Sections 5050 (Fully Protected reptiles and amphibians), 3511 (Fully Protected birds), and 4700 (Fully Protected mammals). Only those sensitive natural communities and special-status species with the potential to occur on the project site are considered in this report. An evaluation of the potential for each species to occur on-site was made based upon the findings obtained during data reviews, literature reviews, and site investigations. A map of known occurrences of sensitive natural communities and special status species in the vicinity of the project site was prepared from data contained in the CNDDB and CNPS databases. Relevant recovery plans and listing packages for threatened and endangered species were reviewed to determine recovery strategies and assess the potential for Critical Habitat to occur on or in the vicinity of the project site.

The National Wetlands Inventory (USFWS, 2010b) and Federal Emergency Management Agency (2010) floodzone databases were reviewed. Soils on the project site and vicinity were researched using maps from the Natural Resources Conservation Service (USDA Web Survey, 2010). These sources provide detailed information regarding the seasons, climatic conditions, and edaphic conditions that could potentially support various sensitive species.

3.2 Field Survey Methods

A biological survey of the project site was conducted on June 17 and 18, 2010 by biologist Gene "Woody" Moise, and Ginger White, of Quad Knopf, Inc., to:

- characterize conditions present at the site;
- determine vegetative communities occurring on-site;
- prepare a species list of plants and animals observed on the site; and
- refine the target list of special status plant and wildlife species potentially occurring in the project area.

Vegetative communities present on the project site were classified based upon visual determinations of species composition and prevalence (*sensu* Holland 1986 and Mayer and Laudenslayer 1988). Modifications were made when necessary to better reflect existing conditions in the field.

A determination of the potential for rare plant species to occur on the project site was made based upon habitat types present, soils types occurring on the project site, exposures, levels of disturbance, and other factors. The site was surveyed on 17 and 18 June 2010 for the presence of summer-blooming rare plant species, but surveys were not conducted for late-winter (February to early March), and spring blooming species (late March to early May). Botanical surveys in this region are typically conducted a minimum of three times during the growing season to ensure that plants are detected and identified while flowering. Surveys are generally conducted in late-winter, in spring, and in mid-summer (June-July).

All individual oak trees within the roadway easement and the adjacent easement where the temporary low water crossing will be constructed were located using a Trimble GeoXH GPS unit with sub-meter accuracy and mapped. Data including diameter at breast height (DBH), canopy height, and canopy diameter were collected. DBH was collected on riparian tree species including willows, sycamores, and alders.

An evaluation of the potential for the project site to support special status wildlife species was based upon the presence of vegetation associations, project site elevation, known occurrences in the vicinity of the project site, and habitat affinities and known distributions and ranges of the various species. A survey for the presence of raptor nests was conducted, but because nests are most easily observed during periods when trees are leafless, the survey period was less than optimal. Furthermore, access was limited in the dense forest surrounding the project site, so only approximately one-third trees of the trees within 500 feet of the project area were examined for nests.

The ordinary high water (OHWM) of the south fork of the Kaweah River and bank to bank areas along the riparian zone were visually determined. Those areas were mapped using a Trimble GeoXH GPS unit.

4.0 RESULTS

4.1 Site Conditions and Vegetation Description

The project site is located in a valley adjacent to gently rolling topography to the southeast of State Route 198 (see Figure 2). The roadway easements leading to and from the bridge are comprised of foothill oak woodland of moderate to dense cover. Areas immediately adjacent to the South Fork Kaweah River are primarily riparian vegetation, and include trees such as sycamore, cottonwood, and willow, as well as understory of spice bush, blackberries, and wild grapes. All plants observed were identified to species, and a list of these is presented in Appendix A. Representative photographs of the project site are presented in Appendix B. The project area contains Blue Oak Woodland and Great Valley Mixed Riparian Forest (GVMRF) communities as classified under the Holland System (Holland 1986). These communities are described below:

BLUE OAK WOODLAND (HOLLAND CODE #71140)

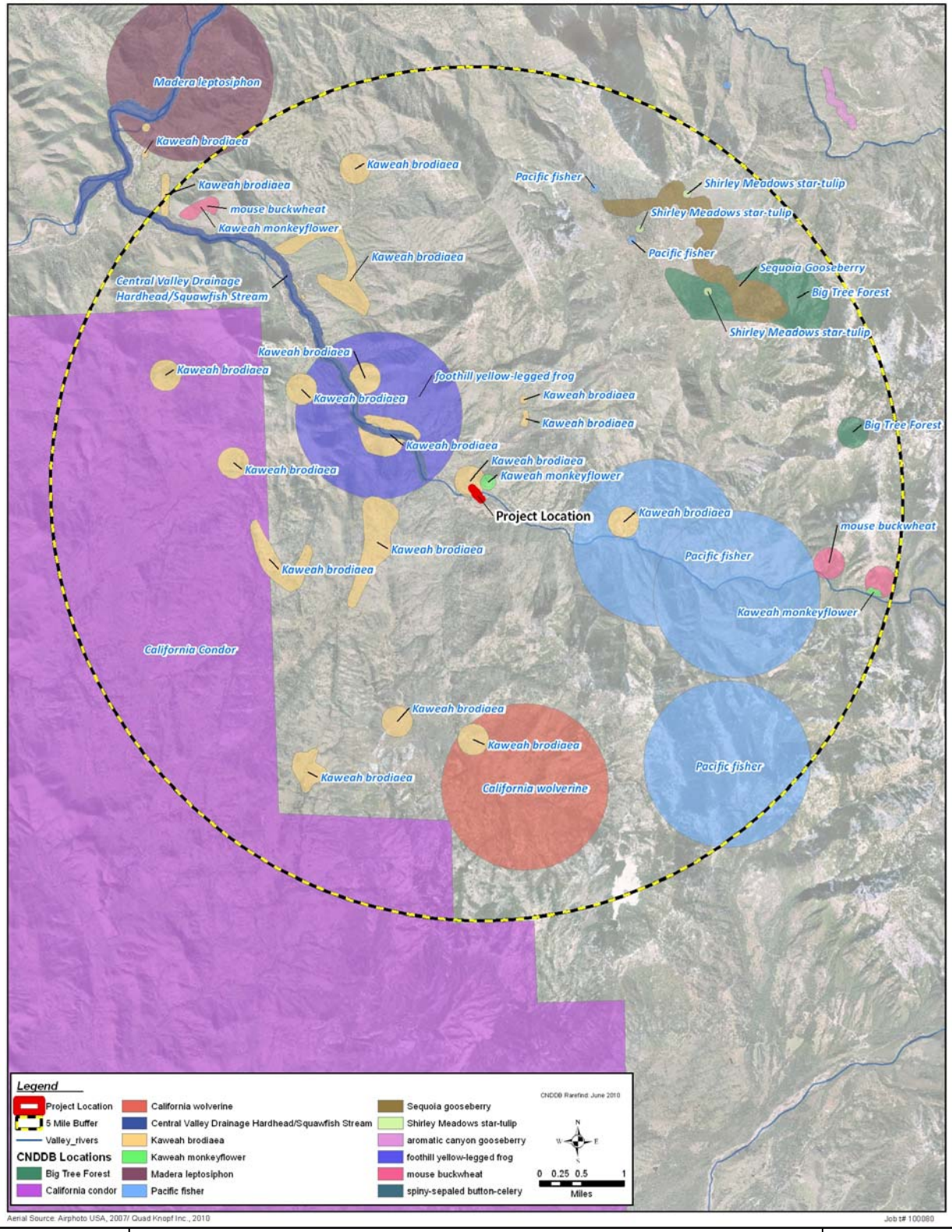
The habitat surrounding the project site is a blue oak woodland, with two residences within 200-300 feet of the project area. This vegetation community occurs widely in this portion of Tulare County and is characterized by the presence of blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), and California buckeye (*Aesculus californica*). There is an undeveloped shrub layer and the herb layer consists of annual grasses and forbs typical for the area and include ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), and wild oat (*Avena fatua*). To the west of the northern section of the project area is an open area with large boulders and a sparse cover of bush lupine (*Lupinus albifrons*) and poison oak (*Toxicodendron diversilobum*).

GREAT VALLEY MIXED RIPARIAN FOREST (HOLLAND CODE #61420)

Tall Fremont cottonwoods (*Populus fremontii*), black willow (*Salix gooddingi*), and western sycamores (*Platanus racemosa*) form the canopy overstory and extend well back from the water's edge, while white alders (*Alnus rhombifolia*) are found along the river shore. A big-leaf maple (*Acer macrophyllum*) and one incense cedar (*Calocedrus decurrens*) were present in the riparian zone upstream of the existing bridge. The understory consists of spicebush (*Calycanthus occidentalis*), California blackberry (*Rubus ursinus*), California wild grape (*Vitis californicus*) and poison oak. There is a sparse herbaceous layer and many areas are persent that contain no living plants, and those areas are covered in leaf and deadwood litter.

4.2 Sensitive Natural Communities

Three sensitive natural communities are known to occur in the project vicinity (Figure 4, Appendix C). Of these, one occurs on the project site: Great Valley Mixed Riparian Forest (see description above). A second, Central Valley Drainage hardhead/Squawfish Stream, occurs approximately 0.6 miles downstream, and hardheads may enter the portion of the stream within the project area, at least on a seasonal basis.



Quad Knopf	RECORDS OF SPECIAL STATUS SPECIES KNOWN WITHIN FIVE MILES OF THE PROJECT SITE	Figure 4

4.3 Special Status Plants

Twenty-four special status plant species were targeted in the nine-quad search area which includes the project site (Figure 4, Appendix C). Two are California Endangered, one is Federally Threatened, and one is California threatened. The remaining species have various California Native Plant Society status designations. Of these 24 target species, 9 are considered to have the potential to occur on or immediately adjacent to the project site (Appendix C). No special status plant species were found on the project site during the surveys, but those surveys were not performed during the appropriate flowering period of most of the target species. The following is a brief summary of habitat requirements, legal status, distribution, and an evaluation of the potential for occurrence of the nine species that have a potential for occurrence on the project site. Data gathered during pre-survey investigations and site-specific information gathered during field surveys were used in these evaluations.

Common Name: Kaweah brodiaea
Scientific Name: *Brodiaea insignis*

Status: California Endangered; Federal Species of Concern; CNPS list 1B.2 (fairly endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Kaweah brodiaea is a showy, herbaceous perennial in the lily family (Liliaceae). It is found in cismontane woodland and valley and foothill grassland from elevations of 500 to 4,600 feet AMSL. From a fibrous corm, it produces several linear leaves, which are crescent-shaped in cross-section, and a leafless stalk topped by a cluster of rose-purple to pink tubular flowers. The flattened corolla and in-rolled staminoidia are characteristic field identification features. It forms pink carpets in May and June within Blue Oak woodlands. This species grows on granitic substrates and deep, clay soils on south- and southwest-facing slopes. (CDFG 2005).

Residential development, roadside maintenance activities, road widening, and livestock activities threaten Kaweah brodiaea. The number of flowering plants appear to vary greatly from year to year, and at least some amount of grazing appears to benefit the species by reducing competition by non-native weeds.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

Kaweah brodiaea is known from several CNDDB occurrences within five miles of the project site. Marginally suitable habitat exists adjacent to the project site and there is a low to moderate potential for it to occur there.

Common Name: Springville clarkia
Scientific Name: *Clarkia springvillensis*

Status: Federally Threatened, California Endangered; CNPS List 1B.2 (fairly endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Springville clarkia (*Clarkia springvillensis*) is an erect annual herb belonging to the evening-primrose family (Onagraceae). The plant can grow to three feet in height. Its stems are usually branched. The bright green leaves can grow to three inches in length and one inch wide. Lavender-pink flowers appear in May to July and have a characteristic purple spot at the base. Features on the outside of the flower that separate this clarkia from others growing near it include color and the absence of long hairs (USFWS 2007). Springville clarkia is found on granitic soils in openings in blue oak (*Quercus douglasii*) woodlands, in chaparral and on road banks. It can be found at elevations between 800 and 4,000 feet AMSL (CNPS 2010).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

A CNDDB record of Springville clarkia occurs 5.5 miles to the north of the project site, and several populations are known to the south and east, from 7 to approximately 16 miles from the project site. Suitable habitat exists on and near the project site, and this species has the potential to occur there.

Common Name: Kern County larkspur
Scientific Name: *Delphinium purpusii*

Status: CNPS List 1B.3 (not very endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Kern County larkspur is a perennial herb in the buttercup family (Ranunculaceae). It varies in height from 2.3 to 3.3 feet and it has hollow stems. Its leaves are palmate and mostly on the lower half of the stem and are from 2.75 to 3.5 inches wide. Its inflorescence is a loose raceme with 5 to 14 flowers. Flowers have five sepals and four petals. Its sepals are narrowly pear-shaped, rose-pink, and 0.25 to 0.38 inch long, with a spur of 0.5 to 0.63 inch long. Its upper petals are whitish, 0.25 inch long, and the lower petals are rose colored. The stalks of the flowers are 0.25 to 1.875 inches long (Hickman 1993). Kern County larkspur occurs in rocky and often carbonate soils in chaparral, cismontane woodland, and pinyon and juniper woodland habitats. Its flowering period is April through May and its elevational range is 990 to 4,400 feet AMSL (CNPS 2010).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

The northernmost population of this species occurs 16.5 miles to the south of the project area (CDFG 2010). There is marginal habitat for this species near the project site, but it is unlikely to occur there because the site is north of the known range of this species.

Common Name: mouse buckwheat

Scientific Name: *Eriogonum nudum* var. *murinum*

Status: CNPS List 1B.2 (fairly endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Mouse buckwheat is a perennial herb in the buckwheat family (Polygonaceae). It varies from approximately 4 to 79 inches in height. Its leaves are 0.6 to 1.5 inch long, appressed to the lower stem, and slightly wavy. The leaves are also densely white-woolly below, and have dense, gray-wooly threads above. Its inflorescence is highly branched, smooth, and slender. The individual flowers are small (approximately .01 inch), white and hairy (Hickman 1993). Mouse buckwheat inhabits dry sandy slopes at elevations from 1,200 to 3,700 feet AMSL. This plant flowers from June to November (CNPS 2010).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

Three populations of mouse buckwheat are known to occur within five miles of the project site: one is located approximately 4.7 miles to the northwest, and two others are located approximately 4.3 miles and 4.9 miles southeast of the project site. Marginal habitat for mouse buckwheat exists in the project site, but no individuals of this species were seen during botanical surveys, despite the surveys being conducted during the appropriate flowering season. It is possible, but unlikely, that this species occurs on or near the project site.

Common Name: Munz' iris
Scientific Name: *Iris munzii*

Status: CNPS List 1B.3 (not very endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Munz' iris (Liliaceae) is a perennial which grows from an underground rhizome about 0.38 inch in diameter. The stem is up to two feet in length with roughly 0.25 inch wide leaves at the base. Flowers are produced from February to April and are whitish near the base of the flower parts, and pale lavender to bluish or reddish violet distally, with deep blue or purplish veins (Hickman 1993). This plant grows on partly shaded slopes in granitic, sandy soils in woodland areas, and along streams, at elevations from 1,000 to 2,600 feet AMSL (CNDDB 2010).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

Suitable habitat exists in the blue oak woodland that occurs on and adjacent to the project site. Four populations are known to the south and southeast of the site, between approximately 10 and 16 miles away. There is a possibility that this species could be present on the project site.

Common Name: Madera leptosiphon, Madera linanthus
Scientific Name: *Leptosiphon serrulatus (=Linanthus serrulatus)*

Status: CNPS List 1B.2 (fairly endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Madera leptosiphon (Polemoniaceae) is an annual plant that grows from two to seven inches tall and has hairy leaves and terminal flower heads. The flowers are funnel-shaped and white with yellow throats. The flowers appear in April and May (Hickman 1993). This species grows on dry slopes, often on decomposed granite, in open woodlands, in chaparral, and in lower montane coniferous forests. It is restricted to the southern Sierra Nevada foothills at elevations between 1,000 and 4,250 feet AMSL (CNPS 2010).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

There is one population of this species located approximately 5.5 miles to the northwest of the project site and another population located approximately 16 miles to the southeast of the site (CNDDB 2010). This species prefers decomposed granite in open woodlands. One open, rocky area occurs over one hundred feet to the west of the project footprint is the most likely habitat in the project area that would support this species. It is unlikely that this species occurs on the project site.

Common Name: Kaweah monkeyflower
Scientific Name: *Mimulus norrisii*

Status: CNPS List 1B.3 (not very endangered in California), Calfornia endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Kaweah monkeyflower is an annual member of the figwort family (Scrophulariaceae). It grows from 2 to 6 inches tall with ascending, hairy stems and ovate leaves that are tapered to the petiole. The flower has purplish sepals with rounded tips and the petals are yellow with 1 large, central, maroon-purple blotch. This plant typically grows in marble crevices at elevations between 1,200 and 4,250 feet AMSL (CNPS 2010).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

This species is known from approximately five miles downstream from the project site (CNDDB 2010). Typical habitat for this species (marble crevices) does not occur on the project site, but this species also occurs on other substrates. It is possible that this species occurs near the project site it is unlikely to occur within the project footprint.

Common Name: calico monkeyflower
Scientific Name: *Mimulus pictus*

Status: CNPS List 1B.2 (fairly endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Calico monkeyflower is an annual member of the figwort family (Scrophulariaceae). It has stems that are 1 to 15 inches in length, 4-angled, and hairy. The oblong leaves are 0.25 to 1.5 inches long, and the flower is white with maroon veins in a distinguishing pattern. This plant is found in bare, sunny areas around shrubs and rock outcrops on granitic soils. It grows at elevations from 320 to 4,160 feet AMSL.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

There are no CNDDB records in the nine-quadrangle search area for this project (CNDDB 2010). The CNPS database lists a non-specific location for the occurrence of this species in the Chickencoop Canyon quadrangle, which is immediately west of the Dennison Peak quadrangle, in which the project site is located. Marginally suitable rocky substrate exists along the South Fork of the Kaweah River around boulders and in the rocky, open area to the west of the project footprint. It is possible that this species occurs near the project site, but it is unlikely to occur within the project footprint.

Common Name: aromatic canyon gooseberry
Scientific Name: *Ribes menziesii var. ixoderme*

Status: CNPS List 1B.2 (fairly endangered in California), California endemic.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Aromatic canyon gooseberry (Grossulariaceae) is a shrub that grows to less than 10 feet in height. It has three spines at each node along the stem, and dense bristles between internodes. The leaf is between 0.5 and 2 inches long, with toothed margins, and is hairy and glandular (tiny, sticky nodules). This plant has one to three purple and white flowers, which are born in each inflorescence; the sepals are purple and reflexed and the petals are white. Fruits are purple and dense with bristles. Aromatic canyon gooseberry is distinguished from the other subspecies in this species group by its aromatic leaves (Hickman 1993). It is found in forest openings in cismontane woodland and in chaparral between 2,000 and 3,800 feet in elevation AMSL (CNPS 2010).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

There are no known records of this species occurring within five miles of the project site (CNDDB 2010, Figure 4). The elevation range of this species is somewhat higher than that of the project site (1,800 feet AMSL). No gooseberries of any species were observed on or near the project site, and it is unlikely that this species is present.

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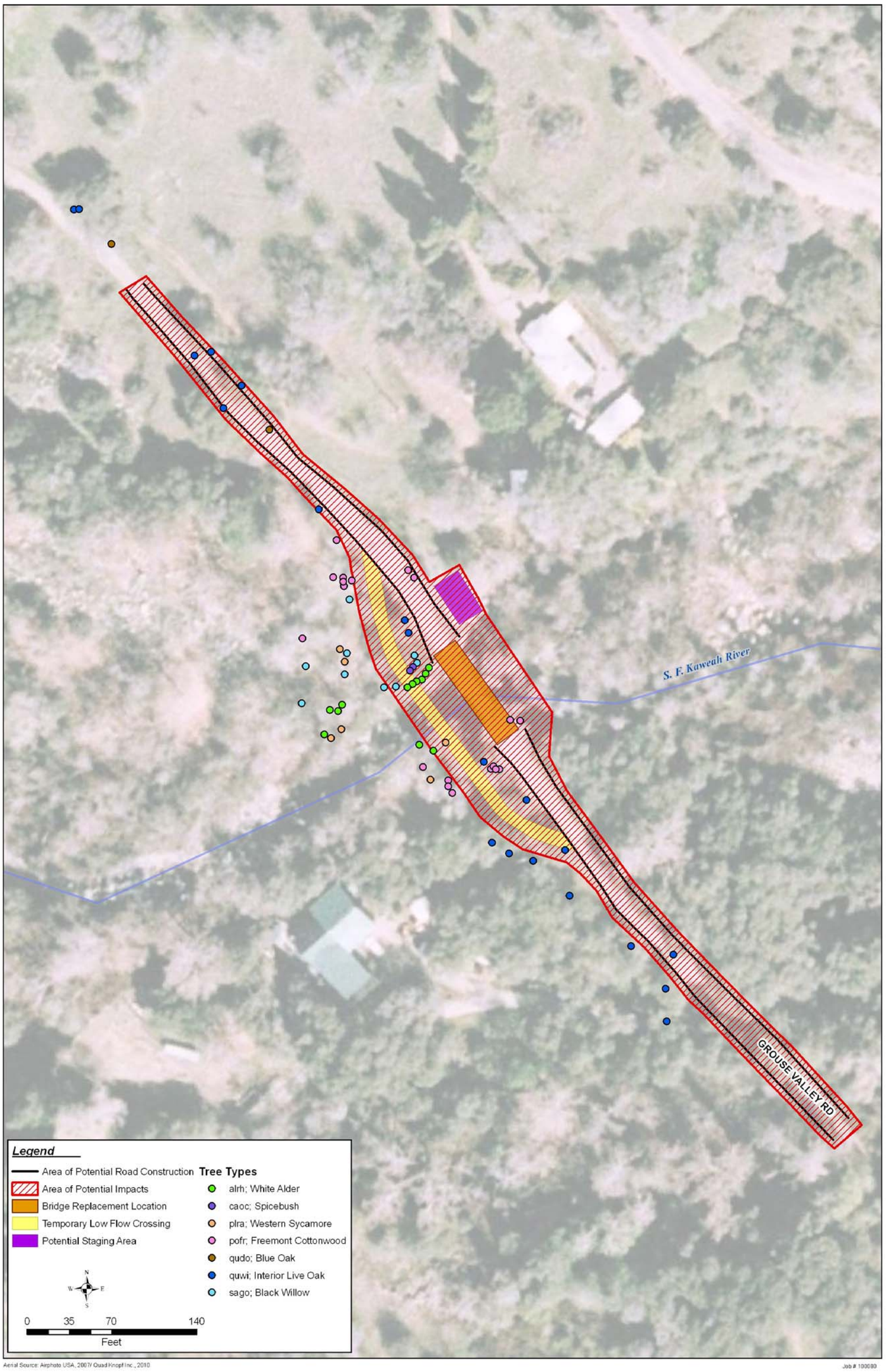

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OAK AND RIPARIAN TREES MAPPED ON AND NEAR THE M319 BRIDGE PROJECT

Figure 5

4.4 Oak and Riparian Trees

Oaks of two species, blue oak (*Quercus douglassi*) and interior live oak (*Q. wizlizenii*) were located within the project footprint. Twenty-two oaks with a DBH of five inches or greater and fifty-two riparian trees (Western sycamores, white alder, spicebush, Fremont's cottonwood and black willows) with a DBH of four inches or greater occur within the surveyed area (Figure 5, Appendix D). Many of the oaks, especially the interior live oaks, had multiple stems at breast height, so each stem was measured and recorded.

4.5 Special Status Wildlife Species

Thirteen special status wildlife species have the potential to occur on the project site (Figure 4, Appendix C). Two of these are listed as Federally Endangered, one is Federally Threatened, one is California Endangered, one is listed as Fully Protected in California, one is a Federal species of Concern, and the remaining species are California Species of Special Concern. Of these 13 target species, 9 are considered to have the potential to occur on or immediately adjacent to the project site (Appendix C). No special status wildlife species were found on the project site during the surveys, but those surveys did not include focused surveys of the intensity required to determine presence or absence of these species. The following is a brief summary of habitat requirements, legal status, distribution, and an evaluation of the potential for occurrence of the nine species that have a potential for occurrence on the project site. Data gathered during pre-survey investigations and site-specific information gathered during field surveys were used in these evaluations.

Fish

Common Name: Hardhead
Scientific Name: *Mylopharadon conocephalus*

Status: California Species of Special Concern.

Recovery Plan: This species is not currently addressed in a recovery plan.

Natural History: Hardhead are large cyprinids, reaching lengths in excess of 60 cm. Hardhead are bottom feeders that forage for benthic invertebrates and aquatic plant material in quiet water. They reach 7 to 8 cm by their first year, but growth slows in subsequent years. Hardhead mature following their second year and presumably spawn in the spring (Reeves 1964). Estimates based on juvenile recruitment suggest that hardhead spawn by May or June in Central Valley streams and that the spawning season may extend into August in the foothill streams of the Sacramento-San Joaquin drainage (Wang 1986).

Hardhead are typically found in undisturbed areas of larger middle- and low- elevation streams (Moyle and Nichols 1973, Moyle and Daniels 1982). The elevational range of the hardhead is approximately 30 to 4,350 feet (Reeves 1964). Most streams in which they occur have summer temperatures in excess of 68 degrees Fahrenheit, and optimal temperatures for hardhead (as

determined by laboratory choice experiments) appear to be 75 to 82 degree Fahrenheit (Knight 1985).

Hardhead require large to medium-sized, cool to warm-water streams with natural flow regimes for their long-term survival. Because such streams are increasingly dammed and diverted, thus eliminating habitat, isolating upstream areas, or creating temperature and flow regimes unsuitable for hardhead, populations are declining or disappearing gradually throughout its range.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

Hardhead are likely to be present within the waters on the project site, at least seasonally. They are known to occur approximately 0.5 miles downstream of the project site.

Amphibians

Common Name: foothill yellow-legged frog
Scientific name: *Rana boylii*

Status: California Special Concern Species.

Recovery Plan: This species is not addressed in a recovery plan.

Natural History: The foothill yellow-legged frog is a medium-sized anuran native to California. Their coloration is brown, grayish, olive, or reddish on the dorsum, but often similar to the prevailing color of the environment. As its name implies, the underside of the legs are yellow, with the color often extending onto the posterior abdomen. They are typically associated with lotic (stream) systems and occur in a range of habitat types including montane riparian, valley-foothill riparian, mixed conifer, and coastal scrub.

Foothill yellow-legged frogs are primarily diurnal and may be active all year in the mildest climates, but may become inactive in colder regions. Adults feed almost exclusively on both aquatic and terrestrial arthropods, with tadpoles preferentially grazing on algae and detritus. Postmetamorphs also feed on insects.

Foothill yellow-legged frogs in California generally breed between March and early June. Unlike other ranid frogs on the west coast, they mate and lay their eggs exclusively in rivers and streams. Masses of eggs are deposited on the downstream side of cobbles and boulders. After egg-deposition, a minimum of 15 weeks is required to reach metamorphosis, which usually occurs between July and September (Zeiner *et al.* 1988, Stebbins 2003).

Historically, the yellow-legged frog has occurred from the Oregon border south through the Coast Ranges of northern and central California and along the foothills of the Sierra Nevada-Cascade crest south to Kern County. In the Sierra Nevada, they are unevenly distributed and occur in less than 15% of the streams.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

The foothill yellow-legged frog is known from five populations near the project site; one record from 1970 is downstream within one mile of the project, and the remainder are located north, south, and southeast at distances from approximately 5.5 to 15 miles from the project. Habitat at the project site is apparently suitable, although at the time of the survey the water was swift, and at its Ordinary High Water Mark. The swift current reduced the potential for these frogs to be present on the site at the time of the survey. Similarly, it could not be established that bullfrogs were present or absent (the presence of bullfrogs may preclude survival of yellow-legged frogs). It is possible, but probably unlikely that this species occurs within the waters on the project site.

Common Name: Sierra Madre yellow-legged frog**,** mountain yellow-legged frog
Scientific Name: *Rana muscosa*

Status: California Special Concern Species and a candidate for federal listing.

Recovery Plan: There is no recovery plan that addresses this species.

Natural History: The mountain yellow-legged frog is a medium-sized anuran endemic to two disjunct areas—the Sierran highlands in California and Nevada and the Transverse and Peninsular Ranges in southern California. They are yellowish, reddish, and olivaceous in color with black or brown spots on the back. Undersides of legs and sometimes the entire abdomen are yellow in color. Mountain yellow-legged frogs are highly associated with streams, ponds, lakes, and wet meadows environments located in montane riparian, ponderosa pine forests, and other alpine habitats.

Terrestrial individuals are chiefly diurnal during the months they are active and are nearly always close to water. During the winter, all adults go into torpor (hibernation) beneath ice-covered streams, ponds, and lakes. Mountain yellow-legged frogs are insectivorous on both aquatic and terrestrial prey, but appear to prefer terrestrial insects.

Mountain yellow-legged frogs begin their breeding activities in early spring or soon after breeding waters are ice-free (April in lower elevations and June or July at higher elevations). Clutch size averages around 230 eggs, which are attached to gravel or submerged rocks, and take approximately 20 days to hatch. In lower elevations, juveniles transform in July and August, but in higher elevations, tadpoles may hibernate overwinter and may not fully transform for two or three summers (Zeiner *et al.* 1988, Stebbins 2003).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

The nearest record of the mountain yellow-legged frog to the project site is a 1904 record that is located 12.4 miles to the southeast, at over 9,000 feet elevation. Although this frog could possibly occur at lower elevations, it is very unlikely that this species will be found in the vicinity of the project site.

Common Name: western pond turtle
Scientific Name: *Actinemys marmorata*

Status: California Special Concern Species.

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: Western pond turtles are medium-sized aquatic turtles that can reach sizes of up to 8.5 inches long. They have an olive brown or blackish-brown carapace (dorsal shell). Plastron (belly) markings range from no markings to dark brown blotches. This species is an aquatic turtle, which is highly associated with permanent ponds, lakes, reservoirs, canals, and low-gradient streams. While adults are habitat generalists, hatchlings and first year young require shallow, warm-water habitats with emergent vegetation. They occur in a wide variety of terrestrial habitats below 6,000 feet AMSL in elevation as long as there is a permanent water source.

Pond turtles are omnivorous and feed on aquatic plants, terrestrial and aquatic insects, crustaceans, fish, frogs, and carrion. Habitat quality is determined by the presence of permanent water, prey availability, and basking sites. Pacific pond turtles require upland sites in the vicinity of aquatic habitats for oviposition. Nest sites are typically dug about 4 inches deep in dry soils with a high clay or silt content (or in sand) and are usually within 200 meters of water. Eggs are laid from March to August depending on local conditions, and clutch size varies from three to twelve eggs. Incubation takes about 70 to 90 days. In warmer areas of central and southern California, hatchlings may emerge in the fall, but most hatchlings overwinter and emerge in the spring (Jennings and Hayes 1994, Stebbins 2003).

Over the last six years the pond turtle has been assigned to three different genera. For several decades western pond turtles were assigned to the genus *Clemmys*. In 2002 most systematic revisions placed it in the genus *Emys*; however, more recently additional studies have now moved it to the genus *Actinemys*, which is the current taxonomic arrangement recognized by Crother *et al.* (2001, 2003). There are two recognized subspecies, the northern wesern pond turtle (*A. m. marmorata*) and the southern western pond turtle (*A. m. pallida*). The project site lies in the region where the ranges of these two subspecies meet.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

Although there are no records of this species within five miles of the project area, western pond turtles are known to occur within 7 to 15 miles west and south of the project site. Swift water at the project site (as was present at the time of the surveys) would preclude their use of the river channel, but during the dry season when slow-moving water prevails, western pond turtles could utilize the site.

Common Name: California condor
Scientific Name: *Gymnogyps californianus*

Status: Federally Endangered, California Endangered.

Recovery Plan: USFWS , *Recovery Plan for the California Condor, Third Revision, 1996.*

Natural History: The California condor was listed as Endangered by the USFWS in 1967 (32 FR 4001) under the Endangered Species Preservation Act of 1966, which was subsequently amended to the Endangered Species Act (ESA) of 1973. The California condor (*Gymnogyps californianus*) is currently listed as Endangered under the federal ESA and California Endangered Species Act (CESA), and is additionally protected under the Migratory Bird Treaty Act (MBTA).

California condors require suitable habitat for nesting, roosting, and foraging (USFWS 1996). Traditional roosting sites are maintained on cliffs or large trees, often near feeding sites, and foraging occurs mostly in grasslands, including potreros within chaparral areas, or in oak savannahs. Potential foraging habitat for California condors occurs across Yokohl Ranch, with potential nesting/roosting habitat consisting of large trees and isolated rocky outcrops and cliffs occurring within only the eastern portion of the property.

California condors historically occurred (1800's to 1930's) along the west coast of North America from southern British Columbia, Canada to the extreme northern portion of Baja California, Mexico (USFWS 1996). The principal foraging regions used by the California condor from the late 1970's to 1987 were a wishbone-shaped area along the foothills bordering the southern San Joaquin Valley, which encompassed six counties, including Tulare County, and totaled approximately 10 million acres (16,400 square miles). In Tulare County, California condors foraged extensively through the oak savannah and grassland habitat north of the Kern County border and west of the National Forest boundary. Important roosting sites were also located within this foraging zone to the east, on the higher slopes and peaks in the Sequoia National Forest, including Blue Ridge. There is one CNDDB record of a California condor occurring in the Blue Ridge area in September of 1976 (CNDDB 2010), however there is no point location information for this sighting. Instead, a polygon of the sighting area is all that is provided in the CNDDB. This polygon corresponds to the Critical Habitat area established for the California condor. In addition to the 1976 sighting, California condors were documented foraging as far north as the Lake Kaweah region with Yokohl Valley being an area of special importance.

The first draft of the USFWS *Recovery Plan for the California Condor* was published in 1975, and Critical Habitat for the California condor was designated under section 7 of the ESA in 1976 (41 FR 41914). Despite early efforts on the part of the Condor Recovery Team, condor numbers continued to decline and by 1987 the last wild condors were captured and placed in a captive breeding program at both the San Diego and Los Angeles Zoos (USFWS 1996). Subsequent captive breeding programs have since been implemented and there have now been condors

released back into the wild, predominantly occurring in the southern portion of their historical range.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

Critical habitat for the California condor is located approximately 2.5 miles to the west of the project site. Blue Ridge Mountain, which is to the south of the project site, is an historical roosting area for California condors, but they do not currently utilize that area except on extremely rare occasions. It is likely however, that as condor recovery efforts advance, they may become more prominent in the vicinity. Project activities are unlikely to have a significant impact on California condors.

Mammals

Common Name: pallid bat
Scientific Name: *Antrozous pallidus*

Status: California Species of Special Concern

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: The pallid bat has large eyes compared to many other North American bats, and its ears are pale and wide. Its fur varies from a pale cream color to light brown dorsally and is white on the venter. The skull is large and the teeth are heavy and robust. The snout of the pallid bat is square and has a ridge on the top. The bat has a total length of 3.5 to 5.5 inches, a wing span of 13 to 15 inches, and a forearm length of 1.9 to 2.3 inches (Hermanson and O'Shea 1983).

Pallid bats become sexually mature at about two years of age. Their breeding season occurs from October to February with females storing the resultant sperm until the first two weeks in April, when ovulation and fertilization take place. Twins are usually born and birth generally takes place during the first half of June. The weight of young at birth is from 3 to 3.5 grams. Within four or five weeks, the young bats are capable of short flights and by eight weeks they attain full adult size (Hermanson and O'Shea 1983).

Female bats roost with their young, while male bats remain separated from the colony until the newborn bats are weaned. Communication between colony members is largely achieved by vocalizations.

Pallid bats leave the day roost about a hour after sunset to forage. They consume up to half their weight in insects every night. They rarely catch flying insects, but instead usually capture prey from foliage or on the ground. Pallid bats typically feed on beetles, crickets, scorpions, and other insects and small arthropods (Hermanson and O'Shea 1983).

The pallid bat is usually found in rocky, montainous areas and near water. They are also found over more open, sparsely vegetated grasslands, and seem to prefer to forage in open areas. The

pallid bat has three different roosts. The day roost is usually in a warm, horizontal openning such as in attics or rock cracks; the night roost is usually in trees with light foliage; and the hibernation roost is often in buildings, caves, or cracks in rocks (Hermanson and O'Shea 1983).

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

There is a single record of the pallid bat located approximately five miles east of the project site (CNDDB 2010, Figure 4). Pallid bats may forage over the project site, but it is unlikely they nest there, because they typically nest and roost in rocky areas.

Common Name: western mastiff bat
Scientific Name: *Eumops perotis californicus*

Status: California Species of Concern

Recovery Plan: This species is not currently addressed by a recovery plan.

Natural History: This is the largest native bat of the United States with a body length of 5.5 to 7.5 inches and a wingspan of over 22 inches. The wings, as in other members of the Family Molossidae, are distinctively long and narrow. The fur is dark brown with white hairs at the base. The ears are large and joined at the base and extend out over the forehead like a bonnet. Its echolocation call is audible to humans.

This bat reproduces in late winter to early spring, and gives birth to one young per year. While most young are born in early July, parturition dates vary extensively and births are not synchronous, even within colonies. Adults of both sexes can be found together throughout the year. Colony size varies from two or three individuals to several dozen. Twenty individuals is a large colony of these bats, although colonies of up to 70 are known. Just before launching themselves into flight, and during flight, the bats utter a series of loud, shrill, chattering calls that can be heard for a considerable distance.

The mastiff bat roosts in crevices in cliff faces, high buildings, trees and tunnels. This bat seeks diurnal refuge in crevices in rocks that form vertical or nearly vertical cliffs. The roost entrances typically are horizontally oriented, have moderately large openings, and face downward so they can be entered from below. When roosting in rock crevices, a vertical face is needed to drop off to take flight. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters.

The mastiff bat occurs in many semi-arid to arid habitats, including dry desert washes, flood plains, conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, montane meadows, palm oases, chaparral, desert scrub, urban, and agricultural areas (Pierson 2005); however, this bat is most commonly encountered in broad, open areas.

Observations indicate that males and females of this species remain together throughout the year, even during the period when young are produced. Normally only one young is produced per pregnancy, but occasionally a female may give birth to twins. The period of parturition probably

extends from June to early July and a nursery colony may contain young ranging from newborn individuals to ones that are several weeks old. At birth the young are dull black in color.

These bats leave their day roosts late in the evening to forage. The primary prey of western mastiff bats are moths (79.9%) and crickets (16.5%). Grasshoppers, bees, dragonflies, leafbugs, beetles, and cicadas have also been reported in their diet. These bats do not use night roosts, but instead soar at great altitudes all night long so that they can feed over wide areas.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

There is one record of the Mastiff bat occurring approximately 1.5 miles west of the project site (CNDDB 2010, Figure 4), and several sightings have been reported approximately 7.5 to 8.5 miles to the north of the project site. Cliff faces, which are the typical roosting habitat for this species are absent form the project site. Large trees in the immediate vicinity of the site could support roosts of this species. Mastiff bats may forage over the project site, but impacts to this species from the project are unlikely to occur. No sign of bats were observed under the existing bridge.

Common Name: California wolverine
Scientific Name: *Gulo gulo*

Status: California Threatened

Recovery Plan: This species is not covered by a Recovery Plan.

Natural History: The wolverine is the largest and least known member of the Mustelidae family. They have thick bushy coats, hairy soles, broad heads, short furry ears, and curved, semi-retractable claws. Generally they are a deep, blackish-brown color with a band of pale chestnut beginning on each shoulder and meeting near the tail; the throat and chest often are marked by large white patches (Seton 1953). Seton suggests that the name “skunk bear” is most appropriate because “in size, color, shape, and smell, the wolverine suggests a cross between a skunk and a black bear.” The smell that he (Seton 1953) refers to is produced by anal and ventral gland secretions for marking and defense. The average length of a wolverine is 36 inches with an average height of 12 inches. They have a compact, powerful build and carry the head and tail lower than their arched back.

The wolverine inhabits tundra, remote mountains, and boreal forests. They generally inhabit areas at or above timberline, but often prefer lower-elevation forests during the winter. Habitat requirement on a landscape scale are currently unknown and may differ substantially between populations (Primm and Clark 1996). Wilson (1982) suggests that wolverines are most common in regions with snow-covered ground throughout the winter. They are morphologically well suited to hunting in the snow and may rely heavily on this advantage during severe winters.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

There is one 1907 record of occurrence of a wolverine approximately 3.5 miles south of the project site (CNDDB 2010, Figure 4). This record is at an elevation of 4,000 feet AMSL. Other sightings occur approximately 6.5 miles to the south of the project sight, 11.5 miles northeast and 10.5 miles to the west. Wolverines are usually at or above timberline, and their presence on the project site is unlikely.

Common Name: Pacific fisher
Scientific Name: *Martes pennanti pacifica*

Status: Federal Candidate Species, California Species of Special Concern

Recovery Plan: There is no federal or California recovery plan for this species; however, the Pacific Fisher is addressed in the *Washington State Recovery Plan for the Fisher* (Washington State Department of Fish and Wildlife 2006).

Natural History: The Pacific fisher is a member of the weasel family. Fishers have long, thin bodies that measure 31 to 40 inches in length. Their fur is mostly dark brown. Individuals weigh between 3 and 18 pounds, with the male being larger than the female. Fishers require a great deal of undisturbed land; they have home ranges of 50 to 150 square miles depending upon food abundance. They den in hollow trees and rocky crevices.

Fishers are mostly nocturnal. They prey primarily upon porcupine and snowshoe hares, although they also eat smaller mammals, fruits, and plants. The fisher's stomach can soften porcupine quills enough for them to pass through the animal's intestinal tract. Fishers prefer heavy stands of mixed species of mature timber, but they range widely in forested regions (Buck et al., 1983). Most records of fishers are in western hemlock, Pacific Silver fir, and Sitka spruce forest zones. They are most often encountered in second-growth forests, and sometimes in forest openings. There are a few records of fishers being observed in communities such as scrub woodlands at lower elevations (Schempf and White 1977). This does not mean, however, that fishers can live in these habitats permanently. In California, fishers primarily inhabit mixed conifer forests composed of Douglas fir and associated conifers, although they are also found in higher elevation fir and pine forests and mixed evergreen/broad leaf forests.

EVALUATION OF OCCURRENCE ON THE PROJECT SITE

There are six records of Pacific fishers occurring within five miles of the project site (CNDDB 2010, Figure 4). Typical habitat for fishers is absent from the project site. This species might occasionally traverse the project site, but this is unlikely because fishers are not known to migrate or exhibit seasonal movements outside of their existing home range.

4.6 Presence of Raptor Nests

No raptor nests were found within 500 feet of the project site. There were no raptors observed at the project site that were exhibiting nesting or breeding activities or which appeared to be "paired".

4.7 Wetlands and Waters of the United States

There are a variety of wetlands and waters occurring near the project site including natural Palustrine Emergent, Palustrine Forested, and Palustrine Scrub wetlands, as well as excavated ponds (Figure 6). There are no wetlands on the project site or within 500 feet of the project site.

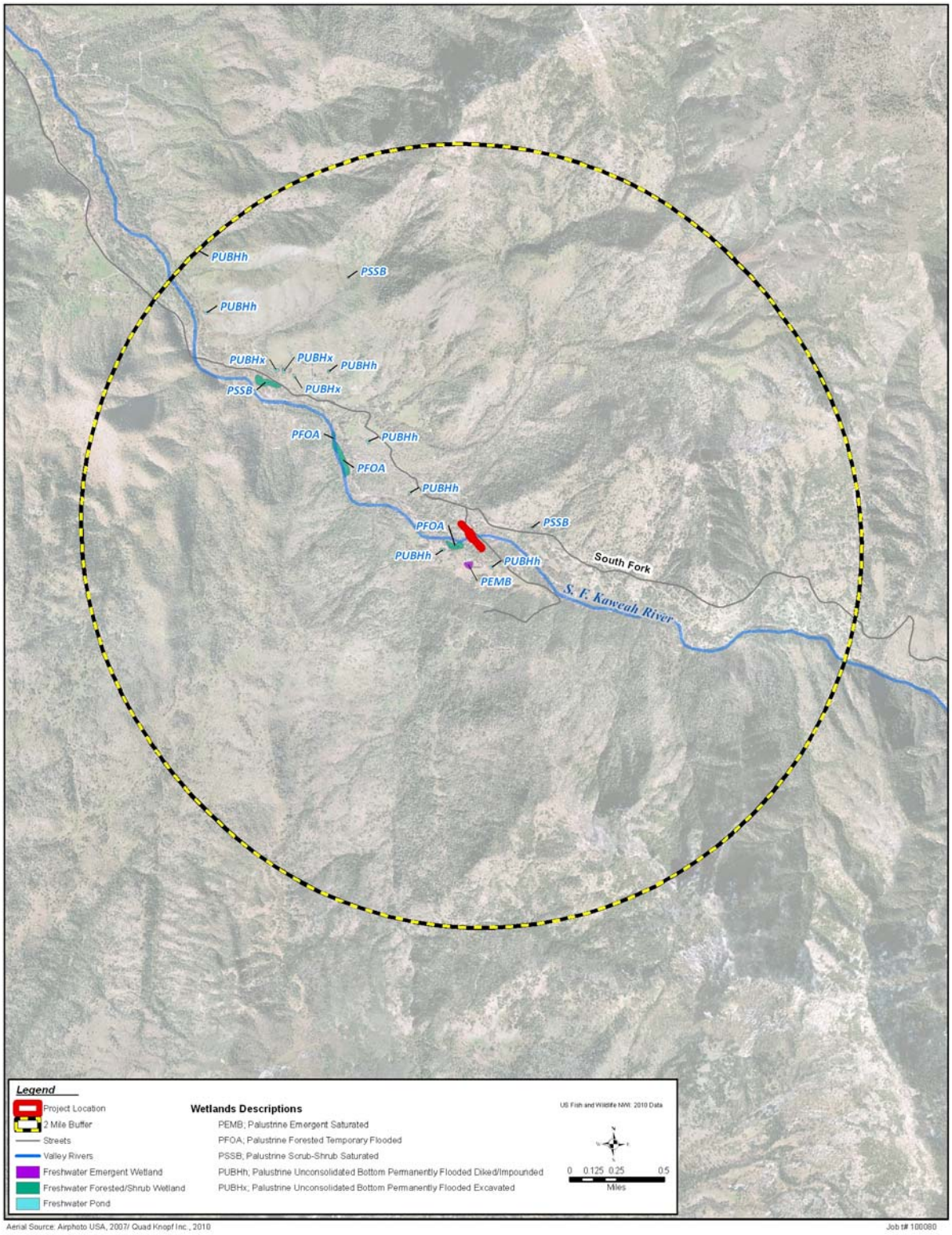
The South Fork of the Kaweah River is a Water of the United States. The portion of the Ordinary High Water of the South Fork of the Kaweah River that falls within the footprint of project site was originally estimated to be approximately 0.16 acres (Figure 7). The Bank to Bank delineations of this river are composed of Great Valley Mixed Riparian Forest, and the portions that fall within the project footprint are approximately 0.22 acres (Figure 7). Based upon demolition and construction methods to be implemented in the revised design plan, the proposed project will not result in fill and cut within the Ordinary High Water Mark of the river, and will not result in disturbance to the Bank to Bank area. Therefore, no impacts within the Ordinary High Water Mark are anticipated, and the total area of Waters of the United States to be impacted will be less than 0.1 acre.

4.8 Flood Zone

The M319 Bridge Replacement Project Site is not within a designated flood zone (Figure 8).

4.9 Soils

Soil types in the project area are limited to Xerofluvents along the riparian zone of the South Fork of the Kaweah River, and Auberry Sandy Loam in the northern portion of the project (Figure 9).



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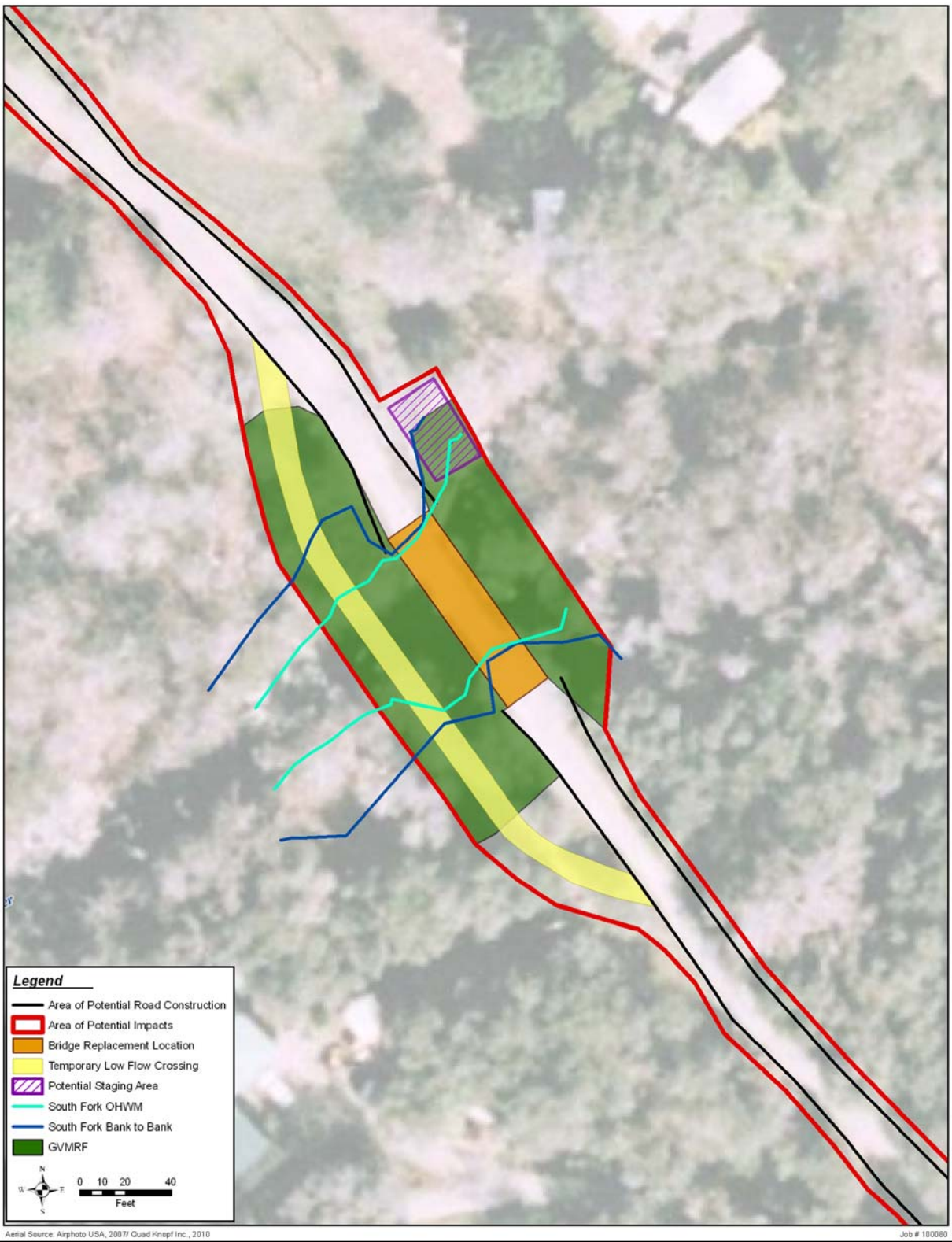
KNOWN WETLANDS WITHIN TWO MILES OF THE M319 BRIDGE REPLACEMENT PROJECT SITE

Figure 6



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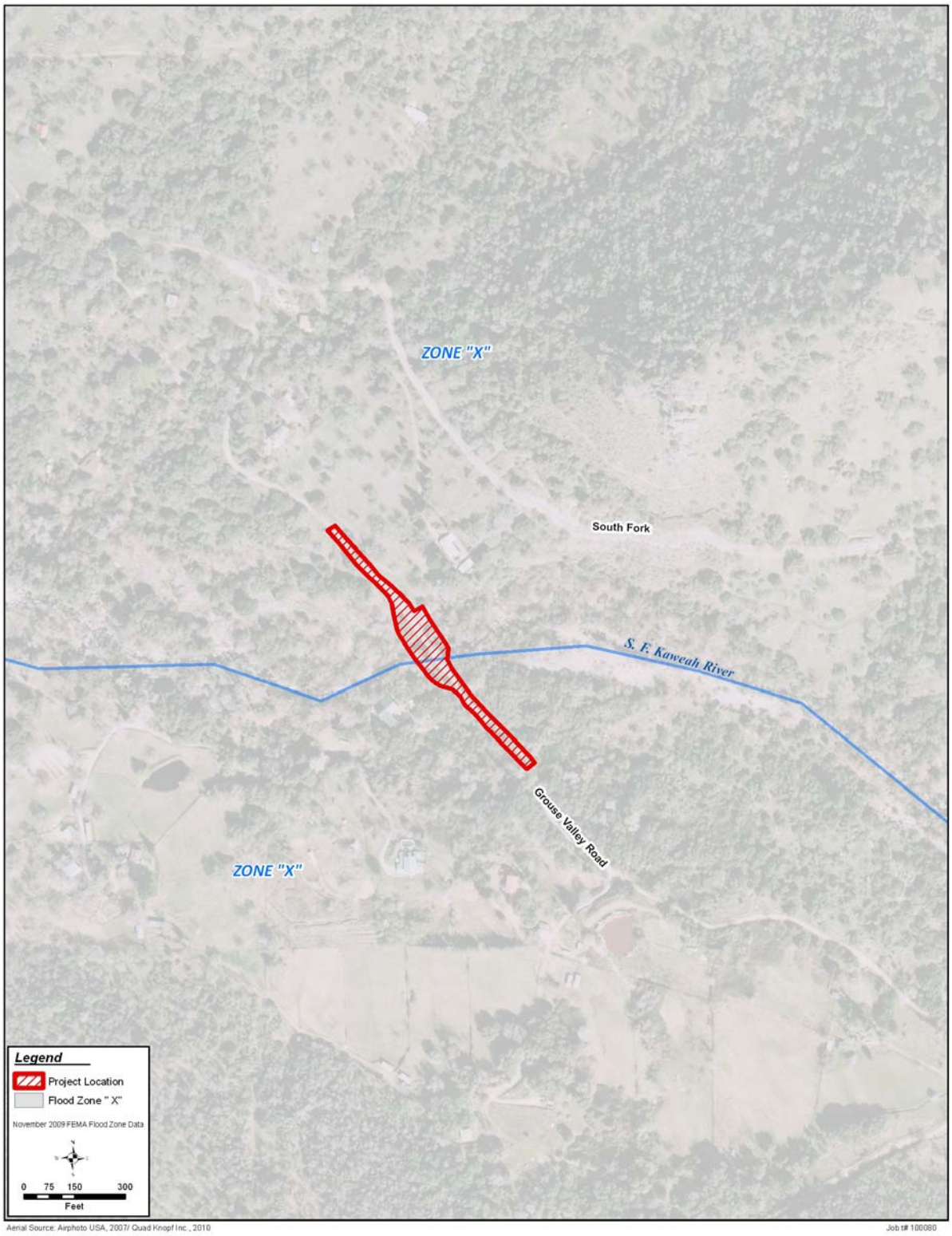
ORDINARY HIGH WATER AND BANK TO BANK LOCATIONS ALONG THE SOUTH FORK OF THE KAWEAH RIVER NEAR THE M319 BRIDGE REPLACEMENT PROJECT SITE, TULARE COUNTY, CALIFORNIA

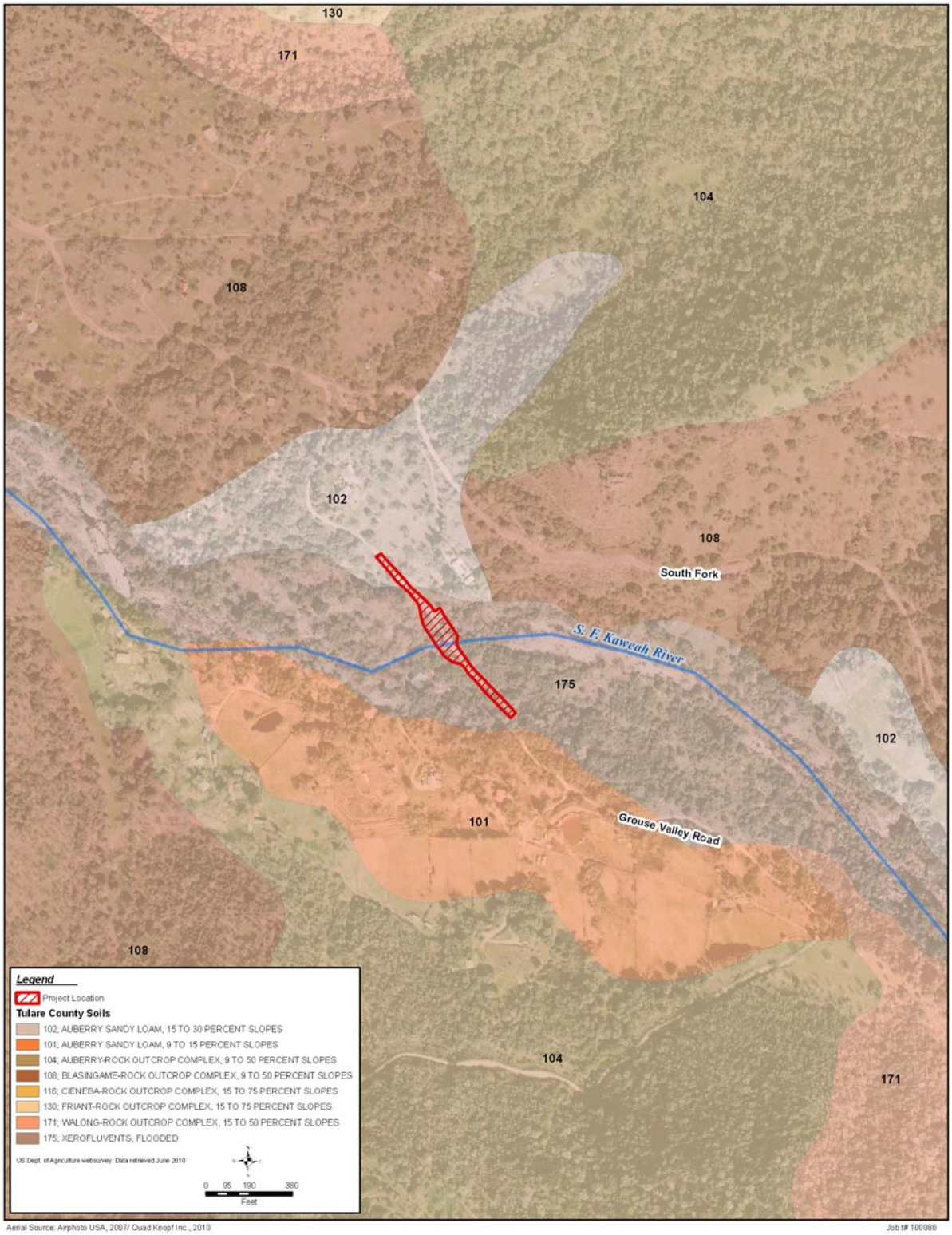
Figure 7



Quad Knopf

100-YEAR FLOOD MAP OF THE M319 BRIDGE PROJECT SITE, TULARE COUNTY, CALIFORNIA

Figure 8



Quad Knopf

SOILS MAP OF THE VICINITY OF THE M319 BRIDGE REPLACEMENT PROJECT, TULARE COUNTY, CALIFORNIA

Figure **9**

5.0 ANALYSIS OF PROJECT IMPACTS

A comprehensive analysis of project impacts cannot be completed until the final design of the bridge is approved, construction drawings indicting exact placement of project components are known, and the amount of cut and fill required in the South Fork of the Kaweah River are calculated. Some additional biological information is also needed, particularly with respect to determining the presence or absence of rare plants and raptor nests. These additional studies are proposed in Section 6 (Recommended Mitigation Measures) as "pre-construction surveys. Nonetheless, based upon the project footprint provided and the biological information gathered, some evaluations of project impacts are possible and are provided. In some cases where there is a lack of sufficient information, these evaluations are not conclusive, but speculative. These include evaluations of the potential for the project to impact:

- Sensitive natural communities;
- Special status plants;
- Oak trees and riparian trees;
- Special status wildlife;
- Raptor nests and migratory birds nests; and
- Wetlands and Waters of the United States.

5.1 Impacts to Sensitive Natural Communities

Prior to the project redesign, potential impacts to riparian areas was estimated to result in disturbance to or loss of up to 0.31 acres of Great Valley Mixed Riparian Forest (Figure 7). Approximately 0.09 acres would have been permanently lost as a result of replacement of the bridge, 0.014 acres would have been temporarily disturbed due to the placement of the laydown area, and up to 0.21 acres would have been temporarily disturbed because of the construction of the temporary low-flow crossing. Impacts to Great Valley Mixed Riparian Forest would not result from construction work associated with upgrading the approaches to the bridge. These estimates of disturbance were maximum acreages, because the final design of the footprint had not been established, and because any reductions in disturbance provided by the implementation of recommended avoidance measures had not been considered. Temporary disturbance and permanent loss of Great Valley Mixed Riparian Forest are anticipated to be less than originally estimated. Mitigation Measures to reduce potential impacts to sensitive natural communities have not been revised because the original measures are adequate to ensure that impacts will be minimized and remain less than significant.

5.2 Impacts to Special Status Plants

No special status plant species were identified to occur on or near the project site. However, the surveys conducted for rare plants are not adequate to determine the presence or absence of many of the targeted species because the surveys were not conducted during the appropriate flowering period. There is potential habitat on the project site that could support three plant species: the California Endangered Kaweah brodiaea, the Federally Threatened, California Endangered

Springville clarkia, and the CNPS List 1B.3 Munz' iris. The project may result in impacts to these species.

5.3 Impacts to Oaks and Riparian Trees

Thirteen oak trees with a DBH of 5'' or more were identified within the proposed project footprint (Figure 5). Some of these oaks may need to be removed and some additional oaks occurring near the project site may need to be trimmed to allow unhindered construction. Exact impacts to oaks cannot be predicted at this time because the final bridge design and footprint has not been established, and because any reductions in disturbance provided by the implementation of recommended avoidance measures has not been considered.

Eighteen riparian species with a DBH of 4" or greater occur within the proposed project footprint. Many of these riparian trees may need to be removed and some additional trees occurring near the project site may need to be trimmed to allow unhindered construction. Exact impacts to riparian trees cannot be predicted at this time because the final bridge design and footprint has not been established, and because any reductions in disturbance provided by the implementation of recommended avoidance measures has not been considered.

5.4 Impacts to Special Status Wildlife

No special status wildlife species were identified on or near the project site, except for the hardhead (a species of fish), which is discussed below. The project site does not contain elderberry bushes, the host plant for the federally threatened Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*); impacts to Valley elderberry longhorn beetles will not result from this proposed project. No impacts are anticipated to occur to the Pacific fisher because the project site does not contain typical habitat for this species and because this species does not exhibit seasonal migratory movements that would allow it to occupy the project site on a seasonal basis. Furthermore, the Pacific fisher is nocturnal and crepuscular, which would further reduce its chances of being on the project site while construction activities are occurring.

The hardhead is known to occur downstream of the proposed project, and it likely occurs at the project site, at least on a temporary basis. Impacts to the river including increased siltation, reductions and diversions in water flows, increases in water temperature, and an influx of contaminants could result in the loss of individual hardheads and a reduction in population levels to below self-sustaining levels.

The project site and areas near the project site may also support two other special status wildlife species, at least on a seasonal or temporary basis: the foothill yellow-legged frog, and the western pond turtle, both of which are California Species of Special Concern. The project could potentially impact these species.

5.5 Impacts to Raptor Nests and Migratory Birds Nests

No raptor nests or migratory birds nests were located on or near the project site. Impacts to breeding raptors and migratory birds are not anticipated. However, pre-construction surveys for active nests will need to be conducted to determine if on-site avoidance measures during construction are warranted.

5.6 Impacts to Wetlands and Waters of the United States

No wetlands occur on or near the project site, and no impacts to wetlands will result from project activities. However, the South Fork of the Kaweah River is most likely a jurisdictional Water of the United States. As revised design plans avoid impacts within the Ordinary High Water Mark, potential impacts to wetlands are expected to be less than the maximum of 0.155 acres estimated to be impacted by project activities (cut and fill). The area from bank to bank falls under the jurisdiction of the California Department of Fish and Game, and maximum impact to this riparian zone would be 0.22 acres. It is likely that actual acreage of disturbance to these features will be reduced by appropriate project design.

6.0 RECOMMENDED PROTECTION, AVOIDANCE, AND COMPENSATION MEASURES

The development of a full compliment of avoidance, protection, and compensation measures is dependant upon a comprehensive and accurate analysis of impacts. Because there are substantial gaps in available information, the impacts analysis and these resulting, recommended mitigation measures are preliminary and may be incomplete. Additional mitigation measures might be required when complete information is available.

Measures to reduce project-related impacts to sensitive biological resources will require a combination of avoidance and protection measures and compensation for the removal and degradation of sensitive habitats. The following measures are recommended:

Measure #1 – Tulare County RMA shall protect and provide compensation for impacts to Sensitive Vegetative Communities: Tulare County RMA shall avoid to the maximum extent feasible, all Great Valley Mixed Riparian Forest. This shall be accomplished through judicious project design, installation of high visibility construction work area fencing, and implementation of a worker awareness training program (see measure # 4)

Tulare County RMA shall provide for the restoration of Great Valley Mixed Riparian Forest that is temporarily disturbed by project activities. Restoration prescriptions, criteria for success, long-term monitoring of monitoring viability, and reporting shall be developed with the cooperation of the California Department of Fish and Game during the application process for acquisition of a Stream Alteration Agreement.

Tulare County RMA shall compensate for the loss of sensitive habitats caused by activities associated with the demolition and construction of the M319 bridge and adjacent temporary low water crossing. Compensation for losses of sensitive vegetative communities would be accomplished through off-site preservation. Compensation shall be “in-kind” and provided by

either the purchase of conservation credits from an approved conservation bank or by the establishment of a conservation easement on an approved conservation site. The County of Tulare RMA shall cooperatively consult with the California Department of Fish and Game to determine the habitat compensation ratios to be implemented to offset losses.

Effectiveness of Measure #1: Implementation of Measure #1 will reduce impacts to sensitive vegetative communities to by protecting existing habitats to the extent feasible, and by preserving in-kind habitat at a ratio commensurate with past and future habitat removal and degradation.

Measure #2 – Tulare County RMA shall protect and provide compensation for impacts to special status plant species: At this time, there are no identifiable impacts to special status plant species. However, the project could potentially impact Kaweah brodiaea, Springville clarkia, and Munz' iris. Additional information is needed to determine impacts to these species and determine appropriate avoidance and compensation measures. Tulare County RMA shall perform surveys of the project site to determine presence/absence of these species prior to construction activities. Surveys shall be conducted during appropriate flower periods of these plants. Appropriate survey periods are: Kaweah brodiaea – April to June, Springville clarkia – May to June, and Munz' iris – February to April. If these species are determined to be absent, then no further measures are warranted. If any one or more of these species are found to be present, then the following shall be implemented.

Tulare County RMA shall avoid populations and individuals of Kaweah brodiaea, Springville clarkia, and Munz' iris. Exclusion fencing shall be established around populations or individuals to protect against take during construction activities. If the removal of populations or individuals is required, then Tulare County RMA shall consult with the California Department of Fish and Game (and in the case of the Springville clarkia, the United States Fish and Wildlife Service), to determine appropriate permitting requirements and compensation requirements.

Effectiveness of Measure #2: Implementation of Measure #2 will reduce impacts to special status plants by protecting existing populations and individuals to the extent feasible, and by providing in-kind compensation commensurate with project impacts.

Measure #3 – Tulare County RMA shall protect and provide compensation for impacts to oak trees and riparian trees: Tulare County RMA shall reduce impacts (e.g., removal, construction beneath the canopy, and trimming) to oak trees and riparian trees to the extent feasible. To facilitate avoidance, high visibility construction fencing shall be placed around oak trees to be avoided. All fencing must provide a buffer area around each oak tree that is not less that the aerial cover of the canopy. When avoidance and full protection is not possible, Tulare County RMA shall provide compensation for the loss of oak trees. Tulare County RMA does not have an adopted Oak Woodland Management Plan or other plan that specifies adopted compensation for the loss of oak trees. In lieu of a plan, the compensation for losses of oak trees shall be determined through consultation with the California Department of Fish and Game and State required compensation shall apply.

Avoidance, protection, and compensation for the loss of riparian trees is covered under measure #1 above because, by definition, riparian trees are a dominant component of Great Valley Mixed riparian Forest.

Effectiveness of Measure #3: Implementation of Measure #3 will reduce impacts to oak trees by protecting existing trees to the extent feasible, and by providing in-kind compensation commensurate with project impacts.

Measure #4 – Tulare County RMA shall protect and provide compensation for impacts to special status wildlife species: The hardhead is known to occur downstream of the project site and it may be present on the site, at least on a temporary basis. Tulare County RMA will implement the following measures to protect hardheads to the greatest extent feasible:

- Reduce cu and fill in the river to the extent feasible;
- Install coffer dams where necessary to divert flow away from construction activities and reduce the potential for siltation;
- Provide habitat restoration along disturbed riverbanks once construction is complete to reduce siltation;
- Limit construction activities within the river to periods of low water flow; and
- Ensure that all fueling and maintenance of equipment occurs in areas isolated from the river so that contamination and accidental spills do not affect riverine resources.

At this time, there are no other identifiable impacts to special status wildlife species. However, the project could potentially impact the foothill yellow-legged frog and the western pond turtle. Additional information is needed to determine impacts to these species and develop appropriate avoidance and compensation measures. Tulare County RMA shall perform surveys of the project site to determine presence/absence of these species prior to construction activities. Surveys shall be conducted during periods when these species are most likely to be present and observable. Appropriate survey periods are during low water flows in late spring and early summer when these species are active: If these species are determined to be absent, then no further measures are warranted. If any one or more of these species are found to be present, then the following shall be implemented.

Tulare County RMA shall develop avoidance measures and provide compensation commensurate with project impacts. The California Department of Fish and Game shall be consulted during the development of avoidance measures and compensations requirements.

Effectiveness of Measure #4: Implementation of Measure #4 will reduce impacts to special status wildlife by protecting existing populations and individuals to the extent feasible, and by providing in-kind compensation commensurate with project impacts.

Measure #5 – Tulare County RMA shall protect raptor nests and migratory birds nests: If construction activities (including vegetation removal, grading or other ground clearing activities, bridge demolition and construction, road demolition and construction) occur during the breeding season of raptors and migratory birds (February 15 to September 15), then pre-construction surveys shall be conducted no more than 14 days prior to initiation of those activities. If more than 14 days lapse between the time of the pre-construction survey and the start of ground-disturbing activities, another pre-construction survey must be completed. Pre-construction surveys shall include the examination of all trees, shrubs, and appropriate ground nesting locations (for ground nesting species such as California horned lark, long-billed curlew, etc.) within 500 feet of planned construction related activities (e.g., site grading, bridge and road construction). If nests are found that are not active, they may be removed by hand and construction may proceed within the area cleared by the surveys. If active nests are found, they must be avoided. Raptor nests shall be avoided by a distance of 500 feet and migratory birds nests shall be avoided by 250 feet. Avoidance shall be accomplished by the installation of exclusion area established around active nests.

Construction within these excluded areas must be delayed until young have fledged (as determined by a qualified biologist) or until the nest has been abandoned. A qualified biologist may modify the size of the buffer based on site conditions and the bird's apparent acclimation to activities. If the buffer is modified, the biologist would be required to monitor stress levels of the nesting birds daily to ensure that project activities would not cause nest site abandonment or loss of eggs or young. At any time, the biologist shall have the right to implement the full buffer size if stress levels are elevated to the extent that could cause nest abandonment and/or loss of eggs or young.

Effectiveness of Measure #5: Implementation of this measure will reduce impacts to nesting raptors and migratory birds.

Measure #6 – Tulare County RMA shall protect, provide compensation for the loss of, and procure permits for impacts to wetlands and waters of the United States: The project will not result in impact wetlands, but there will be impacts to the South Fork of the Kaweah River, which is a Water of the United States. The project may result in up to 0.155 acres of cut and fill within the river. Tulare County RMA shall procure an appropriate permit from the United States Army Corps of Engineers and/or the State Regional Water Quality Control Board. Tulare County RMA shall reduce impacts to the South Fork of the Kaweah River to the extent feasible. If less than 0.1 acres of impacts or less will occur, then compensation for impacts to the river is not required. However, if impacts to the river exceed 0.1 acres, then Tulare County RMA will provide a Mitigation Plan describing restoration and compensation, as required by the permit approval process.

Effectiveness of Measure #6: Implementation of Measure #6 will reduce impacts to waters of the United States by reducing cut and fill to minimal levels, and by providing restoration and compensation commensurate with project impacts.

Measure #7 – Tulare County RMA shall implement a worker training and construction monitoring and reporting program: All on-site contractors and construction workers,

including supervisors and inspectors shall attend a worker training and awareness program. At a minimum, the training program shall include discussions of the natural history of the special status species potentially occurring on the project site, descriptions of the sensitive vegetation communities, and information on the measures that are being implemented. The construction workers shall be made aware of their roles and responsibilities in implementing the project protection measures and other requirements.

Construction activities shall be monitored on a weekly basis by a qualified biological monitor to ensure that all construction fencing and exclusionary fencing is appropriately maintained and that all other measures are fully and faithfully implemented. The biological monitor and the construction team shall work cooperatively to ensure that all measures are effective. The biological monitor shall be on-call to assist with any issues which may arise (such as the "take" of a sensitive species). The biological monitor shall discuss any infractions of the measures with the construction contractor, remedial actions shall be implemented when needed, and solutions shall be devised to prohibit subsequent infractions.

A monthly progress report shall be prepared by the biological monitor, which shall be submitted to the California Department of Fish and Game. That report shall include dates of construction, types of construction activities occurring, descriptions of the measures that were implemented, infractions that occurred, and descriptions of any remedial actions that were taken. A final report shall be submitted once all construction has been completed and site restoration has been completed.

Effectiveness of Mitigation Measure #7: Implementation of worker training, biological monitoring, and reporting will contribute to assurances that the degradation of sensitive habitats will be minimized and that all provisions of the listed measures will be appropriately implemented and followed.

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APPENDICES

APPENDIX A

LIST OF PLANT AND WILDLIFE SPECIES OBSERVED ON THE M318 BRIDGE REPLACEMENT PROJECT, 17 AND 18 JUNE, 2010

Appendix A
Mountain Road M319 Bridge Replacement Project
List of species observed

Species	Common Name
Plants:	
Acer macrophyllum	Big-leaf maple
Aesculus californica	California buckeye
Alnus rhombifolia	White alder
Artemisia douglasiana	Mugwort
Baccharis salicifolia	Mulefat
Bromus hordeaceous	soft chess
Calocedrus decurrens	Incense cedar
Calycanthus occidentalis	Spicebush
Centaurea melitensis	Tocalote
Centaurea solstitialis	Star-thistle
Circium vulgare	Bull thistle
Clarkia purpurea quadrivulnera	Farewell-to-spring
Clarkia unguiculata	Elegant clarkia
Collinsia heterophylla	Chinese houses
Conyza canadensis	Horseweed
Datura wrightii	Sacred datura
Daucus pusillus	American wild carrot
Eriodictyon californicum	Yerba santa
Euthamia occidentalis	western goldenrod
Lotus purshianus	Spanish clover
Lupinus albifrons	Bush lupine
Marah sp.	Wild cucumber
Platanus racemosa	Western sycamore
Populus fremontii	Fremont cottonwood
Quercus douglasii	Blue oak
Quercus wislizeni	Interior live oak
Rhamnus californica	California coffeeberry
Rubus ursinus	California blackberry
Salix gooddingii	Black willow
Toxicodendron diversilobum	Western poison ivy
Verbena bonariensis	Tall verbena
Vitis californica	California wild grape
Wildlife species	
Aphelocoma californica	Western scrub-jay
Cnemidophorus tigris	Western whiptail
Corvus brachyrhynchos	American crow
Melanerpes formicivorus	Acorn woodpecker
Mephitis mephitus	Striped skunk

APPENDIX B

REPRESENTATIVE PHOTOGRAPHS OF THE M319 BRIDGE REPLACEMENT PROJECT SITE, TULARE COUNTY, CALIFORNIA

Northern approach to existing bridge.
Note weedy vegetation on roadside and riparian vegetation on both sides of bridge.

View from northeast corner of existing bridge.

Quad Knopf	REPRESENTATIVE SITE PHOTOS	Photo plate 1

View to north of existing bridge. Note Blue Oak Woodland outside of roadway easement.

View downstream from north end of existing bridge.
Note riparian vegetation flanking the river channel.

Quad Knopf	REPRESENTATIVE SITE PHOTOS	Photo plate 2

Riparian vegetation northwest of bridge. View to west.

Southern approach to existing bridge. View from mid-bridge to south.

View to west (downstream) from existing bridge.

APPENDIX C

LIST OF SENSITIVE NATURAL COMMUNITIES, SPECIAL STATUS PLANTS, AND SPECIAL STATUS WILDLIFE POTENTIALLY OCCURRING ON THE M319 BRIDGE REPLACEMENT PROJECT SITE

Appendix C-1
Sensitive Botanical Resources Potentially Occurring in the Project Area

Scientific Name	Common Name	Status	Habitat Requirements Potential for Occurrence on Site	Potential to Occur on Site
Sensitive Natural Communities				
Big Tree Forest	Big Tree Forest	Protected under CEQA		**Absent.** This community does not occur on or near the project site.
Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	Protected under CEQA	Streams containing this assembage are usually clear water with deep, rocky pools and wide, shallow riffles at mid-elevations. Such streams are found in the Sierra Nevada Mountains from the Pitt River to Kern County.	**Possible.** CNDDB records a hardhead/squawfish stream 0.62 miles downstream of this project. Hardhead (*Mylopharadon conocephalus*) and squawfish (also called Sacramento pikeminnow, *Ptylocheilus grandis*.) were recorded for this location See treatment of Hardhead below.
Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	Protected under CEQA	This is a tall, dense, winter-deciduous riparian forest on fine-grained alluvial soils, although at this site the stream itself is bordered by large boulders. Tree species include Fremont cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), western sycamore (*Platanus racemosa*), with spicebush (*Calycanthus occidentalis*) and California blackberry (*Rubus ursinus*) in the understory.	**Present.** This habitat is found on-site**.**
Sensitive Plant Species				
Brodiaea insignis	Kaweah brodiaea	CE, 1B.2	Cismontane Foothill and Woodland grassland. Micro-habitat includes granite substrates in deep clay soils on S-SW facing slopes, usually in grassland surrounded by woodland. Flowering extends from April to June. The elevation range is from 500 to 4,600 feet AMSL.	**Possible**. This species is known from within five miles of the site, although habitat in the project area is marginal, and it was not observed during the site survey.
Calochortus westonii	Shirley Meadow's star-tulip	1B.2	*Calochortus westonii* is a mountain plant found in California's southern Sierra Nevada, usually growing among fir trees (*Abies*). *Calochortus westonii* is known from the Greenhorn Mountains in Kern and Tulare counties. The flowering period is from May to June. Its elevation range is between 4,900 and 7,000 feet AMSL.	**Absent**. The elevation range of this species is well above that of the project area.

Scientific Name	Common Name	Status	Habitat Requirements Potential for Occurrence on Site	Potential to Occur on Site
Carlquistia muirii	Muir's tarplant	1B.3	This species occurs only in the southern Sierra Nevada and Santa Lucia range of California, on open granitic slopes. Its flowering period is from July to August. The elevation range is from 3,600 to 8,200 feet AMSL.	**Absent**. The elevation range of this species is well above that of the project area.
Cinna bolanderi	Bolander's woodreed	1B.2	Bolander's woodreed occurs in meadows and seeps in upper montane coniferous forests along streamsides and in mesic habitats. The flowering period is from July to August. Its elevation range is from 5,500 to 8,000 feet AMSL.	**Absent**. The elevation range of this species is well above that of the project area.
Clarkia springvillensis	Springville clarkia	FT, CE, 1B.2	This plant species inhabits chaparral, cismontane woodland, and valley and foothill grasslands. It occurs in granitic soils. The flowering period is from May to June. The elevation range is from 800 to 4,000 feet AMSL.	**Possible.** Although this species was not observed during the site survey, the flowering period of this species is somewhat earlier than the survey dates, so it may have been present and not apparent. Furthermore, habitat suitable to support this species is present in the immediate vicinity of the project footprint.
Delphinium purpusii	Kern County larkspur	1B.3	Kern County larkspur occurs in rocky, often carbonate, soils in chaparral, cismontane woodland, and pinyon and juniper woodland habitat. The flowering period is from April to May. Its elevation range is from 990 to 4,400 feet AMSL.	**Unlikely**. Although marginal habitat for this species occurs in the project area, it is not known from within 5 miles of the project site, and the northernmost population documented for this species is 16.5 miles to the south.
Dudleya cymosa ssp. costafolia	Pierpoint Springs dudleya	1B.2	This plant occurs in chaparral and cismontane woodlands on carbonate substrates. The flowering period is from May to July. The elevation range is from 4,700 to 5,250 feet AMSL.	**Absent**. The elevation range of this species is well above that of the project area.
Erigeron inornatus var. keilii	Keil's daisy	1B.3	Keil's daisy occurs in lower montane coniferous forests in meadows and seeps. The flowering period is from June to September. The elevation	**Absent**. The elevation range of this species is well above that of the project area, and habitat

Scientific Name	Common Name	Status	Habitat Requirements Potential for Occurrence on Site	Potential to Occur on Site
			range is from 5,900 to 7,200 feet AMSL.	suitable to support this species is absent from the project area..
Eriogonum nudum var. murinum	mouse buckwheat	1B.2	This species inhabits chaparral, cismontane woodland, valley and foothill grassland. Its micro-habitat includes dry sandy loam slopes in the Kaweah drainage. The flowering period is from June to November. The elevation range is from 1,200 to 3,700 feet AMSL.	**Possible.** Although this species was not observed during the site survey, habitat suitable to support this species is present in the immediate vicinity of the project footprint.
Eryngium spinosepalum	spiny-sepaled button celery	1B.2	Spiny-sepaled button celery is associated with vernal pools, depressions within grasslands, and moist grasslands. Its flowering period is from April to May, and the elevation range is from 260 to 850 feet AMSL	**Absent**. The elevation range of this species is well below that of the project area, and suitable habitat is absent.
Erythronium pusaterii	Kaweah fawn lily	1B.3	Kaweah fawn lily occurs in meadows and seeps in subalpine coniferous forests. This species usually inhabits granitic or metamorphic soils. The flowering period is from May to July. The elevation range is from 6,900 to 9,100 feet AMSL.	**Absent**. The elevation range of this species is well above that of the project area, and habitat suitable to support this species is absent from the project area..
Fritillaria brandegeei	greenhorn fritillary	1B.3	Greenhorn fritillary occurs in lower montane coniferous forests. The flowering period is from April to June. The elevation range is from 4,600 to 6,900 feet AMSL.	**Absent**. The elevation range of this species is well above that of the project area, and habitat suitable to support this species is absent from the project area.
Fritillaria striata	striped adobe-lily	CT, 1B.1	Striped adobe-lily occurs in clay soils in cismontane woodland and valley and foothill grasslands. The flowering period is from February to April. The elevation range is from 450 to 4,750 feet AMSL.	**Absent**. Habitat suitable to support this species is absent from the project area.
Iris munzii	Munz' iris	1B.3	This plant occurs in cismontane woodlands. The flowering period is from February toApril. The elevation range is between 1,000 and 2,600 feet AMSL.	**Possible.** Although this species was not observed during the site survey, habitat suitable to support this species is present in the immediate vicinity of the project footprint.
Ivesia campestris	field ivesia	1B.2	This plant species occurs in meadows and seeps, subalpine coniferous forests, and upper montane coniferous forests. The flowering period is from June to	**Absent**. Habitat suitable to support this species is absent from the project area. Furthermore, the

Scientific Name	Common Name	Status	Habitat Requirements Potential for Occurrence on Site	Potential to Occur on Site
			August. The elevation range is from 6,500 to 11,000 feet AMSL.	elevation range of this species is well above that of the project site.
Juncus nodosus	knotted rush	2.3	This plant species occurs in meadows and seeps and along lake margins of marshes and swamps. Its flowering period is from July to September. The elevation range is from 100 to 6,500 feet AMSL .	**Absent**. Habitat suitable to support this species is absent from the project area.
Leptosiphon serrulatus	Madera leptosiphon	1B.2	This plant species occurs in cismontane woodland and lower montane coniferous forests. The flowering period is from April to May. The elevation range isfrom 1,000 to 4,250 feet AMSL.	**Unlikely.** Although this species was not observed during the site survey, the survey was executed after the flowering period of this species. Only marginal habitat suitable to support this species is present in the immediate vicinity of the project footprint, and no populations are recorded within 5 miles of the project site.
Lotus oblongifolius var. cupreus	copper-flowered bird's-foot trefoil	1B.3	This plant species occurs in meadows and seeps in upper montane coniferous forests. The flowering period is from June to August. The elevation range is from 7,900 to 9,000 feet AMSL.	**Absent**. Habitat suitable to support this species is absent from the project area. Furthermore, the elevation range of this species is well above that of the project site.
Lupinus lepidus var. culbertsonii	Hockett Meadows lupine	1B.3	This plant species occurs in meadows and wetlands. The flowering period is from July to August. The elevation range is from 8,000 to 9,850 feet AMSL.	**Absent**. Habitat suitable to support this species is absent from the project area. Furthermore, the elevation range of this species is well above that of the project site.
Mimulus norrisii	Kaweah monkeyflower	1B.3	This species occurs in chaparral and foothill woodlands, usually on carbonate substrates. Its flowering period is from March to May. The elevation range is from 1,200 to 4,250 feet AMSL.	**Possible.** Although this species was not observed during the site survey, the survey was executed after the flowering period of this species, and marginal habitat suitable to support this species is present in the immediate vicinity of the project footprint. Furthermore, CNDDB records this species within 5 miles of the project site.
Mimulus pictus	calico	1B.2	Calico monkey-flowers occur in bare,	**Possible.** Although this

Scientific Name	Common Name	Status	Habitat Requirements Potential for Occurrence on Site	Potential to Occur on Site
	monkeyflower		sunny areas around shrubs and rock outcrops on granitic soils. The flowering period is March to May, and the elevation range is from 320 to 4,160 feet AMSL.	species was not observed during the site survey, the survey was executed after the flowering period of this species, and marginal habitat suitable to support this species is present in the immediate vicinity of the project footprint.
Oreonana purpurascens	purple mountain-parsley	1B.2	Purple mountain-parsley grows on coarse, sandy to gravelly soils on either granitic or metamorphic substrates in red fir, lodgepole pine, mixed coniferous, and yellow pine forests. The flowering period is from May to June. The elevation range is from 7,850 to 9,400 feet AMSL.	**Absent**. Habitat suitable to support this species is absent from the project area. Furthermore, the elevation range of this species is well above that of the project site.
Ribes menziesii var. ixoderme	aromatic canyon gooseberry	1B.2	Aromatic canyon gooseberry is a deciduous shrub that is found in chaparral and cismontane woodlands in Fresno, Kern, and Tulare counties. The flowering period is April. The elevation range is from 2,000 to 3,800 feet AMSL.	**Unlikely.** Although this species was not observed during the site survey, the survey was executed after the flowering period of this species, and habitat suitable to support this species is present in the immediate vicinity of the project footprint.
Ribes tularense	Sequoia gooseberry	1B.3	Sequoia gooseberry is a Tulare County endemic that is restricted to westernmost isolated stands of mixed coniferous forest between the elevations of 5,360 and 7,040 feet AMSL. The flowering period is May.	**Absent**. Habitat suitable to support this species is absent from the project area. Furthermore, the elevation range of this species is well above that of the project site.

Sources:

California Department of Fish and Game. 2008. California Natural Diversity Data Base, California Department of Fish and Game, Sacramento, CA.

California Native Plant Society (CNPS). 2008. Inventory of Rare and Endangered Plants, Rare Plant Scientific Advisory Committee. California Native Plant Society, Sacramento, CA.

United States Fish and Wildlife Service (USFWS). 2008. Critical Habitat Portal, Critical Habitat Map, United States Fish and Wildlife Service, Sacramento, CA.

United States Fish and Wildlife Service (USFWS). 2008. Federal Endangered and Threatened Species List, Sacramento Fish and Wildlife Office, Sacramento, CA.

Abbreviations:

FE Federal Endangered Species
FT Federal Threatened Species
CE California Endangered Species
CT California Threatened Species
1B California Native Plant Society List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere.
1B.1 California Native Plant Society List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Seriously Endangered in California
1B.2 California Native Plant Society List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Fairly Endangered in California.

1B.3 California Native Plant Society List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Not Very Endangered in California.
2.1 California Native Plant Society List 2 Species-Plants Categorized as Rare, Threatened, or Endangered in California, but More Common Elsewhere; Seriously Endangered in California.
2.2 California Native Plant Society List 2 Species-Plants Categorized as Rare, Threatened, or Endangered in California, but More Common Elsewhere; Fairly Endangered in California.
2.3 California Native Plant Society List 2 Species-Plants Categorized as Rare, Threatened, or Endangered in California, but More Common Elsewhere; Not very Endangered in California.
3.3 California Native Plant Society Review List: Plants about which more information is needed-Not Very Endangered in California.
4.2 California Native Plant Society Watch List: Plants of Limited Distribution; Fairly Endangered in California.

Appendix C-2
Special Status Animal Species that Potentially Occur in the Project Area

Scientific Name	Common Name	Status	Habitat Requirements	Potential to Occur on Site
Invertebrates				
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	FT	Blue elderberry shrubs (*Sambucus* species).	**Absent.** The host plants for this species are absent form the project site and vicinity.
Fishes				
Mylopharodon conocephalus	hardhead	CSC	Hardhead require clear streams with deep pools and wide, shallow riffles. Streams usually run swifly in winter and spring, and remain with deep pools in the summer and fall.	**Possible.** Hardhead are known from within 0.5 mile downstream of the project site, and they may utilize the project site, at least seasonally.
Amphibians				
Rana boylii	foothill yellow-legged frog	CSC	Foothill yellow-legged frogs live in a variety of aquatic habitats with slow-flowing water.	**Possible.** Although this species was not observed during the site survey, and no populations of this species are recorded within 5 miles of the project site, habitat suitable to support this species is present in the immediate vicinity of the project footprint.
Rana muscosa	Sierra Madre yellow-legged frog	FE	Inhabits lakes, ponds, meadow streams, isolated pools, sunny riverbanks in the southern Sierra Nevada Mountians.	**Unlikely**. The nearest population is 12 miles to the southeast, at over 9,000 feet AMSL.
Reptiles				
Actinemys marmorata	western pond turtle	CSC	Western pond turtles live in streams, large rivers and other bodies of slow-moving water.	**Possible.** Although this species is not found within five miles of the project area, western pond turtles are known from west and south within 7 to 15 miles. Swift water at the project site would preclude occupation of the river channel during high flows, but during the dry season of slow-moving water, western pond turtles could utilize the site.
Avian				
Accipiter gentilis	northern goshawk	CSC (nesting)	Northern goshawks inhabit coniferous and deciduous forests, and forest edges.	**Possible as a winter transient**. No suitable breeding habitat for this species occurs on or near the project site, but it could descend to this elevation in winter months..

Scientific Name	Common Name	Status	Habitat Requirements	Potential to Occur on Site
Cypseloides niger	black swift	CSC (nesting)	Black swifts occur in mountainous regions of the western United States and Canada. Currently, black swifts occur in three widely separated areas: central Colorado through central Utah; central and southwestern coastal California; and southern Alaska to northern Washington and inland to southwestern Alberta, northern Idaho, and northwestern Montana. Black swifts nest in colonies on steep rock faces and canyon walls, often near waterfalls.	**Absent**. No suitable habitat for this species occurs on or near the project site.
Gymnogyps californianus	California condor	FE, CE	California condors prefer mountains, gorges, and hillsides, which create updrafts, thus providing favorable soaring conditions.	**Possible as a transient.** Condors may soar over the site, but suitable nesting sites are absent.
Mammals				
Antrozous pallidus	pallid bat	CSC	Pallid bats occur in grasslands, shrublands, woodlands, and forests at elevations from sea level to high altitude mixed conifer forests. This species is most common in open, dry habitats with rocky areas for roosting. It is locally common in low elevations in California.	**Possible as a transient.** Pallid bats may forage over the site, but suitable nesting sites are absent
Eumops perotis californicus	western mastiff bat	CSC	The western mastiff bat roosts in crevices in cliff faces, high buildings, trees and tunnels. In California the western mastiff bat is most commonly encountered in broad open areas, but occurs in many semi-arid to arid habitats. This includes dry desert washes, flood plains, conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, montane meadows, palm oases, chaparral, desert scrub, urban, and agricultural areas.	**Unlikely.** Typical habitat for this species is absent from the site.
Gulo gulo	California wolverine	CT, FP	California wolverines occur in Sierra Nevada open habitat, above or at timberline.	**Unlikely**. A CNDDB record within five miles of the site is from 1907, and a t 4,000 feet, considerabley above the elevation of the project site

Scientific Name	Common Name	Status	Habitat Requirements	Potential to Occur on Site
Martes pennanti pacifica	Pacific fisher	FC, CSC	Pacific fishers inhabit intermediate to large tree stages of coniferous forests and deciduous-riparian areas with high percentages of canopy closure. They use cavities, snags, logs, and rocky areas for cover and den sites. Pacific fishers need large areas of mature, dense forest.	**Possible.** CNDDB records within five miles of the site from the 1960's and 1970's document this species, and the project area contains marginal habitat for this species.
Vulpes vulpes necator	Sierra Nevada red fox	CT	Sierra Nevada red foxes are found in wet meadow, conifer forest, hardwood forest, and mixed hardwood/conifer forest habitat.	**Absent**. No suitable habitat for this species occurs on or near the project site.

Sources:
California Department of Fish and Game. 2008. California Natural Diversity Data Base, California Department of Fish and Game, Sacramento, CA.
United States Fish and Wildlife Service (USFWS). 2008. Federal Endangered and Threatened Species List, Sacramento Fish and Wildlife Office, Sacramento, CA.

Abbreviations:
FT Federal Threatened Species
FC Federal Candidate Species
CT California Threatened Species
CSC California Department of Fish and Game Species of Special Concern

APPENDIX D

CHARACTERISTICS OF OAK TREES AND RIPARIAN TREES ON THE M319 BRIDGE PROJECT SITE, TULARE COUNTY

Appendix D-1
Oak Species Identified within the Project Site

ID #	Species	Canopy (ft)	Diameter*(ft)	Height (ft)	Understory
1	*Quercus wislizeni* Interior live oak	45	0.54	35	Herbaceous
2	*Quercus wislizeni* Interior live oak	42	0.48 0.70 0.55 0.67	32	Herbaceous
3	*Quercus douglasii* Blue oak	45	1.94	33	Herbaceous
4	*Quercus wislizeni* Interior live oak	50	1.37 0.73	39	Herbaceous
5	*Quercus wislizeni* Interior live oak	45	0.67 0.41	42	Herbaceous
6	*Quercus wislizeni* Interior live oak	55	0.46 0.46	40	Herbaceous
7	*Quercus douglasii* Blue oak	30	.73	34	Herbaceous
8	*Quercus douglasii* Blue oak	66	1.40 0.86 1.05 0.95 0.89	36	None
9	*Quercus wislizeni* Interior live oak	21	0.73	36	Herbaceous
13	*Quercus wislizeni* Interior live oak	34	0.90 0.95 0.70 0.50	23	Herbaceous
14	*Quercus wislizeni* Interior live oak	14	0.50	19	Herbaceous
53	*Quercus wislizeni* Interior live oak	18	0.70 0.70	28	Herbaceous
63	*Quercus wislizeni* Interior live oak	58	1.20 0.80 1.10 0.85 0.60 0.55 0.50	40	None
64	*Quercus wislizeni* Interior live oak	47	1.0 0.50 0.70 0.45 0.60 0.60		

ID #	Species	Canopy (ft)	Diameter*(ft)	Height (ft)	Understory
65	*Quercus wislizeni* Interior live oak	40	1.0 0.90 0.60	32	None
66	*Quercus wislizeni* Interior live oak	28	1.2 0.55 0.60 0.45	32	Rocks
67	*Quercus wislizeni* Interior live oak	20	0.70 0.65 0.60	33	None
68	*Quercus wislizeni* Interior live oak	34	0.50 0.50 0.40 0.65 0.65 0.45 0.45	22	None
69	*Quercus wislizeni* Interior live oak	31	1.2 1.2 1.1 0.65 0.70 0.50 0.40 0.65	38	Rocks
70	*Quercus wislizeni* Interior live oak	26	0.80 0.50 0.60 0.55	31	Rocks
71	*Quercus wislizeni* Interior live oak	22	0.8	33	Rocks
72	*Quercus wislizeni* Interior live oak	35	1.0 0.80 0.75	35	Rocks

* Diameter is measured at 4.5 feet above ground level (a.k.a. Diameter at Breast Height or DBH). Note that many of the oaks identified had multiple trucks. The DBH was measured and recorded separately for each trunk; however, only the largest DBH for each tree was recorded in the GPS tracking system.

Appendix D-2
Riparian Species Identified within the Project Site

ID#	Species	Diameter (ft)	Understory
10	*Platanus racemosa Nutt.* California sycamore	0.73	Poison oak
11	*Platanus racemosa Nutt.* California sycamore	2.20	Wild berries
12	*Platanus racemosa* Nutt. California sycamore	0.90	Spicebush/wild berries
15	*Calycanthus occidentalis* Spice bush	.33	NW of bridge, dense area along bank
16	*Calycanthus occidentalis* Spice bush	.33 .33	NW of bridge, dense area along bank
17	*Salix gooddingii* C.R. Ball Goodding's willow	1.20	NW of bridge, dense area along bank
18	*Salix gooddingii* C.R. Ball Goodding's willow	0.58	NW of bridge, dense area along bank
19	*Alnus rhombifolia* Nutt. White Alder	0.50	NW of bridge, close to water's edge
20	*Alnus rhombifolia* Nutt. White Alder	0.50	NW of bridge, close to water's edge
21	*Alnus rhombifolia* Nutt. White Alder	0.57	NW of bridge, close to water's edge
22	*Alnus rhombifolia* Nutt. White Alder	0.33	NW of bridge, close to water's edge
23	*Alnus rhombifolia* Nutt. White Alder	0.50	NW of bridge, close to water's edge
24	*Alnus rhombifolia* Nutt. White Alder	0.33	NW of bridge, close to water's edge
25	*Salix gooddingii* C.R. Ball	0.33	NW of bridge, wild berries, spice bush

ID#	Species	Diameter (ft)	Understory
	Goodding's willow		
26	*Salix gooddingii* C.R. Ball Goodding's willow	0.70	NW of bridge, wild berries, spice bush
27	*Salix gooddingii* C.R. Ball Goodding's willow	0.90	NW of bridge, wild berries, spice bush
28	*Salix gooddingii* C.R. Ball Goodding's willow	1.20	NW of bridge, wild berries, spice bush
29	*Salix gooddingii* C.R. Ball Goodding's willow	1.0	NW of bridge, wild berries, spice bush
30	*Alnus rhombifolia* Nutt. White Alder	0.90	
31	*Alnus rhombifolia* Nutt. White Alder	0.70	
32	*Alnus rhombifolia* Nutt. White Alder	1.25	
33	*Alnus rhombifolia* Nutt. White Alder	0.80	
34	*Platanus racemosa* Nutt. California sycamore	1.0	
35	*Platanus racemosa* Nutt. California sycamore	1.30	
36	*Salix gooddingii* C.R. Ball Goodding's willow	1.30	
37	*Salix gooddingii* C.R. Ball Goodding's willow	0.85	
38	*Populus fremontii* Fremont cottonwood	1.69	
39	*Salix gooddingii* C.R. Ball Goodding's willow	1.30	
40	*Populus fremontii* Fremont cottonwood	0.50	
41	*Populus fremontii*	1.00	

ID#	Species	Diameter (ft)	Understory
	Fremont cottonwood		
42	*Populus fremontii* Fremont cottonwood	0.85	
43	*Populus fremontii* Fremont cottonwood	1.53	
44	*Populus fremontii* Fremont cottonwood	1.00	
45	*Populus fremontii* Fremont cottonwood	0.40 0.40	
46	*Populus fremontii* Fremont cottonwood	0.50	
47	*Populus fremontii* Fremont cottonwood	1.90	
48	*Populus fremontii* Fremont cottonwood	1.10	
49	*Populus fremontii* Fremont cottonwood	1.20	
		1.10	
50	*Populus fremontii* Fremont cottonwood	0.65	
	Populus fremontii Fremont cottonwood	0.70	
		0.60	
51	*Populus fremontii* Fremont cottonwood	0.48	
52	*Populus fremontii* Fremont cottonwood	0.48	
54	*Populus fremontii* Fremont cottonwood	0.44	On waterline
55	*Platanus racemosa* Nutt. California sycamore	0.70 0.50 0.50 0.45 0.45 0.45 0.25 0.25	On waterline
56	*Alnus rhombifolia* Nutt. White Alder	0.70 0.40 0.40 0.25 0.30	On waterline
57	*Alnus rhombifolia* Nutt. White Alder	0.5 0.5 0.3	In river

ID#	Species	Diameter (ft)	Understory
		0.3 0.3 0.3 0.25	
58	*Populus fremontii* Fremont cottonwood	0.70	
59	*Populus fremontii* Fremont cottonwood	0.8.0	
60	*Populus fremontii* Fremont cottonwood	1.08	
61	*Platanus racemosa* Nutt. California sycamore	1.30	In river
62	*Alnus rhombifolia* Nutt. White Alder	0.70	

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Appendix C

Cultural Resources Report

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A CULTURAL RESOURCES SURVEY OF THE MOUNTAIN ROAD M319 BRIDGE (46 C0119) REPLACEMENT PROJECT, SOUTH FORK OF THE KAWEAH RIVER, TULARE COUNTY, CALIFORNIA

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24 July 2010

Topographic Quadrangle: Dennison Peak, 7.5' (1986)
Area: ~18,000 sq ft (~1,672 sq m)

(Keywords: *Tulare, Township 18S, Range 29E, Bridge 46 C0119, South Fork of the Kaweah River, Hockett Trail, Patwisha, Wukchumni, C.W. Cahoon)*

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MANAGEMENT SUMMARY

On 13 July 2010, a cultural resources survey was performed of approximately 18,000 ft^2 (1,672 m^2) of roadway along Mountain Road M319 in rural Tulare County, California. The Project Area surveyed (the Area of Potential Effects [APE]) includes a bridge (46 C0119) crossing the South Fork of the Kaweah River plus approximately 400 ft of roadway on both approached to the bridge; also included in the survey is a potential staging area and proposed location of a temporary bridge to be constructed during demolition and construction of a new bridge. The study area is located in rural Tulare County approximately 0.2 miles south of Mountain Road M348 (South Fork Drive) and ca. seven miles southeast of State Route 198 in the community of Three Rivers, California (Township 18S, Range 29E, Section 16, MDB&M; see Maps 1 and 2).

The County of Tulare proposes to replace the extant bridge on M319 in its existing alignment with a precast prestressed voided slab/box girder, approximately 80-90 ft in length and 20-ft wide. The superstructure will be supported on seat type abutments and founded on spread footings similar to the existing structure. A temporary low water crossing will be provided downstream of the existing bridge to handle vehicular traffic during removal of the existing bridge and construction of the replacement structure.

Quad Knopf is assisting the County of Tulare Resource Management Agency with the preparation of environmental documents necessary under the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA). Provisions and implementing guidelines of the CEQA, as amended July 11, 2006, state that identification and evaluation of historical resources is required for any action that may result in a potential adverse effect on the significance of such resources, which include archaeological resources. Identification of historic properties is also required pursuant to provisions and implementing regulations of Section 106 of the National Historic Preservation Act.

Bridge 46 C0119 has been determined ineligible for listing on the National Register of Historic Places (Caltrans 2009). No historical resources or properties were identified as a result of surface inspection of the APE, and there appears to be little likelihood of buried cultural resources within the APE; thus, it is unlikely that demolition of the existing structure and construction of the new bridge on M319 will have an effect on important archaeological, historical, or other cultural resources. No further cultural resources investigation is therefore recommended. In the unlikely event that buried archaeological deposits are encountered within the Project APE, the finds must be evaluated by a qualified archaeologist. Should human remains be encountered, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

1.0 INTRODUCTION

This report presents the findings of a cultural resource survey of approximately 18,000 ft^2 (1,672 m^2) of roadway along Mountain Road M319 in rural Tulare County, California. The Project Area surveyed (the Area of Potential Effects [APE]) includes a bridge (46 C0119) crossing the South Fork of the Kaweah River plus approximately 400 ft of roadway on both approached to the bridge; also included in the survey is a potential staging area and proposed location of a temporary bridge to be constructed during demolition and construction of a new bridge. The study area is located in rural Tulare County approximately 0.2 miles south of Mountain Road M348 (South Fork Drive) and ca. seven miles southeast of State Route 198 in the community of Three Rivers, California (Township 18S, Range 29E, Section 16, MDB&M; see Maps 1 and 2).

The County of Tulare has found Bridge 46 C0119 to be structurally deficient due to its low inventory load rating, and proposes to replace the extant bridge on M319 in its existing alignment with a precast prestressed voided slab/box girder, approximately 80-90 ft in length and 20-ft wide. The superstructure will be supported on seat type abutments and founded on spread footings similar to the existing structure. A temporary low water crossing will be provided downstream of the existing bridge to handle vehicular traffic during removal of the existing bridge and construction of the replacement structure.

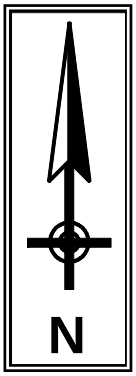
Quad Knopf is assisting the County of Tulare Resource Management Agency with the preparation of environmental documents necessary under the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA). Provisions and implementing guidelines of the CEQA, as amended July 11, 2006, state that identification and evaluation of historical resources is required for any action that may result in a potential adverse effect on the significance of such resources, which include archaeological resources. Identification of historic properties is also required pursuant to provisions and implementing regulations of Section 106 of the National Historic Preservation Act.

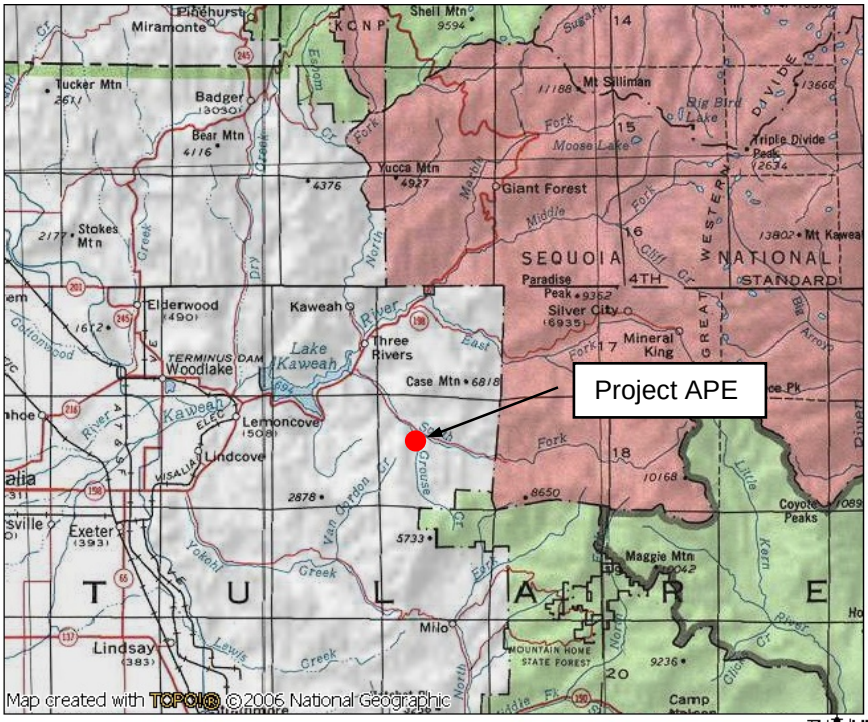
The author conducted a cultural resources survey of the Project APE on 13 July 2010. Bridge 46 C0119 has been determined ineligible for listing on the National Register of Historic Places (Caltrans 2009). No significant historical resources or properties eligible for listing on either the National Register of Historic Places and/or the California Register of Historical Resources were identified as a result of surface inspection of the Project APE.

A brief description of the natural and cultural setting of the Project APE follows this introduction. Survey methods and findings are presented in the subsequent section.

MAP 1. PROJECT VICINITY

Bridge 46 C0119, Mountain Road M319, South Fork of the Kaweah River



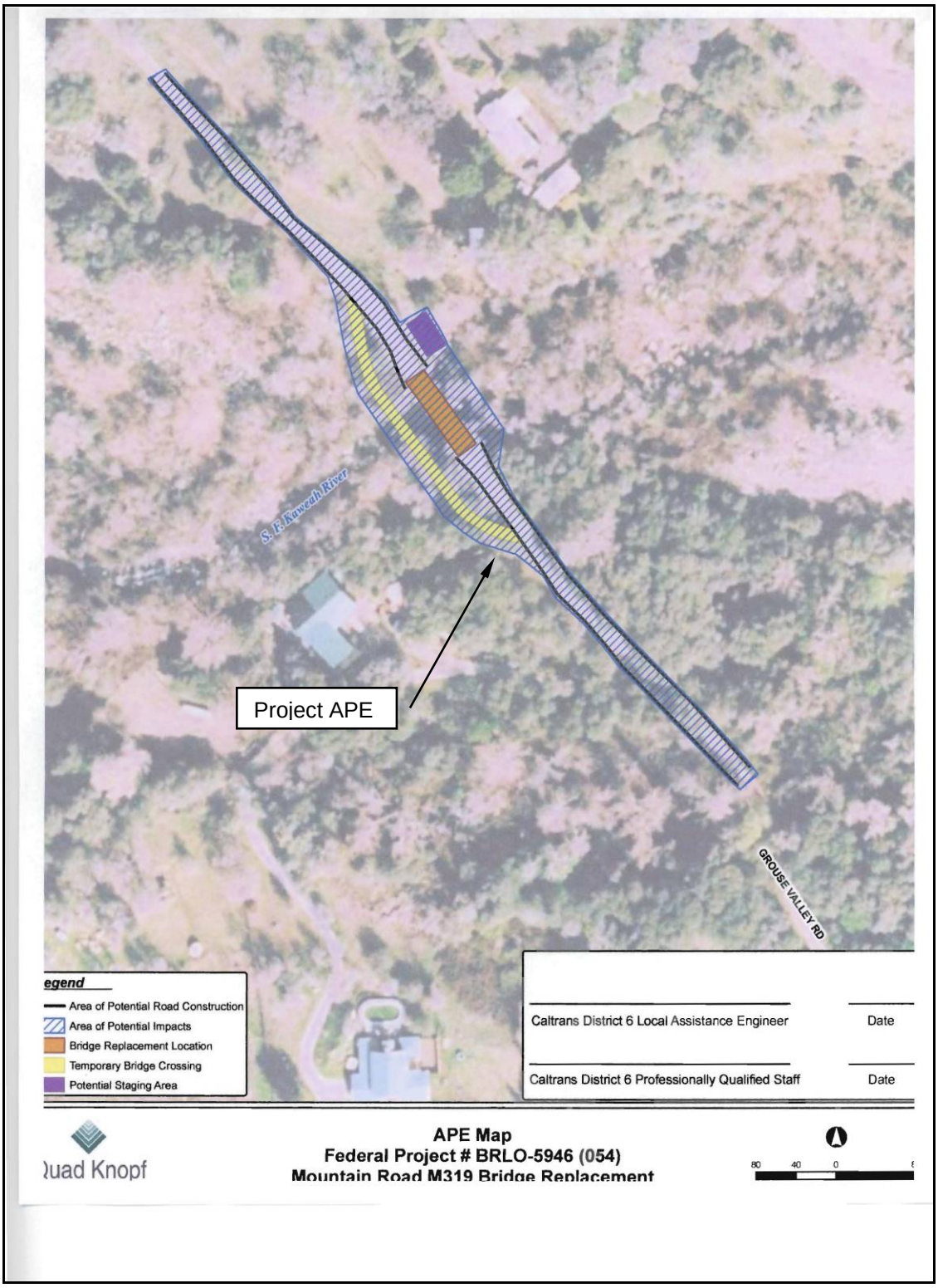


USGS Dennison Peak, Calif., 7.5' (1986) T 18S / R29E, Sec 16

0 5 10 15 20 25 miles
0 5 10 15 20 25 30 35 40 km

TN 14° MN
07/25/10

Map 1. Project Vicinity.



Map 2. Project Location / Area of Potential Effects (APE).

2.0 SETTING

The Project Study Area is located in a rural foothill riparian zone approximately seven miles southeast of the community of Three Rivers in the southern Sierra Nevada foothills in east-central Tulare County, California. Twentieth century modifications within and immediately surrounding the study area include Mountain Road M319, Bridge 46 C0119, associated access roads, and utility lines; several single family residences are located within a ¼-mile radius of the Project APE. Figures 1 through 4 provide a pictorial overview of the Project APE.

2.1 Natural Environment

The project study area is located in the South Fork of the Kaweah River drainage in the lower elevations of the western south-central Sierra Nevada foothills of eastern Tulare County, at an elevation of 1,870 ft (570 m) above mean sea level. The South Fork flows west/northwest and empties into the main fork of the Kaweah River just above Lake Kaweah, eight miles northwest of the project area. Soils within the study area include well-drained sandy loam. Current land use is residential with cattle grazing on surrounding parcels. Vegetation consists of oak woodland with scattered conifers and grassy openings with an under understory of mixed shrubs, forbs and grasses. Along the river is a dense riparian mix of oaks, sycamores, cottonwoods, and willows with thickets of blackberries, wild grape, poison oak, and various forbs.

The lower to mid-elevations of the south-central Sierran Foothills are dominated by grassy hills dotted with blue oak, interior live oak, and grey pine. Patches of annual grassland alternate with shrubs including manzanita, ceanothus, redbud, and numerous other species. Other tree species found within the project vicinity include California buckeye, black oak, cedar, and yellow pines. The variable forest canopy and understory vegetation provides habitat for numerous species of birds, animals, and reptiles.

2.2 Prehistoric Period Summary

The San Joaquin Valley and adjacent Sierran foothills and Coast Range have a long and complex cultural history with distinct regional patterns that extend back more than 11,000 years (McGuire 1995). The first generally agreed-upon evidence for the presence of prehistoric peoples in the region is represented by the distinctive fluted spear points, termed Clovis points, found on the margins of extinct lakes in the San Joaquin Valley. The Clovis points are found on the same surface with the bones of extinct animals such as mammoths, sloths, and camels. Based on evidence from elsewhere, the ancient hunters who used these spear points existed during a narrow time range of 10,900 BP to 11,200 BP.

The next cultural period represented, the Western Pluvial Lakes tradition, thought by most to be after the Clovis period, is another widespread complex that is characterized by stemmed spear points. This poorly defined early cultural tradition is regionally known from a small number of sites in the Central Coast Range, San Joaquin Valley lake margins, and Sierra Nevada foothills. The cultural tradition is dated to between 8,000 and 10,000 years ago and its practitioners may be the precursors to the subsequent cultural pattern.

About 8,000 years ago, many California cultures shifted the main focus of their subsistence strategies from hunting to seed gathering, as evidenced by the increase in food-grinding implements found in archeological sites dating to this period. This cultural pattern is best known for southern California, where it has been termed the Milling Stone Horizon (Wallace 1954, 1978a), but recent studies suggest that the horizon may be more widespread than originally described and is found throughout the region. Radiocarbon dates associated with

Figure 1. View NW along Mountain Road M319 at the southern approach to Bridge 46 C0119.

Figure 2. View of western side of Bridge 46 C0119 over the South Fork of the Kaweah River.

Figure 3. View NW along Mountain Road M319 at the southern end of the Project APE.

Figure 4. View western downstream along the South Fork of the Kaweah River from Bridge.

this period vary between 8,000 and 2,000 BP, although most cluster in the 6,000 to 4,000 BP range (Basgall and True 1985).

Cultural patterns as reflected in the archeological record, particularly specialized subsistence practices became codified within the last 3,000 years. The archeological record becomes more complex, as specialized adaptations to locally available resources were developed and populations expanded. Many sites dating to this time period contain mortars and pestles and/or are associated with bedrock mortars, implying the intense exploitation of the acorn. The range of subsistence resources utilized and exchange systems expanded significantly from the previous period. In the Central Valley, archaeological evidence of social stratification and craft specialization is indicated by well-made artifacts such as charmstones and beads, often found as mortuary items. Ethnographic lifeways serve as good analogs for this period.

2.3 Ethnographic Summary

The project study area is located within an area used by at least two Native American groups. The Wukchumni (Spier's Wikchamni [1978:426]), a Foothill Yokuts group, were centered around Lemon Cove and present-day Terminus Dam/Lake Kaweah. They made seasonal forays into the lower Sierran foothills and may have traveled into the upper reaches of the South Fork of the Kaweah River in the project area vicinity. Generally the 3000 ft elevation is considered their upper boundary (Spier 1978:426). The Patwisha, a Western Mono / Monache group, traditionally occupied the higher elevations of the south-central Sierran slope between 3,000-7,000 ft, often crossing the Sierran crest on trading expeditions with their Eastern Mono neighbors (Spier 1978:427). During the historic period, the Patwisha (Kroeber's Balwisha [1925:586]), along with other Western Mono groups, appear to have been expanding westward into lands traditionally used by the Wukchumni and other foothill Yokuts groups. Gayton (1948) describes the Patwisha as "a small group of Western Mono on the way to complete absorption by their more numerous and culturally richer Yokuts neighbors" (1948:56).

Due to the abundance and diversity of wildlife habitats and plant communities within the Sierran foothills and nearby San Joaquin Valley and higher elevations of the Sierra Nevada, Native American population densities in the region were quite high (Baumhoff 1963). While the acorn was the dietary staple, the diversity of accessible natural resources provided an omnivorous diet. The reader is referred to Gayton (1948), Kroeber (1925), Latta (1999), and Spier (1978a and 1978b) for additional information on pre-contact Yokuts/Miwok subsistence and culture.

Figure 5 depicts the territory of the Yokuts and Western Mono groups relative to the Project APE.

2.4 Historic Period Summary

The Kaweah River area was visited in the early 1800s by Spanish expeditions exploring the interior in search of potential mission sites. Lt. Gabriel Moraga, accompanied by Fr. Pedro Muñoz, about 25 soldiers, and a few neophytes, led an expedition that visited the Kaweah River country in 1806 (Cook 1960:246; Phillips 1993:50). In 1815 Master Sgt. Don Juan de Ortega explored around present-day Visalia and up the Kaweah River to about Lemon Cove (Cook 1960:267). The Kaweah River was named the San Gabriel by Moraga (Derby 1991:59).

From the earliest discovery of the Kaweah River area, EuroAmericans were drawn to its lushness and fertile soils. An early visitor, James H. Carson, waxed ecstatically over the richness and beauty of the Four Creeks region, as the Kaweah River basin was then called,

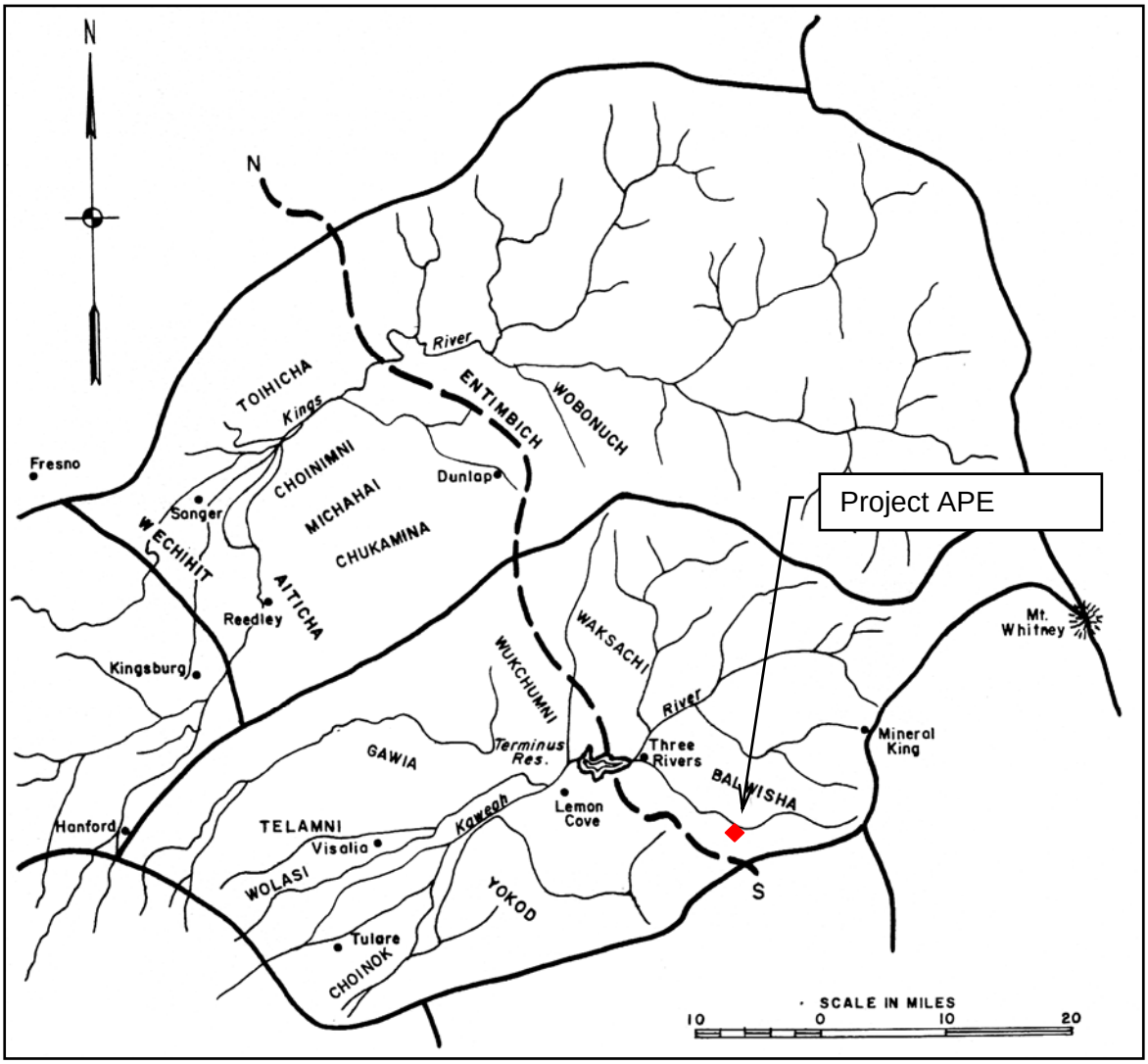


Figure 5. Northern Valley Yokuts Village Locations (from Kroeber 1925: Plate 47).

calling it the most lovely spot in California (Browning 1991:59). Carson and Lieutenant George Derby referred to the Kaweah as the Francis (Frances) River (Browning 1991:59).

EuroAmerican appreciation for the land did not include acceptance of its indigenous human populations, and pressure was exerted upon the US military to remove the Native population from the region, leaving the region open for American settlement and resource development.

The lower portion of the Kaweah River under what is now Lake Kaweah began to be settled by EuroAmericans in the late 1850s and early 1860s. The first non-Indian settler in this vicinity was Hale Tharp who settled at the confluence of Horse Creek and the Kaweah River in 1856. Tharp established a cattle ranch and is known to have befriended the Native American population of the area. Through these contacts he became the first EuroAmerican to visit the large village at Hospital Rock and the giant sequoia in Giant Forest. The Tulare County Map of 1867 shows numerous ranches and farms in the area (Meighan et al. 1988).

In 1870, Joe Palmer, who planted the first apple orchard near what is now the east end of Lake Kaweah, was the first to settle in what is now Three Rivers. Other homesteaders followed and by 1873 the area was organized into a voting precinct and the first school was started. The town, however, had few embellishments. The River Inn and the General Store were built some time before 1900; a half dozen or so private residences and the bridge across the river were found in the area at that time. The population of the general area was sufficient by 1879 for the people to apply for a Post Office (Meighan et al. 1988:252).

In 1862 the Hockett Trail was started which provided access from the western Sierra foothills, across the great Western Divide to the Owens Valley. An 1892 atlas map of Tulare County shows the route of the Hockett Trail following South Fork Drive, east of the present study area, then climbing up to the Hockett Plateau. From this point the trail drops into the Little Kern River drainage, and then to Trout Meadows before heading up the Kern River to Volcano Falls and the over the crest (Thompson 1892).

Figure 6 provides a map of land ownership and development in the general project area vicinity. The Project APE falls within lands under the estate of C. W. Cahoon, an early settler of the Three Rivers and Mineral King area. No structures are depicted within or adjacent to the Project APE.

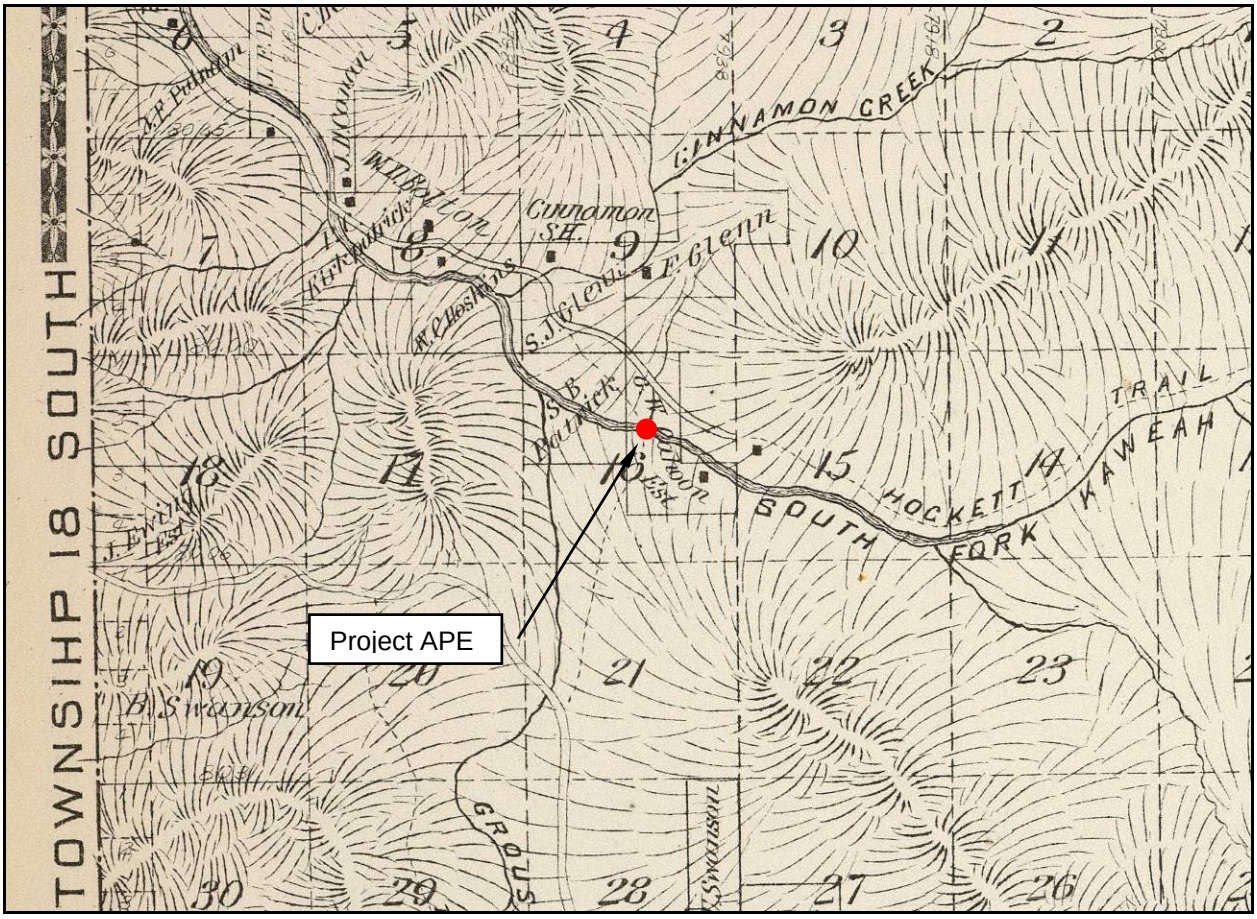


Figure 6. 1892 Map depicting parcel ownership and development within the Project APE (Thompson 1892).

2.5 Record Search Results

Prior to field inspection, a records search was conducted by the author at the Southern San Joaquin Valley Information Center of the California Historical Resources Information System to identify areas previously surveyed and identify known cultural resources present within or in close proximity to the Project APE (Attachment 1). According to the Information Center records, there has been one survey completed within the Project APE (Cantwell 1979) with an additional Survey completed within ¼ mile radius of the Project APE. No recorded cultural resources are situated within the Project APE; six cultural resource sites have been documented within ¼-mile radius of the Project APE.

The Information Center reports that there are no resources within the Project APE that are listed on the National Register of Historic Places, the California Register, California Points of Historical Interest, State Historic Landmarks, Historic Property Data File (10/23/09) nor the California Inventory of Historic Resources. Note that the Madera Canal, which has been evaluated previously as eligible for listing on the National Register of Historic Places, is present within the Project APE.

2.6 Native American Consultation

The Native American Heritage Commission (NAHC) was contacted in order to determine whether Native American sacred sites have been identified either within or in close proximity to the project area (see Attachment 4). A letter was received from the NAHC dated 21 July, 2010 which indicated that while no Native American cultural resources were located within one-half mile of the proposed project APE, there are several Native American cultural resources in close proximity to the APE. Letters describing the proposed bridge replacement project and the findings of this report were sent to the seven individuals identified as local area contacts. To date no response has been received from any of these individuals.

3.0 METHODS AND FINDINGS

On 13 July 2010 the author conducted a cultural resources survey of the Project APE. The Project APE, which includes the existing bridge and roadway for 400 ft along both sides of the bridge, as well as the locations of the proposed temporary bridge crossing immediately downstream of the extant bridge and a potential staging area located adjacent to the northeast end of the bridge was intensively inspected.

Bridge 46 C0119 consists of a single span bridge carrying one lane of traffic over the South Fork of the Kaweah River. The bridge, likely constructed in the 1950s, is approximately 60’ in length and 12’ wide. The bridge superstructure consists of two open web box steel trusses, 4’ deep and spaced 7’4” apart, supporting precast concrete deck panels that are 12’ long by 6’9” wide by 2 5/8” thick each. A timber plan wearing surface exists along the wheel lines on top of the deck panels. Bridge rails and curbs are made of timber and are in fair to poor condition, with some rail members in advanced state of decay. The bridge is oriented on a NW/SE axis.

Other than the bridge, no sites, structures or features were noted within or immediately adjacent to the study area. Previously recorded site P-54-130, originally documented by Jay von Werlhof in 1959 and described as an occupation site with numerous housepits and associated artifacts, is located adjacent to a dirt driveway on private property at 46248 South Fork Drive, outside of the present Project APE to the southwest. No cultural features or artifacts associated with this site were located during inspection of the Project APE.

Surface visibility was good to fair; dense vegetation obscured surface soils adjacent to the bridge along the South Fork of the Kaweah River. All rodent backdirt piles, road cuts as well as the surfaces adjacent to Mountain Road M319 were examined for evidence of surface and/or buried cultural components with negative results. The existing bridge and bridge approaches on both the north and south are on built-up surfaces. For these reasons, it appears that there is little potential for buried cultural deposits within the area which will be affected by the proposed bridge replacement project.

Bridge 46 C0119 has been determined ineligible for listing on the National Register of Historic Places (Caltrans 2009). No historical resources or properties (i.e., cultural resources eligible for inclusion on the NRHP or the California Register) were identified as a result of surface inspection of the APE, and there appears to be little likelihood of buried cultural resources within the APE; thus, it is unlikely that demolition of the existing structure and construction of the new bridge on Mountain Road M319 will have an effect on important archaeological, historical, or other cultural resources. No further cultural resources investigation is therefore recommended. In the unlikely event that buried archaeological deposits are encountered within the Project APE, the finds must be evaluated by a qualified archaeologist. Should human remains be encountered, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

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PREPARER'S QUALIFICATIONS

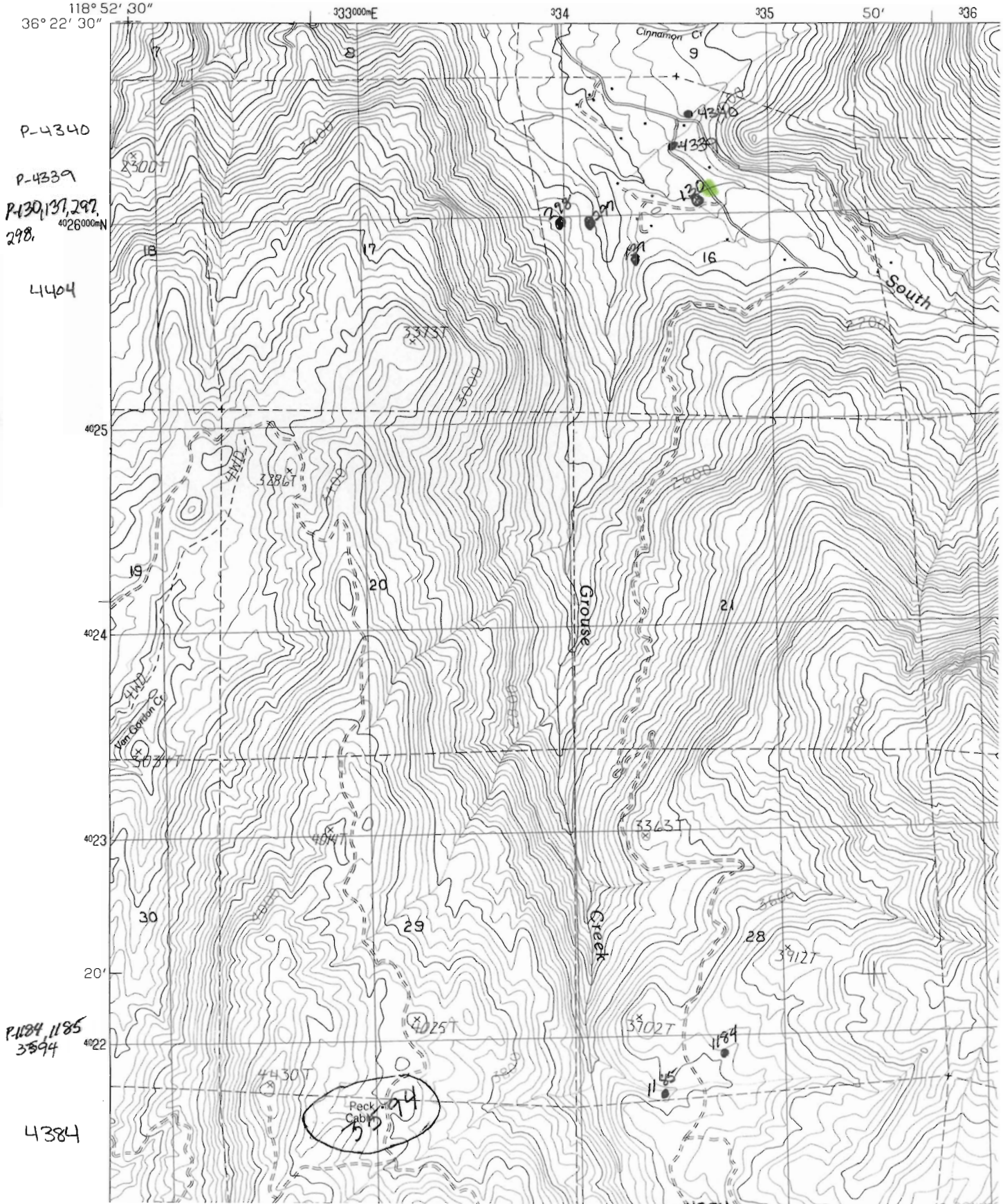
C. Kristina Roper conducted the historical resources inventory and background research, and assisted in the preparation of this Historic Resource Evaluation Report. Ms. Roper has over 29 years of professional experience in the field of archaeology, historical research and architectural evaluation, specifically in the investigation and management of cultural resources within the context of local, state and federal regulatory compliance for projects in the Far West. Ms. Roper holds a Master's degree in Cultural Resources Management awarded in 1993 from Sonoma State University, and is certified as a Registered Professional Archaeologist. She has completed graduate-level coursework in historical architectural evaluation and historic research. Her experience in cultural resources management includes both government and private sector employment and contracting for archaeological field services and historic research, documentation of resource assessments for Initial Studies (IS), Environmental Assessments (EA), Environmental Impact Reports (EIR), and Environmental Impact Statements (EIS). Ms. Roper is a registered archaeologist with the California Historic Resources Information System.

Ms. Roper has participated in planning efforts with numerous governmental entities in the San Joaquin Valley. She has prepared heritage preservation ordinances for the City of Chowchilla, serves as advisory staff to the Chowchilla Heritage Preservation Commission, and has recently completed a multi-year survey and assessment of Chowchilla's built environment. Ms. Roper has prepared a cultural resources records search and sensitivity analysis to be used in the development of a revised General Plan for the City of Coalinga, Fresno County. Ms. Roper has consulted with Native American tribes in the San Joaquin Valley and Sierra foothills under Senate Bill 18 (SB 18), which applies to General Plans, Specific Plans, and amendments proposed on or after March 1, 2005. SB 18 expands CEQA for the protection of California's traditional tribal cultural places by requiring consultation with Native American Groups during these planning efforts to define resources and sacred areas and incorporate protection of these important resources into the planning process.

MS. Roper has served as a Lecturer in Anthropology at California State University Fresno from 1995 to the present. Among her many courses taught is an upper division course in Cultural Resources Management which provides an overview of state and federal historic preservation law and the identification and evaluation of cultural resources. From 2002 through June of 2009, Ms. Roper served as Project Director for a services contract with the California Department of Transportation, District 6, Cultural Resources Branch, administered by the California State University Foundation. Ms. Roper supervised a team of cultural resources technicians who performed professional and technical services required by Caltrans for cultural resource studies. These included archaeological survey, title search for historic structures and properties, prehistoric and historic background research, excavation of archaeological sites, electronic data entry, and maintenance of confidential archaeological records and files.

Attachment 1: Records Search

Cultural Resources Records Search,
Southern San Joaquin Valley Information Center
of the California Historical Resources
Information System
(Records Search #10-277)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DEPARTMENT OF THE INTERIOR
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4404
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DEPARTMENT OF THE INTERIOR
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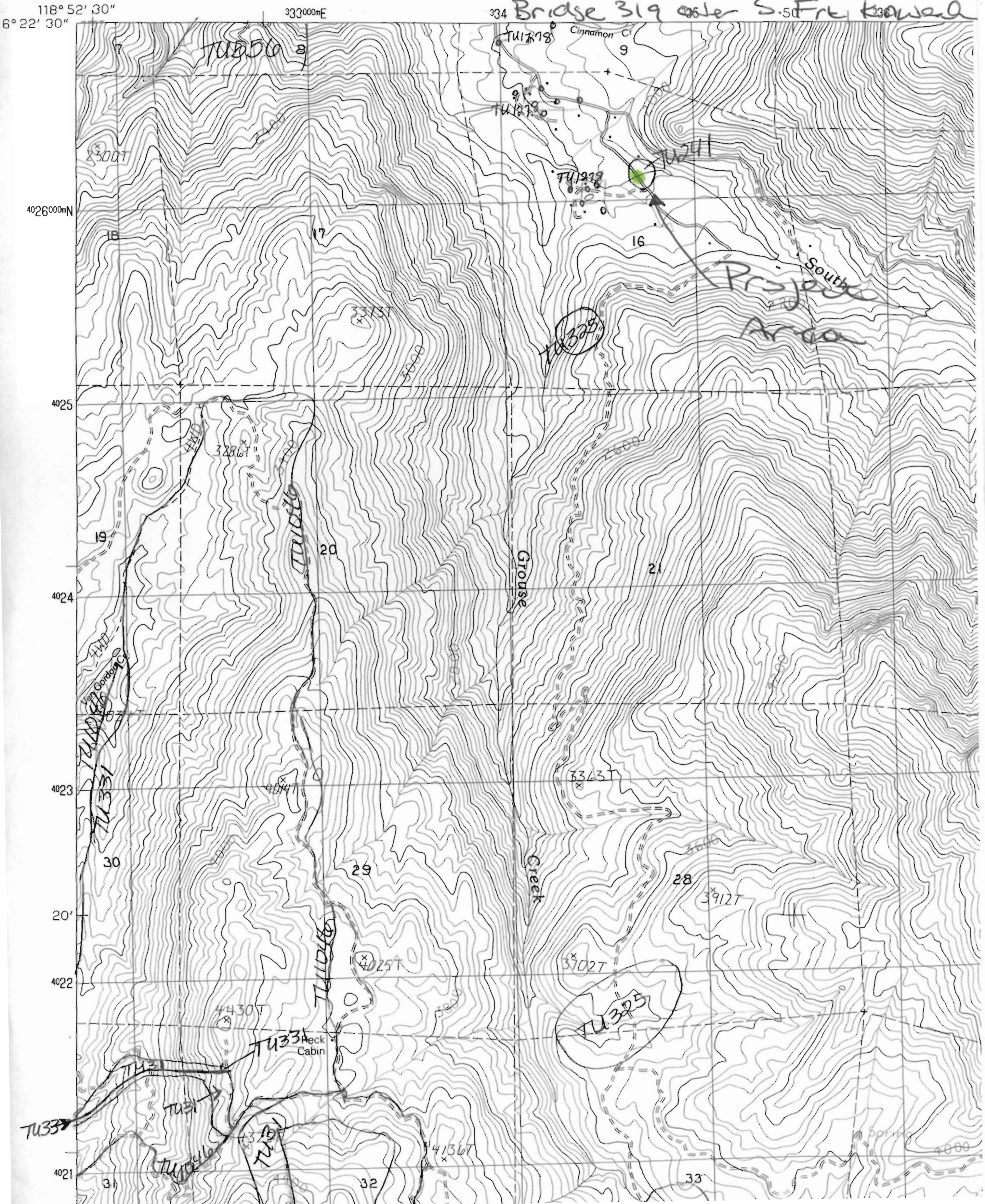
Dennison Peak, CA 7.5 (1986) Prov. Ed.
Bridge 319 over S. Fk. Kaweah



ARCHEOLOGICAL AND HISTORICAL SURVEY REPORT

SOUTH FORK KAWEAH RIVER BRIDGE #M319-0.20

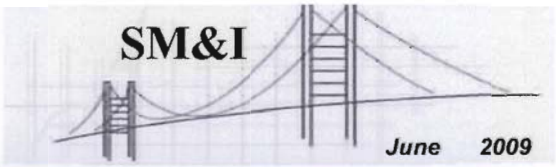
Submitted

October 3, 1979

Attachment 2: Caltrans SM&I Data Sheet, Historical Significance, Local Agency Bridges (June 2009)

Caltrans Structure Maintenance & Investigations Data Sheet,
Historical Significance, Local Agency Bridges (June 2009)

Structure Maintenance & Investigations



Historical Significance - Local Agency Bridges

District 06

Tulare County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
46C0116	MIDDLE FORK TULE RIVER	0.1 MI S OF SR 190	5. Bridge not eligible for NRHP	1985	
46C0117	WHITE RIVER	6 MI SOUTH OF AVE 56	5. Bridge not eligible for NRHP	1979	
46C0118	COTTONWOOD CREEK	0.1 MI WEST OF SR 245	5. Bridge not eligible for NRHP	1936	
46C0119	SOUTH FORK KAWEAH RIVER	0.2 MI S OF M348	5. Bridge not eligible for NRHP		
46C0120	TULARE CANAL	0.4 MI SOUTH AVENUE 248	5. Bridge not eligible for NRHP	1977	
46C0121	DRY CREEK	1.6 MI E OF M465	5. Bridge not eligible for NRHP	2002	
46C0122	DRY CREEK	2.7 MI NE OF SR 245	5. Bridge not eligible for NRHP	1937	2006
46C0123	HOMELAND CANAL	0.1 MI N OF AVE 62	5. Bridge not eligible for NRHP	1977	
46C0124	HOMELAND CANAL	0.4 MI N OF AVE 68	5. Bridge not eligible for NRHP	1978	
46C0125	POSO CREEK	0.1 MI S OF OLD STAGE RD	5. Bridge not eligible for NRHP	1986	
46C0126	FRIANT-KERN CANAL	0.25 MI WEST OF ROAD 216	4. Historical Significance not determined	1949	
46C0127	PORTER SLOUGH	0.1 MI N OF AVE 160	5. Bridge not eligible for NRHP	1950	
46C0128	FRIANT-KERN CANAL	0.4 MI SOUTH OF AVE 170	4. Historical Significance not determined	1949	
46C0129	ELK BAYOU	0.1 MI N/O AVE 184	5. Bridge not eligible for NRHP	1954	
46C0130	TULE RIV	1.8 MI S/O AVE 184	5. Bridge not eligible for NRHP	1945	
46C0131	HOMELAND CANAL	0.1 MI WEST OF ROAD 22	5. Bridge not eligible for NRHP	1972	
46C0132	TRAVER CANAL	0.1 MI EAST OF RD 64	5. Bridge not eligible for NRHP	1954	
46C0133	WHITE RIVER	8 MI SE FOUNTAIN SPRINGS	5. Bridge not eligible for NRHP	1939	
46C0134	PACKWOOD CREEK	0.3 MI NORTH OF AVE 288	5. Bridge not eligible for NRHP	1970	
46C0136	WOOD CENTRAL DITCH	0.4 MI NORTH OF AVE 152	5. Bridge not eligible for NRHP	1930	1947
46C0137	DEER CREEK	0.05 MI SOUTH OF AVE 96	5. Bridge not eligible for NRHP	1939	
46C0138	FRIANT-KERN CANAL	1.0 MI SOUTH OF AVE 80	4. Historical Significance not determined	1949	
46C0139	HORSEMAN DITCH	0.1 MI W OF RD 74	5. Bridge not eligible for NRHP	1949	1960
46C0140	SOUTH BRANCH TULE RIVER	0.7 MI N/O AVE 168	5. Bridge not eligible for NRHP	1943	1980
46C0141	NORTH BRANCH TULE RIVER	0.1 MI N/O AVE 184	5. Bridge not eligible for NRHP	1943	1981
46C0142	INSIDE CREEK	0.4 MI S OF SR 137	5. Bridge not eligible for NRHP	1942	1980
46C0143	CAMERON CREEK	AVENUE 280	5. Bridge not eligible for NRHP	1970	
46C0144	LAKELAND CANAL	2.0 MI EAST OF SR 43	5. Bridge not eligible for NRHP	1945	1967
46C0145	TULE RIVER	0.9 MI EAST OF SR 43	5. Bridge not eligible for NRHP	1948	
46C0146	LAKELAND CANAL	0.3 MI W OF SR 28	5. Bridge not eligible for NRHP	1977	
46C0147	LAKELAND CANAL	0.3 MI W OF RD 20	5. Bridge not eligible for NRHP	1960	
46C0148	FRIANT-KERN CANAL	0.2 MI WEST OF ROAD 236	4. Historical Significance not determined	1949	
46C0149	ARROYO DE BLANCO	3.5 MI NW/O SR 190	5. Bridge not eligible for NRHP	1957	
46C0150	OUTSIDE CREEK	0.2 MI EAST OF RD 164	5. Bridge not eligible for NRHP	1963	
46C0151	TULARE IRRIGATION DISTRICT CANAL	0.3 MI WEST ROAD 132	5. Bridge not eligible for NRHP	1966	
46C0152	DEEP CREEK	0.15 MI S OF AVE 280	5. Bridge not eligible for NRHP	1956	
46C0153	MILL CREEK	0.6 MI N OF AVE 280	5. Bridge not eligible for NRHP	1953	
46C0154	MILL CREEK	0.6 MI W OF RD 68	5. Bridge not eligible for NRHP	1953	
46C0155	PACKWOOD CREEK	0.7 MI E OF SR 63	5. Bridge not eligible for NRHP	1953	1990
46C0156	KETCHUM DITCH	3.25 MI N OF SR 198	5. Bridge not eligible for NRHP	1950	
46C0157	ST JOHNS RIVER NO 1	0.9 MI N OF AVE 328	5. Bridge not eligible for NRHP	1937	
46C0158	ST JOHNS RIVER NO 2	1.0 MI N OF AVE 328	5. Bridge not eligible for NRHP	1937	
46C0159	CROSS CREEK	0.6 MI S OF AVE 360	5. Bridge not eligible for NRHP	1937	

Attachment 3: DPR Site Records, Bridge 46 C0119

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI #**

PRIMARY RECORD

Trinomial
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

 *__Resource Name or #:__ Bridge Number 46 C0119

P1. Other Identifier: Mountain Road M319 Bridge over South Fork of the Kaweah River
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Tulare
and
***b. USGS 7.5' Quad:** Dennison Peak **Date:** 1986 **T** 18S; **R** 129; SW **¼ of** NE **¼ of Sec** 16 **;** M.D. **B.M.**
c. Address: N/A City: N/A Zip: 93271
d. UTM: Zone: 11S; 334634 mE / 4026322 mN (G.P.S.)
e. Other Locational Data: Elevation: 1,870 ft.

Bridge 46 C0119 is located in rural Tulare County approximately 0.2 miles south of Mountain Road M348 (South Fork Drive) and ca. seven miles southeast of State Route 198 in the community of Three Rivers, California.

***P3a. Description:**

Bridge 46 C0119 consists of a single span bridge carrying one lane of traffic over the South Fork of the Kaweah River. The bridge, likely constructed in the 1950s, is approximately 60' in length and 12' wide. The bridge superstructure consists of two open web box steel trusses, 4' deep and spaced 7'4" apart, supporting precast concrete deck panels that are 12' long by 6'9" wide by 2 5/8" thick each. A timber plan wearing surface exists along the wheel lines on top of the deck panels. Bridge rails and curbs are made of timber and are in fair to poor condition, with some rail members in advanced state of decay. The bridge is oriented on a NW/SE axis.

***P3b. Resource Attributes:** HP19 (Bridge)
***P4. Resources Present:** ☐Building ☑Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing

P5b. Description of Photo: Looking N at the western exposure of Bridge 46 C0119

***P6. Date Constructed/Age and Sources:** 1950s ☑Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
County of Tulare
5961 S. Mooney Blvd.
Visalia, CA 93277

***P8. Recorded by:**
C. Kristina Roper, M.A., RPA
Sierra Valley Cultural Planning
41845 Sierra Drive
Three Rivers, CA 93271

***P9. Date Recorded:** 7/13/2010

***P10. Survey Type:**
Intensive Reconnaissance

***P11. Report Citation:** *Roper, C.K., 2010. A Cultural Resources Survey of the Mountain Road M319Bridge (46 C0119) Replacement Project, South Fork of the Kaweah River, Tulare County, California.* Sierra Valley Cultural Planning, Three Rivers, CA.

***Attachments:** ☐NONE ☐Location Map ☐Sketch Map ☑Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

View northwest from southern approach to Bridge 46 C0119.

View southeast along Bridge 46 C0119, showing deterioration of roadway surface timbers.

Attachment 4: Native American Consultation

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

July 21, 2010

Ms. C. Kristina Roper, RPA
SIERRA VALLEY CULTURAL PLANNING
41835 Sierra Drive
Three Rivers, CA 93271

Sent by FAX TO: 559-561-6041
No. of Pages: 3

Re: Request for a Sacred Lands File Search and Native American Contacts List for the proposed **"Mountain Road M319 Bridge (No. 46C0119) Project;"** located near the Community of Three Rivers; Tulare County, California

Dear Ms. Roper:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources. The NAHC SLF search, **did not indicate** the presence of Native American cultural resources within one-half mile of the proposed project site (APE). However, there are Native American cultural resources in close proximity to the APE.

Also, this letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American India tribes and interested Native American individuals as 'consulting parties' under both state and federal law.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amended in 2009) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Culturally-affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g.APE). We recommend that you contact persons on the attached list of Native American contacts. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation Coordinator's office (at 916-653-7272, for referral to the nearest Information Center of which there are 10.

Native American Contacts
Tulare County
July 21, 2010

Santa Rosa Rancheria
Chairperson
P.O. Box 8
Lemoore , CA 93245
(559) 924-1278
(559) 924-3583 Fax

Tache
Tachi
Yokut

Santa Rosa Rancheria
Lalo Franco, Director - Cultural Deparment
P.O. Box 8
Lemoore , CA 93245
(559) 924-1278
(559) 925-8530-FAX

Yokuts
Tachi

Tule River Indian Tribe
Ryan Garfield, Chairperson
P.O. Box 589
Porterville , CA 93258
chairman@tulerivertribe-nsn.
(559) 781-4271
(559) 781-4610 FAX

Yokuts

Wukchumni Tribe
John Sartuche
929 N. Lovers Lane
Visalia , CA 93292
(559) 636-1136

Wukchumni

Sierra Nevada Native American Coalition
Lawrence Bill, Interim Chairperson
P.O. 125
Dunlap , CA 93621
(559) 338-2354

Mono
Foothill Yokuts

Jennifer Malone
637 E Lakeview
Woodlake , CA 93286
559-564-2146 - home
559-280-0712 - cell

Wukchumni
Tachi
Yowlumni

Esohm Valley Band of Indians/Wuksache Tribe
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas , CA 93906
831-443-9702

Foothill Yokuts
Mono

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also, federal National Environmental Policy Act (NEPA), National Historic Preservation Act, Section 106 and fed eral NAGPRA. And 36 CFR Part 800.3.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Mountain Road M319 Bridge Replacement Project; located South Fork of the Kaweah River; located in the Community of Three Rivers in Tulare County, California for which a Sacred Lands File search and Native American Contacts list

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2), the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes.

Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code 5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code 6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of he NHA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contact List

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Appendix D

Notice of Completion, Comments, and Responses to Comments

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The following pages were not included in the publicly circulated document. They are included here as part of the administrative record.

- Notice of Completion to the State Clearinghouse
- Overview of comments and responses to the IS/MND
- Comment letters received during the public review period

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Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Mountain Road M319 Bridge Replacement

Lead Agency: Tulare County Resources Management Agency | Contact Person: Kuna Muthusamy

Mailing Address: 5961 South Mooney Boulevard | Phone: (559) 624-7000

City: Visalia | Zip: 93277 | County: Tulare

Project Location: County: Tulare | City/Nearest Community: Three Rivers

Cross Streets: Mountain Road M319 (Grouse Valley Road) approx. 0.2 miles south of South Fork Drive | Zip Code: 93277

Longitude/Latitude (degrees, minutes and seconds): 36 ° 22 ′ 3.73 ″ N / 118 ° 50 ′ 36.3 ″ W | Total Acres:

Assessor's Parcel No.: 114-060-008, 010, 031, 032, 044 | Section: 16 | Twp.: 18S | Range: 29E | Base: MDBM

Within 2 Miles: State Hwy #: SR 198 | Waterways: South Fork Kaweah River

Airports: N/A | Railways: N/A | Schools: N/A

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☑ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☑ Other: Bridge Replace.

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational: ____
☐ Recreational: ____
☐ Water Facilities: Type ____ MGD ____
☑ Transportation: Type Bridge Replacement
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

☑ Aesthetic/Visual ☑ Agricultural Land ☑ Air Quality ☑ Archeological/Historical ☑ Biological Resources ☐ Coastal Zone ☑ Drainage/Absorption ☐ Economic/Jobs
☐ Fiscal ☑ Flood Plain/Flooding ☑ Forest Land/Fire Hazard ☑ Geologic/Seismic ☑ Minerals ☑ Noise ☑ Population/Housing Balance ☑ Public Services/Facilities
☑ Recreation/Parks ☑ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☑ Soil Erosion/Compaction/Grading ☐ Solid Waste ☑ Toxic/Hazardous ☑ Traffic/Circulation
☑ Vegetation ☑ Water Quality ☐ Water Supply/Groundwater ☐ Wetland/Riparian ☐ Growth Inducement ☑ Land Use ☐ Cumulative Effects ☑ Other: Greenhouse Gas

Present Land Use/Zoning/General Plan Designation:

Not applicable - Tulare County Right-of-Way

Project Description: *(please use a separate page if necessary)*

The project entails replacement of Bridge No. 46C0119, M319 over the South Fork of the Kaweah River. The bridge replacement would consist of removing the existing single-lane structure of approximately 60 feet in length and 12 feet in width, and replacing it on its existing alignment with a pre-cast, prestressed box girder bridge. The new structure would accommodate a two-lane bridge, approximately 80 feet long and 22 feet wide, providing access to residents to the southeast of the bridge. Because access must be maintained for the residents living on the east side of the South Fork of the Kaweah River during removal of the existing bridge and construction of its replacement, a temporary low water crossing will be constructed downstream of the existing bridge.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

X	Air Resources Board		Office of Emergency Services
	Boating & Waterways, Department of		Office of Historic Preservation
	California Highway Patrol		Office of Public School Construction
X	Caltrans District # 6		Parks & Recreation, Department of
	Caltrans Division of Aeronautics		Pesticide Regulation, Department of
	Caltrans Planning		Public Utilities Commission
	Central Valley Flood Protection Board	X	Regional WQCB # 5
	Coachella Valley Mtns. Conservancy		Resources Agency
	Coastal Commission		S.F. Bay Conservation & Development Comm.
	Colorado River Board		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Conservation, Department of		San Joaquin River Conservancy
	Corrections, Department of		Santa Monica Mtns. Conservancy
	Delta Protection Commission		State Lands Commission
	Education, Department of		SWRCB: Clean Water Grants
	Energy Commission	X	SWRCB: Water Quality
X	Fish & Game Region # 4		SWRCB: Water Rights
	Food & Agriculture, Department of		Tahoe Regional Planning Agency
X	Forestry and Fire Protection, Department of		Toxic Substances Control, Department of
	General Services, Department of		Water Resources, Department of
	Health Services, Department of		
	Housing & Community Development		Other:
	Integrated Waste Management Board		Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date November 10, 2010 Ending Date December 10, 2010

Lead Agency (Complete if applicable):

Consulting Firm: Quad Knopf, Inc.
Address: 5110 West Cypress Avenue
City/State/Zip: Visalia, CA 93277
Contact: Travis Crawford, Project Manager
Phone: (559) 733-0440

Applicant: Tulare County Resource Management Agency
Address: 5961 South Mooney Boulevard
City/State/Zip: Visalia, CA 93277
Phone: (559) 624-7000

Signature of Lead Agency Representative: _____ **Date:** 11/9/10

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Public Comments Received

Comment 1
From: Central Valley Flood Protection Board

Summary: The Central Valley Flood Protection Board is responsible for enforcing standards for the construction, maintenance, and protection of adopted flood control plans that will protect public lands from floods. A permit is required for the reconstruction of the M319 Bridge, should the project area be located in a floodway within the jurisdiction of the Board.

Response: The County will prepare and submit a permit application to comply with requirements of the Central Valley Flood Protection Board.

Comment 2
From: San Joaquin Valley Air Pollution Control District

Summary: The Air District concludes that the project would have no significant adverse impact on air quality. Because the project is the reconstruction of an existing bridge to essentially the same use and intensity, District Rule 9510 will not apply. However, the project may be subject to other District rules and regulations, including Regulation VIII, Rule 4102, Rule 4601, and Rule 4641 and/or others.

Response: The Initial Study includes measures for dust control under Regulation VIII Rule 8021 and the County RMA will submit a Dust Control Plan with the Air District prior to beginning construction. It was determined that Rule 4102 - Nuisance does not apply, as the project is located in a rural area and few people will be impacted during the demolition and construction phases of the project. Rules 4601 and 4641 are intended to limit VOC emissions. Plans do not include the application of architectural coatings, so that it is unlikely that Rule 4601 will apply. Should architectural coatings be applied on site, requirements of Rule 4601 will be followed as appropriate. Road M319 will be widened adjacent to each side of the bridge. Should paving be necessary within the project area, requirements of Rule 4621 will be followed. Other rules were reviewed and were found not to apply to the M319 Bridge replacement project.

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

December 6, 2010

Mr. Kuna Muthusamy
Tulare County Resources Management Agency
5961 South Mooney Boulevard
Visalia, California 93277-9394

Subject: Mountain Road M319 Bridge Replacement
SCH Number: 2010111046
Document Type: MND - Mitigated Negative Declaration

Dear Mr. Muthusamy:

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

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

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

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

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

- Vegetation plantings that will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection and flood fight procedures (Title 23, California Code of Regulations CCR Section 131).

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

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

Sincerely,

James Herota
Staff Environmental Scientist
Floodway Protection Section

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

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

November 24, 2010

Kuna Muthusamy
County of Tulare Resources Management Agency
5961 South Mooney Boulevard
Visalia, CA 93277

Project: MND – M319 Bridge Replacement Project

District CEQA Reference No: 20100850

Dear Mr. Muthusamy:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of the M319 bridge replacement project, located at Mountain Road M319 (also known as Grouse Valley Road), in Three Rivers, CA. The District offers the following comments:

1. Based on information provided to the District, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOX, 10 ton/year ROG, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

2. The District has reviewed the information provided and has determined this is a development project being reconstructed to essentially the same use and intensity pursuant to District Rule 9510, Section 4.4.1. Therefore, District Rule 9510 requirements and related fees do not apply to the project referenced above.

3. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

4. The District recommends that a copy of the District's comments be provided to the project proponent.

If you have any questions or require further information, please call David McDonough, at (559) 230-5920.

Sincerely,

David Warner
Director of Permit Services

for, Arnaud Marjollet
Permit Services Manager

DW: dm

Cc: File

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RESOURCE MANAGEMENT AGENCY
COUNTY OF TULARE
AGENDA ITEM

AGENDA DATE: January 11, 2011

Public Hearing Required	Yes ☐	No ☒	N/A ☐
Scheduled Public Hearing w/Clerk	Yes ☐	No ☐	N/A ☒
Published Notice Required	Yes ☒	No ☒	N/A ☐
Advertised Published Notice	Yes ☐	No ☐	N/A ☒
Meet & Confer Required	Yes ☐	No ☒	N/A ☐
Electronic file(s) has been sent	Yes ☒	No ☐	N/A ☐
Budget Transfer (Aud 308) attached	Yes ☐	No ☐	N/A ☒
Personnel Resolution attached	Yes ☐	No ☐	N/A ☒

Resolution, Ordinance or Agreements are attached and signature line for Chairman is marked with tab(s)/flag(s) Yes ☒ No ☐ N/A ☐

CONTACT PERSON: Celeste Perez PHONE: (559) 624-7000

SUBJECT: Adopt The Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement.

REQUEST(S):

That the Board of Supervisors:

1. Certify that the Mitigated Negative Declaration (MND) for the Mountain Road M319 Bridge Replacement Project (State Clearinghouse #2010111046) is complete and adequate and has been completed in compliance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines;
2. Find that the project is accurately described in the MND;
3. Find that significant impacts could result from the project, but are mitigated to a level that is less than significant by project features or deliberate mitigation measures;
4. Approve and adopt the Mitigated Negative Declaration;
5. Approve and adopt the Mitigation Monitoring Plan included in the Mitigated Negative Declaration;
6. Authorize the Chairman to sign the Notice of Determination; and
7. Direct the Clerk of the Board to return the signed Notice of Determination to the Resource Management Agency for posting with the County Clerk.

SUMMARY:

As required by the California Environmental Quality Act (CEQA), the County of Tulare acting as the lead agency for the Mountain Road M319 Bridge Replacement Project must certify and adopt the Mitigated Negative Declaration (MND) prior to

proceeding with the project.

The County is proposing to replace the existing Mountain Road M319 Bridge with a new bridge over the South Fork of the Kaweah River. The bridge is located approximately 6 miles east of State Route 198 near the community of Three Rivers. The existing bridge will be replaced with an 80-foot long and 22-foot wide two lane bridge.

The Draft and Final MND was prepared by Quad Knopf, Inc. as a sub consultant to Cornerstone Structural Engineers Inc., the County's primary consultant for engineering services for this project under the direction of RMA staff. Your Board is being asked to certify that this document complies with the requirements of CEQA and to adopt the MND.

The project description and impacts are described in the MND. The findings in the MND conclude that the project could have significant impacts on the quality of the environment, and that with proper mitigations as described in the MND all impacts could be reduced to less than significant levels. A draft version of this environmental document has been circulated to interested parties and agencies for their comments for a 30-day public review period starting on November 11, 2010 and ending on December 10, 2010. A public hearing was conducted during the December 7, 2010 Board of Supervisors meeting as a means to inform the public of the project and to solicit comments from the affected parties. No comments were received during this public hearing.

Two comments were received during the review period of the draft document. One from the Central Valley Flood Protection Board and another from the San Joaquin Valley Air Pollution Control District These comments have been included in the MND along with responses to these comments and revisions to the document.

FISCAL IMPACT/FINANCING:

An environmental filing fee of $2,044.00 must be paid to the California Department of Fish and Game at the time the Notice of Determination is filed with the County Clerk. The design and environmental portion of this project is funded by the federal Highway Bridge Program. The costs associated with the preparation, review and certification of the Environmental Document will be borne by the design and environmental phases of the Mountain Road M319 Bridge Replacement Project.

There is no net cost to the County General Fund.

LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:

The Project will enhance the safety and security of the public by improving the transportation infrastructure for both the general population in the region and the motorists using this facility.

SUBJECT: Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement Project
DATE: January 11, 2011

ALTERNATIVES:
The Board could choose not to adopt the Mitigated Negative Declaration which would result in significant delay or project termination.

INVOLVEMENT OF OTHER DEPARTMENTS OR AGENCIES:
The County Clerk will be requested to post the Notice of Determination for 30 days.

ADMINISTRATIVE SIGN-OFF:

12/22/10

Britt L. Fussel, P.E.
Assistant Director—Public Works
County Surveyor

cc: Auditor/Controller
County Counsel
County Administrative Office (2)

Attachment(s) Vicinity Map
Final Mitigated Negative Declaration (on file with the Clerk to the Board)
Notice of Determination

BEFORE THE BOARD OF SUPERVISORS
COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF MITIGATED NEGATIVE DECLARATION FOR THE MOUNTAIN ROAD M319 BRIDGE REPLACEMENT PROJECT) **RESOLUTION NO. 2011-0022**

UPON MOTION OF SUPERVISOR VANDER POEL, SECONDED BY SUPERVISOR WORTHLEY, THE FOLLOWING WAS ADOPTED BY THE BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD JANUARY 11, 2011 BY THE FOLLOWING VOTE:

AYES: SUPERVISORS ISHIDA, VANDER POEL, COX, WORTHLEY AND ENNIS
NOES: NONE
ABSTAIN: NONE
ABSENT: NONE

BOARD OF SUPERVISORS TULARE COUNTY, CAL.

ATTEST: JEAN M. ROUSSEAU
COUNTY ADMINISTRATIVE OFFICER/
CLERK, BOARD OF SUPERVISORS

BY: Denise A. Ybarra
Deputy Clerk

1. Found that the Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement Project (State Clearinghouse #2010111046) has been completed in compliance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines.
2. Found that significant impacts could result from the project, but are mitigated to a level that is less than significant by project features or deliberate mitigation measures.
3. Approved and adopted the Mitigated Negative Declaration.
4. Approved and adopted the Mitigation Monitoring Plan included in the Mitigated Negative Declaration.
5. Authorized the Chairman to sign the Notice of Determination.
6. Directed the Clerk of the Board to return the signed Notice of Determination to the Resource Management Agency for posting with the County Clerk.

RMA

DAY
1/11/11

RESOURCE MANAGEMENT AGENCY
COUNTY OF TULARE
AGENDA ITEM

AGENDA DATE: January 11, 2011

Public Hearing Required	Yes ☐	No ☒	N/A ☐
Scheduled Public Hearing w/Clerk	Yes ☐	No ☐	N/A ☒
Published Notice Required	Yes ☒	No ☒	N/A ☐
Advertised Published Notice	Yes ☐	No ☐	N/A ☒
Meet & Confer Required	Yes ☐	No ☒	N/A ☐
Electronic file(s) has been sent	Yes ☒	No ☐	N/A ☐
Budget Transfer (Aud 308) attached	Yes ☐	No ☐	N/A ☒
Personnel Resolution attached	Yes ☐	No ☐	N/A ☒

Resolution, Ordinance or Agreements are attached and signature line for Chairman is marked with tab(s)/flag(s) Yes ☒ No ☐ N/A ☐

CONTACT PERSON: Celeste Perez PHONE: (559) 624-7000

SUBJECT: Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement Project

REQUEST(S):

That the Board of Supervisors:

1. Find that the Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement Project (State Clearinghouse #2010111046) has been completed in compliance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines;
2. Find that significant impacts could result from the project, but are mitigated to a level that is less than significant by project features or deliberate mitigation measures;
3. Approve and adopt the Mitigated Negative Declaration;
4. Approve and adopt the Mitigation Monitoring Plan included in the Mitigated Negative Declaration;
5. Authorize the Chairman to sign the Notice of Determination; and
6. Direct the Clerk of the Board to return the signed Notice of Determination to the Resource Management Agency for posting with the County Clerk.

SUMMARY:

As required by the California Environmental Quality Act (CEQA), the County of Tulare, acting as the lead agency for the Mountain Road M319 Bridge Replacement Project, must adopt a Mitigated Negative Declaration (MND) prior to proceeding with the project.

SUBJECT: Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement Project
DATE: January 11, 2011

The County is proposing to replace the existing Mountain Road M319 Bridge with a new bridge over the South Fork of the Kaweah River. The bridge is located approximately 6 miles east of State Route 198 near the community of Three Rivers. The existing bridge will be replaced with an 80-foot long and 22-foot wide two lane bridge.

The draft and final MND was prepared by Quad Knopf, Inc. as a sub consultant to Cornerstone Structural Engineers Inc., the County's primary consultant for engineering services for this project under the direction of Resource Management Agency (RMA) staff. Your Board is being asked to find that this document complies with the requirements of CEQA and to adopt the MND.

The project description and impacts are described in the MND. The findings in the MND conclude that the project could have significant impacts on the quality of the environment, and that with proper mitigations as described in the MND all impacts could be reduced to less than significant levels. A draft version of this environmental document was circulated to interested parties and agencies for their comments for a 30-day public review period starting on November 11, 2010 and ending on December 10, 2010. A public hearing was conducted during the December 7, 2010 Board of Supervisors meeting as a means to inform the public of the project and to solicit comments from the affected parties. No comments were received during this public hearing.

Two comments were received during the review period of the draft document. One from the Central Valley Flood Protection Board and another from the San Joaquin Valley Air Pollution Control District These comments have been included in the MND along with responses to these comments and revisions to the document.

FISCAL IMPACT/FINANCING:

An environmental filing fee of $2,044 must be paid to the California Department of Fish and Game at the time the Notice of Determination is filed with the County Clerk. The design and environmental portion of this project is funded by the federal Highway Bridge Program. The costs associated with the preparation, review and certification of the Environmental Document will be borne by the design and environmental phases of the Mountain Road M319 Bridge Replacement Project.

There is no net cost to the County General Fund.

LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:

The Project will enhance the safety and security of the public by improving the transportation infrastructure for both the general population in the region and the motorists using this facility.

SUBJECT: Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement Project
DATE: January 11, 2011

ALTERNATIVES:

The Board could choose not to adopt the Mitigated Negative Declaration which would result in significant delay or project termination.

INVOLVEMENT OF OTHER DEPARTMENTS OR AGENCIES:

The County Clerk will be requested to post the Notice of Determination for 30 days.

ADMINISTRATIVE SIGN-OFF:

12/22/10

Britt L. Bussel, P.E.
Assistant Director—Public Works
County Surveyor

cc: Auditor/Controller
County Counsel
County Administrative Office (2)

Attachment(s) Vicinity Map
Final Mitigated Negative Declaration (on file with the Clerk to the Board)
Notice of Determination

BEFORE THE BOARD OF SUPERVISORS
COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF MITIGATED NEGATIVE DECLARATION FOR THE MOUNTAIN ROAD M319 BRIDGE REPLACEMENT PROJECT	))))	**RESOLUTION NO. _____**

UPON MOTION OF SUPERVISOR _____, SECONDED BY SUPERVISOR _____, THE FOLLOWING WAS ADOPTED BY THE BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD JANUARY 11, 2011 BY THE FOLLOWING VOTE:

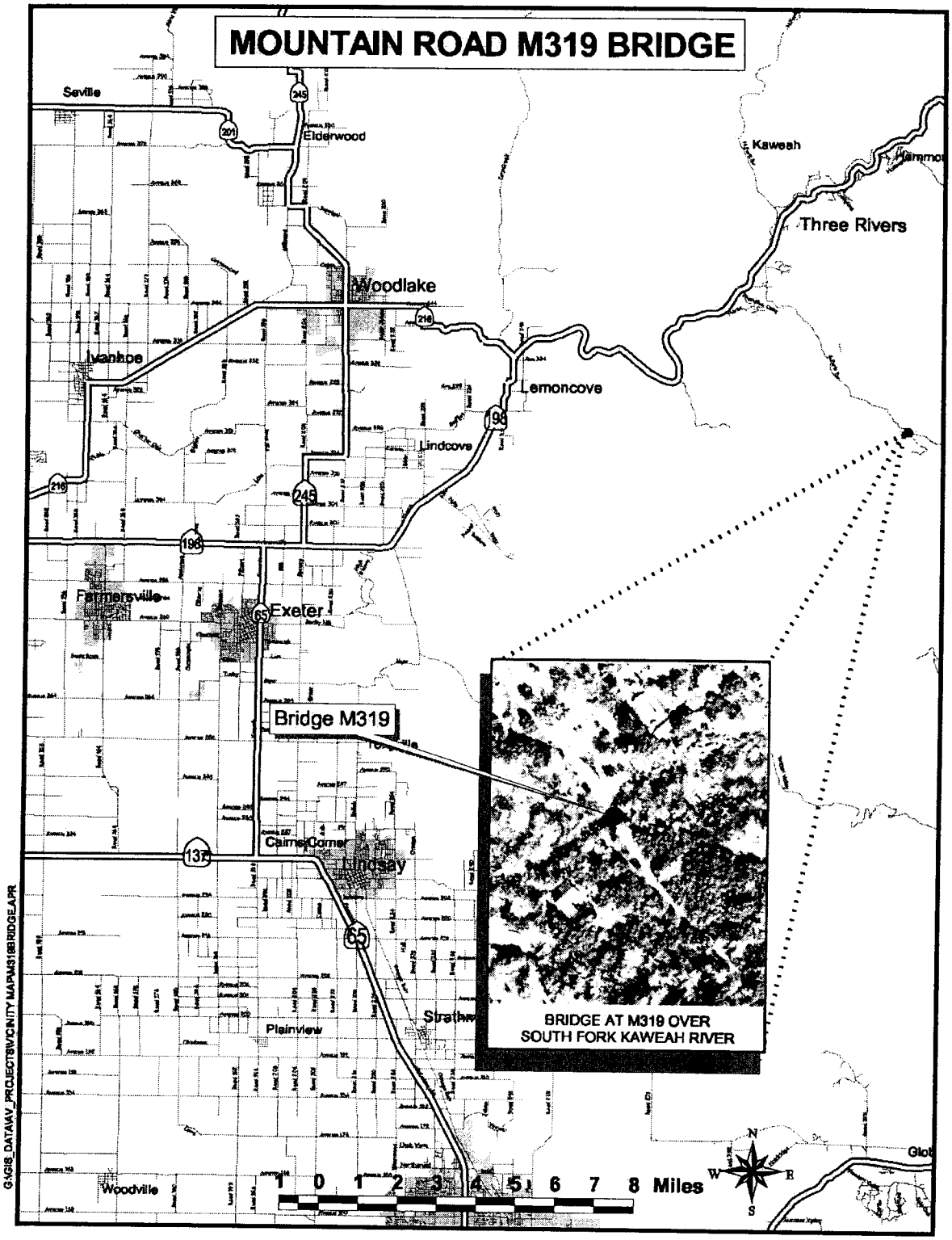
AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST: JEAN M. ROUSSEAU
COUNTY ADMINISTRATIVE OFFICER/
CLERK, BOARD OF SUPERVISORS

BY: _____
Deputy Clerk

* * * * * * * * * * * * * * * * * * *

1. Found that the Mitigated Negative Declaration for the Mountain Road M319 Bridge Replacement Project (State Clearinghouse #2010111046) has been completed in compliance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines;
2. Found that significant impacts could result from the project, but are mitigated to a level that is less than significant by project features or deliberate mitigation measures;
3. Approved and adopted the Mitigated Negative Declaration;
4. Approved and adopted the Mitigation Monitoring Plan included in the Mitigated Negative Declaration;
5. Authorized the Chairman to sign the Notice of Determination; and
6. Directed the Clerk of the Board to return the signed Notice of Determination to the Resource Management Agency for posting with the County Clerk.


MOUNTAIN ROAD M319 BRIDGE
Seville
Elderwood
Woodlake
Ivanhoe
Lemoncove
Three Rivers
Kaweah
Lindcove
Farmersville
Exeter
Bridge M319
Cairns Corner
Lindsay
Strathmore
Plainview
Woodville
BRIDGE AT M319 OVER
SOUTH FORK KAWEAH RIVER
1 0 1 2 3 4 5 6 7 8 Miles
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Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

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

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

☒ County Clerk

County of: Tulare

Address: 221 S Mooney Blvd, Courthouse Room 105, Visalia, CA 93291

From:

Public Agency: County of Tulare Resource Management Agency

Address: 5961 S Mooney Blvd, Visalia, CA 93277

Contact: Kuna Muthusamy

Phone: 559-624-7139

Lead Agency (if different from above):

Address:

Contact:

Phone:

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

State Clearinghouse Number (if submitted to State Clearinghouse): 2010111046

Project Title: Mountain Road M319 Bridge Replacement

Project Location (include county): Tulare County - Mountain Road M319 (Grouse Valley Rd) ~0.2 miles S of S Fork Dr.

Project Description:

The project entails the replacement of Bridge No. 46C0119, M319 over the South Fork of the Kaweah River. Project consists of removing existing single lane bridge and replacing on the same alignment with a two lane bridge. A temporary low water crossing will be established during construction.

This is to advise that the County of Tulare ☒ Lead Agency or ☐ Responsible Agency has approved the above described project on January 11, 2011 (Date) and has made the following determinations regarding the above described project:

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

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: Tulare County RMA 5961 S Mooney Blvd, Visaila, CA 93277

Signature (Public Agency) _____ Title _____

Date _____ Date Received for filing at OPR _____

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

Revised 2005

File (cont) 21

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

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

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County of: Tulare
Address: 221 S Mooney Blvd, Courthouse Room 105
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From:

Public Agency: County of Tulare Resource Management Agency
Address: 5961 S Mooney Blvd
Visalia, CA 93277
Contact: Kuna Muthusamy
Phone: 559-624-7139

FILED
TULARE COUNTY
JAN 13 2011
ROLAND P. HILL
ASSESSOR/CLERK RECORDER
BY:

Lead Agency (if different from above):
Address:
Contact:
Phone:

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

State Clearinghouse Number (if submitted to State Clearinghouse): 2010111046

Project Title: Mountain Road M319 Bridge Replacement

Project Location (include county): Tulare County - Mountain Road M319 (Grouse Valley Rd) ~0.2 miles S of S Fork Dr.

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This is to advise that the County of Tulare has approved the above described project on
☒ Lead Agency or ☐ Responsible Agency

January 11, 2011 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
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6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

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Signature (Public Agency) Mike Ennis Title CHAIRMAN, BOARD OF SUPERVISORS

Date 1/11/11 Date Received for filing at OPR

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

Revised 2005